ICMC-NYCEMF 2019

International Computer Music Conference
New York City Electroacoustic Music Festival
June 16-23

NEW YORK UNIVERSITY
SHEEN CENTER
FRIDMAN GALLERY

INTERNATIONAL COMPUTER MUSIC CONFERENCE

—

NEW YORK CITY ELECTROACOUSTIC MUSIC FESTIVAL

—

JUNE 16-23, 2019

NEW YORK UNIVERSITY

FULTON J. SHEEN CENTER

FRIDMAN GALLERY

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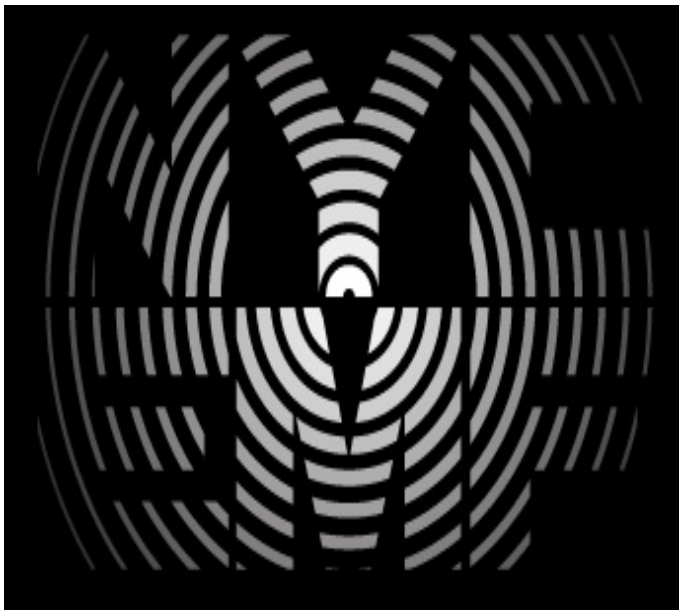
www.nycemf.org



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ACKNOWLEDGEMENTS

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DIRECTOR'S WELCOME

Welcome to ICMC-NYCEMF 2019

On behalf of the Steering Committee, it is my great pleasure to welcome you to the 2019 joint International Computer Music Conference and New York City Electroacoustic Music Festival. We have an exciting program of 25 concerts, paper sessions, sound installations, panel discussions, workshops, "immersion" concerts, and late-night concerts taking place in and around New York University in New York City. We hope that you will enjoy all of them.

We would first like to express our sincere appreciation to the following people and organizations who have contributed to us this year, in particular:

- New York University

- The Genelec corporation, for providing us with loudspeakers to enable us to play all concerts in full surround sound

- The Fulton J. Sheen Center for Thought and Culture

- Harvestworks

- Fractured Atlas/Rocket Hub

- Queens College and Brooklyn College, C.U.N.Y., the State University of New York at Stony Brook, and the University of Central Missouri for lending us equipment and facilities

- Parts Express

- Svensk Musik and the Swedish Society of Composers

- The Adam Mickiewicz Institute

- The Daegu Foundation for Culture

- to our keynote speaker, Brad Garton

Hubert Howe
Emeritus Professor of Music
Queens College and the Graduate Center
City University of New York

WELCOME FROM DEPARTMENT OF MUSIC AND PERFORMING ARTS PROFESSIONS, NEW YORK UNIVERSITY

Welcome to the 2019 NYC International Computer Music Conference!

It is great pleasure that New York University's (NYU) Department of Music and Performing Arts Professions (MPAP) is partnering with NYCEMF in bringing the ICMC conference to New York City this year. The ICMC-NYCEMF team and NYU team have worked tirelessly to bring you 27 concerts, daily parallel paper sessions, installations around the city (including Governor's Island), seven panel discussions, 14 workshops, and Bard Garton as our keynote speaker.

What is very exciting — is not only the sheer number of submissions the event received this year: nearly 1000! — but also the extended seven days of ICMC events we have in store for you, to celebrate the depth and breadth of the world of computer music today.

I am particularly proud of the partnership with the International Computer Music Association (ICMA), NYU Libraries, and MPAP launched last year – the Electro-Acoustic Music Mine (EAMM) archives, where all works presented at ICMCs, starting with last year, will be preserved and archived here in the Big Apple!

Congratulations to all in being selected to this highly prestigious conference — and once again, welcome to The Melting Pot and the City That Never Sleeps!

Sincerely,

Ron Sadoff, Ph.D.
Chair, NYU MPAP

ICMA PRESIDENT'S WELCOME

On behalf of the International Computer Music Association (ICMA) board it is with great pleasure to welcome you to the 2019 ICMC Edition in The Big Apple!

I remember going to my first ICMC in 1998 when I was a graduate student, feeling overwhelmed and exited at the same time. Ever since that visit to Michigan, I have tried to go to every conference possible – when fortunate enough to get my work accepted – developing a close relationship with the conference and … hurricanes: I came to New York City in 2012 when Hurricane Sandy made landfall bringing havoc and rendering silent the southern part of Manhattan (an amazing sonic experience). Sandy, however, vividly reminds me of Katrina, the Category 5 Hurricane that brought devastation to New Orleans in August 2005. A year later in 2006, as some/many of you remember, we triumphantly held the ICMC despite the destruction where much of the effort in producing the ICMC as much an effort to help bring the city back as it was to avoid skipping an ICMC year … An amazing event it was indeed: over 50 volunteers from around the country came to volunteer and help make the Big Easy ICMC a reality – quite literally, we were fixing homes before, during, and after that time including building a shed at my home on the eve of the conference (thanks Yuri!).

Fast forward 12 years … I cannot believe that just last year around this time we were in Daegu, South Korea, enjoying a hot summer ICMC in one of the hottest cities in Korea. As they say, time flies when you're having fun! While time has flown by since organizing the first ICMC some 13 years ago (honestly thinking it would be the first and last but then finding myself organizing the conference just last year) perhaps this year, we will be able to prolong the decay of time a little bit in the City that Never Sleeps with a full week of concerts, papers, panels, workshops, and installation works throughout the city. The weeklong conference model is the result of Hubert Howe's NYCEMF festival vision, which he has been director since its inception. And this year, we fully embrace this model through the ICMC-NYCEMF partnership!

This year, we also continue our partnership with the New York University (NYU) Libraries formally launching the Electro-Acoustic Music Mine (EAMM) project where we have begun to archive compositions and installation works presented at last year's conference. This year marks our second year that is also part of the larger Computer Music Heritage program we initiated in Daegu; and we hope that we will soon be able to share and provide access to the archives in the months to come.

Additionally, we are similarly continue with the Soundscape Heritage Program launched in 2018 with focus on the multidimensional aspects of soundscape exploration, preservation, research, public engagement, and musical possibilities.

Once again, welcome, and thank you to all in making the 2019 ICMC conference possible!

Sincerely,

Tae Hong Park
President, International Computer Music Association

A NOTE FROM THE PAPER CHAIRS

This year's ICMC we had a total of 107 submitted papers where 93 papers were accepted with an 86.9% acceptance rate. The top possible score was 5.0 points. Of the total 107 submitted papers, 25 had ratings greater or equal to 4.0, 44 papers had ratings between 3.0 and 4.0, and 24 papers had ratings > 2.0. Each paper received a minimum of three reviews. The topical spread of papers ranged from Acoustics of Music; Acoustics, Space, and Sound Distribution; Algorithmic Composition; Composition Systems and Techniques; Analysis of Electro-Acoustic Music; Archiving and Preservation of Electro-Acoustic Music; Studio Reports; Perception and Cognition; Acoustic Ecology; Music Information Retrieval; History of Electro-Acoustic Music; Sonification; Improvisation and Technology; New Instruments for Musical Expression; Software and Hardware Systems; 3D Audio; Distributed, Telematic, Mobile Music; Languages for Computer Music; Music Education; Sound Synthesis; Piece and Paper; and Artificial Intelligence and Music.

Tae Hong Park and Michael Gogins
ICMC 2019 Paper Chairs

A NOTE FROM THE INSTALLATION CHAIRS

The artistic and musical field that is computer music is a vast one that defies boundaries, conventions, and norms. Much of the music and art created in our community is inappropriate for the concert hall, as it exceeds the confines of such a presentational space. Acknowledging this, the installation track of the International Computer Music Conference provides a place for these works – which otherwise defy the parameters of the concert hall – an opportunity for inclusion, presentation, and appreciation by our community.

It is both invigorating and challenging to assist in the presentation of an ICMC back in New York City. However, the regrettable reality of this track is that the space restrictions of this city allowed for only a small number of the overall impressive set of submissions. The installations at this year's conference represent just some of the compelling, interactive, and dynamic works occurring in computer music outside the concert hall.

Installations are a labor of love for both the artists and presenters. By virtue of being both decoupled from fixed time constraints, and expected to run continuously throughout the duration of the conference, they can often prove more complex that concert hall pieces. Unlike concert pieces, installation artists must be willing to bring more equipment in order to present these pieces, set their works up individually, and turn on and maintain them every day.

Taking into account the spaces and resources available to us, we determined that we could accept between 8 and 12 works this year. We had 46 installation submissions for possible inclusion at the conference. Each submission was reviewed blindly by at least 2, if not 3, of the 16 adjudicators, who ranked the works according to both their "appropriateness to the conference" and "value as an art/music work". For each of these criteria, the work could receive a score between 5 and 1 (with 5 equating to the strongest score, representing "very appropriate" or "must accept"). These scores were then used to rank the works into groups of "must accept", "accept", "weak accept", "weak reject", and "reject". We then worked to program as many of the pieces as we could according to these rankings. In total, we were able to extend acceptance invitations to 11 pieces and as of this writing expect to have 9 works presented.

We are incredibly excited for this year's conference and the opportunity to present these installation works. We hope everyone will take the time to experience these works, wander around the city to find them, and congratulate the artists who composed them.

Andrew Telichan Phillips
Michael Musick
ICMC 2019 Installation Chairs

INTERNET RADIO INTERVIEW PROGRAM

The (Internet) Radio ProgRam was launched at the 2006 ICMC by Tae Hong Park when he organized the ICMC at Tulane University in New Orleans. This ICMC radio interview program was repeated at the 2018 ICMC in Daegu, South Korea, and this year we are partnering with Wave Farm and Harvestworks to do the NYC iteration.

Live audio streams from the ICMC are made possible by Wave Farm's Transmit Partner Program at www.wavefArm.org/listen and on the Wave Farm Radio App (iOS). Selected conference events will be broadcast live, or recorded for future broadcast, on Wave Farm's WGXC 90.7-FM Radio for Open Ears in New York's upper Hudson valley. Wave Farm ois a non-profit arts organization driven by experimentation with broadcast media and the airwaves. A pioneer of the Transmission Arts genre, Wave Farm programs provide access to transmission technologies and support artists and organizations that engage with media as an art form.

Eadio droadcast/streaming studio is provided by Harvestworks, located at 596 Broadway, Suite 602, New York, NY 10012. Founded by artists in 1977, Harvestworks is a non-profit arts center that provides a creative environment for experimentation with technologies, instructors, and innovative practitioners in the electronic arts, www.harvestworks.org.

Please refer to www.nycemf.org for our daily schedule details.

KEYNOTE SPEAKER: BRAD GARTON

Brad Garton (b. 1957) is currently on the Music Faculty of Columbia University, where he serves as Director of the Computer Music Center (formerly the Columbia-Princeton Electronic Music Center). He originally studied engineering/biology at Purdue University, ultimately receiving a BS in Pharmacology. At the same time, he co-founded (with Richard K. Thomas) Zounds Productions, a multi-track recording facility specializing in sound design work for live theater. He entered the graduate program in Speech and Hearing Science at Purdue, doing psychoacoustic research under the supervision of Edward Burns and Larry Feth.

Soon his professional sound activities became time-consuming (and lucrative!) enough that he left graduate school, picking up a grant from the Indiana Association of Cities and Towns to work with local governments in developing noise control programs. After several years, Garton decided to "get serious" about his music again and entered the graduate program in music composition at Princeton University. He received his Ph.D. from Princeton in 1989, studying primarily with Paul Lansky and Jim Randall. His dissertation was the development of a natural language/learning system for doing loosely-described signal processing tasks, along with a series of compositions realized using the system.

He has assisted in the establishment and development of more than fifty computer music studios throughout the world. He is an active contributor to the greater community of computer musicians/researchers, formerly serving on the Board of Directors of the International Computer Music Association as editor (with Robert Rowe) of the ICMA newsletter. Garton has been the artistic director or co-organizer of several high-profile festivals and conferences of new computer music.

His past work encompassed research on the modeling and enhancement of acoustic spaces as well as the modeling of human musical performance on various virtual "instruments". He is also the primary developer (with Dave Topper) of RTcmix, a real-time music synthesis/signal-processing language. His recent work has focused upon the use of these tools in musical settings, especially in collaboration with Terry Pender and Gregory Taylor in the internationally-known improvisatory group "PGT". He has written a number of 'language objects' for the Max/MSP authoring environment, melding the capabilities of diverse music and general-purpose programming languages with the extensive music and graphics processing of the Max platform. He has also embedded the RTcmix language inside the Unity Development Environment, making it the first fully-featured generative/algorthmic music package available for VR and AR work.

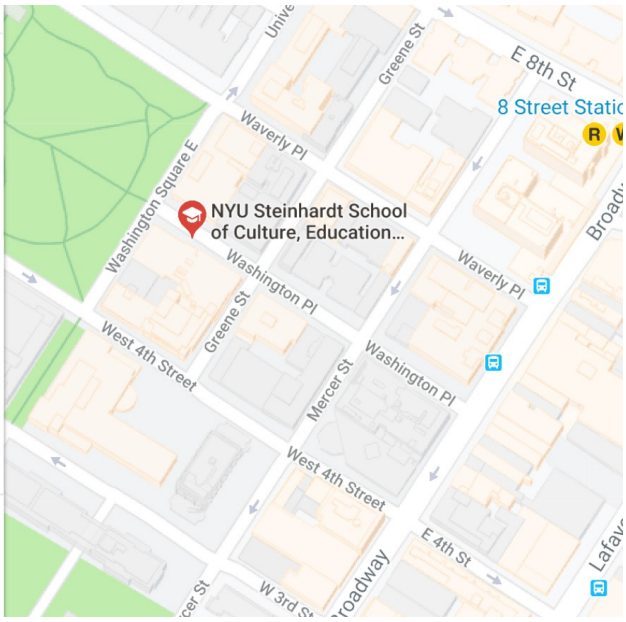
The point of all this work is to continue to make fun new pieces of music, which he does every day.

http://sites.music.columbia.edu/brad

LOCATIONS

NEW YORK UNIVERSITY EDUCATION BUILDING

35 West Fourth Street
Just east of Washington Square Park



HEBREW UNION COLLEGE

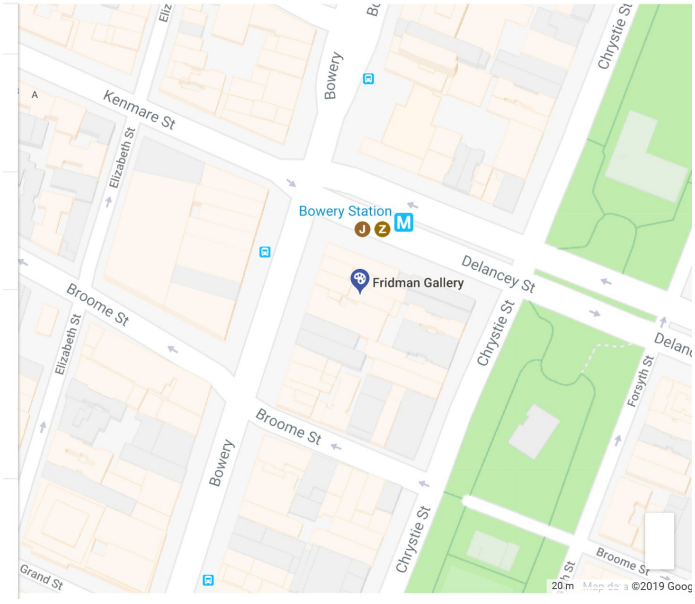
1 West Fourth Street
New York, NY 10012

THE SHEEN CENTER FOR THOUGHT & CULTURE

18 Bleecker Street
New York, NY 10012

FRIDMAN GALLERY

169 Bowery
New York, NY 10002



HARVESTWORKS
596 Broadway
New York, NY 10012

ELMER HOLMES BOBST LIBRARY
70 Washington Square South
New York, NY 10012

KIMMEL CENTER FOR UNIVERSITY LIFE
60 Washington Square South
New York, NY 10012

SCHEDULE

SUNDAY, JUNE 16

9:00 AM-6:00 PM	**Workshops**	NYU Education Building, Room 770-985
8:00-10:00 PM	**Concert 1**	Loreto Theater, Sheen Center

MONDAY, JUNE 17

9:00 AM-6:00 PM	**Immersion Concert 1**	Bobst Library, seventh floor
9:00 AM-12:00 PM	**Paper Sessions**	NYU Education Building, Rooms 771/779
1:30-3:00 PM	**Concert 2**	Loreto Theater, Sheen Center
3:00-4:00 PM	**Panel Session 1**	NYU Education Building, Room 610
4:30-6:00 PM	**Concert 3**	Hebrew Union College
8:00-10:00 PM	**Concert 4**	Loreto Theater, Sheen Center
11:00 PM-12:00 AM	**Concert 5**	Fridman Gallery

TUESDAY, JUNE 18

9:00 AM-6:00 PM	**Immersion Concert 2**	Bobst Library, seventh floor
9:00 AM -12:00 PM	**Paper Sessions**	NYU Education Building, Rooms 771/779
1:30-3:00 PM	**Concert 6**	Loreto Theater, Sheen Center
3:00-4:00 PM	**Panel Session 2**	NYU Education Building, Room 610
4:30-6:00 PM	**Concert 7**	Hebrew Union College
8:00-10:00 PM	**Concert 8**	Loreto Theater, Sheen Center
11:00 PM-12:00 AM	**Concert 9**	Fridman Gallery

WEDNESDAY, JUNE 19

9:00 AM-6:00 PM	**Immersion Concert 3**	Bobst Library, seventh floor
9:00 AM-12:00 PM	**Paper Sessions**	NYU Education Building, Rooms 771/779
1:30-3:00 PM	**Concert 10**	Loreto Theater, Sheen Center
3:00-4:00 PM	**Panel Session 3**	NYU Education Building, Room 610
4:30-6:00 PM	**Concert 11**	Hebrew Union College
8:00-10:00 PM	**Concert 12**	Loreto Theater, Sheen Center
11:00 PM-12:00 AM	**Concert 13**	Fridman Gallery

THURSDAY, JUNE 20

9:00 AM-6:00 PM	**Immersion Concert 4**	Bobst Library, seventh floor
9:00-11:00 AM	**Paper Sessions**	NYU Education Building, Rooms 771/779
1:30-3:00 PM	**Concert 14**	Hebrew Union College
3:00-4:00 PM	**Panel Session 4**	NYU Education Building, Room 610
4:30-6:00 PM	**Concert 15**	Loreto Theater, Sheen Center
8:00-10:00 PM	**Concert 16**	Loreto Theater, Sheen Center
11:00 PM-12:00 AM	**Concert 17**	Fridman Gallery

FRIDAY, JUNE 21

9:00 AM-6:00 PM	**Immersion Concert 5**	Bobst Library, seventh floor
9:00-11:00 AM	**Paper Sessions**	NYU Education Building, Rooms 771/779
11:00 AM-1:00 PM	**Workshop**	NYU Education Building, Room 771
1:30-3:00 PM	**Concert 18**	Loreto Theater, Sheen Center
3:00-4:00 PM	**Panel Session 5**	NYU Education Building, Room 610
4:30-6:00 PM	**Keynote Speech**	NYU Education Building, Room 610
8:00-10:00 PM	**Concert 19**	Loreto Theater, Sheen Center

SATURDAY, JUNE 22

9:00 AM-6:00 PM	**Immersion Concert 7**	Bobst Library, seventh floor
9:00-11:00 AM	**Paper Sessions**	NYU Education Building, Rooms 771/779
11:00 AM-1:00 PM	**Workshop**	NYU Education Building, Room 771
1:30-3:00 PM	**Concert 20**	Grand Hall, Kimmel Center
3:00-4:00 PM	**Panel Session 6**	NYU Education Building, Room 610
4:30-6:00 PM	**Concert 21**	Grand Hall, Kimmel Center
8:00-10:00 PM	**Concert 22**	Grand Hall, Kimmel Center

SUNDAY, JUNE 23

9:00-10:20 AM	**Paper Sessions**	NYU Education Building, Room 771/779
1:30-3:00 PM	**Concert 23**	Loreto Theater, Sheen Center
3:00-4:00 PM	**Panel Session 7**	NYU Education Building, Room 610
4:30-6:00 PM	**Concert 24**	Grand Hall, Kimmel Center
8:00-10:00 PM	**Concert 25**	Loreto Theater, Sheen Center

NYCEMF 2019
STEERING COMMITTEE

Ioannis Andriotis, composer, lecturer of music composition and music technology at the University of Oklahoma. https://www.andriotismusic.com/

Angelo Bello, composer. https://angelobello.net

Nathan Bowen, composer, Professor at Moorpark College (http://nb23.com/blog/)

George Brunner, composer, Director of Music Technology, Brooklyn College C.U.N.Y.

Daniel Fine, composer, New York City

Travis Garrison, composer, Music Technology faculty at the University of Central Missouri (http://www.travisgarrison.com)

Doug Geers, composer, Professor of Music at Brooklyn College (http://www.dgeers.com/)

Michael Gogins, composer, Irreducible Productions, New York City (http://michaelgogins.tumblr.com)

Elizabeth Hoffman, composer, professor at New York University (https://wp.nyu.edu/elizabeth_hoffman/)

Hubert Howe, Professor Emeritus of Music at Queens College (https://www.huberthowe.org/)

Howard Kenty, composer, Stony Brook University, Brooklyn, NY (http://hwarg.com)

Judy Klein, composer, New York City

Eric Lyon, composer, Professor of Music at Virginia Tech University (http://www.performingarts.vt.edu/faculty-staff/view/eric-lyon)

Akio Mokuno, composer and performer, New York City. (www.akiomokuno.com)

Michael Musick, composer, Assistant Professor, University of Montana (http://www.umt.edu/mediaarts/fwp_portfolio/michael-musick)

Dafna Naphtali, composer, performer, educator, New York City (http://dafna.info)

Daniel Pate, percussionist (http://www.danielpatepercussion.com/)

Tae Hong Park, composer, Music Technologist, New York University, New York (http://steinhardt.nyu.edu/faculty/Tae_Hong_Park)

Izzi Ramkissoon, composer and performer, New York City

David Reeder, composer, developer, installation artist, New York City (http://mobilesound.org)

Paul Riker, composer, Lead Audio Development Engineer, Visualization Lab, King Abdullah University of Science and Technology

Meg Schedel, composer, Professor of Music at Stony Brook University (http://www.schedel.net)

Madeleine Shapiro, cellist, New York City (http://www.modernworks.com/)

Joshua Tomlinson, composer (http://www.joshuadtomlinson.com/)

Mark Zaki, composer, Professor of Music at Rutgers University

STAFF

Hubert Howe, Co-Director and NYCEMF co-founder

Tae Hong Park, Co-Director

Travis Garrison, Chief Audio Engineer and Technical Director

Ioannis Andriotis, Assistant Technical Director

Angelo Bello, Assistant Technical Director

Joshua Tomlinson, Assistant Technical Director

Daniel Neumann, Assistant Technical Director

Michael Musick, co-director for Installations

Tae Hong Park and **Michael Gogins,** co-chairs for papers

Andrew Phillips and **Michael Musick,** co-chairs for Installations

Tae Hong Park, Chair, Workshops, Panels, and Internet Radio Programs

Mengjie Qi, Assistant

———

NYCEMF logo designed by Matt and Jeremiah Simpson.

———

VOLUNTEERS AND INTERNS

Andrew Phillips, Cameron Koo, Eriich Barganier, Gareth Wong, Han (Lily) Han, Ian Macdougald, Jeremy Hykras, Josh Stark, Julian Cornell, Kenji Hirotomi, Leo Chang, Michel Vazirani, Mijia Xu, Moto Suzuki, Saksham Trehan, Scott Murakami, Tianning Liu, Toshi Tsuruoka, Virginia De Las Pozas, Xianda Wang, Yichen Zhang

REVIEWING

Music Reviewers

The New York City Electroacoustic Music Festival gratefully acknowledges the assistance of the following people, who helped review the submissions to the festival:

Marc Ainger
Miriam Akkermann
Ioannis Andriotis
Andrew Babcock
Christopher Bailey
Mark Ballora
Christian Banasik
Stevfen Beck
Angelo Bello
Jason Bolte
Nathan Bowen
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Hubert Howe
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Howie Kenty
Keith Kirchoff
Esther Lamneck
Wuan-chin Li
PerMagnus Lindborg
Dariusz Mazurowski
Mikako Mozuno
Takeyoshi Mori
Chryssie Nanou
Jon Nelson
Daniel Neumann
Charles Nichols

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John Thompson
Robert Scott Thompson
Sever Tipei
Joshua Tomlinson
Yu-Chung Tseng
Kari Vakeva
Adam Vidiksis
Rodney Waschka
Samuel Wells
Mark Zaki

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Leila Adu-ilmore
Miriam kkermann
Jesse Allison
Francesco Altilio
Daichi Ando
Areti Andreopoulou
Ted Apel
Luc Ardaillon
Alyssa Aska
Massimo Avantaggiato
Hanae Azuma
Alexis Bacon
Milad Bagheri
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Erich Barganier
Amy Barnett
Andre Bartetzki
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mike frengel
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Pete Furniss
Samir Gangwani
Brian Garbet
Jorge Garcia Moncada
Travis Garrison
Douglas Geers
Daniel Gomes
Sandra Gonzalez
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Yingjia Guo
Mariam Gviniashvili
David Haberfeld
Nathaniel Haering
Rob Hamilton
DO Hana
James Harley
Joshua Harris
G. Blake Harrison-Lane
Patrick Hartono
Akiko Hatakeyama
Sam Hayden
Lauren Hayes
jing he
Jonathan Higgins
David Hirst
Pinda Ho
Ulf A. S. Holbrook
Revital Hollander
Yu Hong
Cat Hope
Andrew Horner
Matthew Horrigan
Tim Howle
Xiao Hu
Chih-Fang Huang
Peter Hulen
Joel Hunt
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Sun Jung Im
Niloufar Iravani
Kim Je Chang
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Siting Jiang
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Jia Li
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Tao Li
Wuan-chin Li
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Sohyun Lim
Ying-Ting Lin
PerMagnus Lindborg
Cort Lippe
Tsung-Ching Liu
Christopher Lock
Alex Lough
Michael Lukaszuk
Jens Lüstraeten
Eric Lyon
Robert Mackay
Chris Malloy
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Dmitri Mazurov
Dariusz Mazurowski
Robert McClure
Clovis McEvoy
Cory McKay
Andrew McPherson

Augusto Meijer
Gan Mengdi
Mark Micchelli
Christos Michalakos
Nicolas Misdariis
Chase Mitchusson
kobayashi mizuki
Ronald Mo
Barry Moon
Takeyoshi Mori
Jeff Morris
james moses
Yunze Mu
Hibiki Mukai
Rutger Muller
Juhan Nam
Mirjana Nardelli
Robert Newcomb
Hiroki Nishino
Erik Nyström
Serin Oh
Yemin Oh
Des Oliver
Naoto Ono
Daniel Oppenheim
Naotoshi Osaka
Sarah Ouazzani Touhami
Ken Paoli
Sihwa Park
Soon-young Park
Sue Jean Park
Carol Parkinson
Paolo Pastorino
Tim Pauli
Stephen Pearse
Anders Bach Pedersen
li pengyun
Gaspar Peralta
Sean Peuquet
Timothy Polashek
Henrique Portovedo
Laurent Pottier
Chad Powers
Miller Puckette
Mengjie QI
YI Qin
Shuang Qu
Brian Questa
David Rafferty
Izzi Ramkissoon
Jorge Ramos
Patrick Reed
Elena Riaño
Carter Rice
Jason Richmond
Martin Ritter
Bradley Robin
Ruud Roelofsen
Neil Rolnick
Jøran Rudi
Stephen Ruppenthal
Adriana Sa
Diana Salazar
Spencer Salazar
Arshia Samsaminia
Mihir Sarkar
Jorge Sastre
Ayako Sato
Carla Scaletti
Przemyslaw Scheller
Philipp Schmalfuss
Diemo Schwarz
Ambrose Seddon
JeongWook Seo
Seth Shafer
Judith Shatin
Lin Shen
Siyang Shen
Meifen Shih
Parsa Shomali
Josh Simmons
Ivan Simurra
Wing Lam Sin
Eva Sjuve
Benjamin Smith
Jacob Smith
Tamara Smyth
Hugo solis
Edmar Soria
Adam Stanovic
Christine Steinmeier
Austin Stillwell
Eli Stine
David Su
Jacob Sudol
Ahn Sukyoung
Ania Sundstrom
Jacob Sundstrom
Stevie Sutanto
Mamoru Takano
Akira Takaoka
Mengxue Tan
Hao Te
Anna Terzaroli
Maxwell Tfirn
Zach Thomas
John Thompson
Robert Thompson
Seth Thorn
Christopher Tignor
Sever Tipei
Matteo Tomasetti
Massimiliano Tonelli
Pierre Alexandre Tremblay
Kent Underwood
Mariana Vieira
Mark Volker
Henrik von Coler
Clemens von Reusner
Andrew Walters
Daniel Walzer
Barry Yuk Bun Wan

Chi Wang
chihyun wang
Johnty Wang
Jun Wang
Lu Wang
Kristina Warren
Ai Watanabe
Andreas Weixler
Ruolun WENG
Nathan Wolek
Kristina Wolfe
Jim Woodhouse
Garling Wu
Yifan Wu
Sunhuimei Xia
Du Xiaohu
Shahrokh Yadegari
Jo Yeabon
Matthew Yee-King
Woon Seung Yeo
Tsun Yeung
Steven Yi
Dai yongbing
Minjoon Yoo
Ji Won Yoon
Michele Zaccagnini
Mark Zaki
Dong Zhou
Lidia Zielinska

Installation Reviewers

Arne Eigenfeldt
Calvin Lee
Chris Malloy
Clovis McEvoy
Douglas Repetto
Eirik Arthur Blekesaune
Hunter Ewen
Jacob Sundstrom
Joo Won Park
Matthew Bethancourt
Michael A Musick
Michael J Spicer
Ryan Maguire
Simon J Hutchinson
Stephen Rush
Teresa M Connors

CONCERT PROGRAMS & NOTES

Concert 1
Sunday, June 16
8:00-10:00 PM
Loreto Theater

Program

Jørgen Teller
Plane Z's 22'10"

Brian Ellis
Small Music 4'30"
violin

Ulf Holbrook
Forest Glade 5'04"

Chris Malloy
Cold Light 6'17"
Keith Kirchoff, piano

Gerald Eckert
about water III 10'15"

INTERMISSION

Douglas Geers
Sapling 11'
Keith Kirchoff, piano

Ragnar Grippe
Sculpting Moments 12'36"

Chenyu Sun
Sonnet of Light, Shadow and Illusion 3'36"
video

Gerard Gormley
Odessa 10'48"

Bradley Robin
Becoming 12'25"
Sara Church, dancer

works without a performer are fixed media

Program Notes

Jørgen Teller, *Plane Z's*
Uses special intervals panned out in large number of speakers, thus creating spatial experiences and states. Recorded vibraphone and 2 violins are used.
First version for 16 tracks was in an acousmatic speaker-orchestra consisting of 42 speakers at IAC Malmø – who commissioned the work. Later PLANE Z's has been performed at Intonal 2017 and SPIR Festival. A stereo-mix is available on Jørgen Teller's 3CD BOX οδοιπορικό (=Travelogue).
https://vimeo.com/202009876

Brian Ellis, *Small Music*
Exploring divested compositional agency, *Small Music* works to expose the most intimate details of any performance. This algorithmically generated piece is unique for every performance, and the performer is expected to be performing the work at first sight. This intentional situation of performance prima vista works to highlight both the performer's prowess and humanity. Comprised of a simple soloist's line set against simple electronic counterpoint, this intimate work explores our imperfect human nature.

Ulf Holbrook, *Forest Glade*
Forest Glade is an abstract narrative of imagined wildlife in a clearing in a forest. The spatial motions of the individual and clustered acousmatic sounds creates certain characters moving through the space. And through custom algorithmically generated sound trajectories, the motions of these sound characters fluctuate around the space. At times wildly, at times calm.

Chris Malloy, *Cold Light*
Cold Light was composed in tempore belli. The title is from the phrase, "in the cold light of day," referring to any objective, disquieting evaluation of past decision making. While I was composing this piece, American forces launched a massive assault on the city of Fallujah; the death toll for American soldiers in Iraq reached 1,000; and estimates ranged from 25,000 to 100,000 Iraqi civilian deaths. Most of those civilians were killed during American airstrikes. Most were unarmed women and children. I dedicate this music to their memory.

Gerald Eckert, *about water III*
Processes of approximation, or rather the oscillation between abstract and concrete states, determine the construction of about water II. By sampling the characteristics of sound progression, information is revealed about the spatial consistency of individual moments, and also their positions within a time texture. The ascertainment of their positions also reveals something about the relation of sound texture and its characteristics, of the superposition of materials, parametrically mutated and transformed in complex ways. At the same time, space serves as a projection

area, which, by striding through, acquires its own individual shape.

Douglas Geers, *Sapling*
Sapling is a meditation on potential and vulnerability. The title derives from a gift I received years ago from my father. He had traveled to California and returned with tiny saplings of Sequoiadendron giganteum, the giant sequoia tree; and he gave one sapling to each of his children. This piece is dedicated to his memory. In performance, a piezo microphone is affixed to the music rack of the piano, and its signal is fed into a Max/MSP patch created by the composer. The electroacoustic portion of the music consists entirely of processed live audio from the piano, including finger taps and scrapes near the mic.

Ragnar Grippe, *Sculpting Moments*
Music as sculpture or at least the sounds being seen as bodies. Also a world where anything said is a truth. Or ? Meeting the abstract through the eyes of the well-known, harmonies giving comfort before.....

Chenyu Sun, *Sonnet of Light, Shadow and Illusion*
This video combines light and shadow to show the mix of traditional, oriental and modern aesthetics of the poem. The imagery in the poem conveys the author's own conception about time and space between himself and the world. The use of several traditional Chinese characteristics in a modern garden and in a virtual space shows the structure of time in a traditional and modern sense. These combinations indicate the author living in an integration of the world and the fusion of art. The audio is based on Logic and Ableton Live production, and use Max / Msp for parts of the sound. The use of a synthesizer sound with electronic melodies with the distortion of the national tone of the East indicates a modern fusion of the nation. The change in sonic frequency reflect the concept of light and shadow staggered. The video and audio together shows the combination of light and illusion, oriental tradition and modern time and space together to create an image of the sonnet.

Gerard Gormley, *Odessa*
Odessa embodies the idea of the past looking back on itself. It takes inspiration from 1990's 'glitch' music, as in Cascone's classic text (2000), and equally, compositional methods inspired by composers ranging from Xenakis (microsound, tape splicing) to Horacio Vaggione (granular synthesis). However, it treats these in a fundamentally old-fashioned way. Everything in the piece is constructed by hand, whether subtle acoustic manipulations, or the layering of thousands of fragments across the 10-minute work. It therefore has as much in common with the reel-to-reel experiments of the musique concrète era as it does with modern 'noise music'.

Bradley Robin
Becoming
Becoming tells the story of a protagonist's discovery and mastery of his inner voices in conjunction with growing clarity of his past and a greater synchronicity with the present. The piece explores the many ways and relationships between the discovery, acknowledgment, coping, and eventual healing from trauma. Video is used as a way to provide imagery and symbolism of past and present. Imagery may include collages of memories, faces of impactful people to the protagonist, as well as abstract imagery enhancing or reflecting the energy of the moment. Dance is used (in conjunction with music) to portray the relationship between feelings and their triggers, the latter can be images on screen and/or voices diffused through the immersive speaker system. The protagonist reveals his relationship to music as both a personal inspiration, spiritual anchor, and eventual way to integration, health, and eventual creative prosperity.

Concert 2
Monday, June 17
1:30-3:00 PM
Loreto Theater

Program

Linda Marcel
Absurdity 6'30"
Enzo Filippetti, alto saxophone

Zach Thomas
Husk 12'03"
fixed media

Jessica Rudman
My Father was a Ventriloquist 6'30"
Daniel D'Addio, trumpet

Hongshuo Fan
Handwriting WuXing 13'
live electronics, video

Chi Wang
Qin 6'36"
data-driven instrument

Nicholas J. Hubbell
Apollo 10'30"
SPLICE ensemble: Samuel Wells, trumpet
Adam Vidiksis, percussion
Keith Kirchoff, piano

Flannery Cunningham
Eh/k/oh 8'41"
SPLICE ensemble: Samuel Wells, trumpet
Adam Vidiksis, percussion
Keith Kirchoff, piano

Se-Lien Chuang
ignition 50 for ELAK 8'10"
fixed media

Riccardo Santoboni
Terra 6'52"
Enzo Filippetti, tenor saxophone

Program Notes

Linda Marcel, *Absurdity*
Absurdity challenges the performer to create unique and interesting tonal qualities on the few pitches given within the composition. The 3-minute section of improvisation asks for free interpretations to include the elaborations and extemporization of rhythmic ideas while keeping within the pitch parameter given, with use of a full and extended range. Any extended techniques are welcome. The task of the saxophone performance is to create a juxtaposition to the fixed media electronics. Absurdity challenges the performer to create a playful drama.

Zach Thomas, *Husk*
Husk is a study of dissection, classification, and reanimation. The work uses ancient texts on anatomy from Ibn Sina, Aristotle, Cicero, and Francis Bacon as an impetus for examining and defrauding sonic material of its structural identity. Shattered objects are rebuilt from salvage and mobilized for surrogacy.

Jessica Rudman, *My Father was a Ventriloquist*
My Father Was a Ventriloquist is one of most personal pieces I have ever written. Growing up, I had a difficult relationship with my father. When I was in my 20s, he abruptly left my mother and went into a tailspin. During the few years after their divorce, I spoke to him on the phone periodically, but the stories that I got from him were very different from the picture of his life that he painted to other family members. I gradually realized that what I thought was alcoholism in remission was in fact the tip of a much larger iceberg of addiction. When I was commissioned to write a work for trumpet and electronics, I decided to confront my feelings about my father. The work is a modern take on the art song, although the narrator is disembodied and frozen in a recording. The trumpet serves as a sort of commentary, sometimes supporting the text, sometimes screaming over it, always adding a layer of emotional expression beyond what is spoken.

Hongshuo Fan, *Handwriting WuXing*
Handwriting WuXing is a multimedia interactive performance for the Leap Motion controller and Chinese calligraphy stroke gesture recognition system. In this composition, the composer not only to use hands' and fingers' position data in 3D space reports by the Leap Motion, but combine those accessed data with Machine learning system to build a Chinese calligraphy stroke gesture recognition system, then to control and modify physical modelling sound and live-generate image (Max/MSP and DIPS) in real-time. Therefore, the hands' movements in the air and dynamic gesture as well as live processing audio and video create lively intermedia experience to reveal the Chinese fivefold philosophy conceptual scheme of the five elements, or WuXing, as dynamic states of change, that many traditional Chinese fields used to explain a wide array of phenomena, from cosmic cycles to the interaction between internal organs, and from the succession of political regimes to the composition of arts.

Chi Wang, *Qin*
Qin is a real-time interactive composition of approximately eight minutes in duration for two custom-made performance interfaces, custom software created in Max, and Kyma. Qin ( ) is a special symbol in Chinese culture and literature that is associated with delicacy, elegance, confidence, power, eloquence, and longing for communication. The symbol Qin appears in literature as early as the time that the Book of Songs was collected. Qin is also a Chinese instrument. Qin has been played since ancient times, and has traditionally been favored by scholars and appeared in literature as an instrument associated with the ancient Chinese philosopher Confucius. In my composition *Qin*, I took as inspiration the shape of the original Qin instrument and mapped some of the traditional functions on to my custom-made performance interface, replacing the traditional Qin performance techniques with newly developed techniques that draw the desired data from the controllers.

Nicholas J. Hubbell, *Apollo*
The title of this piece *Apollo* comes from the poem: *Hymn of Apollo,* by Percy Bysshe Shelly. In the poem, Apollo is the owner and dispatcher of all light:

"Whatever lamps on Earth or Heaven may shine,
Are portions of one power, which is mine."

The piece celebrates this light, in many of its manifestations, from subtle intimacies to ecstatic displays. To represent light particles shooting through space, I chose a very short sample of a children's choir. I wanted a sound both pure and irreducible. As the piece begins, these sounds emanate from the fixed media playback, but later they are triggered from an octapad for live performance. As I worked on the piece, I felt I needed to use a fixed media format as opposed to a more interactive one, but I still wanted each performance to be unique. There are sections with varying degrees of improvisation, culminating with all 3 players improvising on a pattern at the end, for the final explosion of light, then fading into darkness.

Flannery Cunningham, *Eh/k/oh*
Eh/k/oh plays with an instrumental expression of text through using whispered, spoken, and sung vowels which act as filters on noisy inputs. This non-vocal (though vocally controlled) speech combines with motoric, regular rhythms to create a kind of mechanistic quality that contrasts with more “human” sections.

Se-Lien Chuang, *ignition 50 for ELAK*
The composition makes use of the digital transformation of the instrumental sounds originating from a Paetzold contrabass recorder. This piece was composed in 16 channel - 8 groups of stereo channel. It is multichannel electroacoustic composition and can be performed in an acousmatic instance by using different characteristics of loudspeakers. Last but not least the subwoofers would be essential for giving a promising restitution of the piece. With respect to the multichannel spatialization and the compositional aesthetics within an electroacoustic and acousmatic connotation I use the stereo grouping positioned in mostly circular arranged loudspeakers for the static impact on the one hand, and the migration of the sounds taking place between the loudspeakers dynamically assembles the circle on the other hand. The piece was realized for a special jubilee in 2014 and was premiered within 55x Acousmonium.

Riccardo Santoboni, *Terra*
Terra (Earth) is one of the four elements. The sound materials are built according to the main frequencies of the earth: The Schumann partials, the lava rivers partials of a volcano, the acoustic beats of seismic waves,etc.(in their original values or rationally distributed in the spectrum). The sax has due sound categories: horizontal profile and large descendant gap (to remember the horizontality of earth vision and the falling from the sky to earth). The melodic profiles, reverberates the partials of the synthesized spectra, and gradually morph one toward the other in different combinations of horizontal and down gap directions, until the reaching of a balance. Sometimes is the sax that excites one of the partials of the spectrum and give rise to spectral evolution, sometime is vice versa.

Concert 3
Monday, June 17
4:30-6:00 PM
Hebrew Union College

Program

Adam Stanovic
Metallurgic 8'16"
fixed media

Sohyun Lim
Disjunction 6'36"
Sohyun Lim, piano

Fred Szymanski
Horn Volley 9'15"
fixed media

Andrew Walters
Volts and Kettles 6'55"
synthesizer and fixed media

Sergio Blardony
Tracto 5'04"
video

Devin Maxwell
Cloudseeding 9 - Wind Harmonics 10'46"
fixed media

Daisuke Kawashima
Timpangee 02 5'
fixed media

Shelly Knotts
Project Group 12'
live video

Ewan Stefani
black drums rolled 5'28"
fixed media

Mark Oliveiro
Thunor's Gate 10'18"
Joshua Michal, horn

Program Notes

Adam Stanovic, *Metallurgic*
In 2015, I was frustrated by an increasingly prominent ‘trope’ that appeared to have emerged within the field of electroacoustic music, in which form appears to rest on little more than the dissimilarity between two sets of materials and their subsequent tussle for dominance. Metallurgic set out to parody this trope, using a wide range of metallic source sounds which were processed with little concern for the inevitable clichés that would result. A sustained pitched sound was ultimately contrasted with various noise-based granular materials, thus establishing the kind of binary contrast similar to that which I was attempting to parody. To my surprise, it was extremely difficult, and enjoyable, to work with this binary. The act of composition was every bit as complex and fascinating as my experience of composition more generally, and I completed the piece having developed a genuine and long-lasting respect for the very trope that I had set out to parody.

Sohyun Lim, *Disjunction*
Disjunction means a lack of correspondence or consistency. Or the relationship between two distinct alternatives. The piece inspired by both definitions.

Fred Szymansi, *Horn Volley*
Horn Volley is a multi-layered electroacoustic composition encompassing resampled brass samples, noise impulses, and other percussive effects. An emitter with multiple audio streams was constructed for the purpose of modifying the material in a multidimensional space. Grouped textures, generated through the application of daemon-like force fields, were applied to a simulated environment of swirling particles and patterns produced by intertextural fluctuation emerged. The piece was created for multi-channel diffusion and is spatialized for eight channels.

Andrew Walters, *Volts and Kettles*
Volts and Kettles is for multi-channel fixed media and live analog Mother 32 Moog synthesizer. It evokes images of currents and boiling, but also of the vultures that roost near my house.

Sergio Blardony, *Tracto*
Endoscopy inside a bass saxophone. *Tracto* is the image of an inert place, which when touched, it becomes an organic center, a confluence of the dry and the moist, the perfect and the throbbing, the calculated and the unpredictable. Is a journey through an interior preserved, the path through the dark cave whose holes arises breathing, halite and noise. Special Mention Madatac 04 Festival (Madrid). Awarded in the Shup Up And Listen! (Viena).

Devin Maxwell, *Cloudseeding 9 - Wind Harmonics*
All of the compositions in my *Cloudseeding* series deal with power dynamics. Specifically, power dynamics that are in play while trying to manipulate the weather. *Cloudseeding 9* uses wind samples recorded at the Sun Tunnels and computer-generated tones that whirl up and down the harmonic series. The wind and tones are related by noise gates controlled by the wind that allow the tones to peek through over the course of the piece. This composition is dedicated to James Tenney and was premiered at the Utah Museum of Fine Arts.

Daisuke Kawashima, *Timpangee 02*
This piece is based on "Future life time". "Future life time" is expected to be greatly different from the current life time. In such a case, the gap that occurs between them becomes "Reverse Science Fiction" in a sense.

Shelly Knotts, *Project Group*
...that Enchantress who has thrown her magical spell around the most abstract of Sciences and has grasped it with a force which few masculine intellects (in our own country at least) could have exerted over it. (Babbage, 1843) Contemporary Witchcraft is a performance project by *Project Group*: a multimedia inter-continental feminist performance group. The performance combines sound, video and movement in a reflection on the interweaving of narratives on programming, women's bodies and mysticism. The performance is telematic with each performer located on a different continent: in Australia, Spain and South Korea. Each performer transmits a different medium which the others respond to, to develop an improvised performance. Knotts live codes music, Cas uses motion tracking devices to transmit movement data and Bahng interweaves archive video footage with live video streams of Knotts and Cas performing. Cas and Bahng's video streams are projected in the performance space alongside the code

Ewan Stefani, *black drums rolled*
Musically, the work explores the disruption and abrupt termination of repeated patterns to suggest short episodes of pulses and rhythms that are never fully resolved or developed. Most of the sounds in the work come from recordings that I made from inside an upright piano, and inside a clock. These sources are juxtaposed with short samples of Baroque string orchestra. Patches in Reaktor and Max were used to create spatial movement (in the 8-channel version) and rhythmic modulation of playback position within each sound. The title of the piece comes from a line in Norman MacCaig's poem 'Sounds of the Day', where the dark sounds in the poem, and silence that follows them represent the intense pain of grief and loss. The relevant extract from the poem is:

When the black drums rolled, it was water
falling sixty feet into itself.

When the door
scraped shut, it was the end
of all the sounds there are.

You left me
beside the quietest fire in the world.

Mark Oliveiro, *Thunor's Gate*
It is a common theme in the legends of the ancients, to elucidate their awe of the world, by drawing a spiritual connection to the forces of Nature. The many mythological paradigms that represent the natural states of cause and effect as a consequence of the mood or wraith of the Gods; gives this work its narrative. Thunor, the God of Sea and Storm, was the Anglo-Saxon model of the Thunder God Thor. With his crashing hammer, swelling seas and violent winds; Thunor is an image of a legendary past that is ripe for an abrasive musical setting. In the course of writing the work I found much inspiration from the musical past of the people who's mysticism I have attempted to evoke; the Germanic peoples of northern Europe. The Bukkehorn is an ancient shepherd's instrument made from the horn of a ram or goat and plays with a warm lamenting beauty that is of interest in the setting of this piece. As Thunor's totemic symbol is the "Ram", it seemed especially appropriate to capture the sound of the Bukkehorn in the composition of the Solo Horn. To further the conceptual

relevance of nature and its connection to the supernatural, the programmatic narrative is thrust upon itself in the aural realm. This work is set for Solo Horn and live electronics. Every sound heard, during the course of the work, is a manipulation of the Horn's raw acoustic self (the natural) or a re-synthesis of a snapshot of the acoustic realm (the Supernatural). The live electronic component of this work is a max/MSP patch and uses a host of synthesis techniques to produce the realtime sonic canvas that underpins the acoustic solo. Granular synthesis, signal delay, frequency modulation and other techniques constitute the complex electronic environment.

Concert 4
Monday, June 17
8:00-10:00 PM
Loreto Theater

Program

Christopher Biggs
A Letter to the Moon 10'
SPLICE ensemble: Samuel Wells, trumpet
Adam Vidiksis, percussion
Keith Kirchoff, piano

Sunhuimei Xia
The Book of Poetry 4'30"
Jing Hu, guzheng

Domenico De Simone
BIOS 10'30"
Enzo Filippetti, alto saxophone

Li Pengyun
XingCao 8'03"
Zhou Keqi, Chinese bamboo flute

James Dashow
Soundings in Pure Duration N. 7 11'12"
Enzo Filippetti, alto saxophone

INTERMISSION

Brian Belet
Loose Canon 12'
SPLICE ensemble: Samuel Wells, trumpet
Adam Vidiksis, percussion
Keith Kirchoff, piano

Eli Stine
Vestigial Wings 5'07"
video

Omar Peracha
Colour Etude II 5'
Keith Kirchoff and Adam Vidiksis, toy pianos

John Wiggins
I am Not a Composer 3'
fixed media

Wilfried Jentzsch
Maqam_Evolution 12'04"
Enzo Filippetti, alto saxophone

Jacob Elkin
Metropolis 13'40"
fixed media

Program Notes

Christopher Biggs, *A Letter to the Moon*
The work draws inspiration from the The Distance to the Moon short story that is part of Italo Calvino's *Cosmicomics.* In the story the characters have an interdependency with the moon: they harvest materials from the moon when it is close enough. However, their situation changes as the moon's orbit widens and it moves further from the earth. When this happens their actions no longer map to the same outcomes and they have no power to control the changing orbit. Additionally, some characters have undisclosed plans that further disrupt the normal flow of events. Musically the electronic processing represents the changing context in which the characters in the story exist: the actions of the performers have a variety of variably-predictable outcomes and the performers are not in control of those outcomes directly.

Sunhuimei Xia, *The Book of Poetry*
This piece was inspired by the *Book of Poetry* from ancient China. The poetry is describing the gentle love between the young lady and gentleman. The tone of this piece is singing this poetry, with the modulation of the timbre to depict the scene and the emotion.

Domenico De Simone, ***BIOS***
BIOS starts from the idea of entrusting the management of all electroacoustic parameters to 'dynamic' Markov matrices. 'Dynamics' in the sense that matrices are subjected to continuous mutations deriving from data processing (pitch, duration, etc.) that are "extracted" from the score played by the saxophonist. *BIOS* has been conceived in order to make evident the action of the matrices that modify the sound of the saxophone and are, in turn, modified. The formal structure is tripartite, with two small "brackets" to highlight, and almost cut out, a slice of the "absolute" time in which this piece is inserted. The first section can be defined as "learning". The matrix, still shapeless, changes modifying itself and "learning" from the performer. In the second section, the part entrusted to the saxophone is written so as to cause

an "emptying" of the matrix, in an attempt to bring it back to a "primitive" state. The last section is only *BIOS… LIFE.*

Li Pengyun, *XingCao*
XingCao (for Chinese bass bamboo flute and live electronic music) is a works which combine the Chinese traditional instrument with modern live electronic music. Many special playing technics are used, such as breath blow sound and random pitch note. except for one routine play technic. The bass bamboo flute lowest pitch is middle c, and the highest pitch around the high c, Sometimes exceed the high c as possible as high. The live electronic music mixed the live sound processing in max/MSP with prepared sound sampled from bass bamboo flute and other Chinese traditional instruments. The title *"XingCao"* refers to the Chinese calligraphy style between the running script and cursive script. it is either like running script or cursive script. It represents the unity of external beauty and internal beauty in Chinese calligraphy, and emphasizes not only the recognition, but also the beauty of external form. It has a delicate brush edge like slim lines, but also dense point. The sound of Chinese bass bamboo flute just as the Xingcao, especially the breath sound play technique. All kinds of sound of the Chinese bass bamboo flute is represents the spirit of XingCao.

James Dashow, *Soundings in Pure Duration N. 7*
The seventh in the series of *Soundings in Pure Duration* provides a wealth of timbres and trajectories in octophonic space designed to place the alto saxophone soloist in the middle of varying degrees of transformative motion, musical and physical. No, the saxophonist doesn't fly around the hall, but the three-dimensional temporally structured spatialization of the constantly evolving sounds creates the impression of everything, including the soloist, moving in contrapuntal complexities.

Brian Belet, *Loose Canon*
Loose Canon was composed in 2017, although the title and general concept had been floating around since 2011. Designed for any three instruments and real-time Kyma computer processing, the music was first composed as independent gestures within the section plan of Introduction, Canon 1, Interlude 1, Canon 2, Interlude 2, Canon 3, Postlude, and Coda. For any given instrumental trio, these Ur-gestures are adapted to the specific instruments involved. Within a given section, the performers are invited to explore the notated gestures in any order (including repetition and/or omission), and rather strict subject-answer procedures are followed in the three Canon sections. The Kyma processing includes several independent real-time analysis/resynthesis algorithms running in parallel. Additional processing includes granulation, cascading echo delay, and nonlinear synthesis. This composition is jointly dedicated to Allen Strange (1943-2008), Stephen Ruppenthal, Bruno Liberda, & Keith Kirchoff.

Eli Stine, *Vestigial Wings*
At the boundary of the desert
Beneath the telescopic sky
I stopped to take the world in
As it went on rushing by

I thought ten hundred futures
Of what could and would become
As the dark of night got closer
Slipping disk of orange sun

I thought of all I'd loved and lost:
Of dropped, forgotten things
Of books with unread pages
Broken roots, vestigial wings

I thought of names gone unremembered,
And of places never seen,
Of the last of every species,
Silent forests, noiseless seas

And as dusk made way to nightfall
Black sky pricked with yellow light
I had not moved a single muscle
And so doing lost my life

Because in thinking and not doing
All I did was just compare
What could and would become of
Rather than what was really there

Omar Peracha, *Colour Etude II*
Colour Etude II was commissioned by keyboardist Xenia Pestova. The piece is scored for one or two toy pianos and iOS Device. The piece is the second in a series exploring the strict application of certain spectral techniques influenced by the research of William Sethares, after *Colour Etude I*, this time with an added emphasis on improvisation. It makes use of two pitch sets; one from the spectral analysis of a toy piano's C4 (middle C), and one from its F4. The electronic components of the piece are controlled with the *Colour Etude II: Live Electronics* application for iOS, developed specially for the piece by the composer. They consist of two procedurally-generated and evolving soundscapes derived from the the analysed spectra, which provide the backdrop for the piece, and a sampler which contains toy piano notes tuned to pitches from these spectra that would otherwise be unplayable (microtones and notes in an extreme high register).

John Wiggins, *I am Not a Composer*
All my life I have found ways to make sounds and use them to some end. Always organized whether guitar notes or birds, but I don't like to be called a "composer". I don't think I am. I invent procedures to follow, schemes to try and see what sounds I get. I don't like to repeat my sounds at all so I'm sort of a "serialist" but honestly I create recordings. I do love sound and I have my own relationship to it. I love to listen, life vibrating all around me and I can create with it, an endless supply of paint to

use. It brings me great joy.

Wilfried Jentzsch, *Maqam_Evolution*
This piece is a result of my preoccupation of microtone composition. The Modus is a diatonic scale with quarter tones based on the following proportions: 100-250-250-100-200-50-250 Cent. The character of this piece is melody-dominant with figurations which develops more and more complex to reach the climax where the melody transforms to multiphonics. This composition is structured by a large number of phrases varying in character and time. Each phrase is separated by a short silence. The first version of this piece composed in 1983 was for alt-saxophone solo. Last year the idea to create a new version with electronics came into my mind. The function of the electronic part is to give this piece a new spatial dimension. For the electronic part the saxophone part has been analyzed in short samples by computer to create an evolution of harmonics. The short samples interpolated create a continuous evolution of harmonics in which short delays and fine granulated spectra have been added.

Jacob Elkin, *Metropolis*
Metropolis is an audio coded piece built in Supercollider which uses a great deal of limited randomness to create a unique performance while maintaining the identity of the work. The pitches are chosen at random from a selection of 24 “quarter-tone” intervals which are justly-tuned using 13-limit consonant ratios. Each tone’s individual timbre, duration, envelope and spatialization are chosen by the program within set parameters. Like the inhabitants of a city, they act uniquely within a cultural setting. The pitches are accompanied by recordings which emphasize the features of each section and are taken from my experience traveling through some of the great cities of the world.

Concert 5
Monday, June 17
11:00-12:00 PM
Fridman Gallery

Program

Adam Tindale and Angus Tarnawsky
Improvisation for Computer Musicians 10'
laptop computers

Junzuo Li
Style, Color and Space 4'15"

Robin Meeker-Cummings
Vivify 11'13"

Alyssa Wixson
The Mine of the Unconscious 5'36"

Andrew Dolphin and Ben Ramsay
Crizzle 6'29"

Epa Fassianos
ElectroSantouri 14'12"

all works except the first are fixed media

Program Notes

Adam Tindale and Angus Tarnawsky, *Improvisation for Computer Musicians (for David Wessel)*
We present an improvisation between two self-identified computer instrumentalists. What began as a preparation for a performance turned into a discussion about the relationship of a performer to their instrument and if and how that relationship differed between acoustic and computer musicians. The discussion continued and the performance was never prepared. What remained was a lengthy discussion about each other's convictions and questions about the relationship between performer and performance, and the duty of the performer to the audience. We continuously circled back to the ideas of control, intimacy, and communication. Originally trained as drummers, then moving their practice to the computer, we have been heavily influenced by both the theory and practice of David Wessel and his many collaborators. In an attempt to show our respect for the late David Wessel we utilize only the trackpads of our laptops to reference both the SLABS controller and the seminal paper “Problems and Prospects for Intimate Musical Control of Computers.”

Junzuo Li, *Style, Color and Space*
This is an Electro-Acoustic Music piece,the composer's idea of"sound gestures"was created by making a "gesture" on the sound of different types of sound materials, Try to show how different styles and colors are meet in space and in the form of combinations, while also seeking a balance between the tone and noise used in electroacoustic music.

Robin Meeker-Cummings, *Vivify*
I picked the name *Vivify* because I was working with the sounds of storms and animals. I imagine the rain forest awaking with the thunder storm. In this piece I was considering the types of animal sounds I used, what their natural habitats are, and where they live in the world.

Alyssa Wixson, *The Mine of the Unconscious*
The Mine of the Unconscious is a programmatic work for fixed media consisting entirely of original sounds designed through FM synthesis. The musical program is a metaphor for the creative journey taken by visual artists, writers, filmmakers, and musicians alike as they search within themselves for artistic inspiration. In the program, the seeker, tempted by the spectre of

inspiration, enters a system of caverns. They consider their passions as they skirt the Land of Fire; they confront their fears as they pass through the Land of the Dead. Always, some guise of the half-formed idea is in front of them, leading them on. Finally, they reach the Inmost Cavern of their mind, glittering with precious gems. The seeker takes one of these gems, but they are not unopposed; a monster threatens to stop the seeker from taking the treasure away. Pursued by the monster, the seeker escapes to the upper air with the treasure for which they came, a pure, fully-formed idea which need only be cloaked.

Andrew Dolphin and Ben Ramsay, *Crizzle*
Contacts, collisions, and energy transfers give way to fracturing textures with hints of a literally deconstructed piano.

Epa Fassianos, *ElectroSantouri*
ElectroSantouri is an acousmatic work which includes transformed soundworlds emerging from a traditional Greek instrument called Santouri. The Santouri is mainly used for traditional ceremonies such as weddings or Hellenic islands' local feasts. I decided to make use of this instrument in a totally different way; by exploring its pitch and gestural possibilities and by using its idiomatic sound as a basis for transformed soundworlds. A number of electronic works featuring the Santouri have been composed but through detailed research I found out that in these works, the instrument was used in its natural form whereas other electronic sounds were added in the background. In opposition to these works, my work features new sound textures emerging from the instrument itself as the main compositional tool. This work has been composed as part of the composer's PhD Portfolio of Works, with title: "Portfolio of Electroacoustic Compositions".

Concert 6
Tuesday, June 18
1:30-3:00 PM
Loreto Theater

Program

Connor Kirts
Suite from Soundtrack+ 5'06"
Connor Kirts, laptop

Marc Evanstein
Barlicity 12'
Marc Evanstein, piano

Yingzi Li
Pieces of recollection and remaining impression 6'19"
fixed media

Yifan Wu
A Glove with some Sensors 7'
Yifan Wu, live electronics

Daichi Ando
Whitehearted 6'52"
Enzo Filippetti, tenor saxophone

Jeffrey Stolet
ImPossible 8'
Jeffrey Stolet, performer

Carter J. Rice
Grain Elevator 5'45"
Samuel Wells, trumpet

LanQing Ding
The possibilities of freedom 7'40"
Samuel Wells, trumpet

Zeynep Ozcan
Inconnu 4'30"
fixed media

Stevie Sutanto
inMemory (sound-ritual) 7'30"
Stevie Sutanto, bowls

Jordan A. Key
God Ourselves 7'40"
Keith Kirchoff, piano
Eleonora Claps, soprano

Program Notes

Connor Kirts, *Suite from Soundtrack+*
Suite from Soundtrack+ was the composition that was created in 2018 to test participants in an affect study. Although created as part of a research study, it also stands alone as a composition. The work is intended to be performed live from a laptop on stage. Panning and diffusion is realized through a Max patch that was specifically created for the piece and the research. *Soundtrack+* aims to measure the amount of participant-reported change in affect, resulting from the participants listening to various multichannel panning patterns. The ultimate goal of this project is to see if it is possible to capture user-reported data regarding a change in affect, and then after an analysis, incorporate multi-channel patterns into a composition that would elicit a predictable and replicable change in affect for those participants.

Marc Evanstein, *Barlicity*
Barlicity is a modular work that can be presented in three different configurations, under the following names: (1) *Barless* for piano and detuned sine waves, (2) *City* for stereo fixed media, (3) *Barlicity* for piano and fixed media. *Barless* is, in its conception, a solo piano work. However, since it is based harmonically on a form of just intonation, I chose to create a fixed media part consisting of a subtle backdrop of detuned sine waves that bend the pitches towards their true frequencies. *City* grew out of a faster moving accompaniment part to Barless, which I ultimately decided to feed into the CREATE Modular Synthesizer at UCSB and turn into a fixed media piece. Many mixes and iterations later, it has arrived at its current form. Although *City* is a stand-alone tape piece, I chose to retain and refine its complementarity with the *Barless* piano part. When the piano part for *Barless* is combined with *City,* the result is *Barlicity* for piano and fixed media.

Yingzi Li, *Pieces of recollection and remaining impression*
Life is to remember those years one have gone through, either happy or sad, sometimes sweet and sometimes bitter, yet they can become great spiritual wealth.Since I have long lived abroad my versatile memories and impressions of China have slowly grown blur and intermittent. My work using and combining unique Chinese instruments such as Yangqin Erhu Banhu Guzheng Guqin processed vocals etc. enabled me to achieve new sound image colors. They are sometimes clear, sometimes vague and abstract. Thus one can hear my identity in sound, memorable and impressive moments of my life.

Yifan Wu, *A Glove with some Sensors*
A Glove with Some Sensors is an interactive composition for custom-made performance interface, custom software, and Symbolic Sound Kyma. The composer attempts to study and explore date-driven instrument through the process of building the interface, composition, and performance. The control data of this piece is derived from the performative actions selected by the composer include bending finger joints, contacting two fingers using different pressure, hand movements in 3D space. After mapping data through a software layer, the data is eventually routed to the sound synthesis environment - Kyma. During the performance, the control data is sent to Kyma in real-time so that the performer can control the sounds' timber, pitch, location, duration, and volume.

Daichi Ando, *Whitehearted*
Whitehearted has been composed for Yoko Shishido, a Japanese saxophonist. All phrases, harmonies and computer sounds is suitable for her very tender tenor saxophone tone. The composition process of the *Whitehearted,* two Interactive Genetic Programming system, a kind of machine learning technique but it is for cooperation with a human composer interactively to generate quite new composition methods, developed by a composer. Two Interactive Machine-learning system, harmony generation, scale generation is used to compose this piece, *Whitehearted.* In the first Interactive Machine-learning system, computer programs, which generates harmony progress takes past generated harmony progress as input, are emerged. In the second Interactive Machine-learning system, computer program which generates scales suitable for harmony progresses in generated by the first system.

Jeffrey Stolet, *ImPossible*
ImPossible is an interactive performance composition for three custom-made infrared sensors, Max and Kyma. *ImPossible* is a true virtuoso performance work that requires the rapid execution of thousands of notes within short timespans. *ImPossible* is about musical speed and pounding action controlled through physical micro- and macro- movements. Through waves of musical intensifications the interaction between performer and instrument drives the dramatic thrust of the composition to its final climax. The title is a play on words that refers the extreme technical difficulties of performing the piece – *ImPossible* – and the idea that these impossible difficulties can be overcome – *ImPossible.*

Carter J. Rice, *Grain Elevator*
Growing up in the rural Midwest, grain elevators were a daily sight. These tall, almost ominous structures provided inspiration for this piece in both a technical and an aesthetic sense. Large, rising gestures reminiscent of the powerful mechanisms which move grain up and down these structures intersect with granular synthesis to create this piece.

LanQing Ding, *The possibilities of freedom*
The source of inspiration of this piece comes from the word "infinity" of "Xiaoyaoyou" which is written by a Chinese philosopher Zhuangzi, a founder of Taoism. According to the theory of Zhuangzi, the concept of infinity is a state of freedom. In this piece, infinity is shown by a relationship between the trumpet and the computer that are correlated each other by a free multilayer and multi-relationship, which will provide a sense of space representing the possibility of freedom.

Zeynep Ozcan, *Inconnu*
In *Inconnu,* each sound is designed for separate speakers, but each channel is considered to be laid out in a linear fashion where one sound could only travel into adjacent channels, implying a strict directionality. However, when the piece travels in space, the building itself adds various effects beyond what the composition affords and further interrupts the linearity of the sonic trajectories depending on the placement of loudspeakers. Through the diffusion of the piece, the artist obscures the trajectories determined during the composition process. Still, through close listening, the audience can untangle this ambiguity and recognize the underlying trajectories that are deeply embedded into the composition.

Stevie Sutanto, *inMemory (sound-ritual)*
Four augmented singing bowls are used to facilitate a ritual, containing the memory of the souls. The singing bowl is crackling and sparkling for at least one life that has been taken. A ritual specialist conducts the ritual by listening to the crackles and producing sound from the bowls as a colotomy to the ritual. It provides time and space for the audience to make their wishes, prayers, or hopes for the world. The goal is, however, not to inform, but to console those who were left by their loved ones. The four singing bowls are augmented by piezo, transducers and LEDs in order to produce the candle-like flickering and crackling from the inside. The performer listens to the crackling sound and improvises using violin bow and mallet. The performance is half structured and half improvised.

Jordan A. Key, *God Ourselves*
Written in collaboration with poet Karen Garry, *God Ourselves* is part of an ongoing project to contribute to the relatively small repertoire of gay or "queer" themed art song. As residents of central Florida, active members in the LBGTQ community, and present in Orlando on June 12, 2016, the composer and his partner were directly affected by the Pulse Nightclub shootings. Having lost friends and community close to them - feeling anger, horror, and fear - the composer wrote this music within the week following the massacre. Attempting to speak to a broader community of queer peoples beyond his state and country, this piece is accompanied with recordings of international LBGTQ poets reading the song's text in English as well as in each poet's own native language, including French, German, Polish, Arabic, Afrikaans, and Xhosa.

Concert 7
Tuesday, June 18
4:30-6:00 PM
Hebrew Union College

Program

Oliver Hickman
Tight Ratchet 7'42"
Andrew Koss, soprano saxophone

Jun Wang
Door of the soul 4'54"
fixed media

Sue Jean Park
Panorama 5'24"
Jacob Kopciensky, alto saxophone

Mark Vaughn
Basketball and Cricket 2'26"
fixed media

Lucas Rei Ramos
Peito de Lobo 9'30"
Danica Borisavljevic, piano

Kyong Mee Choi
Pendulum 8'56"
Scott Bartucca, English horn
Erin Lensing, oboe

Jingran Peng
Song of the Mulberries 6'55"
zheng

Angelo Bello
Ricercar 7'35"
fixed media

Yunpeng Li
Song of across the river 4'50"
Peng Xu, Chinese xiao

Nathaniel Haering
Shenanigan No. 1 7'
fixed media

Hua Sun and Jinshu Feng
Crazy Fabric 9'
video

Benjamin Montgomery
Machine 6'45"
Joey Speranzo, alto saxophone

Program Notes

Oliver Hickman, *Tight Ratchet*
Nice and tight.

Jun Wang, *Door of the soul*
There is a city in everyone's heart. Behind each door lies a different secret. Open the door of your heart, you will find which is the real you. The main materials of this work is clap and human voice. In audio processing, I use Max platform and Kyma system. Different Settings were made for processing the original material, such as loop start or loop end, as well as the playing speed Resynthesis technology.

Sue Jean Park, *Panorama*
Panorama was written for saxophonist Jacob Kopciensky, a close friend of mine. This piece is inspired from my Hawaii trip during the winter break. In the beginning of the piece, I designed the music for the expression for Hawaii trip, using the melody lines of alto saxophone, and as well as the imitating the air sounds

on the electronic part. The B section describes a scenery of the sky and seabirds, using some of extended techniques for the alto saxophone, and percussive rhythmic gestures on the electroacoustic accompaniment part. Lastly, this piece is expressing the whole scenery of the sea that including the whales, waves, and the clean airs.

Mark Vaughn, *Basketball and Cricket*
This piece uses two separate field recordings as a template for the sound design, structure, and phrasing of the musical material. The field recordings are also used as part of the music and are treated as equally important to the composer's choices.

Lucas Rei Ramos, *Peito de Lobo*
Peito de Lobo (Wolf chest) is a short tale written by the Galician writer Alfonso Rodríguez Castelao, which is part of an autobiographic anthology of short stories. This work is based on that story, which describes the mixture of the Galician local customs and magic elements, related to rituals and mythology. Even if the story doesn't have magical elements per se, the border between real and magical in the oral storytelling tradition is very permeable. The story speaks about a costume with a large head used in a local celebration to caricature the ugliest person in the village, nicknamed Peito de Lobo. This man is also the strongest, and reacts offended with violence. However, as time goes by, he sees this costume and it's large caricatured head as a reflection of himself, and sees it as if it were own brother. The costume is used every year, until it is stored in a wet place. As the costume wears by the effect of time, so Peito de lobo's health fades away.

Kyong Mee Choi, *Pendulum*
As the title suggests, *Pendulum* depicts a journey - how a physical or social phenomenon swings through extreme cases. The piece tries to show that there is only one object creating this motion even though, at times, the two opposite ends seem to attract more attention on the surface. Different characters of the oboe and English horn are utilized to portray the opposite ends, while similarities between the two will be used to depict oneness. The electronic part plays an essential role in augmenting the differences and similarities of both instruments. The sound sources come from oboe and English horn as well as various found objects.

Jingran Peng, *Song of the Mulberries*
The name of the work is taken from the Chinese han yuefu folk song "mo shang sang song of the mulberries", which expresses the quality of the female in the poem that she is soft and firm, not afraid of power.The work is a Zheng solo.The rich and varied special performance techniques of guzheng are used to perform different sound effects to express the class conflict and drama in the historical background of the poem.

Angelo Bello, *Ricercar*
The piece Ricercar was composed with the GENDYN algorithm, relying on random walks guided by probability distribution functions, to define the character of complex timbres as well as musical form. Sound is generated through mathematical expressions that act as a sample generator, and that are defined by initial conditions designated by the composer, setting in motion the computations encoded in the program. Ricercar was realized with a re-implemented version of the algorithm by musicologist and computer scientist Peter Hoffmann as The New GENDYN Program (developed in the late 1990s). Additional components were developed by the composer of this work, that interfaced with Hoffmann's program, to enable a broader range of possibilities with respect to timbre and formal structure. There are three primary classes of GENDYN compositions: (1.) a tempered - or tuned - GENDYN computation, enabling pitched timbres to be exposed to the the probability distributions, resulting in an unfolding of stochastic melodies and harmonic constructions, (2.) a strict GENDYN computation wherein the pieces are created in whole cloth, in one go of the algorithm and are self-contained, following the assignment of all initial conditions prior to execution, and (3.) a combination of the above, with an additional interactive component, where the composer has intervened in the computation of the work and applied an element of real-time performance, by adjusting a parameter that defines the character and pitch of one of the timbres, during the execution of the work, while the digital audio data is written to a computer hard disk. The piece Ricercar is of this third class.

Yunpeng Li, *Song of across the river*
Song of across the river is a Song poetry in ancient Chinese. The composer echoed the structure of the poetry in this piece, and tries to express some is very lively, and some is very cold and cheerless.

Nathaniel Haering, *Shenanigan No. 1*
An etude in structured improvisation with live electronics.

Hua Sun and Jinshu Feng, *Crazy Fabric*
Composed for interactive stage performance. It is presented by using flexible cloth that made with touch devices and combining lighting design. The part of music piece is driven by real-time data control in sound engine, and it is designed for performers to reach their emotion rhythm. On stage, performers imprint their hands on the flexible cloth to create different three dimensional positions and shaping. Each movements trigger the clues of sounds. It symbolizes the fabric has been implant the ghost, which presents the nirvana, transmigration, and reborn. Also, *Crazy Fabric* insinuates the meaning of life like this breezy flexible cloth with soul. Once the soul is gone, the fabric is just a piece of waster.

Benjamin Montgomery, *Machine*
The fixed media component for *Machine* consists of mechanical and metal sound samples. These are manipulated until they are digitally distorted in various ways and create a contrast with their unaltered versions.

The rawness of the gestures and the prominent pitch content of those noises become the musical material exploited by the saxophonist. As the piece progresses, the saxophone exerts some of its own agency, and the electronics begin to be influenced by this. This conflict and cooperation propel the piece forward and reflect the influences exchanged between humans and machines.

Concert 8
Tuesday, June 18
8:00-10:00 PM
Loreto Theater

Program

Robert Seaback
Mutation (as the mark that noise leaves upon presence) 8'30"
SPLICE ensemble: Samuel Wells, trumpet
Adam Vidiksis, percussion
Keith Kirchoff, piano

Miriam Akkermann
Shadow 4'41"
fixed media

Hiromi Ishii
Ryojinfu 10'09"
fixed media

Girilal Baars
R**d*** 5'
fixed media

Scott Barton
Tempo Mecho 4'07"
robot and video

Kwang Rae Kim
Echoes 10'
Keith Kirchoff, piano

INTERMISSION

Bahar Royaee
Kucha Lar 8'
SPLICE ensemble: Samuel Wells, trumpet
Adam Vidiksis, percussion
Keith Kirchoff, piano

Cort Lippe
Cerevo 8'52"
fixed media

Deborah Kim
Rhythms of Rain 7'30"
Deborah Kim, Janggu

Antonio Scarcia
Interludio ("And I rejoice in my bonnie Bell") 4'44"
fixed media

Brian Topp
...to travel the distance of a changing feeling... 8'
Sarah Wasik, dancer
Margaret Lancaster, flute
Emmalena Fredriksson, choreographer

Hsien-Te Hsieh
Crazy Kitchen! 4'14"
fixed media

Marta Gentilucci
"Auf die Lieder" 8'45"
Eleonora Claps, soprano
Daniel Pate, percussion

Program Notes

Robert Seaback, *Mutation (as the mark that noise leaves upon presence)*
The title *Mutation (as the mark that noise leaves upon presence)* is derived from N. Katherine Hayles's semiotics of virtuality with which she maps her concept of posthumanism as a literary phenomenon. Mutation "achieves its potency as a social and cultural manifestation of the posthuman" when noise erupts into the material world causing changes in material forms. Following this thread, *Mutation* explores artificial—informational—structures derived from the natural property of acoustic resonance and embraces the noise that emerges from their unconventional manipulations. At odds are body representations such as the harmonic series, recordings of resonant objects, prescriptive music notation, and the distortions that emerge from material and embodied circumstances which, while always inevitable, are reinforced through extended performance practices and transformative digital processes. *Mutation* was written for and is dedicated to the SPLICE Ensemble.

Miriam Akkermann, *Shadow*
[Shadows, in one moment sharply contoured, in the next blurry and vanishing, appearing and disappearing almost imperceptibly, existing prominently without being grasped, overlaying and independent, coming close without touching, creating an illusion of depth and movement on a solid wall.] The piece is based on sound synthesis using the program Segmod by Martin Lorent and Luc Döbereiner.

Ariannys Marino, *Nocturnal Musings*
The timbres, brevity, color and movement in space build

atmospheres that respond to images and are the dramaturgical discourse of the work.

Hiromi Ishii, *Ryojinfu*
This work was inspired by a legend of a Japanese emperor. Go-shirakawa, born as a forth prince, was devoted in Buddhist chant since his childhood. However, he had to succeed to the throne and since then he had to fight many battles. The more he fought and killed, the more religious became he. He felt the dilemma between his religious thought and the reality of battles? The musical development is based on his psychological distortion I imagined. The title was named after a legend of Chinese master singers whom Go-shirakawa dreamed to become like; when they sang, all dusts in the temple-hall danced musically. The singing voice and dancing dusts (musical-spirits) are the basic idea for sound processing. The material sounds are; 1. Singing voices of Buddhist Chant, 2. Noises recorded at a Buddhist ceremony, 3. Grain sounds of rice. All sound transformations are related to the sound aesthetics of Japanese Buddhist vocal music and traditional Japanese music.

Girilal Baars, *R***d***
*R******d* is an exploration and a celebration of unwanted sounds. The title can be seen as alluding to both Redacted and Recycled. Composed using sounds and noises expunged from other recording projects by the composer. The sounds were labeled undesirable, suffering questionable aesthetic origins and had ended up on the wrong side of the ever-evolving delineation between what is deemed to be good and bad sound. Lest it seems so, the aim is not just to anthropomorphize unwanted sounds in an attempt to paraphrase societal tendencies. It is also intended as an honest exploration of the tools and the mindset of contemporary sound engineering practice. The threshold for “noisy” shifts along with improvements to the digital tools enabling us to identify and isolate unwanted sounds, thus perhaps even affecting our perception of sound.

Scott Barton, *Tempo Mecho*
A groove changes identity depending on the tempo it inhabits. Typically, there are small ranges within which a rhythm feels at home. Once there, a rhythm reveals the energy, detail and character of its true self. Some rhythms are travelers, able to assimilate into contrasting locales. Some rhythms are chameleons, changing their colors depending on their temporal context. Tempo macho explores some of the ways that tempo change can affect our sense of musical material. Here, tempos can change gradually and also can shift abruptly according to a variety of mathematical ratios. These movements occur over a range of time scales to illuminate the rhythmic limits of short-term memory and what is required to entrain to a cyclic pattern that reveals a groove. A theme persists throughout the piece to make these rhythmic aspects, which also include unusual meters and polyrhythms, clear. The temporal complexity of these ideas finds a natural voice through mechatronic instruments.

Kwang Rae Kim, *Echoes*
Echoes is a work of second order ambisonics for piano and tape. The tape part renders audible imaginary sounds, inspired not only by the notes and figurations of the piano, but also by the motion and gestures of the performer, forming an electronic counterpart to the piano’s performance in the 3D spatial sound system.

Bahar Royaee, *Kucha Lar*
Kucha Lar is a reconstructing process of a deconstructed folk tune from Azerbaijan (North-West of Iran). It is an experimentation with ways in which the sound of each individual instruments can relate to and concurrently transform into an overarching electronic part, consisting of the sound of processed trumpet samples and other natural sounds. Later on in the work, all three of these source materials are altered so that the listener perceives an obvious connection between the three - giving the impression not only of three separate sound entities, but also of three different versions of the same organic matter. The tune says: “I sweep the dusts of the laneway, So it is empty of ashes when my beloved returns.”

Cort Lippe, Cerevo
Cerevo was created at the request of the composer Felipe de Almeida Ribeiro for a new acousmatic piece to be premiered at the 2018 Simpósio Internacional de Música in Curitiba, Brazil, and included on a CD release of music by composers involved in the 2018 Simpósio. Like its close relative, the three-minute piece *Vereco,* the piece *Cerevo* is an exercise in personal musical archeology, and a tribute to the Surrealist technique of cadavre exquis. The theme of the 2018 Simpósio was the concept of the “micro-world” in electroacoustic music. All the sound transformations for *Cerevo* were produced either with granular sampling or techniques making use of the Fast Fourier Transform, which allow composers to explore the micro-world of sound in the electroacoustic domain.

Deborah Kim, *Rhythms of Rain*
Rhythms of Rain is an electroacoustic piece with a solo musical instrument (Janggu) and fixed media in 7.1 surround sound. The fixed media uses the Janggu, the traditional Korean drum, as the only sound source hence explores unique sounds through the sound transformation. The inspiration is drawn from the Janggu which represents rain.

Antonio Scarcia, *Interludio ("And I rejoice in my bonnie Bell")*
A short acousmatic work, just an interlude, inspired by the words of a poem by Robert Burns, "My Bonie Bell" of 1791. The materials consist largely of tonic sounds articulated on two different registers, in strong constriction and with the control of roughness as a compositional parameter on the high register. Made with techniques, in digital domain, that recall the classic tape

studio practice, it is the result of a study work that has integrated Common Music, synthesis by sampling and processing by Supercollider.

Brian Topp, *...to travel the distance of a changing feeling...*
How do we experience the change of feeling? How do we communicate, explore, resolve, or emphasize that change? What are the boundaries, the constraints, the restrictions that we can explore in order to fully express, experience, and then exhaust that change of feeling?

Hsien-Te Hsieh, *Crazy Kitchen!*
The restaurant is about to close up. The chefs are preparing the final meal and want to get off work as soon as possible, but there are full of customers who are slowly enjoying the meal, so the chefs are resentful and cranky. The whole piece has a total length of four minutes and is divided into three sections. The choice of sound material is the first section: preparing the ingredients, cutting vegetables and the sound of egg beating. The second section: gas stove ignition, opening the range hood and the sound of cooking. The third section: cleaning the dishes, the people chatting and the sound of chewing food.

Marta Gentilucci, *"Auf die Lieder"*
Fragmented words. Frictions between concrete daily words and the refusal of their limitations. Embellishments as negation of a preordered sense. Everything flows into the realm of the dense distorted natural sound of the voice. At that point, the electronic pulls back and gives the scene to the acoustic instruments. The piece is part of a wider composition project. It concludes a Song Cycle based on the text of the Italian poet Elisa Biagini.

Concert 9
Tuesday, June 18
11:00-12:00 PM
Fridman Gallery

Program

Robert Cosgrove
coat 7'19"
laptop orchestra

Pinda Ho
Parle Do I 5'46"
fixed media

Jack Kilgore
Dusk Walk 4'53"
fixed media

Nate Ghormley
Riding the Wavetable 3'49"
fixed media

Daniele Pozzi
CK91 10'
Daniele Pozzi, live electronics

Man Jie
Enchanted 7'55"
fixed media

J. Diaz
Helen in Boston 8'13"
fixed media

Margaret Schedel
After Apple | Box 10'
laptop orchestra

Program Notes

Robert Cosgrove, *coat*
coat is an attempt to recreate the ecosystem inside. The brain is constantly in flux; oscillating between points of reflection and distraction. Our devices not only mirror this world, but act as extensions of it. Written for laptops and guitar wire, the work is based on an insular sonic experience within a vast industrial landscape. The sounds occur at this place of contact: where our scalps brush our hoods and our bodies encounter the environment.

Pinda Ho, *Parle Do I*
This work is a five channels fixed media piece. It inspired by how often an idea or behavior of one individual is rejected by another with a simple phrase, “this makes no sense.” Too often have “sense” become a word of rejection in further understanding differences between individuals; it shuts down the opportunity of knowing and the celebration of diversity. However, this piece is not about conflict and rejection with a drama of finally being accepted. I am more fascinated by the rejected idea’s inner context, as it is a living organism that stands and lives by its own rights within its history and culture. Hence, following this idea, the piece is a practice of using minimal sound sources (a huge bag of Kraft paper) to create as many sounds and gestures with electronic engineering and granular synthesis (GRM tools); the monotone of the original sound source hence becomes the idea that “does not make sense,” and the processed result becomes the inner organism of the idea in question.

Jack Kilgore, *Dusk Walk*
Dusk Walk is a piece that explores the sounds of my somewhat chaotic college town. The majority of audio comes from personal recordings made as I walked through the area. Some recordings are documentations of others activity, while others are my own improvisations of smacking and sliding various sticks and surfaces. Just paying my dues to adding to the sound pollution I suppose. Manipulation of the audio was done using a granular approach in Supercollider. At the time, I was exploring approaches to manipulating audio while retaining its original morphology. I attempt to combine untouched field-recordings with mutated versions of those same recordings; creating a sort of lateral, dramatized version of that walk I took. I decided to take all my field-recordings from the same day in order to extend my granular methods to my aesthetic choices as a curator of sources. Rich, compelling material is available if one decides to look deeper, rather than wider.

Nate Ghormley, *Riding the Wavetable*
Riding The Wavetable is a journey through composition and sound design. Composed and arranged within Ableton Live 9. Drawing on FM synthesis techniques using VST's such as Serum and Reaktor. As well as resampling pre-recorded audio sample's using Native Instruments 'Form' synthesizer as well as Metasynth. This piece expands on the idea of sonification, using sound to communicate with each other to convey feelings and music.

Daniele Pozzi, *CK91*
CK91 is a performance for microphones, loudspeakers and laptop based on dynamical interdependent analog and digital feedback networks. Acoustic feedback is solicited and processed by digital transformations having different sensitivity to the input signal, and in turn affecting Larsen. The performer is physically coupled to the system - his body acts as a filter between speakers and microphones - and can interfere with its dynamics by actively manipulating the objects that compose it, or can trigger specific sound events through his actions. The piece explores various balances between the two feedback networks and the generative potential that derives from their coupling.

Man Jie, *Enchanted*
This piece was created during my recent study on algorithmic composition and artificial intelligence technologies. The basic sound material is made with the help of software such as Open Music, Max / Msp, Omax, Audio Sculpt, in which, recorded sound (such as Inner Mongolian folk music the sound of the typhoon in Tokyo) have been transformed into various interesting sounds. With the help of AI technologies, I was able to explore the structure, harmony, rhythm, and the musical texture in a new way.

J. Diaz, *Helen in Boston*
Helen in Boston is part of the EP *Triptych of the Naked Boy*. The multi-movement work explores the arrival and departure of love as its poetic content. It includes a range of found sounds from metro systems, porn, and kitchens.

Margaret Schedel, *After Apple | Box*
As I was cleaning out the attic of my childhood home after my father's death in 2017, I found his collection of wooden ammunition crates. As I continued to sift through years of memories, I developed the idea for this piece, inspired by Pauline Oliveros's Apple Box Orchestra. In Pauline's piece, the apple box serves as a resonator for acoustic sounds, amplified by pickups. In After | Apple Box, the ammunition boxes serve as electroacoustic instruments; four pickups allow me to use machine learning (specifically the Wekinator software package) to know where and how the boxes are being touched. Those four data streams are bandpassed and then merged into a stereo signal that is parsed by the computer. Performers are instructed to create samples of sonic memories of loved ones who have passed away and map them to different locations on the boxes. poetic content. It includes a range of found sounds from metro systems, porn, and kitchens.

Concert 10
Wednesday, July 19
1:30-3:00 PM
Loreto Theater

Program

Yang Wanjun
Spring Breeze Sweeps beyond Yumen Pass 11'53"
Lichuan Wang, composer
Jinhao Han, live coding
Yong Xu, sheng
Fei Wei, dancer

Jason Bolte
Ambient-P 7'46"
fixed media

Steve Wanna
Edge of Sound 8'
Andrew Borkowski, cello

Stylianos Dimou
Machine Learning 12'04"
Enzo Filippetti, baritone saxophone

Meifen Shih
The Death Gaze of a Whale 5'05"
Griffin Meinbresse, double bass

Paulo Brito
...nothing but a string of songs 16'
Paulo Brito, piano

Aldo Lombera
LUCID 10'52"
video by Jessica Rodriguez
Madeleine Shapiro, cello

Program Notes

Yang Wanjun, *Spring Breeze Sweeps beyond Yumen Pass*
In 116 B.C., the emperor of Han Dynasty erected the Yu Men Pass (Jade Gate Pass) on the Great Wall in the desert, which located west of Dunhuang. The Silk Road passed through it. Until the 6th century, it was the final outpost of Chinese territory for caravans on their long journeys to India, Parthia, and the Roman Empire. Since then, Jade Gate was the bridge of China and Western world, different civilizations conflicted, interplayed and blended here. But hundreds of years before, there were just wars at the gate, the interaction between cultures was halted. There was a famous poem in China, “spring breeze never sweeps beyond gate Yu Men”( ). Nowadays, 2000 years later, China has a new look to the world, and begin to develop in same pace with the world, and devote more intelligence to the world. The Sheng is a Chinese mouth-blown free reed instrument consisting of vertical pipes. It is a polyphonic instrument and enjoys an increasing popularity as a solo instrument. It is one of the oldest Chinese instruments, with images depicting its kind dating back to 1100 BCE, and it was one of the most important instruments in Han Dynasty. This piece is a live coding multimedia acousmatic piece composed for Sheng. The composer recorded unique Sheng samples, then loaded them into Sonic Pi to be organized and processed in real-time. The music controls the live video at the same time. The piece demonstrated the history of Jade Gate and the different interrelationship of cultures of the past 2000 more years.

Jason Bolte, *Ambient-P*
Ambient P was composed in response to my friend, David McIntire, and Irritable Hedgehog's Putney Project. *Ambient P* uses material derived from David's early exposure to the EMS VCS-3 synthesizer, also known as the "Putney." The analog materials David supplied were processed and manipulated in the digital environment.

Steve Wanna, *Edge of Sound*
Edge of Sound explores the boundaries between audible and inaudible or imagined sounds. The piece is inspired in part by the phenomenon of a slowly decaying sound, like that of a bell or gong, that fades so gradually it becomes difficult to discern the exact point at which the sound has completely stopped.

Meifen Shih, *The Death Gaze of a Whale*
Taiwan poet – Xui Hui-Zhi, in 1997 create the Poetry collection *When a whale eager to the ocean* because of the Taiwan anti-nuclear movement. These poems gave me inspiration to create the work *The Death Gaze of a Whale* for solo double bass and computer music. The environment in which we live is increasingly corrupt under the premise of economic development priority, and greedy human are persecuting the environment and ecology. There are two materials in this work. First one is the sounds of the ocean. It represents the earth-mother that has been gradually destroyed. You can hear this material from the original ocean sound gradually twisted deformation by computer processing .The second material is solo double bass that symbolizes a whale which also is innocent creature in the world who are unable to resist human destruction of nature. In the poem the poet wrote "the beauty of death". It means the Whale is negative, no hope of survival, symbolizing protest against mankind. In the first part of this song, the double bass use the overtone skills to symbolize the lament of the whale. The second paragraph uses the pizzicato technique to describe the useless struggle of the whale in the increasingly serious pollution. The last paragraph is a canon duet. I use the sound of the double bass that edited by computer and it played with original double bass together to depict the gradual progress of the whale towards beautiful death.

Paulo Brito, *...nothing but a string of songs*
“Any memory of those days is nothing but a string of songs.”
–Dancer from the Dance, 39
. . . nothing but a string of songs comprises a pair of pieces that adumbrate the notions of “étude” and “transcription” in translating passages from Andrew Holleran’s 1978 cult gay novel *Dancer from the Dance* into music. The constitutive element of the Twelfth Floor/disco in alt is the fixed electronic component, to which the piano reacts “live” with the virtuosity traditionally characteristic of études. In this piece, the tape part “transcribes” the literary text by intercutting between two musical references that constitute key elements within it: Curtis Mayfield’s 1972 single “Make me believe in you,” sung by vocalist Patti Jo—a song first heard by the narrator at the Twelfth Floor, a favored dance spot of the New York gay demimonde portrayed in the novel, and the mad scene from Vincenzo Bellini’s opera *I Puritani,* in a live Metropolitan Opera broadcast from 1976 starring soprano Joan Sutherland—who lends her name to the character of the speed-addicted drag queen Sutherland as well as, in the moment from the novel that caps the piece, her trademark E-flat in alt. Taking the first part of its title from a phrase repeatedly used to describe the novel’s sex symbol protagonist Malone, prisoner of love/transfigured broadens the scope of reference in using sound from the final sequence to the 1946 film Humoresque, where Franz Waxman’s *Fantasy on Tristan and Isolde* plays as actress Joan Crawford—like Malone at the end of the novel—walks off the Long Island beach into the Atlantic Ocean for good.

The electronic part's more allusive relationship to the novel is reflected in a freer division of roles between piano and tape, with the piano at one point even "cutting in" to the tape to play Franz Liszt's transcription of the Liebestod from Richard Wagner's opera. The piece's nature as an étude concomitantly becomes more flexibly defined to encompass a study of the piano's harmonic and resonant properties at the softest dynamic levels.

Aldo Lombera, *LUCID*
LUCID is a science fiction work. It takes place in a not-so-distant future, probably the present for many, in which we all exist at a pace so extreme that it does not allow us to feel, think, appreciate a moment… it does not allow us to live. We are machines that are self-programmed to produce and consume. Nature is merely a memory, blurry and confusing images that you can only evoke with your mind, once in a lifetime if you are lucky. The main character of this work: a meta-cello with an identity crisis. For a moment, he escapes from the routine; he opens his eyes and realizes that he exists, here and now. He has no idea what he is or how he got to that moment. Where did time go? Not wanting to think any longer, he takes advantage of the fugue to explore himself. Different gestures appear all around him. Cold, distant sketches of a distorted mirror. Suddenly something starts to respond to him; every time he makes a sound, another one imitates him.

Concert 11
Wednesday, June 19
4:30-6:00 PM
Hebrew Union College

Program

Marcel Chyrzyński
Mahāmudrā 10'
fixed media

David Rafferty
Mechanics 8'
Yunsuk Eom, gayageum

Dohun Lee
Nakhwa - a falling flower (*) 5'
Youngji Oh, Pansori singer
Sung-Yun Kim, piano
Yunsuk Eom, gayageum
Jihye Kim, violin

Leah Reid
Crumbs 3'07"
Patti Cudd, percussion

Peiyue Lu
Aquatic Cubes 11'
video

John Gibson
Almost an Island 5'55"
fixed media

Paul Botelho
S:ta Karin and Helge And, Visby 13'06"
Paul Botelho, voice

Asako Miyaki
Hidden Garden 6'
fixed media

Meihui Qiao and Heru Zhao
Genealogy 2'20"
video

Hannah Hitchen
Anthro 5'22"
fixed media

Christina Oorebeek
Keychain 9'
Phyllis Chen, piano and robot toy piano
(*) world premiere

Program Notes

Marcel Chyrzyński, *Mahāmudrā*
In this particular case, Chyrzyński subscribes to understanding the term *Mahāmudrā* as a strive for fulfilment of the real nature of the Mind. Once it is achieved, nothing seems complex or difficult. Since time immemorial, our minds are shrouded in darkness, of which there are four kinds: the shroud of basic ignorance [lack of knowledge], the shroud of confounding emotions [which throw the mind out of order, out of its predeterminated path], and the shroud of karma. These four shrouds darken the mind and prevent its achieving the ultimate fulfilment-that is its progress towards the Enlightenment. According to Chyrzyński, this succinct statment by the late Kalu Rinpoche (1905-1989) was a source of inspiration to create the piece based on the sounds of electric guitar played by the author,which were later processed digitally in ProTools and its native plug-ins.

David Rafferty, *Mechanics*
Mechanics (8 channels, Gayageum solo, live signal processing) interprets the structural characteristics of the gayageum and the performance techniques as sonic mechanical processes.

Dohun Lee, *Nakhwa - a falling flower*
This piece was inspired by the poem *Nakhwa,* written by Cho, Chi-hun (1920-1968), who was a Korean poet, critic

and activist. *Nakhwa* draws sympathy for a lost country at the sight of a falling flower. But I tried to express in this piece musically that the end is not an end but a new beginning.

Peiyue Lu, *Aquatic Cubes*
A cube is a simple, solid, and symmetrical three-dimensional shape; however, when the cube is conceptually combined with the elegance of the movement of water new complexities arise. Aquatic Cubes is a real-time interactive multimedia work for a single compact flashlight, Processing and Ableton Live that consists of both live generated music and visual domain animation. In my composition I work to depict the subjective representation of both the visual and sonic dimensions of water and its movement. The sound sources for this piece were derived from percussion, synthetic sounds, and audio recordings of water. The hybridity of the concrete and abstract sounds combined with visual domain animation strive to unfold my interpretation of the world of water.

Leah Reid, *Crumbs*
Crumbs, for amplified percussion and electronics, is an aphoristic composition that explores delicate grains, sounds, and textures. The work was designed to be portable. The instruments and found objects used in the live-percussion part can easily fit inside a small box. The work is comprised of six short sections, each examining a unique set of small handheld percussion instruments and common household items. The work is centered around a 5:1 ratio, which controls the piece's proportions and the distribution of the number of attacks per section. Each of the first five sections are composed of two gestures: 1 decelerating and 1 accelerating. Their weighted proportions gradually shift from a 5:1 to a 1:5 ratio. The 6th section is divided into 5 additional parts that mirror the large scale proportions in the piece. The work begins with small, bright, effervescent grains, and gradually incorporates larger, deeper, and more resonant textures.

John Gibson, *Almost an Island*
Almost an Island is the result of my visit to a wooded peninsula at a nearby lake. An early spring morning, the wind was up and driving small waves into the sandy shore at the tip of the peninsula. The piece represents these small, but vigorous, waves in an imaginary close-up view, colored with superimposed harmonies. This vision clears briefly in the middle to reveal the natural soundscape. All audio comes from the recorded water, even when explicit water sounds are absent. Instead, spectral audio analysis of the water yields streams of notes that mimic the dynamic shape of the waves.

Paul Botelho, *S:ta Karin and Helge And, Visby*
S:ta Karin and Helge And, Visby were primarily composed while in residence at the Visby International Centre for Composers in Visby, Sweden and are part of a larger set of works focusing on the sonic environments of the medieval church ruins of Visby. Work on the project included capturing first-order Ambisonics field recordings, impulse responses, and vocal improvisations in the church ruins where the composer reacted vocally in real-time to the environment. The resultant pieces act as multi-level representations of the sonic environments of the ruins expressed through vocal performance, sound transformations, and the extracted sonic characteristics of the spaces.

Asako Miyaki, *Hidden Garden*
There is a garden created with light and sounds.It exists in human consciousness. Occasionally flowers of afterimage quietly bloom. For a while, we drift in an absent garden.

Meihui Qiao and Heru Zhao, *Genealogy*
Genealogy is composed with the aid of Ableton Live, utilizing sampled sounds and pre-recorded loops, altering and manipulating them through techniques such as speed manipulation, pitch shifting, delay, reverb, reverse, filtering, and automation mixing, to re-present the history and evolution of Chinese Genealogy.

Hannah Hitchen, *Anthro*
Anthro is a work that explores the idea of social and personal identity. Social identity is defined as an identity based on an individual's association with a certain group or trait (ethnicity, age, gender, etc.), whereas personal identity is a self-constructed identity that cannot be easily assumed by others. This work is comprised of audio recordings of university students discussing their personal and social identities, as well as sounds derived from a modular synthesizer.

Christina Oorebeek, *Keychain*
Keychain is inspired by mobiles, sculptured and connected hanging objects, each with its own range of movement and timing. *Keychain* consists of seven musical objects, providing the music heard on the various keyboard instruments and echoed in the digitally transformed fixed-media. The partially-prepared toy piano effects are played 'live', with the Robot toy piano playing automatically from midi files. The "Clap object" made with the hands on the case of the toy piano, is heard at the beginning of each musical object played on the toy piano(s) in the first minutes of the piece - the 'links of the keychain'. In the second part, the acoustic grand piano is heard parallel with the Robot toy piano and the fixed-media, making for a collage-like setting, in which themes come and go - 'living apart together'. All of the melodic and harmonic material is derived from the composer's Harmonic Retrograde Cross modes.

Concert 12
Wednesday, June 19
8:00-10:00 PM
Loreto Theater

Program

Naotoshi Osaka
Kakekagami 9'57"
Kourtney Newton, cello

Natasha Barrett
Dusk's Gait 12'
fixed media

Mark Phillips
Favorable Odds 10'02"
Andrea Cheesman, clarinet

Robert Rowe
Melting the Darkness 6'34"
Miranda Cuckson, violin

Jonathan Bell
In Memoriam Jean-Claude Risset 7'
Sangjun Lee, flute
Jonghyun An, clarinet
Sung Hee Shin, violin
Griffin Meinbresse, bass

INTERMISSION

Nicoletta Andreuccetti
Resounding Resonances 7'28"
Sangjun Lee, flute
Jonghyun An, clarinet
Sujung Huh, piano

Dariusz Mazurowski
Bye, Bye, See You Tomorrow 11'14"
fixed media

Theocharis Papatrechas
Pictorial Fields: Traces in 1A 7'15"
Sung Hee Shin, violin
Jooyeon Song, cello
David Valbuena, bass clarinet

Mikako Mizuno
Wind Cave 4'55"
fixed media

Marc Ainger
A Walk Through Stockholm 9'
Ann Stimson, flute

Jonathan Wilson
A Chamber of Mouthpieces 5'35"
fixed media

Timothy Polashek
How to Listen to... 9'45"
Sung-Yun Kim, piano

Program Notes

Naotoshi Osaka, *Kakekagami for Cello and electronics*
The composer has been creating a series of mirror pieces. Many variations of musical materials such as timbre is compared to the ray change of a mirror. This piece uses a sound hybridization as a main timbre synthesis technique. Sound hybridization is a sound cyborg, in which one stream (a single sound) is consists of many perceptive elements of other sounds. A talking clarinet is one example, where phonemes are only the characteristics of a speech. In this piece, an instrumental vibrato other than cello such as Shakuhachi (the Japanese bamboo flute) is incorporated into cello's timbre. The title's 'kake' means to hybrid, and 'kagami' means a mirror. This is a coined word. So the title is a hypothetical mirror which reflects the hybridization of real image and a modified image in some way or other.

Natasha Barrett, *Dusk's Gait*
Dusk's Gait is partly narrative in form, while projecting an overarching appreciation of the natural world: as dusk falls, a habitat of fictional creatures is released, celebrating moments of real nature that may easily expire. Although acousmatic sounds may appear abstract, they can be imbued with a sense of character through their gait - or literally the manner of moving - in space, in spectrum and in time. In *Dusk's Gait,* ambisonics spatialisation and custom-made sound analysis and transformation methods are used to create spatial objects, each with a characteristic gait.

Mark Phillips, *Favorable Odds*
The title derives its name from the fact that the overtone structure of the clarinet has only odd harmonics (frequencies that are 1, 3, 5, 7, etc. times the fundamental pitch played by the performer). It shares this characteristic with square waves and triangle waves. All sounds in the accompaniment have some connection to this sonic signature or to non-traditional clarinet noises. Among the techniques utilized are synthesized triangle and square waves, filtering, granular synthesis, live processing, sampling, and physical modeling. The rhythmic engine in the final section of the piece consists of bass clarinet samples I recorded in my first-ever encounter with the instrument as a "performer," having had no prior experience playing any reed instrument.

Robert Rowe, *Melting the Darkness*
Melting the Darkness was written for Miranda Cuckson and commissioned by the New Spectrum Foundation.

The piece is built around contrasting styles of music and performance, ranging from gritty, rhythmic phrases to more lyrical and slowly shifting sonorities. These contrasts are amplified and elaborated by an electronic commentary consisting of fragmented and processed material from the violin performance as well as a number of secondary sources. The title comes from The Tempest (as it should when a piece is composed for Miranda): "…as the morning steals upon the night, Melting the darkness…"

Jonathan Bell, *In Memoriam Jean-Claude Risset*
In Memoriam J.C. Risset, premiered in September 2018 at the Gaudeamus Festival (Utrecht), constitutes the author's first experiment using head-mounted displays. By simply displaying each part of the score over the heads of the performers (for flute and clarinet only), this piece revealed interesting potentials to be exploited in future works. The harmonic material of this piece, as an homage to the French composer, is entirely based one of the most successful techniques of the beginning of computer music: frequency modulation, which Risset was amongst the first composers to use in his piece *Mutations* (1969), thanks to Chowning's generous permission.

Nicoletta Andreuccetti, *Resounding Resonances*
Resounding Resonances is a piece constructed around the boundary of 'sound' and 'music'. Resonance is the 'place' in which this relationship is re-written: the place to listen to new landscapes, which emerge from the intersection of cultural/technological sound and natural sound. Hybrid landscapes in which the 'cultural resonances' from the acoustic instruments are seamlessly connected to the 'natural resonances' of the cyber instruments modelled by the Tri-Axis Modeling Synthesis (TAMS). The percussion of the hammers on the strings of the piano is the gesture that excites the resonators of TAMS that model instruments with archetypal forms (ring, bell, sphere, pipe, and hexagon), made up of archetypal materials of the world: stone, marble, copper, silver, zinc. Unusual resonances, in turn, managed by Interactive Machine Learning techniques, which, starting from the initial recognition of a defined number of gestural articulations, will control in real time the resonances of the TAMS.

Dariusz Mazurowski, *Bye, Bye, See You Tomorrow*
Bye, Bye, See You Tomorrow is the first part of a large-scale electroacoustic composition *The Destroyer of Dreams,* which may be performed as a separate piece also. It is a very personal work, dealing with thoughts of happiness. *Bye, Bye, See You Tomorrow* contains a large collection of various sounds – pure electronic, synthesized, concrete and many others. In this particular case, the whole sonic spectrum have been processed with both analog and digital tools to gain rather complex, hybrid textures. Composed and recorded at the De eM Studio, between April 2015 and June 2017. Main audio sources for this composition include complex analog, digital and hybrid synthesizer patches, various textures created with the use of phase vocoder technology, analysis and resynthesis of various sources. For the multichannel mix various advanced software processors were used to obtain a faithful spatial diffusion of the sounds. Premiere performance: Moscow Tchaikovsky Conservatory, September 28, 2017.

Theocharis Papatrechas, *Pictorial Fields: Traces in 1A*
The nature of the particular project is purely experimental, focusing mainly on the parameters of form, structure, and narrativity. It draws inspiration from the ideology behind Jackson Pollock's Formalist Spaces with point-of-interest the painter's artwork "Number 1A (1948)". The work does not provide a global score. The three parts were written independently with each part moving through its own temporal stream. The three parts, sharing duration and sonic identity by being consistent on a dominant textural hue, were written to co-exist by beginning and finishing together, with the instrumentalists playing using click-tracks and without being aware of each other during the performance. The notion of independence is also reflected in the process of programming the electronic component of the piece, the patch, which has been structured with three independent and simultaneous layers of live signal processing and three metronomes triggering at the same time the three click-tracks.

Mikako Mizuno, *Wind Cave*
Wind Cave indicates the dry air near the dessert. The wind sometimes give difficulties too hard and sandy to human beings. When I visited Turkey several years ago, the marvelous construction of the underground city strongly impressed me. In the cave people can have their original lives with enough food and comfortable environment even though they seldom enjoyed the sunlight. The caves are said to be built by the Phrygians in the 8th- 7th centuries B.C. The electronic sounds sometimes come from the deep tunnels. Inside the cave we can find the space for kitchen, bath, school as well as chapel.

Marc , *A Walk Through Stockholm*
A Walk Through Stockholm was written as a walk with flutist Ann Stimson as she plays her flute in Stockholm, records the sounds of the environment, and occasionally listens to the ring tone from her cell phone (a recording of her own performance of a previously composed sonata for flute and piano, though here it is abstracted through convolution with the sounds of the environment). A Walk deconstructs the flute and the piano, and threads it through the sonic landscape of Stockholm. Occasionally the flutist hears voices in the landscapes and deconstructs these with her own voice resonating through her flute and the computer. In the end, the flutist is trying to remember everything she has heard, and finds that memory is not always a mechanical act of re-creation but, rather, it is often an imaginative, creative act. This piece was made possible, in part, by a residency at the EMS.

Jonathan Wilson, *A Chamber of Mouthpieces*
This composition utilizes mouthpieces from several acoustic instruments, including an alto saxophone, tenor saxophone, clarinet in B-flat, and a flute.

Timothy Polashek, *How to Listen to...*
How to Listen to... is interactive music and video for piano. The music (virtuosic yet humorous) involves the pianist simultaneously playing a grand piano and a digital keyboard to interactively and expressively control video clips rendered by a computer program written by the composer. The video clips are excerpted from a 1950s era marketing film from the Radio Corporation of America (RCA) that enthusiastically promotes RCA's stereophonic and hi-fidelity recording and playback technologies. This integrated visual, acoustic, and technological performance paradigm enables a composition that plays with physical, visual, and musical rhythms; musical and speech perceptions; perceptions of emotion through visual and musical means; and narrative concepts.

Concert 13
Wednesday, June 19
11:00-12:00 PM
Fridman Gallery

Program

Daniel Höpfner and Michele Samarotto
untitled av 10'
laptop orchestra

Larry Gaab
Words Halfway There 6'14"
fixed media

Krissy Dejuri
Chiroptera 6'42"
fixed media

Gintas Kraptavicius
Vintage Digital 12'
Gintas Kraptavicius, laptop

Kyle Shaw
Intra- 5'58"
fixed media

Program Notes

Daniel Höpfner and Michele Samarotto, *untitled av*
A duo set of improvised collaborative audio visual live coding exploring dynamic wave terrain synthesis.

Larry Gaab, *Words Halfway There*
The piece creates an organic soundscape with subtly shifting timbres, rhythms, and pulses. Akin to the sensory challenges of navigating the passages of a cave. Leaving the familiar outside, going inside subterranean worlds. Entering the rough opening and discovering quite quickly how far you have come. Time references disappear without substitution. The mental map of the terrain that had been forming swiftly disappears without notice. Insistent kinetic sensations compel you to push your way through. A fearful fascination sets in as you chart regions without reference.

Krissy Dejuri, *Chiroptera*
Chiroptera: any of a widely distributed order of nocturnal usually frugivorous or insectivorous flying mammals that have wings formed from four elongated digits of the forelimb covered by a cutaneous membrane and that have adequate visual capabilities but often rely on echolocation.

Gintas Kraptavicius, *Vintage Digital*
Vintage Digital is a live performance with a pc/software controlled by a MIDI keyboard and controller. The patch is built in Plogue Bidule software with VST plugins assigned and controlled by MIDI keyboard and controller. All parameters are controlled live during the concert.

Kyle Shaw, *Intra-*
Music works from the inside out. The ancient Greeks believed that it had the power to manipulate one's inner soul and thus affect one's external behaviors. Music often starts as a thought inside one's mind before becoming audible to the external world. In rigid adherence to this pattern (starting within before going out), I used as source material for this piece only sound-making objects already found within the electronic music studio before presenting it to the world external to the studio.

Concert 14
Thursday, June 20
1:30-3:00 PM
Hebrew Union College

Program

Juan Parra Cancino
TNchain_JI*JP_NY19 12'
Jonathan Impett, remote trumpet
video

Rodney Waschka
A Portrait of Larry Austin 5'51"
fixed media

Erich Bargainier
Light Shards 6'20"
Esther Lamneck, tárogató
Erich Bargainier, live electronics

Tate Carson
And the water receded 12'33"
Patti Cudd, percussion
video

Dave O. Mahony
Radio Click Suite 5'53"
fixed media

Peter Hulen
Wobbly 7'
Peter Hulen, laptop

Jean Pichardo
Azul de mañana 7'39"
Esther Lamneck, tárogató
video

Michael Pounds
Steelwork 7'14"
fixed media

Chris Corrigan
Is Fada an Lá 9'
Enzo Filippetti, soprano saxophone
Seunghee Han, harp

Program Notes

Juan Parra Cancino, *TNchain_JI*JP_NY19*
Through *TNchain_JI*JP_NY19* I seek to integrate the telecommunicative, algorithmic and poetic understanding of a “network” by further exploring the ideas seeded in stochastic synthesis and Boolean network patterns into what I call "Timbre Networks". This setup aims to integrate and expose the multi-threaded role of the computer music performer, blurring the borders between composition, software and hardware controller design into an integrated entity. Linear structure composition is replaced by the elaboration of a network of interdependent sound engines and manipulators, as well as an array of rules governing the initial states of each element, and the thresholds where those states are transformed. Performance is then presented as the unfolding of this network over time and space.

Rodney Waschka, *A Portrait of Larry Austin*
A Portrait of Larry Austin pays homage to one of the great people of computer music. Austin (born 1930) has made significant contributions as a composer of computer music pieces, as the President of the ICMA, as a founding editor of Source Magazine, and as the President of the Consortium to Distribute Computer Music. Source material for this piece includes a reading of a timeline of Austin's life, which features study with Darius Milhaud, Andrew Imbrie, and Violet Archer; performances by Leonard Bernstein/New York Philharmonic, Cage, Cunningham, and many others; teaching at universities: California – Davis, South Florida, and North Texas, his marriage to Edna Navarro, the making of many computer music works (names of works are read), and the deaths of two of his children. Some of the sound structures reference Austin's fondness for thickly layered collages, while the opening references his Quadrants: Event Complex series of pieces. This work is dedicated to Larry Austin and his family.

Erich Bargainier, *Light Shards*
Light Shards is an improvisatory work between Dr Esther Lamneck (tárogató) and Erich Barganier (live electronics) that emerges through Lamneck’s energized tárogató passages filtered through and processed by Supercollider live controls that Barganier manipulates in real time. The individual components build over an increasingly frantic series of sound samples that Barganier manipulates in real-time using granular synthesis. The effect is a swelling sonic landscape that intensifies to the last possible second.

Tate Carson, *And the water receded*
And the water receded is a sonification of Hurricane Katrina for three players and electronics. The listener will experience the track the storm from its forming into a tropical depression on August 23, 2005; to its strengthening into a Hurricane and landfall in New Orleans on August 29, 2005. Hearing this on a reduced timescale allows for a greater appreciation of the magnitude of the event because it can be perceived in one sitting.

Dave O. Mahony, *Radio Click Suite*
The composer’s brainwaves are being used to modulate a Eurorack modular synthesizer. Audio material is being semi-stochastically accessed and played using an Interaxon Muse Brainwave Interface and Eurorack

modular synthesizer to determine start position, pitch, playback speed, spatialization and duration. The brainwaves are further used to modulate Eurorack effects and to introduce timbral material. Temporal elements and sound events in the composition are influenced by the composer's brainwaves at 'runtime' and as such each iteration of the performance is unique. Real time audio events were generated using an iPad and gestural movements (used for triggering sound and shaping timbrality) are heavily influenced by my continued exploration of Wishart's Imago.

Peter Hulen, *Wobbly*
Born of the endeavor to develop wireless controllers for a laptop ensemble, this multilayered piece for laptop soloist uses an OSC-Touch interface developed for the iPad. Data are transmitted to control live synthesis parameters, sample playback, and panning by the axial motion of the iPad, and the touching of its screen interface to wirelessly control a Max patch on the laptop. The patch controls the parameters of various subtractive synthesis processes, audio signals, and the playback of a samples.

Jean Pichardo, *Azul de mañana*
The work is called *Azul de mañana* (Blue of tomorrow) and is located in the sense of loss and the search for one's own identity. Through a journey that seeks to resignify the state of the lessening of consciousness, the autobiographical piece has as starting point the death of my mother. That incident led me to the momentary failure to find a meaning in life, thinking that I was unable to find a clear goal or directive. The genesis of the work is the result of the association between the passages of The Divine Comedy by Dante Alighieri and the one of the paintings by Fernando Molero. In 2014 I met the Spanish painter Fernando Molero thanks to the composer Miyuki Ito. I immediately got interested in his work and especially in one of his paintings titled "Early blue morning". He told me that most of the titles of his works are dedicated to his wife, who died a few years ago.

Michael Pounds, *Steelwork*
Steelwork was created by recording sounds from a lap steel guitar into the computer, and then processing and editing those sounds for 5-channel playback. The guitar is a 1941 Epiphone Electar Zephyr lap steel that belonged to my father. I remember him playing the instrument when I was a very young child in the 1960s. My father had a love of music and technology, and his interests undoubtedly had a strong influence on my creative life and my choice of careers.

Chris Corrigan, *Is Fada an Lá*
Is Fada an Lá (The Day Is Long), for soprano saxophone, concert harp and electronics, is a setting of a traditional Irish lament which I learnt from the singing of Pádraigín Ní Uallacháin. It recounts a young woman's plea to her lover not to abandon her and their daughter for a woman of wealth. Her despair is compounded by the knowledge she will likely be ostracised by her family and community if deserted. Such laments are often sung unaccompanied in the 'old style' (sean-nós), with the performer making extensive use of elaborate melodic ornamentation to convey the emotional landscape of the text. This piece explores the importance of ornamentation in sean-nós interpretations of such laments. Much of the soundworld is derived from improvised responses to short, ornamented fragments of melodies from the Irish tradition. The text is then reframed using these newly derived materials. Is Fada an Lá was commissioned by harpist Tanya Houghton and saxophonist Franziska Schroeder.

Concert 15
Thursday, June 20
4:30-6:00 PM
Loreto Theater

Program

Melissa Dunphy
June 8'05"
Eleonora Claps, soprano

Nicola Giannini
For Hannah 7'20"
fixed media

Yaroslav Borisov
Precise time 6'39"
Yaroslav Borisov, piano

Nathan Bowen
The Vast Majority 4'20"
Nathan Bowen, live electronics

Yu Chung Tseng
I Sing and the Moon Wanders 9'40"
Eleonora Claps, soprano

Kobayashi Mizuki
Ike-Bana for violin and computer 8'40"
Maja Cerar, violin
Kobayashi Mizuki, live electronics

Paul Dibley
Below the Forest 16'43"
fixed media

Jeffrey Bowen
What Will Sound (was already sound) 13'
Maja Cerar, violin

Program Notes

Melissa Dunphy, *June*
June was composed for Voice of this Generation and Network for New Music in Philadelphia. Poetry by Lauren Rile Smith.

Nicola Giannini, *For Hannah*
For Hannah is a piece dedicated to the king cobra (Ophiophagus Hannah). I wrote a composition about this animal because the first time I heard its hiss I was surprised by how it could seem a musical phrasing. Forcing this comparison, I asked myself: do cobras play electro-acoustic music? I deepened my knowledge of the animal thanks to the studies of Professor A. Young, who kindly sent me some of his reptile recordings. The piece is divided into four sections. "Scales" evoke cobras movements. "Sensing" recalls the way in which they perceive the world. They do not have external ears, and they perceive sounds mostly through their body. They also use their tongue to orient themselves, identifying chemical signals. I sonically evoked the rapid movements of the tongue, obtaining a high frequencies sound spectrum, in contrast with sounds they can perceive. "Hissing" refers to their behavior when they feel threatened: they raise the front part of their body, take the hood position, and hiss loudly. They do not have vocal cords, and the sound they emit depends on the air passage in their trachea. Thanks to Young's studies I could realize a model of the trachea. "Aposematism" refers to the defense behavior that they assume towards their potential predators, remembering the consequences of an attack. The rich spectral content is suitable for the timbre spatialization. Human beings should be able to localize those sounds easily, considering the danger feelings associated with them.

Yaroslav Borisov, *Precise time*
The piece has influences of chamber music and acid culture of 90's.

Nathan Bowen, *The Vast Majority*
During the United States government shutdown in early 2019 the Joshua Tree National Park was impacted by employees being off contract, with a skeleton crew of eight workers and volunteers covering 1200 square miles of land. At the time of this shortage of staff, some Joshua trees were cut down by vandals. The Parks Service said, "While the vast majority of those who visit Joshua Tree National Park do so in a responsible manner, there have been incidents of new roads being created by motorists and the destruction of Joshua trees". Due to climate change these trees are predicted to be extinct within the next 100 years. I marvel at the sudden impact of a few reckless people to cause irreparable damage to these precious trees and sensitive environments that take years and years to develop, amidst a larger population of visitors that is generally respectful. In this piece I explore these stark contrasts.

Yu Chung Tseng, *I Sing and the Moon Wanders*
I Sing and the Moon Wanders was created for Soprano and Electronics in the duration of 9 minutes 38 seconds. The poetic background of the work was inspired by "Drinking Alone under the Moon," a Chinese poem by Lee Po in Tang Dynasty. In the work, the soprano singer was assumed to present the roll of the poet, drinking alone under the moon and dancing with the moon and his own shadow, while electronics music acts as the moon/shadow, and serves as the creator of the poetic atmosphere of the work as well. For reflecting the particular Chinese quality of the poem, some vocal idioms drawn from Chinese Opera music were employed here, including the glissandi with inflection of single tone singing, sudden dynamics changing and different vibratos of a single tone, and the embroidery tone techniques used for the vocal line …etc.… The work was commissioned by Taipei Shangshu Music Forum and had been premiered at ShoYi Concert Hall in Taipei, Taiwan in 2017.

Kobayashi Mizuki, *Ike-Bana for violin and computer*
This piece *Ike-bana* is a live electronics work written for violin and computer. Ikebana is a traditional Japanese art originating from 794-1185 in which flowers and plants are specially arranged in a vase for appreciation. In order to maintain the original beauty of the violin sound, the computer part is intentionally used mainly for pitch shift. Together with the beauty to restrict sound, there is an intention to emphasize the change that the space is distorted and more floating by adding flowers. It try to collect the timing and magnitude values of the accent part of the violin part in real time. And by reflecting it in the sound itself of the computer part and the reaction timing, it is had a try to build stronger ensemble relationship between musicians and computers. Finally, the sound of the computer and the sound of the amplifier's amplification are designated to fade-out. This is composed for expressing that each life is living really beautifully and really strong.

Paul Dibley, *Below the Forest*
Moving from human utterance and the passing of time, to a dystopian wild landscape. Natural sounds are interspersed with a range of sorrowful sonorities, eking out and building on the misery of the soundscape. Brief gestural sections punctuate the evolutions, allowing the composition to move into different textural realms.

Jeffrey Bowen, *What Will Sound (was already sound)*
What Will Sound (was already sound) is in large part an homage to the artist William Kentridge. Specifically, the piece takes up formal ideas of his work What Will Come (has already come), in which anamorphic charcoal animations are projected onto a white circle, which supports a cylindrical mirror in the center. These charcoal figures are distorted beyond recognition, but the reflective convex surface of the cylinder adjusts the angles and proportions to reveal familiar images. In What Will Sound (was already sound), the live electronic component acts in a manner analogous to the cylindrical

mirror. Through its series of convolution filters—derived from recordings of Bach's Violin Partita in D minor—the electronics extract periodic components from the gestures of the violin, building harmonic resonances apart from, yet dependent upon, the live violin material, producing an oscillation between the immediate moment of live performance and a secondary plane of historical resonance.

Concert 16
Thursday, June 20
8:00-10:00 PM
Loreto Theater

Program

Anna Rubin
A Small Impromptu God of the Partial 9'30"
Madeleine Shapiro, cello

David Taddie
Wayward Country 6'23"
Justin Massey, alto sax

Alessio Gabriele
Âme lie 12'
Eleonora Claps, soprano
Enzo Filippetti, alto saxophone

Christopher Hopkins
Touché 10'08"
Esther Lamneck and Marianne Gythfeldt, clarinets

Natsuki Kawakami
Style of Bird 5'30"
Sangjun Lee, flute
JungAh An, piano

Mara Helmuth
Sound Dunes 8'36"
Esther Lamneck, tárogató

INTERMISSION

Orlando Garcia
separacion 12'08"
Enzo Filippetti, soprano saxophone

Manuella R. Blackburn
Snap Happy 8'51"
fixed media

Andrew May
Ada 8'
Maja Cerar, violin

Gayle Young with Madeleine Shapiro
Burrage Lake 6'
Madeleine Shapiro, cello

Zuriñe F. Gerenabarrena
Barne 7'53"
Patti Cudd, percussion

Program Notes

Anna Rubin, *A Small Impromptu God of the Partial*
A Small Impromptu God of the Partial was inspired by the poem of the same name by Sharon Olds. Harmonics of all sorts are of course deployed as well as noise elements provided by beads woven around the stick of a second bow. The electronic portion of the piece is subtle and meant to subtly inflect the playing of the live cello. This romantic piece gives the performer a wide palette of both lyrical and percussive styles.

David Taddie, *Wayward Country*
Wayward Country for alto saxophone and interactive electronics was written on commission from saxophonist Michael Ibrahim who provided the bass saxophone samples and, along with Justin Massey, the alto saxophone samples. The samples were extensively processed by various means, to provide accompanying material to the saxophone part which is simultaneously processed in real-time during the performance. Dr. Ibrahim is a virtuoso saxophonist with a comprehensive mastery of extended techniques, thus their extensive use in this piece.

Alessio Gabriele, *Âme lie*
An ideal uninterrupted flowing breath is the soul that binds the voice and the saxophone, as in the indissoluble relationship between generating and generated entities, along a path that explores multiple stages of interaction and interpenetration of resonant bodies. The WindBack is considered as the device that "augments" the saxophone by means of unconventional excitation of the air column into it, as the instrument in which the performer's musical intentions are melted into and projected out, enriched by the acoustic and tonal warping induced by the feedback. The work is made up of three sections, generated from a sequence of six notes, corresponding to a musical cryptogram of the piece title. The piece is a sound structure in which voice, instrument and live electronics evolve into functional and harmonic relations in the form of dialogue, overlapping, conflict. The WindBack is the feedback system designed by Michelangelo Lupone. *Âme lie* is produced by CRM-Centro Ricerche Musicali

Christopher Hopkins, *Touché*
Touché is a single movement duo-concertante in a toccata style. Two clarinet soloists are united in a musical contest, between themselves and in opposition to an ensemble of synthetic clarinets automated from computer. The toccata paradigm emphasizes the

immediacy of touch upon the instruments, which traditionally serves to allow idioms of virtuosic performance to take the lead in determining musical form. *Touché* also takes the idea of musical touch to a yet more detailed level, that of articulation, the specific qualities of attack upon and the subsequent shaping of the musical tones. Here, therefore, the emphasis is on how the tones themselves are touched. The synthetic clarinets in particular emphasize these articulations, being made artificially sharp and separated, or more rarely, artificially dulled. There are also important shaping gestures, such as sudden swellings of tone with pointed conclusions, that suggest the rhythmic interchange of swordplay, notably fencing—en-garde.

Natsuki Kawakami, *Style of Bird*
This work was realized for flute, piano and live computer system. The main motives for both flute and piano parts are derived from the twitters of the bird called Narcissus Flycatcher that is classified as a subspecies of the sparrow. Male birds have two kinds of twitters. One of them is "bird song" which is a beautiful and characteristic sound to attract female's attentions. Another one is "bird call" that consists of a short phoneme. In this work the flute part presents "bird song" and the piano part imitates "bird call". Both instrumental sounds are transformed with diverse real-time signal processing technique programmed in Max. By superimposing these musical materials, Narcissus Flycatcher is symbolically represented as music.

Mara Helmuth, *Sound Dunes*
Sound Dunes is a collaborative composition by the tárogató performer and computer music composer. It was inspired by exploration of the tárogató sound world, and its digital transformations. The piece has resonances with the natural environment of a sand dune, with its curving contours and granular texture.

Orlando Garcia, *separacion*
separación (separation) is an extended study focusing on circular breathing and the minute control of timbre and intonation. Written for saxophonist Daniel Kientzy, the title refers to the separation that exists between the live saxophone part and the materials on the tape. This separation takes place in a very subtle manner as the performer is asked to interact with the materials on the tape part in extremely controlled ways using slight variations in timbre and intonation. The tape part consists of materials requested by me and recorded by Daniel Kientzy. These materials were later processed and manipulated using a computer and a variety of software. The final tape part was created during the fall of 2000, at the Florida International University Music Technology Center in Miami. Separacion was released on my most recent CD, fragmentos del pasado, on New Albion Records NA 124 with Daniel Kientzy performing.

Manuella R. Blackburn, *Snap Happy*
Snap happy is a collection of three miniatures exploring the sounds of cameras. Older cameras from around 1940 (Kodak Brownie cameras –Reflex, Flash and Popular models) provided heavier clicks and clunks from their internal mechanisms. Contemporary cameras provided sounds of flashes, zooms, digital functions and focus lenses. All these sounds tended to be short in duration, enabling me to continue my interest in building compositions from miniature, barely there sound materials. Listening to many cameras demonstrated how distinctive different brands could be. I became acquainted with the Canon AE- program, which appeared to 'cough' with each photo taken. It was fascinating to listen to modern cameras (including camera functions on phones), which use camera shutter sound effects to indicate the taking of a 'snap shot'. Older functions of winding a camera film, opening up a camera back and cartridge chamber, along with winding mechanisms are sounds that feature in this work.

Andrew May, *Ada*
Ada is a guided improvisation for violin and computer based on the opening Adagio movement of Bach's first solo violin Sonata. The florid ornamentation of Bach's composition evokes traditions and practices of other times and places and conjures up an ensemble that is violin-derived but far from the Baroque. The computer tracks, recalls, and matches material across time to create a responsive but unpredictable accompaniment, combining phase vocoding resynthesis of the live performance with assemblages of sampled violin and mandolin timbres.

Gayle Young with Madeleine Shapiro, *Burrage Lake*
Burrage Lake, for solo cello and four-channel audio, matches the cello with sounds of waves breaking along a rocky shoreline. Selected acoustic components of the water sounds are emphasized through electronic treatment. This is a companion piece to *Avalon Shorelines* (Albany Records, Troy 1577), and part of cellist Madeleine Shapiro's ongoing Nature Project, speaking to her deep interest in improvisation and the natural world. The piece begins with single waves, then introduces combined rhythmic waves with high-frequency components, and closes with waves breaking on the rocks, creating bursts of noise. The cellist plays a controlled improvisation in response to the pre-recorded audio, expanding on the acoustical nature of the pre-recorded audio, highlighting rhythmic, pitch, and timbral content, including noise.

Zuriñe F. Gerenabarrena, *Barne*
Barne, ("within") where the most intimate feelings coexist in dialogue between extremes, from love, to pain, rage or helplessness in the face of violence. The work is structured like human relationships, with sounds that overlap in conflict, reaching simple and poetic solutions, in a desire to achieve dreams.

Concert 17
Thursday, June 20
11:00-12:00 PM

Fridman Gallery

Program

Kıvanç Tatar, Philippe Pasquier, and Remy Siu
REVIVE 8'30"
MASOM: AI performer
Kıvanç Tatar: performer / developer audio
Philippe Pasquier: performer / system design
Remy Siu: collaborator / developer video

Xiaohan Chen
Friends in travel 3'04"
fixed media

John Thompson
Into the rarefied air 9'30"
John Thompson, electric guitar and drum machine

Jay Afrisando
The (Real) laptop Music :)) 5'
fixed media

Ben Neill
Fathom 15'
Mimi Goese, vocals
Ben Neill, mutantrumpet

Jon-Carlos Evans and Kevin Ramsay
Dreampop Dysphoria 14'15"

Program Notes

Kıvanç Tatar, Philippe Pasquier, and Remy Siu, *REVIVE*
REVIVE is the live interaction between the musical AI MASOM, electronic musicians, Kıvanç Tatar, and Philippe Pasquier and generative visuals by Remy Siu. MASOM (which stands for Musical Agent based on Self-Organizing Maps) is a musical AI that has learned electroacoustic and electronic music by listening to a vast quantity of it. For each musician, a corresponding visual agent puts its sound and musical decisions into images thus revealing the musical gestures that are so often lost in electronic music performance.

Xiaohan Chen, *Friends in travel*
I used the sound of recording baby, the sound of the park in the morning, the roar of the night, the sound of the beach, the sound of squirrels and so on. This story is mainly about the baby traveling and talking with animals in nature in these scenes, crying and laughing, and becoming good friends with them. These sounds are added electronically to the song.

John Thompson, *Into the rarefied air*
Into the rarefied air is performed live on electric guitar and analog drum machine. The nature of the drum machine is largely subverted in favor of hypnotic sonic textures. The guitar explores a limited set of pitches that eventually blooms into harmonies that were latent. Extended techniques using superball mallet and a bow take the piece into alien territory … into the rarefied air.

Jay Afrisando, *The (Real) laptop Music :))*
The (Real) Laptop Music :)) emerged from a question on a laptop for a composing activity; is it used mainly to operate software or is it used as a main physical source of sound?

Ben Neill, *Fathom*
Fathom is a multimedia piece by composer/performers Mimi Goese and Ben Neill originally commissoned by the Beacon Institute for Rivers and Estuaries (BIRE) through a New Music USA grant. In *Fathom,* Goese and Neill use data sonification to translate environmental patterns into music that explores the power and soul of the Hudson River. Made up of three sections that correlate to data collected prior to, during and immediately following Hurricane Sandy, *Fathom's* technical roots are creatively absorbed into the heart of the music. Goese's lyrics and melodies are woven into the music, telling stories of life, industry and beauty as well as the long history of human intrusion on the Hudson River. The visual component combines crowdsourced videos of the Hudson with real time video animations of the patterns from which the musical material is derived.

Jon-Carlos Evans and Kevin Ramsay, *Dreampop Dysphoria*
Dreampop Dysphoria is a long-form electronic music release and immersive audiovisual performance structured in five acts. The year 3666 AD: All music and sound projections are created and approved through the DvA Central Protocol, a multinational AI think-tank funded by the world's governments. The "DvACenPro" was unilaterally accepted by the UN after a wave of suicides from popular musicians and the copycat cults of teenagers that followed. As a result, music is censored almost to the point of abolition in less privileged parts of the world. Instruments, musical education, and access to 'ancient" music is limited to a class of chosen elite who horde and bury the knowledge of the past. For eleven years, society remained at a relative calm as the DvA Protocols quelled the major rebellions with infectious tunes and numbing anthems. 100% of the music produced in the world emanates from DvA. The musical artists and performers who appear as the commercial faces of the industry are merely actors and mannequins, licensed and regulated by the world ruling bodies. Those caught performing "forbidden music" are executed on sight. On the anniversary of the Great Silence, a group of rebels, dubbed the "Dissidents" by the media, break into

the DvA Central Mainframe and upload a virus nicknamed “Popkiller.” Designed to disrupt and slowly destroy the brainwashing signals, Popkiller takes hold of DvA, corrupting its programming to produce an unpredictable output of noise, beats, broken melodies, and intercepted transmissions . . .

Concert 18
Friday, June 21
1:30-3:00 PM
Loreto Theater

Program

Ali Balighi
Chahar-Rah 4'40"
laptop orchestra

Johannes S. Sistermanns
Questoning the e_cho 5'52"
fixed media

Stephen F. Lilly
Invisible Lines 9'30"
Jonathan Britt, trumpet

Robert Mackay
Living Waves 8'18"
fixed media

Christian Banasik
Retweet K. (Ver. 2) 5'12"
Danica Borisavljevic, piano

Takeyoshi Mori
Into Immense Circulation 9'
fixed media

Mark Zaki
be still and wait without hope 8'
Mara Zaki, piano

Yuriko Hase Kojima
Fossil Ripples: Memories of the Ocean 10'
Danica Borisavljevic, piano

Qian Zhou
Varying II 9'12"
fixed media

Program Notes

Ali Balighi, *Chahar-Rah*
In Persian, "chahar-rah" means the crossing. The crossing always means arriving and getting away for me. The crossing is where that people see together, sometimes they walk away very fast or they stay and watch other. Arriving, departing… The entire sound of this piece was recorded in my favorite crossing in Tehran. This crossing is where I went to university, I was falling in love and grew up. I used the sound of street, the modern Persian music theory and a nostalgia sense in this piece.

Johannes S. Sistermanns, *Questoning the e_cho*
All is inspired by the atmosphere and sounds created in spaces of urban and ecclesiastic architecture, composed entirely with their echoes: intentional as well as unintentional sound impulses, commonplace echoes, incidental as well as intentionally set impulses. Everything began while sitting in a Café in 57th Street in Manhattan in spring. My attention increased when I noticed that I heard rather more activities and traffic movements than actually took place in front of the Café. It was the spreading echo of some activities from other roads leading into 57th Street. And sounds were to be heard which lay far outside of my field of vision. I tried to capture the echo with my eyes. I tried also to visually follow the movements it made. My eyes touched the material surfaces of the concrete canyons, sliding unopposed over glass, aluminum and marble. I let myself be summoned by these echoes emanating from the surrounding streets in West Manhattan and followed them a whole afternoon.

Stephen F. Lilly, *Invisible Lines*
In any moment, one has but a narrow perspective on what constitutes "now." So it is when realizing *Invisible Lines.* The trumpet player cannot simultaneously present all five independent streams that collectively constitute the *Invisible Lines* score; the performer must dip into each stream individually. The three topmost layers are melodic, and if one heard any one of these in its entirety, it would resemble a complete piece in and of itself. The bottom two streams are derivative—one, synthetic scales constructed from the upper layers, and the other, the breath and articulations from the upper streams devoid of pitch. The trumpet player's role is to weave together a composite work that hints at all the streams while reacting to the electronic sounds. The electronic accompaniment is a combination of synthesized sound and processed trumpet, and like the trumpet score, it consists of layers which the computer is instructed to shuffle, concatenate, and superimpose anew each performance.

Robert Mackay, *Living Waves*
This piece was created using the sounds of ringing stones. It was commissioned for the Ruskin Rocks Project (www.leeds.ac.uk/ruskinrocks/) which brought

together musicians (including Dame Evelyn Glennie) and scientists to create two 21st Century lithophones (designed by Dr. Kia Ng (University of Leeds) and Marcus de Mowbray (freelance musical instrument maker)) to be housed at Brantwood, the former home of artist, naturalist and social commentator John Ruskin, now a museum situated in the Lake District. The two tuned percussion instruments have been created from ringing rock extracted from several Cumbrian Quarries. Living Waves has been inspired by the thoughts, writings and paintings of Ruskin. It is the sub-title he himself gave to Deucalion, his book on geology. Mountains are viewed as fluid and dynamic forms, living waves created by the shifting of the earth's crust.

Christian Banasik, *Retweet K. (Ver. 2)*
A tweet is limited to 280 characters - the most popular twitter account worldwide is that of Katy Perry with currently approx. 106 million followers. For me specially "Dark Horse" was one of the most interesting and popular song to work with. A ReTweet is primarily a forwarding of the content. A ReTweet also shows that the tweet was read and noticed. My short piece uses some forms and rules of these social media phenomena: 280 events in the piano score represents the main feature and the motivic line - melodic and rhythmic structures are derived and varied from the song parts and the basic tonality as a musical symbol. The spelled declamation of the name - Katy - became a performative and interrupting spoken form element. The video processes the most striking and intense colors and movement patterns of the original music video of Katy Perry's song. It takes over the function of moving light reflections created with new recorded and manipulated film material.

Takeyoshi Mori, *Into Immense Circulation*
A word "circulation" was the starting point of this project and subsequently two images came to my mind along with the word: circulation of seawater and abundant information media around us. Circulation of seawater has various layers such as surface and deep in the vertical level, swirling ocean current in the northern and southern hemisphere, and other ocean currents. All the layers relate to each other and function in the parallel structure; there are many things in common between the structure of its circulation and music. As for information media, it surrounds us in immense circulation with videos, music, text, speech and more. I conceptually applied information as the input sources and circulation of seawater as the whole structure; this piece attempts animating the immense circulation of seawater and information as electroacoustic music.

Mark Zaki, *be still and wait without hope*
"I said to my soul, be still and wait without hope, for hope would be hope for the wrong thing; wait without love, for love would be love of the wrong thing; there is yet faith, but the faith and the love are all in the waiting. Wait without thought, for you are not ready for thought: So the darkness shall be the light, and the stillness the dancing."
-T.S. Eliot

Yuriko Hase Kojima, *Fossil Ripples: Memories of the Ocean*
There is a site near by the ocean in my hometown in Tokushima, Japan, where people can easily access to the fossil ripples. It used to be actually the layers of the sand long deposited underneath the ocean for billions of years in pre-historic time and eventually it was uplifted to the surface of the Earth during the diastrophism of the Nankai Trough about 45 million years ago. Unique texture and colorful layers of this gigantic rock-like fossil ripples are breathtakingly beautiful. It makes us imagine the Earth's history since the time of its birth until today. I imagine a long duration of time from the moment a sound was created on the Earth until the moment that fades away within ambiguous time of present. The background sound of the ocean and the wind unfolds the memories of the ocean along with the minimalistic piano phrases mainly composed of the intervals of major seconds and major ninths that have been processed by Max as if blurring in the water. (Y.H.K.)

Qian Zhou, *Varying II*
Varying II, is a piece for representing the nonobjective world by nonobjective sound. All the sound was sampled from the objective world and varied its characteristic by abstract expressionism. For the aesthetics of this work, it is an electronic music work for the thinking about objective and nonobjective world. This work is a piece which concerned about the sound movement in spatialization. It started from a very short sound element as a grain, and the variation of the grain filled in the space with logic sound organization as follow. This piece will be present as the form for multi-channels.

Concert 19
Friday, June 21
8:00-10:00 PM
Loreto Theater

Program

Tibor Szirovicza
Alchemist for violoncello and soundtrack 8'30"
Madeleine Shapiro, cello

Kari Vakeva
If Bees are few 11'58"
fixed media

Iddo Aharony
falling out of time 13'
Madeleine Shapiro, cello

Clemens von Reusner
Anamorphosis 7'19"
fixed media

Hubert Howe
Inharmonic Fantasy No. 9 10'25"
Andrew Borkowski, cello

INTERMISSION

Brad Garton
Reading of book excerpts 10'
live presentation

Konstantinos Karathanasis
Pollock's Dreams: Liquefied Sounds 10'
video

Joel Gressel
Moving On 10'48"
fixed media

Sylvia Pengilly
Maze 7'41"
video

Nicolas Chuaqui
Memories 11'30"
Madeleine Shapiro, cello
Marija Ilić , piano

Michael Rhoades
Cylindrical Dimensions 9'28"
video

Program Notes

Tibor Szirovicza, *Alchemist for violoncello and soundtrack*
Alchemist for violoncello & electronics is a composition written for Music Festival in Osor dedicated to cellist Monika Leskovar, which at the very beginning gives a contrast to several different contemporary string techniques. Soundtrack appears almost unnoticeable at first, and during the composition gradually takes over the initiative with some electronic sounds derived from the instrument itself with added artificial sounds and effects. With the intense dialogue between the electronics and the acoustic sound of violoncello one of the interesting features is the illusory contrast between 'dry' and 'spatial' sound effects, creating a link between the real and the surreal world - the ultimate goal of the Alchemist - the material transmutation.

Kari Vakeva, *If Bees are few*
If bees are few opens gently with a cloud of buzzing noises. Slowly other voices join in, as if the feeling of life wakens around for a new day to begin. All is calm and pastoral, until... The work *If bees are few* (2018) is written with C++ and a synthesis software built by the author. Though mostly sound-based, the piece features also pitched material which slowly evolves in a microtonal way. The pitched sounds grow from a "seed" interval in a process which is dynamic. The technical realization uses granular and vocal formant synthesis, among other methods. The title is taken from Emily Dickinson's lyrics.

Iddo Aharony, *falling out of time*
Inspired by David Grossman's novel of the same name, the piece is designed as a musical dialogue between live cello passages, their electronically processed shadows, and a recording of a traditional Jewish-Iraqi psalm cantillation. Grossman's novel explores the experience of grief partly through the metaphor of one's journey away from home, in search of what is no more. The text of the psalm, on the other hand, poetically reflects upon a physical and spiritual sense of exile from one's home and from what is left indefinitely behind: "By the rivers of Babylon we sat and wept as we remembered Zion...". Along the piece's length, the relationship between the cello and the psalm cantillation gradually evolves and transforms, perhaps echoing in some way the tension and imaginary dialogue between the two aforementioned textual perspectives. The cantillation of Psalm 137 is performed by Yehuda Petaya, cantor of the Minhat Yehuda synagogue in Jerusalem, and used with his kind permission.

Clemens von Reusner, *Anamorphosis*
Anamorphosis involves the processing of two contrasting structures, which are exposed in the first part of the composition. One has more gestural character, the other appears more textured. Both structures are based on a brief sound of a wooden door, which, however, does not

appear in its original form during the course of the composition. Instead the structural nature of this basic material, especially the fast repetitions changing in time, leads to spectral and temporal variants of these structures, which are tonally developed in the second and third, more reprise-like sections of the composition. Spatialisation: Ambisonic.

Hubert Howe, *Inharmonic Fantasy No. 9*
In my previous inharmonic fantasies, I have compressed or expanded the components of a sound into various intervals, ranging from two octaves and a fifth to as small as a perfect fourth. In this work, I employ frequency shifting, which allows the partials to be spread over much wider intervals. The process involves taking the first 24 partials of a tone and shifting them up arithmetically by the interval of about a tritone, preserving the equal distance between the partials but not the ratio between them, so that they are no longer in a harmonic relationship. The components of each tone are introduced either as a complex envelope, where they each fade in and out over the course of the duration, or are attacked individually and then fade out. The order in which the partials enter is related to the harmony of the context.

Brad Garton, *Reading of book excerpts*
I will be doing a set of short readings from three 'books' I have written: "My Music Book", "My Book of Dreams" and "Memory Book". The books run as interactive text/music/graphics applications on laptops and tablet computers. The music and graphics are algorithmically-generated within the apps. They are tightly synchronized with the text at any point. Essentially these are 'books with soundtracks'." Most of the readings will come from "Memory Book", my most recent release. The "Memory Book" is a recollection of memories, enhanced by the music and graphics. Past stories act as a springboard for speculations about life, memory, existence. "My Book of Dreams" is similar, with the text drawn from a series of dreams I had during a particularly intense time of life. "My Music Book" contains general observations about music and culture.

Konstantinos Karathanasis, *Pollock's Dreams: Liquefied Sounds*
The title refers to Jackson Pollock's paintings using his dripping technique, which became the source of inspiration for this piece. Volatile environmental sounds captured around the campus underwent a condensation process through Max/MSP (including phase vocoding, and/or granular synthesis "freeze", filtering, envelope shaping, pitch shifting) to be transformed in to liquid pigments. The liquefied sounds were then arranged in to the canvas (Pro Tools) and balanced dynamically through spontaneous real-time processes. The animation styles were informed by Pollock's paintings, especially by my favorite of his works *FULL FATHOM FIVE* .. .and I tried to create the same feelings of dimensions and layers as he did, using animation tools. Much of the "paint" is achieved with particle systems using volumetric renders, then composited through multiple renders of filters and effects, and then re-composited with other layers of film and animations that had been synthesized in similar fashions.

Joel Gressel, *Moving On*
Moving On begins with a 20-note melody that breaks a single 12-tone row into three jazz-like phrases. This melody and its post-romantic inversions are tossed around for the rest of the piece. The title, although expressing a desire to explore new ideas, refers more to a realization of my advancing age. The rhythms of all the melodic lines in the piece are shaped (by force of habit) by ratios that expand or reduce successive measures as well as the beats within these measures. The normal 12-tone square of 48 row forms has also been distorted by interpreting the numbers not as members of the chromatic scale, but as indices to three ascending diminished-seventh cycles. Transposed rows have segments in common, but no two are the same. It is quite easy to ask the computer to overlap these melodic lines with different instrumental colors at different speeds. Moving On was composed in 2018 on my home computer using an updated version of the Music 4BF program, an ancestor of CSound, that presumably no one else has used since the 1980s. All the sounds were digitally synthesized.

Sylvia Pengilly, *Maze*
As a child, I vividly remember my parents taking me to Hampton Court, where the major attraction for me was not the palace, but the maze. We would wander through it, often taking wrong turns and having to retrace our steps, and soon were completely disoriented. Finally, we would hit on the correct combination of turns and find our way to the exit, having been pleasantly scared. These experiences combined to suggest the form for *Maze,* which is followed by both video and music: the "main path" is represented by the color segments, which are interspersed by a series of "wrong turns," represented by the black and white segments, which lead to dead ends. These finally return to the "main path," each segment of which leads a little further into the heart of the maze. After this, the "wrong" and "right" turns are combined and presented in retrograde, forming a type of palindrome which, like all good palindromes, ends as it began.

Nicolas Chuaqui, *Memories*
This piece stems from a trip to Rome; I tried to capture the most salient moments, places and images as they appeared to me. The title, *Memories,* invokes the ancient nature of the city. The materials of the piece are frequently statuesque or monumental, also invoking this sense. This combines with moving textures, which represent the continuing nature of time. Also present in the work are references to people, such as the breathing in the second movement. This was perhaps the most fascinating part of my experience in Rome: knowing there were countless people who had been there that I will never see or, in most cases, know anything about. Titles of movements:

i. The Sant' Angelo bridge, sunset, looking east to west
ii. A statue in the Courtyard of the Vestal Virgins showing the decay of time
iii. Three memorial stones on Via della Reginella
iv. Saint Peter's Square, noon; the immensity of space

Konstantinos Karathanasis, *Pollock's Dreams: Liquefied Sounds*
The title refers to Jackson Pollock's paintings using his dripping technique, which became the source of inspiration for this piece. Volatile environmental sounds captured around the campus underwent a condensation process through Max/MSP (including phase vocoding, and/or granular synthesis "freeze", filtering, envelope shaping, pitch shifting) to be transformed in to liquid pigments. The liquefied sounds were then arranged in to the canvas (Pro Tools) and balanced dynamically through spontaneous real-time processes. The animation styles were informed by Pollock's paintings, especially by my favorite of his works *FULL FATHOM FIVE* .. .and I tried to create the same feelings of dimensions and layers as he did, using animation tools. Much of the "paint" is achieved with particle systems using volumetric renders, then composited through multiple renders of filters and effects, and then re-composited with other layers of film and animations that had been synthesized in similar fashions.

Michael Rhoades, *Cylindrical Dimensions*
Cylindrical Dimensions, an exploration of the effects of reflective curvatures on light, is a visual music composition. Created in the summer of 2016, it was produced primarily using Csound and Maya.

Concert 20
Saturday, June 22
1:30-3:00 PM
Grand Hall, Kimmel Center

Program

Mahoor Pourmoghadam
Another World 5'10"
New York University New Music Ensemble

Jorge Sosa
Cells 8'34"
New York University New Music Ensemble

David Durant
The Called Has Again 5'29"
New York University New Music Ensemble

Andreas Weixler
WaterGhosts 7'21"
fixed media

Sai Ma
The Dying Albatross 7'25"
Andrew Borkowski, cello

Raphael Radna
Étude: Splice-Tone Melody 2'
fixed media

Patric Simmerud
WO 8'49"
Mika Takehara, percussion

Cédric Camier
Spinning in a room 8'25"
fixed media

Laurie Radford
Event Horizon 12'
Sung Hee Shin, violin
Jooyeon Song, cello
Sujung Huh, piano

Amber Vistein
I Grit My Teeth Against the Glacier 4'08"
Jooyoung Bang, mezzo-soprano
Sungjun Lee, flute
Jooyeon Song, cello
June Hahn, percussion
Taehi Kim, piano

Program Notes

Mahoor Pourmoghadam, *Another World*
Another World won the second prize of the "Reza Korourian Awards (2016)" and was performed by NYU New Music Ensemble in Frederick Loewe Theatre, New York December 9, 2018

Jorge Sosa, *Cells*
Cells (2018) for improvising ensemble and electronics was composed for the NYU New Music Ensemble directed by Esther Lamneck. "Cells" departs from improvisational processes. The ensemble was asked to improvise a number of gestures during a sampling session, which became the main musical gestures for the piece. The musical fabric alternates between short blasts of energy and lyrical, legato texture, aiming to create an organic sound world in continuous transformation. The samples and motives are like organic cellular structures, which evolve and recombine to create a larger musical fabric. If you would like to hear more of my music please visit my web page www.jorgesosa.com.

David Durant, *The Called Has Again*
I composed *The Called Has Again* in the fall of 2001 and

revised it in early 2018 to include an improvising chamber ensemble. It was the first electroacoustic piece that I composed entirely using a personal computer. Before this work, I had variously used a Moog synthesizer, an NED Synclavier, reel-to-reel tape recorders, and a Cray super computer. In *The Called Has Again* I employed for the first time a beta version of ProTools, to record and mix with, and the sampler and audio plug-ins from the digital audio software Fruity Loops (now called FL Studio). I also, for the first time, used a single item as a source for my audio samples. I have subsequently used these tools (and their successors) and techniques in most of my EA works. It seems somewhat naïve to say now, but I wrote this piece while contemplating the effect of the cell phone on our personal communications. I used samples from a 20th-century cell phone for much of the sonic material of the piece.

Andreas Weixler, *WaterGhosts*
WaterGhosts was created in the Studio Alpha of VICC in Visby, Sweden during a composer in residence in February 2017. All electronic sounds are based on on processing of recordings of acoustic instruments and field recordings. A multichannel realtime audio processing studio session of voice and double bass gave gestural movements later composed with processed recordings of the acoustic sounds of low drums and a trombone and a Petzold subcontrabass recorder together with recordings of the sea side in Visby. Audio processings shape a spatial composition in an organic soundscape. Performers:

Jonny Axelsson (S), drums
Ivo Nilsson (S), trombone
Matilda Andersson (S), vocal
Jonas Nilsson (S), bass
Julia Russer (GER), Petzold recorder
Andreas Weixler (A) electronics

Sai Ma, *The Dying Albatross*
By using kyma's frequency analysis, the harmony is automatically generated based on the analysis results. The GrainCloud, and the pitchshift simultaneously during the delay are also used to change the sound intensity and the tone color, or to create dramatic tensions to express the bird's strong desire for survival and struggle with the death. In addition, kyma's recording and playback function is used in section B. local material is recorded into the memory and the loop is generated at the same time with the other effects achieved. The loop constitutes the acoustic characteristics of the multi-voice with the playing of cello.

Raphael Radna, *Étude: Splice-Tone Melody*
Étude: Splice-Tone Melody features concrete sounds that have been segmented, transformed, and reconfigured using algorithmic procedures. Assembled on four tracks, it invites listeners to experience timbre, gesture, rhythm, and spatial movement both as a series of discrete events and as a continuum.

Patric Simmerud, *WO*
WO is composed for marimba, vibraphone, noah bells and computer (one player/fixed media). It is based on a line from the work OMAR by Italian composer Franco Donatoni. OMAR is a set of variations for vibraphone solo, *WO* is consequently variations upon a variation. *WO* was commissioned and first performed by Japanese percussionist Mika Takehara at the Tokyo Opera 2008.

Cédric Camier, *Spinning in a room*
Following the observation of moving source trajectories at high velocities from K. Stockhausen, C. Guastavino (McGill University) and F.-X. Feron (CNRS, IRCAM) initiated a research thematic focusing on auditory cues for moving sources. As a researcher collaborating on circular motion recognition investigation I introduced an ad hoc spatialization algorithm adapted for real time computation and allowing for high speed trajectories. By experiencing sources moving at audio rate, I observed very specific phenomena, related to a spatial dependent modulation. A residency at Conservatory of Montreal has been made in 2017 to initiate the exploration of these phenomena through an Acousmatic perspective. The proposed piece, a tribute to Alvin Lussier, is in the continuation of this work. Dynamic spatial transformations and variation of sound materials are the core of the composition. They are extensively used for pitch, amplitude, rhythmical, and timbre modulation.

Laurie Radford, *Event Horizon*
Pulling the light escape velocity redshifted proper time singularity. An “event horizon” is a boundary in spacetime beyond which events cannot affect an outside observer…a “point of no return”… the point at which the gravitational pull becomes so great as to make escape impossible…a phenomenon usually associated with black holes. The concept of energy at the horizon or the edge of our immediate grasp of time has been a motivating interest in a number of my compositional projects in recent years. It continues to provide impetus to explore movement, speed, transformation and process in many aspects of my music. In Event Horizon, various components of the phenomenon provide conceptual points of departure for each of the sections of the piece. The live 8-channel audio signal processing of the violin, violoncello and piano extends the exploration of both sound and time to the spatial and spectral attributes of the listening experience.

Amber Vistein, *I Grit My Teeth Against the Glacier*
I Grit My Teeth Against the Glacier is the first of movement of *Man Will Not Outlive the Weather*—a chamber opera for mezzo-soprano, flute, cello, piano, percussion and electronics. This movement deals with glacial motion and features field recordings of glacial ‘screams’ and ‘squeals’ heard during ice calving; when large chunks of ice break off from a glacier. These field recordings were analyzed using Orchids (IRCAM). And those analyses provided the work’s harmonic and rhythmic points of origin. Glacial motion was also considered in terms of gesture: scraping, crashing,

cracking. These motions influenced the small-scale gestures of the musicians: the friction of suspended rolled ‘r’ sounds and percussive use of consonants; scraping against the surface of the bass drum and cymbals; and a gamut ranging from delicate, unpitched scraping sounds to distorted, over-pressured squeals on the cello. These motions also animate the 7.1 spatialized sound score that accompanies the work.

Concert 21
Saturday, June 22
4:30-6:00 PM
Grand Hall, Kimmel Center

Program

Lara Morciano
Liphyra 11'19"
Lara Morciano, piano
Jose Miguel Fernandez, assistant

M. O. Abbott
White Standee Line 6'58"
fixed media

Nicola Fumo Frattegiani
Gusseisen 5'53"
video

Mengjie Qi
Breathing 5'40"
fixed media

Xiaozhou Xiao
Dislocation 6'
fixed media

Philip Liu
Resonance Morphology 10'30"
live audio

Lars Bröndum
When the Sky is Low and Heavy 11'24"
fixed media

Yuan-Yi Fan
Structural Analogy - IV 1'29"
video

Martina Claussen
Cri (Schwebungen II) 7'30"
fixed media

Program Notes

Lara Morciano, *Liphyra*
In *Liphyra* the research is based on the correspondence between the gesture and the characteristics of the sound signal as well as the synchronization and interaction between the hands movements of the performer and various sound processes. The work is composed of shorts movements, everyone conceived as an individual sound universe, also played independently. The prevailing idea of the ambiguity of the double explores the cohabitation of a temperate world with that of a virtual resonant instrument detuned (treated and diffused by the transducers, which recreate and diffuse also the sound synthesis manipulated with the motion capture directly into the piano). The name reference to a family of butterflies inspires certain movements such as the light mobility of the wings in the air produced by the pianist’s fingers as well as the concept of metamorphosis (from the state of larvae to that of beautiful butterfly) by different transformations evoking the changes of color of the piece.

M. O. Abbott, *White Standee Line*
White Standee Line (2016) for 8-channel fixed media is inspired, as is much of my work, by the mundane and every day. The piece loosely depicts a series of commutes on public transit. The title refers to the white line on the floor near the front of a local bus, in front of which passengers are not permitted to stand for safety reasons. Each commute is unique in its precise details, for example the different people encountered, conversations overheard, the precise time of arrival, the weather. And yet, all commutes share certain common qualities and aspects; it is mainly the minor details that are different each day. As such *White Standee Line* is cast in "continuous variations" form – similar gestures and sections are presented from different perspectives and in a range of permutative guises. The flow of *White Standee Line* is dynamic and often surprising, against a backdrop of self-similarity.

Nicola Fumo Frattegiani, *Gusseisen*
Literally “iron casting”. The metamorphosis of bodily form. The opposition of the material states. The white-hot and bright liquid which conceals yet magnifies a colourless hardness ready to endure time. The movement becomes stasis. An individual conflict founded on the ineluctable mental solitude, harbinger of potential chimerical scenarios. The epiphany of memories or fantasies, as well as desires and denials is founded on strips of never-ending antinomies. The alternation becomes a mass which submerges and deforms the facets of identity and of its vital and absolute uniqueness within a progressive internal tension. At the end of the voyage the mass resurfaces affirming its own being, resolving itself.

Mengjie Qi, *Breathing*
Breathing is so essential is our lives; sometimes we take it for granted, and never perceive and appreciate it. It means the aliveness of our body, the pace of our mind, and even the freedom of being able to be alive and be active. The composer tries to create a meditative musical space for the audience to experience their own breathing, with the timbre varies between the original cello sounds and the synthesized sounds in the electronic music, people will perceive their own pace through intensive sounds and relaxing sounds. All the images develop to abstract phantoms following the development of the sounds.

Xiaozhou Xiao, *Dislocation*
Dislocation refers not only to leaving the original state, but also to a natural law of evolution. Here, the word “dislocation” is used to express the relationship between time and space, that is, the relationship between vertical and horizontal tone lines. The whole composition mainly uses a four-tone theme to express different states through different rhythms and dynamics. This makes the whole work unified. The original module :<+3, +3, +1, -5>. In the aspect of effectors, the author uses delay and shuffling effectors extensively. In this work, the author uses “dislocation” to explore more possibilities of timbre.

Philip Liu, *Resonance Morphology*
Resonance is what enables us to perceive space. Resonance is the only way that we realize sound as an entity, as sound does not present itself in the form of substance. This live audio-visual performance is about morphing the resonance itself rather than morphing sound qualities directly, or in other words, morphing properties of a virtual space. During the performance, a performer continuously generates a set of data using a 3-D touch controller and a light reactive controller. The data determines shape, size and density of virtual objects, the objects can be small vibrating objects, or can be a collection of spaces surrounding the small objects. Then sonification of the objects occurs, with physical modelling synthesis. The work is also an exploration of shape-sound relationships, as physical modelling is an actual mathematical representation of a targeted object, which yields pure and intuitive 1:1 relationship between the shape and the resulting sound. Through this, audiences can experience the moment of autonomously perceiving sound along with visual, without coding and systematization.

Lars Bröndum, *When the Sky is Low and Heavy*
When The Sky is Low and Heavy is based on five strains from Charles Baudelaire's poem *Flowers of Evil:*

i. from the whole horizons murky grid
ii. the dome of stone
iii. voiceless hordes of spiders
iv. bells leap with rage
v. long processions without fife or drums

The piece is a remix of a live recording of Bröndum's piece *Spleen.* In this 2018 reworked version, the piece has been abbreviated and new electronic parts has been composed as well as arranged for 8-channel surround. *When The Sky Is Low and Heavy* is featured on Bröndum's new CD *Chimera Cadence* which was released in 2018.

Yuan-Yi Fan, *Structural Analogy - IV*
Sound Figures by Ernst Chladni (1787) is the origin of systematic attempt to visualize sound as images. Inspired by Chladni’s acoustics research, thesis of *Structural Analogy* is that aesthetics of audiovisual transformation could be enriched by systematically integrating music information retrieval and pattern formation techniques into creative processes. Structural Analogy is a series of visual music studies that seek systematic rules to transfer structures and narratives from audio to visual domain. In this version, high-level music descriptors of the electroacoustic composition are used as parameters to control a visual system with fluid-like behaviors and vibration characteristics. The music video is created using a custom software application. It enables examination of emergent connections between sound and visuals at various spatial and temporal scales through computation and algorithms.

Martina Claussen, *Cri (Schwebungen II)*
The piece *Cri* consists almost entirely of individual voices that, when placed together, create sounds in relation to one another. Chatting, determining, looking for affinity, complaining, questioning, consoling, self-celebration or sometimes even just trying to conceal oneself takes its course.

Concert 22
Saturday, June 22
8:00-10:00 PM
Grand Hall, Kimmel Center

Program

Russell Pinkston
Zylamander 8'
Marc Zyla, French horn

Chris Arrell
Video 65 5'15"
video by dextro.com

Eric Honour
Still, In Motion 12'
Jamie Yoo, flute
Lucy Hatem, bass clarinet
Sung Hee Shin, violin
Jooyeon Song, cello
Eun Hye Kim, percussion
Sujung Huh, piano
Taehi Kim, conductor

Scott L. Miller
Accretion 9'40"
Jamie Yoo, flute
David Valbuena, clarinet and bass clarinet
Sung Hee Shin, violin
Jooyeon Song, cello
Eun Hye Kim, percussion
JungAh An, piano
Taehi Kim, conductor

INTERMISSION

Akira Takaoka
Vanishing Trajectories 11'30"
video by Keiichi Tanaka

Robert McClure
Struggling in Excess 7'56"
Michele Fiala, oboe

Phillip Sink
To See in Color 5'35"
video

Antonio D'Amato
Béatitudes lysergiques 6'
fixed media

Seth Thorn
Windowless 9'
Seth Thorn, violin

Program Notes

Russell Pinkston, *Zylamander*
Zylamander is an interactive piece for solo horn and computer. The software, written in Max/MSP, follows the score, captures certain parts of the live horn part, and generates an electronic accompaniment in real time.

Chris Arrell, *Video 65*
Sound and image in *Video 65* both result from computer coding, but this coding is complemented by the incorporation of physical movement into the creative process, track-pads, keystrokes, and hacked game controllers all engaged to add real-time spontaneity and human imprecision. The resulting choreography is both controlled and free, image and sound dancing an improvisation of shimmering bifurcations and whirling, luminous tones. Commissioned by the Alte Schmiede (Austria).

Eric Honour, *Still, In Motion*
When this piece was commissioned, I was told that the theme of the concert would be centered around the "road trip." That immediately sparked a series of associations for me. I am fascinated by the hypnotic glamour of long drives, and by the many paradoxes that confront us when we travel by car. Chief among these are the strange dichotomies of moving quickly while sitting still, and of roaming free while strapped tight to a chair. The feeling of rushing forward while the scenery never changes – readily experienced on many road trips – inspired the central section of this piece, which alternates timeless, floating, slowly developing webs of sound with jagged, fast-paced music. The latter, marked "rest stop, scherzoid" in the score, highlights another traveler's paradox: the most one gets to move about during a road trip is in those times when the car finally stops.

Scott L. Miller, *Accretion*
Accretion is inspired by the process of growth through the gradual accumulation or coalescence of matter, as layers or clusters. In this case, the coalescent matter is fragmentary musical material. Over time, it accumulates within the instrumental line or the ensemble into larger, denser or more coherent forms. The composition of Accretion began with recordings of the frozen High Falls on the Grand Portage Trail and lapping ice flows in the Grand Marais Bay which I made in March 2015. The acoustic instruments perform music based on rhythmic and pitch data generated from spectral analyses of these recordings. The electronic sound in Accretion is also the result of these analyses, or fragments of the recordings themselves. This work was developed while in residence at the Lucas Artists Residency Program, Montalvo Arts Center.

Akira Takaoka, *Vanishing Trajectories*
Vanishing Trajectories is a multimedia work consisting of computer-generated music, live lasers, optical filters, various light effects, and video. The music begins with the 12-tone aggregate that corresponds to the opening blackout. As the music unfolds, synchronizing with the formation and the transformation of visual patterns, the 12-tone aggregate starts evolving, gradually forms patterns of continuously transforming pc-sets, and in the end grows into the patterns found in the second and the third sections. All the transformations of the pc-sets and the formation of melodic patterns are strictly regulated by L-systems. The music is entirely generated by my own Java program, in which the L-systems and all the rules for the transformations of pc-sets, voice leading, and melody formation are implemented. The Java program generated score files for RTcmix instruments of channel vocoder, table-lookup synthesis, and others written by Brad Garton, John Gibson, and Doug Scott.

Robert McClure, *Struggling in Excess*
Struggling in Excess explores the vast amounts of waste humans produce on a daily basis. This general observation was magnified during my time living/working in China. Excessive packaging accompanied nearly all products in a vain attempt to elicit a feeling of luxury in the consumer. This plastic packaging served as the primary sound producing material. Plastic sounds are put through numerous processes, both sonically and spatially, in an effort to overwhelm the listener just as physical plastic is overwhelming the Earth, particularly the ocean. Waves of plastic swirl around the listener while other plastic sounds have been filtered and colored with pitch; tainted. Additional sounds were recorded from balloons. These sounds interact with the oboe's multiphonics. The oboe and balloons scream through the din of plastic as their last breaths are extinguished under the weight of our excess.

Phillip Sink, *To See in Color*
“I’m colorblind---I don’t see race” is an incredibly tone-deaf statement uttered by some to appear empathetic to people outside their race. The obvious problem with the statement is that it treats the color of someone’s skin as something that needs to be ignored. As a reaction against the aforementioned statement, I wanted to celebrate what it means to see in color. After all, we express our personal and cultural identities through colors in many ways. If you think about it, seeing in color is a remarkable thing. We are perceptive to a minuscule frequency band of light, which allows us to exist in a vibrant world. To See in Color probes the anatomy of the eye by tracing the path that light takes before the image information is transmitted to our brains. The music was composed after I constructed the video, in which I attempted to create soundscapes to enhance the imagery of the video. For instance, I incorporate samples from a set of chromatic desk bells to represent rays of light.

Antonio D'Amato, *Béatitudes lysergiques*
The idea behind the piece developed after reading an article I stumbled upon a 1966 copy of the *Life* magazine (*Life* 9 September 1966) titled: "New Experience That Bombardes the Senses." LSD Art. The article reviewed an exposition at New York's Riverside Museum created by a group called USCO, a collective of artists, filmmakers, engineers, and poets who presented, acid-inspired artworks. The declared aim of USCO was to create a sensory overload by bombarding the observer with “throbbing lights, dizzying designs, swirling smells, [and] swelling sounds.”* Their goal was to disrupt the sense of time and place, and produce disorientation, lifting the visitors into a state of heightened consciousness, or inducing wildly unpredictable set of artificial emotions. With this piece I try to immerse the listener in a contemplative, mystical environment, where smooth and coarse textures appear unexpectedly and coalesce, assault and seduce - “They can be ecstatically beautiful - or terrifying.”

Seth Thorn, *Windowless*
Windowless is a computational system for improvised violin performance. It consists of an evolving suite of custom hardware and software, including a data glove (alto.glove) worn on the right hand, an EMG and IMU that are sometimes worn on the left, and a custom shoulder rest that generates haptic feedback coupled to the overall sonic dynamics of the system. The software consists of an array of processing modules that can be organized into different scenes to structure improvised performances. These include modules that process live sound from the violin in choreographic spatial patterns, as well as generative elements that are driven by analysis of the sensor and audio data.

Concert 23
Sunday, June 23
1:30-3:00 PM
Loreto Theater

Program

Jing He
Across the time (Exp. music for sine waves... 6'03"
fixed media

Jihyun Kim
BA-bel 9'26"
Eleonora Claps, soprano

Wuan-Chin Li
Summer Morning Rain 7'06"
fixed media

Adam Wilson
Plectrodon 5'
Adam Wilson, guitar

Matthew Goodheart
Berlin Head Metal - I 12'54"
fixed media

Silvia Rosani
The Day I Woke, I woke on Churchyard Hill... 8'
Eleonora Claps, soprano

James Harley
Wild Fruits 3 12'50"
fixed media

Cristiana Palandri and Pietro Dossena
A Fragmented Deity 19'20"
Eleonora Claps, soprano

Program Notes

Jing He, *Across the time (Exp. music for sine waves...*
This piece is a multi-channel work for sine waves. s mainly used to express the combination of the music and multichannel spatiality and three harmonic superposition methods and a series of algorithms to make the simplest sine wave also become wonderful music. The main platform is Max/msp, using additive synthesis, and FM synthesis completes all the sound design of the work.

Jihyun Kim, *BA-bel*
The origin of "Babel" is a term that describes the human desire to build a tower and open the door of God. Opening the door of God in this song is not just about showing pride in humans, but about the good intentions of reaching up to God and listening to his voice. they insulted God in order to tell their wish to demolish the towers they had built. this song encounter a paradox that create to destroy. It means that they wanted to get closer to God and hear the voice of God so they built hard to be destroyed the tower.the people worked hard to build a tower even though they knew God would destroy it in anger.The punishment of human beings began with the sound of trumpets and the punishment was no other than the inability to communicate.

Title: BA-bel (The 'Door of God')
Subtitles: Maison Diev. ("The Temple", "The Holy Temple" and "Arrogance")

“Let us go down and confuse
their language
so we may distinguish
the people
from our thoughts.”
*
Can it be true
that the baby is afraid
his wish
to gobble us up
has been realized
already?
*
Hard to say
since we’ve thrown our voice
into the future
and the past.

COMMENT
The first two lines of this poem are quoted from the Genesis account of The Tower of Babel. The rest of the poem is a dialogue with God, the speaker of those lines.

Wuan-Chin Li, *Summer Morning Rain*
Summer Morning Rain is a Max/MSP-assisted composition for Piano, Soundscape, and Computer-Generated Sound (stereo, surround, 5.1 or 8 channels). This work was influenced by Dr. Jean Eichelberger Ivey's *Skaniadaryo* for Piano and Tape (1976). In Summer Morning Rain the pianist improvises in the spirit of *Skaniadaryo,* then uses Max/MSP to develop contradictory voices in real-time. Live and processed piano together achieve a new composition using modern technology to convey the concepts of the older work: a contemporary reworking of an historical electronic music composition. The composer hopes that with this new work, the spirit and context of early electronic music will be continued and preserved. This work is dedicated to Dr. Jean Eichelberger Ivey who founded the Electronic Music Studio of the Peabody Conservatory of the Johns Hopkins University 50 years ago. Congratulations to the Peabody Computer Music Department on its 50th anniversary this year (2019-2020).

Adam Wilson, *Plectrodon*
Plectrodon is the latest version of my evolving real-time human-computer improvisation system. The system incorporates a novel software component enabling the computer to improvise in the musical styles of its human collaborators. It also generates formal structures for independent musical accompaniment from the aggregate data supplied by the human performers. All of this is achieved with an adaptation of the online factor oracle algorithm, which is used to build and update automata representing all substrings of notes from the human performance—in the smallest number of states—and perform rapid pattern matching on the results to generate more or less stylistically coherent musical responses. In this instance, the system receives input from a fretless electric guitar player in real-time.

Matthew Goodheart, *Berlin Head Metal - I*
Berlin Head Metal - I is the first movement of a large-scale, four movement work for fixed media. The work was created from over 1000 samples from six metal percussion instruments, consisting of large and small chau gongs, two large Vietnamese gongs, a Thai button gong, and a bell plate, using reembodied sound techniques. Initial recordings were made by activating the instruments with a variety of techniques, such as striking with a mallet, striking the edges with a knitting needle, drawing fingernails across their surface, and so forth. Each instrument's specific set of samples were then played back into itself via an attached surface transducer, and recorded again to create a new set of samples. This process was repeated until the sound reduced to the base resonance of the instrument (usually 4-6 recursions). The full work was released on the Infrequent Seams label in April of 2019.

Silvia Rosani, *The Day I Woke, I woke on Churchyard Hill...*
The work mimics the deterritorialization which voices go through, when they undergo displacement through Skype or social media. Is it, though, only the voice which is transformed through the spatial transition? By not being in a determined space, but yet being able to transfer one's voice to it, one can project different selves and discover one's potential as well as have an impact on others who are physically or virtually occupying that space. The reference to Sylvia Plath's poem suggests the image of a woman split between present and past, female solidarity and mourning, and describes the stage of awakening and realisation of her potential. The Day I woke was developed while in Darmstadt and performed there by Giulia Zaniboni and later at Grains of Sound festival in San Francisco by Molly Boggess.

James Harley, *Wild Fruits 3*
Wild Fruits is the final manuscript of Henry David Thoreau, a journal of observations of the natural environment Thoreau lived in, organized as a series of dated entries on the wild fruits (along with nuts and other edibles) he observed on his daily walks. The journal has inspired a series of electroacoustic compositions that bring together Thoreau's acute observations with more recent and ecstatic musings on nature by Annie Dillard. Wild Fruits 3: Chestnut (2008) is based on recorded text drawn primarily from Thoreau. The soundscape materials, mixed to eight-channel presentation, incorporate more discrete sounds, including footsteps, evoking Thoreau's walks through the countryside around his home. The altered voice evokes the fragmentary nature of Thoreau's journal notes, added over several years.

Cristiana Palandri, *A Fragmented Deity*
The breaths of a feminine animal being, who discovers sound inside and outside of herself. The multicoloured and elusive words of Molly Bloom, the unfaithful (though still in love) wife of Leopold, Joyce's *Ulysses.* A performance for voice and tape recorder, where the ancestral Feminine and contemporary Woman resonate with each other.

Concert 24
Sunday, June 23
4:30-6:00 PM
Grand Hall, Kimmel Center

Program

William Thompson
Telephone 6'
laptop orchestra

Scott D. Miller
Paganini Monotype 6'05"
fixed media

Abby Aresty
Moments 6'36"
fixed media

Dafna Naphtali and Jen Baker
Clip Mouth Unit 12'
Jen Baker, trombone
Hans Tammen, blippo box

Julius Bucsis
Sentinels Along the River of Time 5'39"
fixed media

Michael Gogins
silence-2003-07-07-19.52.47.py 7'35"
fixed media

Libby Fabricatore
phase transition 9'06"
fixed media

Federico Cámara Halac
Say Under 8'44"
video

Felipe Otondo
Night Study 2 9'44"
fixed media

Program Notes

William Thompson, *Telephone*
Telephone is a laptop orchestra realization of the child's game telephone in which a message is whispered in the ear of each child going down the line. The finally and usually surprising resulting phrase is revealed at the end of the line. However, in this piece performers and audience members would hear the message as it develops and is wirelessly passed from one ensemble member to another. In Telephone, performers in a laptop orchestra take turns updating an audio buffer with new versions of a ten second wave file which can be sent using scp to any of the computers on the local network. The manipulation of audio by performers is accomplished through use of phase vocoders and pitch shifting. As the initial recorded sound is passed from one ensemble member to another, it begins to resemble its original form less and less taking on a new sound all its own. As indicated by the score these audio messages are realized in various ways throughout the composition in three distinct sections.

Scott D. Miller, *Paganini Monotype*
Apart from a few stray notes, this piece is completely derived from recorded fragments of the *24 Capricci for Solo Violin,* by Niccolò Paganini. Part of the intent was to push an editing program to points where it could not adequately perform instructions, thereby creating overloads that resulted in distortions. I also made liberal use of extended classical electronic studio tactics that I developed in the 1980s, when I composed a large number of experimental musique concrète works. What I have always admired most about Paganini, is not his technique, but rather his tunefulness, so it seemed appropriate in the first part of this work to create new tunes out of his tunes, and in the second part, to color/erase/rearrange/distort one of these melodies, and then send it out into the world in a radically different form.

Abby Aresty, *Moments*
Moments is a series of sonic vignettes exploring what it means to be fully present in each instant. The piece includes sonic materials ranging from field recordings of mosquitoes she collected at Joshua Tree National Park to recordings of her playful, improvisatory interactions with mundane household objects; these include, but are not limited to: a balloon, a rake, tracing paper, and aluminum foil.

Dafna Naphtali, *Clip Mouth Unit*
Since 2014, Baker and Naphtali *Clip Mouth Unit* have been developing a score in the form of a deck of cards/"Post Its" each with a different behavior or electroacoustic process and outlining relationship between instruments and processing. Using this unique set of open form compositions, the cards are organized differently for each performance of the work, merging classic electro-acoustics, multiphonics, and extended techniques (for both voice and trombone), integrated directly with tonal and rhythmic concepts. Two versions are on today's program. Metathesis (added text if 8-channels are available for a live performance) The title's definition is "transposition of phonemes, letters, syllables, or words". In this piece, Metathesis is taken to refer to linguistic phenomena that inform sound. This is the first sounding of an excerpt of a larger work-in-progress for trombone, multiphonics and multi-channel sound.

Julius Bucsis, *Sentinels Along the River of Time*
Sentinels Along the River of Time was inspired by the block universe theory which proposes that all time, past, present, and future exist and are equally real.

Michael Gogins, *silence-2003-07-07-19.52.47.py*
This piece was composed in 2003 using the Python programming language with my CsoundAC algorithmic composition library. The piece is based on a set of discrete dynamical systems with strange attractors, which generate sequences of notes that are fitted to a predetermined chord progression. I synthesized the music using Csound.

Libby Fabricatore, *phase transition*
phase transition is a music concrete process piece, whereby a sub bass drone progresses to white noise, punctuated by percussive granules which are dispersed throughout. The granules weave concentric patterns, occasionally synching into a polyrhythm before imploding into chaos again. The drone underneath was created by processing and layering a series of found sound samples. Varying filter and delay effects were applied in order to accentuate resonant frequencies, intermittently resulting in beating effects. The granules are a combination of processed found sound samples and processed white noise, which were then arranged into modulating patterns.

Federico Cámara Halac, *Say Under*
-- say under // back into those speak about // mean between those // about without to // but outside // so around form lead // far than // within become // who such // speak or speed a speak // rather he need these // make become speed a make // since back after sea come // around before but // will we at // -- "say under" is based on chaotic poetry, turbulent ink and images of an unnamed city at the second Tehran International Electronic Music Festival held in Tehran, Iran, on

September 1-9, 2018. I am very grateful to have been selected for this performance by the Offborders Festival for Electroactoustic music, visual, and performing arts from Greece.

Felipe Otondo, *Night Study 2*
This piece was conceived as a sonic journey through real and imaginary nocturnal landscapes using as a timbral framework the wide palette of percussive and tonal sounds of a Javanese gamelan orchestra. Various kinds of recordings of individual gamelan percussion instruments were used as a basis to develop an organic sonic framework where natural and synthesized sounds were blended and contrasted with nocturnal wildlife field recordings carried out in Chile, Mexico and England.

Concert 25
Sunday, June 23
8:00-10:00 PM
Loreto Theater

Program

Mario Davidovsky
Synchronisms No. 11 7'37"
Ross Wightman, double bass

Eric Lyon
Stratospheric 7'15"

Michael N. Starck
Ueberlastung des Systems 2'26"

Censong Leng
Jiang Xue 7'05"
video

Hans Tutschku
dark matter - avalanche 14'45"

Timothy Sapp
There is a Piece Missing 8'55"

Kang Shinae
Aruna 5'26"

Takashi Miyamoto
Fragments for Viola and Computer 9'15"
Maja Cerar, viola

Reuben de Lautour
Echoes of the Inveigled 11'08"

Rainer Bürck
Lamento industriale 10'

Rodrigo Cadiz
Hapsis 9'01"

Zachary Boyt
A Need to be Free 7'40"
Zachary Boyt, performer

All works without a performer are fixed media

Program Notes

Mario Davidovsky, *Synchronisms No. 11*
Synchronisms No. 11 for Double Bass and Electronic Sounds was commissioned alongside *Synchronisms No. 12* by the new music group SEAMUS along with a consortium of institutions in honor of Davidovsky's 70th birthday. Originally dedicated to and premiered by Donald Palma, *Synchronisms 11* features sampled double bass and clarinet sounds.

Eric Lyon, *Stratospheric*
Stratospheric is multichannel fixed-media music exploring spatial stratification, articulated with rhythmic counterpoint, layers of similar materials, and divergent multichannel sound processing techniques. Through these strategies, sound aggregations that would be too cluttered or dense in a stereo format present rich and clear spatial perspectives for listeners seated both inside and outside the sweet spot of the multichannel array.

Michael N. Starck, *Ueberlastung des Systems*
Ueberlastung des Systems (System overload) is a 2-channel electroacoustic piece from 2008. The composition is essentially based on the recitation of a poem with the same title. Using extreme ways of wave manipulation and dense layering, the abstract, yet gloomy words generate a noisy, deconstructed sound texture which is flanked by dark and glitchy elements.

Censong Leng, *Jiang Xue*
To use pitch processing of the Spectral music and through the computer modulation of Simple wave according to the harmonic series sampled of instrument, and combined it with the deformation of sampling waveform of Nation music Instrument, it tried to express the individual specific imagination, as well as a new acoustics realm of combination an artificial one with natural one.

Hans Tutschku, *dark matter - avalanche*
Inspired by the music of Iannis Xenakis, this composition explores the relationship between sound masses and movement in space. The work uses 24 loudspeakers, positioned as a dome around the audience, to create a highly polyphonic gestural choreography of contrasting sound entities. The human voice, as well as individual sounds from percussion and orchestral instruments,

were the starting point for dense accumulations. Computer models of falling rocks and flocking birds were adapted to be “performable” in the studio and to control sound movement throughout the dome.

Timothy Sapp, *There is a Piece Missing*
There is a Piece Missing is an interactive composition created in Supercollider. While the form of the piece is presented here as a more or less fixed entity, the minute details are produced through various techniques of controlled randomness and the performer has the capacity to interact with and change elements of the piece from the global form down to the most minute details. This allows for each iteration of the piece to either be nearly indistinguishable from each other, with only minor surface details changed between iterations, or to be very distinct.

Kang Shinae, *Aruna*
It is believed *Aruna*, meaning morning stars in Sanskrit that appears only in daybreak inspired the Buddha on his spiritual enlightenment. This work implicates that there should be a genuine effort for the true enlightenment. You can hear chorus although it is not. It sounds like a chorus with added computer mixed voice, which was intended to implicate that the peoples’ aspirations for enlightenments add up to compose the whole. It implies unification into a whole from parts, people’s individual desires into something above.

Takashi Miyamoto, *Fragments for Viola and Computer*
This work is a work for a viola and computer. This work is made focusing on the relationship between the physicality of musical instrument playing and the change of sound image by computer. While the composer creates computer music works, he also perform as a VJ. In that activity, I noticed the importance of the difference in sound impression due to the performance of performers on the stage. In the performance of the instrument there is visual information of the performer's movement accompanying the performance. Sometimes the impression of sound changes depending on the visual information. In this work, the change of the impression is expanded using a computer. The material of the sound is not only the sound of viola but also the sound collected by field recording. These sounds are subjected to original sound signal processing using max.

Reuben de Lautour, *Echoes of the Inveigled*
Echoes of the Inveigled is based on a fragment from a field recording of a street demonstration in Istanbul's Istiklal Caddesi. The sonic features of the demonstration include a traditional drum group playing a frenzied rhythm while protestors shout, whistle and sing. For this work I chose a short segment of the recording with some particularly forceful unison drum strikes. Exploring the idea of what this might sound like in slow motion, I stretched the segment into a longer sequence lasting about eleven minutes, re-inventing and elaborating the spaces between each drum strike.

Rainer Bürck, *Lamento industriale*
Lamento industriale was commissioned by the biennial open air festival Interim, which took place on the pastures and in the forest near Grabenstetten, Germany between 16 September and 1 October 2017. There were sculptures, installations and several performances spread over the entire area. One of the location presented sculptures by Stefanie Zoche from Munich. Her sand casting sculptures displayed various augmented industrial objects. Four musicians were commissioned to create music inspired by these sculptures. I recorded sounds from miscellaneous industrial firms such as a metal construction firm, a brewery, a quarry, a scrap yard etc., and processed these materials in diverse ways. I was particularly fascinated by a sound based on a recording of scraping metal, which, having been processed, sounded to me like sometimes like an electric guitar, sometimes like a saxophone and sometimes like a lament.

Rodrigo Cadiz, *Hapsis*
Hapsis is a word in Latin from Greek origin that means orbits, curve, arch, bow, and hoop. This piece explores the spaces between orbital/cyclical motion.

Zachary Boyt, *A Need to be Free*
This piece began as an exploration in instrument interface design for the Kinect, a motion sensing input device for the Xbox entertainment system. Unsatisfied with the invisible nature of the Kinect interface on its own, I wanted to make something more tactile and physically responsive. The resulting flexible fabric screen brought a sense of restraint and confinement. The sounds produced by the performer’s actions of stretching and prodding the fabric interface embody this feeling, a need to be free.

Immersion Room Concerts
Avery Fisher Center
Elmer Holmes Bobst Library
70 Washington Square South, 7th floor

Immersion Concert 1
Monday, June 17
9:00 AM - 6:00 PM

Program

Mark Ferguson
Deadwood 7'

Nicola Cappelletti
"11235855" 5'26"

Gustavo Chab
Spiral Voice 9'30"

Daniel Blinkhorn
kibuyu 11'16"

Enrico Francioni
All in bass 9'10"

Claudia Robles-Angel
BLOSSOMS 5'50"

Xiaojiao Dong
Suspension 9'20"

Program Notes

Mark Ferguson, *Deadwood*
Single branch, on edge of Severn Estuary. South-westerly winds; internal vibrations. Jagged, rotten bark. Decaying sapwood; cross-sectional transition to sodden heartwood. Partial and complete submergence. Descent towards dense estuary mud; envelopment of flaked bark fragments. Glimpses of common reeds and shoreline during incoming tidal flow. Decomposition processes. Common woodlouse, brown centipede and white-legged snake millipede. Larvae of deathwatch, stag, lesser stag and red-headed cardinal beetles. Invertebrate palps, mandibles, antennae, body segments, wings, elytra, and mucous membranes. Larval stages, egg casing friction and arthropod communications.

Nicola Cappelletti, *"11235855"*
The Fibonacci series acts as a structural excuse for this piece, consisting of a constant dialogue between the flugelhorn and electronics. The two stage a narration that starts from the exploration of some extended techniques of the flugelhorn and ends in a landscape drawn by the electro-acoustic elaboration of the lowest reachable extremes of the instrument. In the middle, a swirling acceleration, a pursuit in which the flugelhorn draws paths that electronic processing follows, metabolizes and returns in continuously changing form.

Gustavo Chab, *Spiral Voice*
A voice from the past come to the present as a Spiral in my mind. This voice is a brief chant in Ladino of my grandfather that emerge like and Spiral in this composition. This excerpt of audio was taken from a video of my family. This work tries to combine sounds that are related with this situation “the voice of Sefarad” (past) and sounds of the present that sometimes come to my mind and appear in form of repetition with punctual sounds. Mixing sounds appear in different manners trying to go in form of evolution like a Spiral. The sounds “of the present” mainly are made and created with Modular Synthesis, different kind of systems like Buchla 200e and others machines. Exploring the possibilities of this Instruments trying to make flexible as a poetic expression and mixing then inside the atmosphere of the piece.

Daniel Blinkhorn, *kibuyu*
Off the coast of Tanzania, on the small island of Zanzibar I happened upon a bazaar in Stonetown with all manner of beautiful African instruments. I found myself drawn to a small, handmade kibuyu. This humble instrument buzzed and creaked and was far from perfect, yet striking a tine was instantly so musically agreeable. kibuyu in Swahili translates to ‘Calabash’ and is the box resonator used in the construction of the instrument. I wanted to use the term as a metaphor similar to the phenomenon of seashell resonance, except in this instance, as one holds the kibuyu against their ear they don’t hear sound redolent of the ocean, but rather a more dynamic abstraction of sonic imagery resounding well beyond the instrument itself and deep into the island of Zanzibar and the many evocative soundscapes it contains. All the material within the composition comes from the striking of three tines of the kibuyu, with no additional sonic material employed within the piece.

Enrico Francioni, *All in bass*
The initial idea was to assign eight sound groups (in ambisonic octophonie), eight respective groups of sound material. Material generated in a specific area of the instrument. Four were the elements from which the production of sound samples started: [WHERE]: where to generate sound? [MEANS] by which means? [WHEREBY] how ...using that medium and in which part of the instrument ? [MOVEMENTS] gesture, what movements generate sound? From a formal point of view the piece consists of four sections: the first is

characterized by events with sounds held, "to carpet"; the second from extra events and "random gestures"; the third from events with gestures of fixed duration; finally, the fourth from events of a-periodic duration (dense / rarefied). At a more refined level of observation the distinct sub-sections have been instead articulated with textures of various nature and complex gestures or micro-gestures generated also thanks to sound processing operations such as sound stretching.

Claudia Robles-Angel, *BLOSSOMS*
The start point of this composition was the creation of a smooth space becoming rugged; as a consequence of this search, the space 'sprouts up' in thousands of small particles. As this natural burgeoning was impossible to stop, it became alive and continued growing, occupying more and more of the sonic space.

Xiaojiao Dong, *Suspension*
Objects can be suspended in liquids or in gases. In this work I try to suspend the point sound material in the linear sound material. Through a variety of sound combinations, the physical phenomenon of suspension is transformed into psychological feelings. The work is for stereo.

Immersion Concert 2
Tuesday, June 18
9:00 AM - 6:00 PM

Program

Caleb Westby ***Translucents***	12'24"
Sangwon Lee ***Torturing Piano***	8'
Sebastian Edin ***Sojourn***	5'45"
Robert Scott Thompson ***Flora of Fynbos***	14'
Matthew Briggs ***I'm Not Speaking English***	5'45"
Maxwell Tfirn ***Sign Interrupt Cycle***	7'48"

Program Notes

Caleb Westby, *Translucents*
Translucents is a study on the sounds of glass and water. This piece afforded me the opportunity to stretch my conception of sound organization and musical structure as it was a stark departure from my typical wind band works. The first movement explores asynchronicity in both pitch and time, as glass has a complex wave form and even when two different glasses have the same pitch they are never exactly identical. The second movement attempts to encapsulate transitions, both on the small scale in transforming one sound into another, as well as in a larger time sense of transitioning from glass to water-based sounds. The final movement is one of energy, building both in an immediate sense and also a larger structural one.

Tiernan Cross, *Noether / 106-0045*
Noether / 106-0045 is a two-part electroacoustic composition that was assembled during a research residency at the Spatial Sound Institute in Budapest Hungary. Using an augmented-reality field recorder to capture the soundscapes of modern Budapest, the intention of this composition was to deconstruct the traditional principles of concrete sound in routine life to stimulate unconventional computer music practice.

Sangwon Lee, *Torturing Piano*
Many composers have enjoyed using extended Piano techniques in their works from a solo piano to an orchestra work. But sometimes, I feel as if the Piano gets torture when its extended techniques are used too much. As a role of satire, Ballade No.1 of Chopin who wrote primarily for solo piano and expanded of the limits of the Piano is inserted. The entire sound sources in this work are only from the Piano.

Sebastian Edin, *Sojourn*
Six easy steps to self-induced placelessness:
1. Access Google Maps.
2. Look up an unfamiliar city.
3. Drop down to street-view on an arbitrary spot.
4. Click your way around, letting the cityscape carry you along. Exhaust your attention on each and every slice of time presented to you.
5. Repeat step 4 for as long as you possibly can.
6. Walk out your front door, with the thousand images of that distant city imprinted behind your eyelids.
Sojourn might be likened to an acousmatic soliloquy— a short sonic meditation on the interrelation of place and identity.

Robert Scott Thompson, *Flora of Fynbos*
The Fynbos ecoregion is one of the world's six floral kingdoms and is both the smallest and richest per unit of area. Exceptionally beautiful in topography and general landscape, the region exhibits extremely high biological diversity with over 9000 species of plants occurring in the area. Of these, 6200 are endemic and grow nowhere else in the world. Comparable in floral diversity to tropical rainforests, the area is unique for a relatively dry continental zone. Flora of Fynbos is an acousmatic fantasia inspired by the pungent, earthy sweetness of Rooibos and also by the fragile ecosystem of the Fynbos region where the tea is found. Made from both leaves

and branches, and sometimes ground to a fine red dust, Rooibos, also known as bush tea, is a unique and highly prized brew; fully without caffeine, yet high in anti-oxidants and full of beneficial effects.

Matthew Briggs, *I'm Not Speaking English*
I'm Not Speaking English was composed entirely by manipulating a recording of a Polish man saying the title sentence in a very thick Polish accent.

Maxwell Tfirn, *Sign Interrupt Cycle*
Sigh Interrupt Cycle is a fixed media composition that utilizes the Mater Suspiriorum, Our Lady of Sighs digita/analog synthesizer and live coding to generate the timbres of the composition. This composition explores the possible harsh static sounds of the Mother of Sighs synth combined with granulated feedback and “pure” sounds taken form in low and high pitched sine tones. Other sounds and patterns in the composition are taken from live coding with a custom sample library taken from the Mother of Sighs sound generated in the composition in the TidalCycles environment. This environment allowed for unpredictable patterns to form using the sounds of the composition to add shifting layers that feel organic. TidalCycles also allowed for custom programmed pattern based effects in Supercollider that would only apply an effect to a certain sound in a loop every n amount of cycles. Each time the sample would cycle the effect would possibly engage with a weighted possibility of occurring and randomized parameters of the engaged effect.

Immersion Concert 3
Wednesday, June 19
9:00 AM - 6:00 PM

Program

Du Xiaohu
Twinkle 5'08"

Lin Shen
Bird Song 5'42"

Bin Cheng
The Mortal World 5'57"

Benjamin Krumwiede
Variations on Isolated Sounds 7'52"

Kairi Nagashima
nu2 6'44"

Daniel Smith
Spirits of the Deep 4'50"

Matthew Test
Bloop: A Cyprid Opera in 9 Acts 10'09"

Kristin Dahlborn
guadalupe 4'42"

Program Notes

Du Xiaohu, *Twinkle*
An glowing sound Stars twinkled in the sky.

Lin Shen, *Bird Song*
Nature gives a new life,
Like a universe being born again and again.
We are the children of the earth,
grateful for the gifts of nature.
We worship nature, we revere life.
But a long time ago,
We began to transform our homes,
until the boundary between man and nature gradually blurred.
Can man and nature coexist harmoniously? Is there still time? This work uses the real sound of nature (including birdsong, ocean waves, wind, etc.) to form a counterpoint and interaction with the imitation of birdsong played by Chinese bamboo flute. The author depicts a picture of mixed reality and chaos, twisted and intricate. The author tries to ask: when will man stop conquering nature?

Bin Cheng, *The Mortal World*
The production's construction is rondo, ABACA structure, the A change minor, and a sharp contrast with the B/C. The material of the A is the "living Buddha jing" and "huma" expressing the peace of religion. The material of the B/C is the noisy and restless of the suona and the electronic music.

Benjamin Krumwiede, *Variations on Isolated Sounds*
After studying album after album by composers such as François Bayle, Bernard Parmegiani, Francis Dhomont, and Mario Davidovsky, this is the Krumwiede's first attempt at writing for fixed media. Having written strictly for acoustic instruments up to this point, writing for electronics has opened an entirely new way of thinking about music for the composer. In *Variations on Isolated Sounds,* Krumwiede explores some of the possible variants that electronic processing can provide to a single knock and a glissando gesture produced from the knock.

Kairi Nagashima, *nu2*
nu2 is created for 4 channel tape. This piece is made from about 20 sound materials that have various character. The title of work is derived from "null" that means 'zero' or 'nothing' in the world of computer programming language. A sound movement and field with a sense of unity is created by discretely arranged sound materials. The sound material are not only sounds of instruments such as piano, guitar, djembe, but also

environmental sounds such as cars and birds. And those sound materials were processed by Max.

Daniel Smith, *Spirits of the Deep*
The deepest places of the Earth are the quietest, the loneliest. When all that is familiar has faded away, there is little left in the darkness, save what alien creatures have hidden away from the surface. And as your eyes adjust to the dark, there's no telling what tricks your mind might be playing from the slow approach of that which lurks just beyond our senses' grasps.

Matthew Test, *Bloop: A Cyprid Opera in 9 Acts*
Originally presented as Part of Chimefest 2018, Presented by the Chicago Integrated Media Experimental Studio at the University of Chicago, April 2018.
T-Roy Martin - Tenor & Trombone
Jenny Magnus, Alto & Flute
National Oceanic and Atmospheric Administration, Deep Sea Ocean Recordings
ACTS
1. Overture, Or, A Typical Evening For the Lonely Oceanic Researcher 00:00
2. Whales Scream In The Presence of Noise Pollution 01:50
3. An A Among Bees 1 (Pastoral) 02:55
4. An Anomaly is Potentially Discovered 03:56
5. Other Unknowns Offer Their Support 04:16
6. We Dream of the Beginnings of Things 06:33
7. Aria: An A Among Bs 07:26
8. A Creature Willed Into Existence Through Wild Speculation Faces An Uncertain Present 08:05
9. The Bloop 09:57

Kristin Dahlborn, *guadalupe*
guadalupe was created with the hopes of understanding the unification of Mexico following the apparitions of the Virgin of Guadalupe ten years after the colonization of Mexico. It features solo voice to emphasize the innate melodies in the Nahuatl language and to make sense of the exchange of Spanish and Indigenous Mexican culture through religion and language.

Immersion Concert 4
Thursday, June 20
9:00 AM - 6:00 PM

Program

Georg Boenn
Ad Infinitum 5'22"

Mattia Benedetti
Se Qatre Khun (Three Drops of Blood) 4'35"

Silvia Lanzalone
Skenè 10'49"

Nikhil Sighh
Passacagia for 30 Lazy Guitars 5'16"

Erik Lawson
Chris Evert, Martina Navratilova, French Open 1985 4'21"

Massimo Fragala
Impressioni 8'10"

YunCi Ceci Lau
Whisper In the Dream 3'59"

Andrew Lewis
Skyline 9'28"

Guo Huimu
MaWeiPo 5'56"

Program Notes

Georg Boenn, *Ad Infinitum*
Ad Infinitum is a tribute to Jean-Claude Risset, composer and pioneer of Computer Music, who died in 2016. One of his many contributions was an acoustic illusion, the famous infinite glissando. My composition explores his glissando in a polyphonic way by using various transformations. First, the speed of the glissando is continuously changed. Secondly, the harmonic series is used to transpose the glissando and to transform its sound via granular synthesis. Finally, several voices are composed together and projected in circular movements around the auditorium. Furthermore, a trigonometric formula was developed for generating accelerandi and decelerandi of two pulse stream towards the end of the piece that signify a translation of Risset's pitch–based glissando to a 'glissando' in the rhythmic domain.

Mattia Benedetti, *Se Qatre Khun (Three Drops of Blood)*
Sadegh Hedayat is a master of deceit: the same objects appears from multiple perspectives, sometimes opaque and trivial, sometimes shiny and mysterious. *Three Drops of Blood* is perhaps his best short novel: a cruel and melancholic glimpse of madness that stages an ensemble of mirrors and crashes them all. We're descend into the abyss of an insane asylum, where after a year a sectioned patient can finally write his memories. We used just a few sounds to evoke his world: two distant voices in farsi, strange machinery, lonely tolls. Dismantled, broken down, mixed and treated, they're familiar and uncanny at the same time. Machinery tries to talk, voices becomes inhuman. What's happening is not clear at all, the environment is gloomy and cold. The curtains drops.

Silvia Lanzalone, *Skenè*
Skenè, electroacoustic set for various music pieces: Hindemith, Marenzio, Coltrane (2013). The music of Skené comes from other 'music', different from each other, but all conceived to be performed in a specific 'scene', appropriate and natural, necessary and exclusive. The scene of Skene is, instead, imposed and alienating artifice, profanation, abuse, perhaps pornography. The research does not promise more than an alienating metamorphosis, from which the 'music' could escape only by the power of modesty. The experience of listening, however, always leads new 'scenes', interior stages, new spaces of experience. The ancient 'skené' therefore, almost unwittingly, renews, redeems and evolves itself. Skené is composed of a variable number of electroacoustic pieces made through free elaborations of fragments taken from works by historical authors. This version of *Skené* consists of pieces from Paul Hindemith, Luca Marenzio, and John Coltrane.

Nikhil Sighh, *Passacagia for 30 Lazy Guitars*
Passacaglia for 30 Lazy Guitars explores the cultural image of the electric guitar, its potentials as a device for sound-making and noise-making, its physicality as a material to be played with, and its sonic presence considered aside from its constructed “aesthetic of virtuosity”. All constituent sounds come from a prepared electric guitar.

Erik Lawson, *Chris Evert, Martina Navratilova, French Open 1985*
Chris Evert, Martina Navratilova, French Open 1985 explores the rhythm, qualities, and motion of the 1985 French Open final match between Chris Evert and Martina Navratilova. The composition is guided by archival film, creative coding (Max) and features prepared piano, mandolin, modular synthesizer, and field recordings. The piece celebrates international friendship, competition, and collaboration.

Massimo Fragala, *Impressioni*
All the sounds that form this composition derive from the elaboration of concret sounds (metal chimes, piano notes, birds, recordings of the sea, stones, etc.). Starting from this sounds I tried to change the original characteristics in order to generate a range of sounds more or less different compared to their original variety. This was possible using particular technique of sound processing such as spectral stretching, time stretching, transposing copies of sound on top of one another, filters, etc. This composition has been realized on linux kxstudio.

YunCi Ceci Lau, *Whisper In the Dream*
Whisper in the Dream is a piece consisting of one woman voice. There still exist some normal nature voice in it, like most of the electroacoustic music. In the process of disposing, the GRM tools has been widely used.

Andrew Lewis, *Skyline*
The Blackbird’s song: at once immediately accessible and impenetrably complex; transcending cultural and historical context; performed daily and free of charge, in the grandest gardens and the bleakest urban slums; a single line and a complex web of counterpoint; endlessly inventive and always repeating itself; completely original and so well known; the peace of a garden and the irrepressible joy of creativity; a music that belongs to all and is owned by none. *Skyline* was realized in 2016 in the Electroacoustic Music Studios of Bangor University (Wales, UK) and premiered on October 20, 2016 at Theatr Bryn Terfel, Pontio, Bangor. It was awarded first prize in the 2017 Destellos Competition, Mar del Plata (Argentina). Skyline includes recordings of Bangor University’s Crossley-Holland collection of pre-Columbian Mexican wind instruments. My thanks to Susan Rawcliffe (flautist) and Scott Flesher (recording supervisor).

Guo Huimu, *MaWeiPo*
The works of the same name were written in ancient Chinese poetry in the Tang Dynasty. The background of the story took place in 755. The powerful An Lushan general rebelled. The emperor abandoned the capital Chang'an and fled to Sichuan with Yang Guifei and his family. Yang Guifei (because her family had political relations with the general's instigating coup) was forced to hang himself in front of the temple, and when the rebellion was finally crushed by his son, the emperor could not forget the grief and finally ended in depression. In the first half of the work, the work is written in a realistic way. Yang Guifei sang the last song and then hanged himself. The emperor drunk in the temple, the latter part deepened the means of electroacoustic music, and extended his memory of his lover.

Immersion Concert 5

Friday, June 21
9:00 AM - 6:00 PM

Program

Kory Reeder
Eyes: Open 8'50"

Juan Carlos Vasquez
A Chinese Triptych 6'

Jacob Duber
tell me i'm alone 8'16"

Ding-Lian Chen
Sprawl 6'19"

Shuang Qu
Bouncing 6'30"

Leo Cicala
Khoisan 10'45"

Jacob Frost
My Fingernail Choir 8'01"

Massimo Avantaggiato
Et erit Lux Lunae sicut lux solis 3'30"

Program Notes

Kory Reeder, *Eyes: Open*
Eyes: Open is a sort of collage written at the end of my master's degree at BGSU. The piece uses recordings of acoustic pieces I wrote while at BGSU as the only source material. Taking a step back, I wanted to reflect on another side of my creative impulse; the majority of my acoustic music is slow, contemplative, and involves a kaleidoscopic approach to material, but here, I wanted to explore the opposite. I wanted to be loud, and express the beauty that I find in the distorted, crumpled, and broken which so often escapes me in acoustic composition. Of course, I don't think any sort of dynamic is better or worse than another, but taking my delicate music and throwing it on its head was a fantastic way to end my time in Ohio. In the end, I find that this piece is beautiful and delicate as well, it just has thorns.

Juan Carlos Vasquez, *A Chinese Triptych*
A Chinese Triptych was composed with recordings from an extensive sound documentary made by the artist in the Chinese cities of Hangzhou, Suzhou, Shanghai, Wuxi, Harbin, and Beijing during 2017. The piece overlaps sonic events from the rural, the industrial and the digital China in a single flowing musical discourse, attempting to represent the full range of highly contrasting ways of living in China. The piece lasts exactly 6 minutes, a number that in China is given the connotation of events "flowing smoothly".

Jacob Duber, *tell me i'm alone*
tell me i'm alone is a line from the track *Archangel* by British electronic artist Burial. Inspired by Burial's dusty production techniques, "tell me..." explores metamorphosis, abandonment, and decay. All samples were recorded with a hydrophone, an underwater microphone, in my bathtub.

Ding-Lian Chen, *Sprawl*
The core concept of this piece is kindled by the sound of metal. Its form is extended through different media (e.g. wood, rock, water...etc.), and further led into different sections by the variation of motive or another layer of the new sound.

Shuang Qu, *Bouncing*
This work uses eight channels to express the bouncing characteristics of table tennis. Computer technology is used to deal with the sound of table tennis and the sound of its deformation, and various space effects are created through eight speakers.

Leo Cicala, *Khoisan*
Khoisan is a symbolic piece playing on peculiar morphological elements of this primal language full of hard consonants and popping, explore from the perspective of psychological inner sense of necessity that migration from the dawn of our species still repeats between Africa and Europe. The shape of the track is arranged metaphorically in events which take place as a series of stages, steps, in the first part the evolution of sound events is posted in the wake of a gesture that represents the primary need to do something in response to another. In the remaining three parts there is a construction of micro-events that goes in the opposite direction to the first part being on the one hand the charm of a better world and the fear of the unknown.

Jacob Frost, *My Fingernail Choir*
The title of this piece, *My Fingernail Choir,* references both the source and the production of the songs contained within. The midsection of the piece is primarily derived from a recording of me scraping my fingernail along a guitar string. The outer sections take inspiration from choral music: the long, pitched drones that open the piece are reminiscent of an organ, while the ending includes vowel sounds produced by a talkbox and other effects. The title is a reference to Cedric Bixler-Zavala's lyrics from The Mars Volta song "Luciforms" from their 2008 album Octahedron. The full line reads, "If your heart doth cease to speak / My fingernail choir / Will make your chalkboard sing."

Massimo Avantaggiato, *Et erit Lux Lunae sicut lux solis*
Et erit Lux Lunae sicut lux solis is an electronic music work which combines concrete sounds that refers to aquatic world. A microcosm of sounds becomes the hyletic universe explored through various techniques in this piece. Heterogeneous sound materials are used: sound of bottles; water dispenser noises ; whistles in bottle; water droplets; electronic wind sounds; chimes; gong; ; Granular accumulations. Just to name a few. The sounds are here combined in well-identifiable electronic gestures.

Immersion Concert 6
Saturday, June 22
9:00 AM - 6:00 PM

Program

Ayako Sato
Kishimu, irodoru 8'13"

Charles Halka
Expand, Contract, Breathe, Weep, Bellow 6'41"

Dimitris Savva
Moments of Liberty III: Standing Without 10'45"

Kyle Vanderburg
Tempest in a Teakettle 8'

Francesco Bossi
broken lines over the silence 3'11"

Bruce Hamilton
Maive 5'45"

Liona Kuo
Rainy - The Train Image 3'10"

Woon Seung Yeo and Ji Won Yoon
Lapsus linguae (ver. 3) 7'05"

Sever Tipei
Ghioc 13'

Clarence Barlow
$^{13}C_2$=[?] ("2 of 13 chronometry") 8'45"

Program Notes

Ayako Sato, *Kishimu, irodoru*
... A half century passed since then. Perhaps the chirping of cicadas, of chickens, and the calm sea may be here same as 50 years ago, but they may have changed. Accumulation of repeated daily life constructs history, cultures, creaks and colors. The mosaic in the center of this small town that carved his name would continue to see and listen quietly to trivial debris of the daily repetition.

Charles Halka, *Expand, Contract, Breathe, Weep, Bellow*
Expand, Contract, Breathe, Weep, Bellow consists of amplified hums, buzzes, drones, whistles, clicks, taps, scrapes, and air, all layered and arranged to gradually transform initial stillness and reserve into unbridled and cathartic release. The work was inspired by and designed to accompany movement by UNLV choreographer Cathy Allen.

Dimitris Savva, *Moments of Liberty III: Standing Without*
"From nowhere to somewhere..." I am grateful to the dancers Alejandra Caro and Maria Jesus Intostroza for the excellent performances that have been sonically recorded and used in this composition. I am also very thankful to my beloved friend Fotini Diakaki for her beautiful singing improvisations, some of which have been included in this work.

Kyle Vanderburg, *Tempest in a Teakettle*
The title suggests the small problems we consider on a daily basis, waiting as they build within us. 'Waiting' is explored in several ways throughout, and uses the medium to augment these daily dramas until we will allow ourselves to view them center-stage. After being introduced to the teakettle in which we'll be experiencing the storm, the noise of rain and wind quickly begin to fill the sonic space. Soft rains and distant thunder churn over one another in a tempest, finally giving way to cautious harmonies fashioned from the wail of a storm siren. Through these elements, we explore the sense of obsession that comes from being kept constantly on alert. We wait for the storm, wait for it to pass, and are waiting for what comes next. Just as soon, the sirens fade, and a full kettle has come to boil while we were preoccupied. As the sonic manipulations alter and extend the soundscape of the piece, the unease of waiting blurs the sense of scale between the tempest and the teakettle.

Francesco Bossi, *broken lines over the silence*
This work is a music algorithmic animation: two lines are broken by the sound of the piano on the dark silence. The basic idea is represented by the artistic evolution of the oscilloscope. The idea is that there is almost no sound that is not related to its visualization. If the perception of sound depends on our visualization, then a visualization can hardly exist without external sounds and this conditions our mental state. The algorithmic animation has been realized with the aid of the Vsynth package of Max. A few words about piano music: it was built on a mode (c, c #, ...). There are three very short movements: the first is based on nine long alternate chords, the second, more lively, is built upon the idea of "talea" and "color" in a complex timing (48/16). The last movement is an arpeggio (6/4 = 5/8 + 5/8 + 2/8).

Bruce Hamilton, *Maive*
Maive is a short piece exploring different segments of the harmonic series (mostly) through sampled piano sounds.

Liona Kuo, *Rainy - The Train Image*
This piece combines the realistic sound recorded around the train station of my country. It uses the particle synthesis method and the reverberation to shape the sound of rainy days, with the intention of depicting the sound-image of the rainy station.

Woon Seung Yoo and Ji Won Yoon, *Lapsus linguae (ver. 3)*

Lapsus linguae (ver. 3) is a sonic experiment to explore musical possibilities of short human voices, mostly sounds of interjections. Phrases composed of short syllables, as well as phrases with longer sounds generated from elongated syllables, are interwoven with others - either in harmony or contrast, resulting in fluctuations of the level of tension that drives the development process of the whole piece. While the overall visual layout remains relatively simple and stable, hue/saturation/brightness levels of the horizontal lines (or, more precisely, connection of dots) change gradually based on the sonic gesture of the music, representing the timbral variety of the music in the visual domain.

Sever Tipei, *Ghioc*

Ghioc is a sea shell used by professional fortune tellers to listen to the noise inside the hull in order to predict the future - and to deceive their customers. The instrumental part and the fixed media part are two independent collections of sections that are uneven in length and can succeed each other in various ways. The randomness embedded in the electro-acoustic part all levels is mirrored in both the structural and detailed decisions made by the human performer. The two entities have multiple strategies at their disposal while being engaged in a dialogue of the deaf. During this process, the live instrument seems to try to decipher the unconcerned computer-generated sounds: another *Unanswered Question.*

Clarence Barlow, *13C2=[b]("2 of 13 chronometry)*

Five Dodecaphonic Pieces is a series of 12-channel electronic pieces realised in 2016 and 2017. All of them are based on the same fixed permutation of 78 combinations of 2 out of 13 tracks each lasting 520”. The 13th track is silent and as such absent. The fifth piece of the series, 13C2=[ ] (“2 of 13 chronometry”) is a work comprising twelve percussive timbres playing a perpetuum mobile in twelve tracks in a total of 48 different meters of one to twelve pulses at exactly nine per second. Each track starts in a meter of as many pulses as the number of the track, the first track with one pulse, the second with two, etc. Every meter (except that with one pulse) is a unique permutation of 2- and/or 3-pulse units, e.g. three 7-pulse meters (2+2+3, 2+3+2 and 3+2+2). There are as many as twelve 12-pulse meters. At 6’13⅓” the meters begin to grow in length, one track at a time, until 7’20”, when every track is in a different 12-pulse meter, all of them synchronized.

Panels

All panel sessions take place in the Steinhardt Building, room 610, 3:00-4:00 PM

Panel 1
Monday, June 17

Women in Computer Music
Maja Cerar

Panel 2
Tuesday, June 18

Soundscape Heritage
Tae Hong Park

Panel 3
Wednesday, June 19

Where Things Stand: Taking Stock 17 Years After the OrchestraTech Festival
Rand Steiger

Panel 4
Thursday, June 20

Computer Music Heritage
Keith Underwood

Panel 5
Friday, June 21

Developing Curricula for Electronic Music degree programs
Douglas Geers

Panel 6
Saturday, June 22

Feedback Musicianship
Chris Kiefer

Panel 7
Sunday, June 23

Follow My Score: Selection, Exposure, and Politics on YouTube
Victoria Cheah

Workshops

All workshops take place in the Steinhardt building

Workshop 1

Sunday, June 16, 9:00-12:00 AM
room 770

Hugh Lobel
University of Colorado, Boulder

Composing and coding in the Music and Sound Design Platform: a free performance platform for electronic composers that's expandable with Max

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Workshop 2

Sunday, June 16, 9:00-6:00 PM
room 777

Thibaut Carpentier
Ircam

3D Sound Spatialization and Reverberation with Ircam Spat

Workshop 3

Sunday, June 16, 9:00-12:00 AM
room 778

Nikhil Singh
MIT Media Lab

Prototyping and Developing Audio iOS Applications Using Csound

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Workshop 4

Sunday, June 16, 9:00-12:00 AM
room 779

David Tang
Individual

Soundscape composing Out

Workshop 5

Sunday, June 16, 9:00-12:00 AM
room 985

Hunter Ewen and Paul Hembree
Amper Music

Amper Music: How and Why an AI Music Composition Company is Hiring Composers

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Workshop 6

Sunday, June 16, 1:00-3:00 PM
room 770

Victoria Cheah
Zach Thomas
Ermir Bejo
Dan Tramte
Score Follower

Make a score-following video!

Workshop 7

Sunday, June 16, 1:00-6:00 PM
room 771

Henrique Portovedo
CITAR - Portuguese Catholic University

Composition Models for HASGS

Workshop 8

Sunday, June 16, 1:00-3:00 PM
room 778

John Granzow
University of Michigan School of Music, Theater, and Dance
Romain Michon
Grame: Centre National de Création Musicale

Computer Aided Design for Prepared Instruments

Workshop 9

Sunday, June 16, 1:00-3:00 PM
Room 779

Tae Hong Park
New York University

Deployment, Analysis, and Creative Composition with Citygram's Soundscape Sensor Network System

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Workshop 10

Sunday, June 16, 1:00-3:00 PM
room 985

Ioannis Andriotis
NYCEMF

A Suggested Metholodogy for Composing and Performing Live-Electronics

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Workshop 11

Sunday, June 16, 3:00-6:00 PM
Room 779

Jonghwa Park
NanoBio Electronics & Systems Lab.(Seoul Nat'l Univ), social-Human Robot Interaction Lab. (Korea Institute of Science and Technology)*

Translating Neurons' conversation into music

Workshop 12

Friday, June 21, 11:00 AM-1:00 PM
room 771

Ioannis Andriotis
NYCEMF

The Future of Virtual Microphones: A New Approach to Audio Recording and Music Technology Education

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Workshop 13

Saturday, June 16, 11:00 AM-1:00 PM
room 771

Ivica I Bukvic
Virginia Tech

Raspberry Pi Orchestra–Promoting Access to and Participation in Community-Driven Computer Music Ensembles

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Installations

Lemon Guo and Mengtai Zhang

> 19980 - Miasma

“Ten thousand things are heard when born,
But the highest heaven’s always still.
Yet everything must begin in silence,
And into silence it vanishes.”
-Wei Yingwu, On Sound ( )

In Taoist macroscopic ideology, the richest sound cannot be heard, but felt. Human hearing is limited to a narrow frequency range between 20Hz and 20kHz, which split the sound not only from the maker but also from its nature. The sound exceeding this range would not be heard by the ear, but felt by the body. In this universe, infinite things are producing ultrasonic and subsonic waves around us all the time. While it has been an ancient source of poetic inspiration, the inaudible world is far from being innocent, having been exploited for its physical potential as weaponry and for surveillance since World War I. Then, what is this inaudible world really like? Driven by this question, “>19980” starts as a series of audio-visual exploration following the idea of the inaudible soundscape. As part of the project, “Miasma” investigates this idea within the urban environment, while incorporating computer-generated imagery as an imagination of such sound world. This work begins with field recordings in the urban space, including subways, water pipes, electrical appliances, and everyday noise. The subsonic and ultrasonic waves under 20Hz and over 20kHz are extracted from the original recordings, and sped up or slowed down into audible ranges to generate musical materials. The visual projection employs algorithmically generated imagery, utilizing techniques such as fractal noise, geometric distortion, and particle systems. The work extends the Taoist ideas on music, reimagining sound unheard, that transcends the human experience, transforming with time and space.

Anthony Lyons and Paul Fletcher

Complimentary Halves

‘Complimentary Halves' is an audio-visual installation work consisting of two inter-related sound and moving image projections. The work explores two perspectives on future urban design/development. Using manipulated and re-imagined images, field-recordings and animation materials from the Fort Canning park area in Singapore, the installation represents a familiar future pressure facing the dwindling pockets of green space in countless urban areas throughout the world. In 'Forest Bokeh' – The impression of an abundant forest of green with sunlight piercing through tiny gaps in the leaves is constructed. The future imagined in this vignette is one where nature is given a chance to flourish and refresh and simplify our busy and complex lives of the future. With 'Mechanical Trees and Frangipani Flower Drones' – A new tourist attraction is imagined. The form of a tree is extruded to make a large public art sculpture, a prototype for a skyscraper modelled on the form of a tree – ridges of bark provide passive cooling assistance, natural drainage and water collection. Drones disguised as floating frangipani flowers emit timed mists of fragrant oils. Occasional glitches may occur.

Teresa M Connors

Currents: A nonlinear interactive audiovisual installation

‘Currents’ is one of several interactive audiovisual installations in development by the author that explores the environment of east coast Newfoundland. Emerging from a meshwork of materials that includes ocean data-sets, live streamed wind data, a heart rate monitor and audiovisual material captured in this environment, Currents combines these expressive actants to explore nonlinear creative processes within an immersive experience. Using a PulseSensor, all elements of the installation are triggered by a gallery visitor’s heart rate that, in turn, generates a backdrop of animated water droplets. Combined with the sonification of live wind data, ocean data-sets and pre-recorded musical improvisations, a multi-temporal experience is realized.

Jacob Sandridge

Each step

‘Each step’, an interactive sound installation, allows for user agency and discovery. Participants are given a map to the space and are encouraged to observe how their interactions with the space affect the algorithms creating the sound. Participants are encouraged to step into a square and observe the gradual effect they have on the sound. 'Each step' was created as a response to Matthew Ritchie’s 'The Demon in the Diagram', a site-specific visual art installation that investigates the history of the diagram as a means of mapping both human knowledge and lived experience. For this presentation of ‘Each step’, a map with symbols is provided for participants. The symbols are clues as to what affect each square has on the sound. There are two synthesizers, one activated by stepping anywhere in the larger purple square, the other by stepping in the larger blue square. Each of the smaller squares within these larger squares affects one of the parameters of these

two synthesizers. The one square central square that falls within both the purple and blue squares affects the fundamental frequency of both synths.

Mara M Helmuth, Yunze Mu, Owen Hopper, Zhixin Xu, and Shawn Milloway

Five Worlds

'Five Worlds' is a virtual reality environment in which audience members experience interlocking virtual worlds with their own unique sound components. The worlds were created by Mara Helmuth (Tranquilarea), Owen Hopper (Woods Sounds World), Zhixin Xu (Idiophone), Shawn Milloway (Visualizer Cave), and Yunze Mu (Sky World). The various worlds are entered by touching a particular sphere. Tranquilarea, the peaceful and golden central Menger Sponge-based fractal universe modulates in levels, transparency and timbral complexity based on user actions. Woods Sounds World is a natural habitat with woods grassland, pond and cave, with some objects providing unusual sounds. Idiophone is a musical instrument which reacts to striking balls hung from a ceiling of a room. Another world allows one to explore sonic visualizers reacting to heard sounds. The sky world allows the person to experience a world where sunrises and flying are accessible by verbal command, flying high above or falling down into a body of water, as well as interacting with birds and various sounding objects. The worlds were created in Unity 3D game engine with RTcmix programming for sound.

Haein Kang

Illusion: you can hear, but you cannot see

'Illusion' is a performance-based sound installation, which is activated by brainwave and produces rhythmic sounds. A performer sits in the middle of a room wearing an EEG headset. Custom electronic percussions are behind the performer and a projection of an eye in the front. When the performer closes their eyes, 8 to 13 Hz electrical signals trigger in the visual cortex. It's called 'Posterior Dominant Rhythm(PDR)' in neurology. PDR actuate the percussion instruments to play cadenced sounds. EEG is a non-invasive technique to monitor the electrical activities of the brain using electrodes placed on the scalp. A century ago, German psychiatrist Hans Berger recorded the first human EEG, and in 1965, pioneering American composer Alvin Lucier created Music for Solo Performer, generally considered the first musical work to use brainwave. Illusion takes its inspiration from this history but employs a recent advanced technology, brain-computer interface (BCI) to measure and process brainwaves. Aesthetic goal of Illusion is to create a synesthetic metaphor. Blinking of the eyes divides the visual perception into light and darkness. The BCI system of Illusion turns the repetitive gesture into the musical rhythm. If you close your eyes, you can see the world imaged by sounds. Illusion is an instrument propelled by the mind and the experience of a moment of obscurity.

Alexis S Crawshaw

Kroumatograph No. 4

'Kroumatograph No. 4' is the latest work in a series entitled '"Kroumatograph"' (2016–present), created uniquely for the 2019 ICMC-NYCEMF. The idea of a kroumatograph is proposed as a novel spatiotemporal compositional form that unites three acoustic phenomena: standing waves, frequency beating, and the biomechanical resonance of the human chest. Taking careful account of these phenomena when selecting and acoustically analyzing a potential venue, one can create a dynamic spatial terrain of evolving haptic polyrhythms with only one static, additive tone diffused from a single subwoofer. This work is informed by a series of recent site-specific acoustic experiments on the nodal drifting that occurs at frequencies slightly offset from standing waves. These frequency deviations result in unique spatial profiles that, when selectively superimposed, result in a rich topography of polyrhythms. Compositionally, the work explores the notion of spatiotemporality and how one might guide musical form in a navigable space. The two movements of the piece explore two possibilities. The first movement borrows from both music and ballroom dance notation to guide the audience-goer along a compositional, spatiotemporal trajectory. In the second movement, the trajectory is left open for the audience-goer to improvise their own musical path, thus blurring the lines between composition and installation. This work is part of a greater research project looking at the spatial approaches particular to an original form of compositional practice: electro-somaesthetic music (ESM). This music is computer-generated and is characterized by its intentional engagement of the somatosensory system. The kroumatograph is a proof-of-concept for an acoustic spatialization paradigm within ESM. It is an example of how one can spatialize allocentric (or environment-centric) content in ESM using acoustic analysis alone.

Daniel B Formo

The Orchestra of Speech

'The Orchestra of Speech' is a part sound installation, part instrument and performance concept coming out of a recent artistic research project exploring the musical

features of spoken language, in particular the relationship between everyday conversation, social interaction and musical improvisation. An instrument system has been developed as the main method for this exploration, based on software for analyzing, extracting, arranging, interacting and with the musical content of speech in real-time. The software is connected to a setup of transducers mounted on acoustic instruments, resulting in a hybrid electro-acoustic orchestra installation, exploring the differences between speech and music, electric and acoustic, and between the virtual and real.

Angus Tarnawsky

Variable Frequencies

'Variable Frequencies' is a cable sculpture and reflexive sound work. Using unshielded cabling, an antenna is constructed in combination with a FM transmitter broadcasting on a site-specific frequency. This is spatialized with multiple receivers whereby bodies in the space significantly alter the effectiveness of the antenna signal, resulting in a shifting soundscape and connection to nearby radio bands. In this way, the work looks to highlight the fragile relationship of physical presence and resulting impact on omnipresent yet invisible channels of communication.

Installation Artists

Teresa Connors is active as a creative coder, acoustic and electroacoustic composer, opera singer and audiovisual installation artist. Her creative works have received awards and support from the Canada Council for the Arts, British Columbia Arts Council and Bravo Fact, and have been presented at international conferences, film festivals and galleries. She has recently returned to St. John's, Newfoundland, to conduct postdoctoral research with the International Institute for Critical Studies in Improvisation (IICSI). Having completed her PhD on "Audiovisual Installation as Ecological Performativity" at Waikato University in New Zealand, her research with IICSI will expand on the use of environmental data as a co-creative apparatus within an immersive and improvisational audiovisual system. www.divatproductions.com

Alexis S Crawshaw (b.1986) is a transdisciplinary media artist/composer/researcher/technologist/theorist/educator. She holds an M.A. in Music and is currently both a Ph.D. Candidate in the Media Arts and Technology (MAT) program at UC Santa Barbara, and a doctoral researcher in the Ecole Doctorale "Esthétique, Sciences et Technologies des Arts" (EDESTA) at the Université Paris 8 Vincennes-Saint-Denis. As an artist and researcher, she has worked on a variety of compositions, installations, and performative projects in both France and the United States. Among these projects, she has created site-specific installations for both the Santa Barbara Center for Art, Science, and Technology and for the Maison des Sciences de l'Homme Paris Nord (Northern Paris Institute of Human Sciences). [Redacted]'s research interest is in exploring musical composition both 1) across the different sensory modalities and 2) as a means of structuring formative temporal experiences in new art forms, particularly educational/pedagogical ones. At present, her research-practice follows two main threads. The first thread engages the frontier of haptic expression through spatial haptic music and haptic sound sculpture (using vibrotactility). This area of focus entails the design of new technologies—including computational tools and wearables—to aid in its production. The second thread outlines an aesthetic theory for computational creation across all media, bridging ideas from information aesthetics and the cognitive sciences together with contemporary digital practice.

Paul Fletcher is an Animator, digital video maker & sound artist. His work has been shown at festivals from Melbourne to London, Texas to Iceland. He is interested in the relationship between sound and animated motion. 'Collaborator 2' is a Lecturer in the Animation at the Faculty of Fine Arts and Music at the University of Melbourne. 'Collaborator 2' has worked collaboratively on several projects with multi-discipline central Victorian art collective Punctum. He is a member of the Art and Technology Coalition and contributed to their international travelling exhibition "InsideOUt". 'Collaborator 2' is a current and active committee member and contributor to the Undue Noise Collective. He has facilitated short courses and group production projects often integrating Environment, Science and Art themes. He continues to produce digital film work situated at an intersection of abstraction and narrative, and create installation and live performance projects, involving the invention of custom built audiovisual instruments. Currently working on projects involving Public Site Specific Projection and Mixed Media Installations incorporating Kinetic and Audio Sculpture, Video and Animation. 'Collaborator 2' has engaged with many Animation methods and sound production, but has a special interest in visual music, abstract animation, experimental film, soundtrack composition, live film, improvisation and procedural animation, projection art and animation installations.

Daniel Formo is a keyboard player, improviser and sound artist from Trondheim, Norway, working within a broad range of music from improvised and written contemporary music, to jazz and popular genres, as well as electroacoustic music and electronic art. His work takes a special interest in the relationship between language and music, instrument building, and between virtual and real soundscapes.

Mara Helmuth composes music often involving the

computer, focussing recently on environmental issues and wildlife. Her recordings include Irresistible Flux on Esther Lamneck's Tarogato Constructions, from O on Open Space CD 33 Benjamin Boretz 9x9, Lifting the Mask on Sounding Out! (Everglade), Sound Collaborations, (CDCM v.36, Centaur CRC 2903), Implements of Actuation (Electronic Music Foundation EMF 023), and works included onOpen Space CD 16 and the 50thAnniversary University of Illinois EMS collection. Scores are published in Open Space Magazine Issues 19-20(from O), and Notations 21(String Paths), edited by Theresa Sauer. Her music has been performed internationally at conferences, festivals and arts spaces. Her research includes software for composition and improvisation has involved granular synthesis (StochGran), wireless sensor networks, user interfaces, performance over Internet2, Unity musical game environments and contributions to the RTcmix music programming language. She is Professor of Composition at the College-Conservatory of Music, University of Cincinnati and Director of the CCM Center for Computer Music. She previously taught at Texas A&M University and New York University. She holds a D.M.A. from Columbia University, and earlier degrees from the University of Illinois, Urbana-Champaign. She served on the board of directors for the International Computer Music Association, as Vice President for Conferences, newsletter editor and President and on the SEAMUS board of directors and newsletter editor. She also plays tennis.

Yunze Mu is a Chinese composer based in Cincinnati, Ohio. He is currently pursuing a Master in Composition at the College-Conservatory of Music, University of Cincinnati where he studies computer music with Dr. Mara Helmuth. Mu holds a Bachelor's degree in music composition from Central Conservatory of Music. His music has been performed at numerous events in China, Poland, France, U.S., and Korea.

Owen Hopper (b.1995), is currently a Masters student in composition at the University of Cincinnati College-Conservatory of Music. Through work that encompasses sound, media, acoustics, and digital technology he draws inspiration from topics in science, environment, literature, and the relationships between landscape and meaning. His language revolves around texture and timbre, density and openness, as well as aspects of minimalism. His work has been performed at the Electroacoustic Barn Dance, the West Fork New Music Festival, The Navy Band International Saxophone Symposium, the Midwest Composers Symposium, and at various concerts in the Columbus and Cincinnati areas. He is currently studying composition and computer music with Dr. Mara Helmuth.

Haein Kang is a multidisciplinary artist employing advanced technology to explore the infinite possibilities of artistic expression. She intends to surprise you with novelty and beauty of her artwork. Recently, she has been studying physiological responses of the brain to the mind and body for artwork at the University of Washington. Kang began in earnest her career as an artist by winning the grand prize at an installation art competition, Construct, held by the San Francisco Arts Commission in 2002. Her artworks have exhibited in various venues in Korea and the U.S. including SOMA Museum, Seoul Museum of Art, Southern Exposure Gallery, Richard Levy Gallery, and Gallery 4Culture.

Anthony Lyons is a composer and sound artist whose practice is an interdisciplinary one traversing moving image, performance, design and installation. His creative output includes works for orchestra, bands, EDM, installation, and hybrid-arts projects. An active explorer of audiovisual electronic music his work has been featured in festivals such as the Matera Intermedia Digital Arts Festival, the Greenwich Sound-Image Colloquium, the Zèppelin Ars Electroacustica, the Porto/Post/Doc Film & Media Festival, and the Melbourne International Film Festival. 'Collaborator 1' embraces multiple modes of making and he is interested in the ways technology, extra-musical interaction and collaboration coalesce in creative practice. Granular processes and sampled materials feature in many of his compositions and he is increasingly drawn to the inner worlds of sound and connections to memory, sonority and place. 'Collaborator 1' works have been performed, exhibited and broadcast in Australia and internationally. He is a lecturer in Interactive Composition at the Faculty of Fine Arts and Music, at the University of Melbourne. Yunze Mu is a Chinese composer based in Cincinnati, Ohio. He is currently pursuing a Master in Composition at the College-Conservatory of Music, University of Cincinnati where he studies computer music with Dr. Mara Helmuth. Mu holds a Bachelor's degree in music composition from Central Conservatory of Music. His music has been performed at numerous events in China, Poland, France, U.S., and Korea.

Jacob Sandridge; As a composer, sound artist, and performer of contemporary art music, I am interested in both adaptable-length and traditional fixed-length works for acoustic and electronic media. I create music as a method of expressing themes of memory, transformation, nature, and comfort. I understand and experience art as a unique space that allows for the suspension of disbelief where audience and performers can experiment with the juxtaposition of ideas that might originate from dissimilar places. This juxtaposition of dissimilarities is parallel to the alterity I felt as my Appalachian identity was displaced in more urban and more academic environments. As I engage with new ideas, I learn to coalesce new ideas with my past experience, creating works that express some part of my personal history while engaging with the changing world around me. Recent projects include a sound installation at Montrose 4411 in Houston with artist Sarah Sudhoff. Another recent project is an interactive piece for tenor saxophone or viola and live electronics, that reflects the activities of a flock of birds at dawn. Last year, I collaborated with double bassist Annick Odom to create a work that discusses current issues in Appalachia, including the opioid epidemic and lack of economic

opportunity.

Angus Tarnawsky is an artist and musician who investigates perceptions of sound and space through installation and performance. Drawing from his experience as a drummer and audio engineer, he uses repetition, motion and transmission to engage with site-specific concerns of temporality and materiality. A frequent collaborator, he works alongside a variety of artists, most notably through his curatorial project ICM, where he releases lathe-cut records and organizes concerts. Originally from Tasmania, Australia, he lives and works in Toronto.

Zhixin Xu is a Chinese composer, sound artist, programmer, music engineer and music performer based in Cincinnati, Ohio. He is currently pursuing a DMA in Composition at the University of Cincinnati's College-Conservatory of Music where he studies computer music with Mara Helmuth and teaches introductory courses in electronic music. A native of Shanghai, Xu holds a bachelor's degree in music production and engineering from Shanghai Conservatory of Music. His music has been performed at different events and venues in China, North America and Europe. Much of his recent music has been focused on exploring how purely computer-generated sound materials can be used along with musical instruments and purely acoustic sounds. As the director Cincinnati Composer Laptop Orchestra project (CiCLOP), he also contributes software for laptop ensemble performances. Shawn's music seeks to engage the rhythms and force of progressive rock, disco, and funk. His music has been described by the Classical Voice of North Carolina as: "ironic and maniacal...[combining twisted marches, tortured rock/pop grooves, and moments of genuine sweetness..."

Composers

M.O. Abbott began playing classical trombone at age 9 and began forays into composition in his early teens. Today, M.O.'s foci include computer-assisted algorithmic composition, electroacoustic music, microtonality and just intonation, and sonification. He is fascinated by stochastic systems and emergent generative forms, and often draws creative inspiration from science, nature, the mystical, the absurd, and the mundane. M.O. holds a B.M. in Theory from Eastman School of Music and a M.M. in Music Composition from University of Illinois at Urbana-Champaign, where he now a D.M.A. candidate, and the administrator of CAMIL (Computer-Assisted Music Instruction Laboratory) and CMP (Computer Music Project). His principal composition instructors include Sever Tipei, Scott A. Wyatt, Heinrich Taube, Eli Fieldsteel, Erin Gee, Brian Belét, and David Liptak. He has had additional lessons or masterclasses with Marc Sabat, Elainie Lillios, Ann Cleare, Juraj Kojs, and Marcos Balter, among others.

Jay Afrisando is an Indonesian music composer and sonic artist. He uses music and sound-based art to share awareness of human-nature-technology relationships; this includes building a better relationship between people and technology, promoting a healthier symbiosis between human & nature, and inducing consciousness of our senses (and its critical appraisal)—especially the auditory one—towards the surrounding. To communicate these vision to public, broad range of approaches are chosen: from musical composition to sound installation, from acoustic to electroacoustic, from fixed-media to improvisation, from implied to overt participatory-setting that invites audience to the very making, and everything in-between. Currently, he is a PhD student in composition at the University of Minnesota. For further information about his works, visit https://www.jayafrisando.com/.

Composer and sound artist **Iddo Aharony's** diverse body of work includes pieces for a variety of ensembles, solo instruments, and electronics, along with compositions for contemporary dance, opera, and various multimedia projects. Aharony's acoustic and electronic music has been performed by ensembles and musicians in the United States, France, Italy, Britain, Spain, Israel, and Australia, including Ensemble Dal Niente, Mivos Quartet, and Eighth Blackbird. It was presented at festivals such as SEAMUS, NYCEMF, June in Buffalo, and the Valencia International Performance Festival. Among his awards are the 2014 soundSCAPE festival composition prize and commission, and fellowships from the MacDowell Colony, Ucross Foundation, and Atlantic Center for the Arts. He serves as Artistic Director for Chicago-based multimedia group Fused Muse Ensemble. He received a Ph.D. from the University of Chicago in 2016, and is currently an Assistant Professor of Music Technology at Colorado College.

Miriam Akkermann studied classical flute and New Music and Technologies at Conservatorio C. Monteverdi in Bolzano (I), audio communication at TU Berlin, and composition and Sonic Arts at Berlin University of the Arts (GER), where she also completed her PhD in musicology in 2014. Her artistic focus is sound art and experimental music, especially improvisational formats in which she also collaborates with dancers, performers and visual artists. In research, her focus is music of the 20th and 21st century with especial interest in computer music, electro-acoustic composition, improvisation, and historically informed performance practice.

Marc Ainger is a composer and sound artist who works with concert music, computer and electronic sound, film, dance, and theater. Recent performances of his works have included the New York Philharmonic Biennial; the GRM; the Royal Danish Ballet; CBGB; Late Night with David Letterman; the Goethe Institute; the American Film Institute; Guangdong Modern Dance; the Palais de Tokyo (Paris); FolkwangWoche Neue Musik (Essen);

Gaggego (Gothenburg); the Joyce Theater (New York); and New Circus artists. Awards include the Boulez/LA Philharmonic Composition Fellowship, the Irino International Chamber Music Competition, Musica Nova, Meet the Composer, the Esperia Foundation, and the Ohio Arts Council.

Daichi Ando was born in 1978 in Japan. has a Ph.D in Science. He studied composition and computer music under Takayuki Rai and Cort Rippe at the Sonology Department, Kunitachi College of Music, Japan. Then he studied computer music with Palle Dahlstedt and Mats Nordahl at the Art & Technology, International Master Program from IT-University of Göteborg, Chalmers University of Technology, Göteborg, Sweden. Currentrly, he teaches and conduct researches as Assistant Professor in Division of Industrial Art, Tokyo Metropolitan University. He is very interested in "Interactive Machine Learning" and "Genetic Programming" to share musical knowledgement between computer and human. His constructed interactive machine learning systems for composition generates many pieces in past, some pieces performed in ICMC. Currently he works methodology of musical improvisation performance knowledgement to apply into machine learning.

Nicoletta Andreuccetti composes acoustic and electronic contemporary works. After the awards in several international competitions (I prize at the International Electroacoustic Music Competition Musica Nova in Prague, I prize at Dutch Harp Composition Contest Utrecht etc.) her music has been performed in the most significant international festivals: Achantes 2009 (Metz-Paris), International Gaudeamus Music Week 2012, Biennale di Venezia 2012, Mixtur 2014 (Barcelona), I Pomeriggi Musicali 2016 (Milan), 12th International Symposium on Computer Music (CMMR) São Paulo, NWEAMO FESTIVAL 2016 in Tokyo, 46th Annual John Donald Robb Composers' Symposium atUniversity 2017 (New Mexico), ISCM World New Music Days 2017 (Vancouver), SCM 2018 (Cyprus). She is currently a PhD candidate in Musicology at the University of Toulouse. Her research work focuses on the application of physical modeling synthesis to the compositional practices.
https://www.nicolettaandreuccetti.it

Ioannis Andriotis (b. 1983, Greece) is interested in creating projects that bridge the gap between popular and academic music. As an artist, Andriotis focuses on sociological aspects of music emphasizing elements of human interaction, culture, and social memory. His work and research has been presented at various music festivals/ conferences and art installations in Europe, Middle East, and the US. Andriotis holds a D.M.A. in Music Composition from the University of Oklahoma (USA). During the upcoming academic year he will serve as a lecturer of music composition & music technology at the Univ. of Oklahoma. In the past, he served as an instructor of music technology/theory/composition at Oklahoma State University, Oklahoma City Community College, and Rose State College. Andriotis is also an assistant technical director and member of the steering committee for NYCEMF. For more info visit www.andriotismusic.com .

Abby Aresty is a composer and sound artist who uses technology to facilitate unexpected interactions between people, the built environment, and the natural world. Her projects are playful, meditative listening interventions that seek to provoke audience reflection on habitual listening practices in contemporary sonic environments. Aresty's site-specific installations have been featured in local and national news outlets; Paths II: The Music of Trees, a temporary installation in Seattle's Washington Park Arboretum, was featured in an interview with Melissa Block on NPR's All Things Considered and was hailed as "otherworldly" and "sometimes eerie, sometimes transportingly lovely," by the Seattle Times. Aresty has presented her research in the United States, Canada, Australia, and Hong Kong, at conferences including ICMC, Balance/Unbalance, ISEA, and Sonic Environments. She has held fellowships at the Studio for Creative Inquiry at Carnegie Mellon University, Grinnell College, and the Acoustic Ecology Lab at Arizona State University's Herberger Institute for Design and the Arts. Aresty is the technical director for the TIMARA Department at Oberlin.

A computer algorithm addict and former metal guitarist who wrote his doctoral dissertation on the music of avant-garde composer Gérard Grisey, **Chris Arrell** takes equal inspiration from contemporary music and the Digital Age. Arrell's commissions include the Alte Schmiede (Austria), Boston Musica Viva, MATA, Spivey Hall, Cornell, and the Fromm Foundation. A winner of the Ettelson Composer Award for his work Of Three Minds, Arrell holds additional prizes from Ossia Music, the League of Composers/ISCM, the Salvatore Martirano Competition, the MacDowell and ACA colonies, and the Fulbright-Hays Foundation. His music, praised for its nuance and unconventional beauty by New Music Box, the Boston Music Intelligencer, and the Atlanta Journal Constitution, is available from Beauport Classical, Electroshock Records, Parma Recordings, Trevco Music, and Ablaze Records. Arrell is an associate professor at College of the Holy Cross in Worcester, Massachusetts, where he teaches courses in composition, theory, technology, and directs the Holy Cross Laptop Ensemble Federation. www.chrisarrell.com

Massimo Avantaggiato took a degree in Electroacoustic Composition with full marks (Milan Conservatoire) and a degree as a Sound Engineer. Finalist in some composition and video competitions, he has recently participated in: Csound Conference 2017 (Montevideo, Uruguay; SEGNALI 2017, Perugia, Italy; EMUFEST 2010; 2013; 2016 (Rome, Italy); Rieti Elettroacustica 2016, Rieti, Italy; Csound 30 Conference 2016, Maynooth University , ireland; V Cycle du son - Image & Resonance, Espace Culturel de Rivadavia, Mar del Plata, Argentina; Labirinti sonori 2016, Casa del Suono, Parma; Art and Science days 2016, Bourges, France; Diffrazioni Festival 2016 (Florence, italy); SMC

2016 (Hamburg, Germany).

Girilal Baars is a composer based in Uppsala Sweden. He works in the fields of electroacoustic music/sound art often with elements from traditional vocal folk music, also field he has specialized in for many years. He has a PhD in composition from the University of Huddersfield, UK, as well as having studied composition at EMS in Stockholm, and voice at the Sibelius Academy in Finland. He has collaborated with many artists, including working in Marina Abramovich's performance at the Museum of Modern Art in Stockholm in 2017 and writing his own part in a production of Puccini's Turandot later in 2017 (Folkoperan, Stockholm). Over the last few years his music has been performed as far apart as Toronto, Belfast, Birmingham, Perth, Fullerton, Tuscaloosa, New York, Finland, Malaysia, Lithuania, Mexico, Portugal, Belgium, Germany, Macedonia, Estonia and Italy.

Ali Balighi is an experimental composer. His works are mostly composed based on traditional and folk music of Iran. His main tendency is on micro-tonality and new perspective of instruments. Ali is an accomplished composer, with a wide variety of instrumental works including symphonic, chamber, and solo pieces, as well as music for theatre productions, and theme music for film and television. In the summer of 2017, he won the composer competition in The Iranian-Canadian Composers of Toronto (ICOT) and the Canadian Music Centre for *Daramad for solo Accordion*. In the fall of 2017, he won the second place in the composer competition of Radio Javan (Islamic Republic of Iran Broadcasting) for *a little piece for orchestra symphonic*. In the spring of 2018, his piece *Too loud a solitude for Cello and live electronic* selected by 3rd Electroacoustic music composition competition Reza Korourian Awards 2018. His works have been performed at contemporary music festivals in Iran, Portugal, Finland, Belgium and Canada.

Christian Banasik (b.1963) is a Dusseldorf (Germany) based composer and lecturer. He studied composition with Gunther Becker and Dimitri Terzakis at the Robert Schumann University of Music and Media in Dusseldorf and with Hans Zender at the University of Music and Performing Arts in Frankfurt. His instrumental and electronic works have been featured in concerts and radio programs throughout Europe as well as in the Americas, Asia, and Australia. He has received national and international music awards and scholarships. Banasik is lecturer for Audio Visual Design at the University for Applied Sciences / Peter Behrens School of Arts. He is a member of the Institute for Image and Media at the PBSA and artistic director of the Computer Music Studio of the Clara Schumann Music School in Dusseldorf. Beside live electronics and instrumental music he has produced fixed media works, radio plays, music theatre and film soundtracks.

Erich Barganier (b. 1991) is a composer and multi-instrumentalist hailing from St. Petersburg, Florida USA. He writes chamber, orchestral, film, solo instrumental and electronic music that explores microtonality, extended techniques, melodic interplay, generative processes, and algorithmic phrasing. His compositions have been performed live or as installations across the world in cities as diverse as New York City, London, Minsk, Sydney, and Kuala Lumpur and have been recorded on several labels, including Nebularosa Records and Janus Music and Sound. His music has been featured at The Mostly Modern Festival, The New Music Gathering, Spectra Malaysia, New Music New College, New York University, Spectrum NYC, The University of Georgia, and the Florida International Toy Piano Festival among others. He was awarded a Fulbright Scholarship in 2014 and taught English at the Belarus State University of Culture and Arts in Minsk while collecting regional folk songs and performing traditional American music across Eastern Europe. Erich currently resides in New York City.

Natasha Barrett (Norway/UK) composes acousmatic and live electroacoustic concert works, sound and multi-media installations, and interactive music. After completing her PhD in 1998, she moved to Norway, and has since been highly active as a composer and in the mediation of cutting edge technologies focusing on spatial audio and its contemporary music context. She regularly collaborates with musicians and visual artists, as well as architects and scientists. Her work is commissioned, performed and broadcast throughout the world by festivals, organisations and individuals, and includes a regular schedule of portrait concerts and programs featuring her work. Besides her compositional activities, she is active in performance, education and research. She is co-director of the Norwegian spatial-music performance ensemble Electric Audio Unit (EAU), founder and chairman of 3DA (the Norwegian society for 3-D sound-art) and a member of Ocean Design Research Association. She currently holds a professorship at the Norwegian Academy for Music, Oslo.

Scott Barton composes, performs, and produces (electro)(acoustic) music and develops music technologies. He founded and directs the Music, Perception and Robotics lab at WPI, which develops robotic musical instruments and software that enables human-robot musical interaction. He co-founded EMMI, a collective that designs, builds and performs with robotic musical instruments. As a researcher, programmer, and author, his work in rhythm perception and production has been published in journals such as Music Perception and Acta Psychologica. He is also active in the world of audio production as a recordist, mixer and producer. These varied interests, particularly in rhythm, inspire his compositional efforts, which have been performed throughout the world including at SMC; ICMC; SEAMUS; CMMR and NIME and have been released on a number of record labels (most recently Stylistic Alchemies was released on Ravello Records). He is an Associate Professor of Music at Worcester Polytechnic Institute. www.scottbarton.info.

Brian Belet lives in Campbell, California (USA), with his partner and wife Marianne Bickett. He performs with the ensemble SoundProof using Kyma, viola, and bass. A CD containing ten of his computer music compositions, *Sufficient Trouble,* was published by Ravello Records (PARMA Recordings) in July 2017. His music is also recorded on CDs published by Capstone, Centaur, Frog Peak Music, IMG Media, Innova, SWR Music/Hänssler Classic, and the University of Illinois labels; with research published in Contemporary Music Review, Organised Sound, Perspectives of New Music, and Proceedings of the International Computer Music Conference. To finance this real world Dr. Belet works as Professor of Music at San Jose State University, where he was named President's Scholar in 2017.
www.BeletMusic.com

Jonathan Bell (1982) is a French composer. After his degree in piano and a baccalaureate in sciences, he studies at the Paris Conservatoire with Emmanuel Nunes and Stefano Gervasoni, where he gets a masters in Composition and Music Theory (2010). He owns a composition doctorate from the Guildhall School of Music and Drama of London (City University) and attended a 2-year residency at IRCAM. His pieces have been performed by the current ensembles: Court-Circuit, De Caelis, Soli Tutti, Matheus (France), Exaudi (UK), Contrechamps (Switzerland), SKAM (Stuttgart) and Zafraan (Berlin). All his compositions currently imply animated notation and/or networked performances, using SmartVox, a web-based notational tool of his invention. He currently reads music at Aix-Marseille University, and pursues his research at FRE PRISM lab-AMU/CNRS.

Angelo Bello creates electroacoustic works, sound art, and hörspiel works utilizing formal algorithmic processes realized through computational means. He has a multidisciplinary background in engineering, music and digital signal processing, with a focus on generative and algorithmic composition. He received his MS in Electrical Engineering from Drexel University, and a BS in Electrical Engineering from Penn State University, where he also studied electronic music with Burt Fenner. During a three-year study and research residency (1995-98) at Les Ateliers UPIC, now the CIX, Centre Iannis Xenakis, he researched the UPIC system, while earning a Diplôme d'Étude Aprofondies from the University of Paris 8 under the direction of composer Horacio Vaggione. He is a member of the steering committee and an assistant technical director of the New York City Electroacoustic Music Festival (NYCEMF) since 2015.

Mattia Benedetti is an electronic musician and improviser from Italy. His research deals mainly with acousmatic and algorithmic music and instrumental extended techniques. He studies History Anthropology and Religions in Rome and Electronic Music and New Technologies in Perugia. He attended workshops and master classes with Nicolas Bernier, James Dashow, Marco Momi , Brigitta Muntendorf and others. As a performer and improviser, he took part in conductions with Francesco Giomi (LFO#9) and Simone Pappalardo (Fields), employing different means as electric guitar and tendency-masks-based laptop instrument.

Ranjit Bhatnagar works in music, installation, and text, with a particular interest in algorithmic techniques and in improvisation at all stages of creation. His works have been exhibited across the United States and in Europe, and a book of algorithmic poetry, Encomials, was published last year. Ranjit has performed recently with Lea Bertucci, Thessia Machado, and Margaret Leng Tan. His heaviest work is Stone Song, a 7500 pound outdoor sound sculpture; his longest is The Tapestry of the Search for Terrestrial Intelligence at 44 yards.

Christopher Biggs is a composer and multimedia artist residing in Kalamazoo, MI, where he is Associate Professor of Music Composition and Technology at Western Michigan University. Biggs' recent projects focus on integrating live instrumental performance with interactive audiovisual media. Biggs' music has been presented across the United States and Europe, as well as in Latin America and Asia. His music is available on Ravello Records, SEAMUS CD Series, PARMA Recordings, Electroacoustico Records, Thinking outLOUD Records, and Irritable Hedgehog. Biggs has written music for various ensembles, including Ensemble Dal Niente, the Western Brass Quintet, the Prism Saxophone Quartet, SPLICE Ensemble, Keith Kirchoff, Pangea Piano Project, Kari Johnson, Samuel Wells, Western Michigan University Symphonic Band, and the Truman State University Wind Ensemble. Biggs is a co-founder and the director of SPLICE Institute, which is a weeklong intensive summer program for performers and composers to experience, explore, create, discuss, and learn techniques related to music for instruments and electronics. SPLICE takes place each June in Kalamazoo, MI.

Manuella Blackburn is an electroacoustic music composer who specializes in acousmatic music creation. However, she also has composed for instruments and electronics, laptop ensemble improvisations, and music for dance. She studied music at The University of Manchester (England, UK), followed by a Masters in Electroacoustic Composition with David Berezan. She became a member of Manchester Theatre in Sound (MANTIS) in 2006 and completed a PhD at The University of Manchester with Ricardo Climent in 2010. Manuella Blackburn has worked in residence in the studios of Miso Music (Lisbon, Portugal), EMS (Stockholm, Sweden), Atlantic Centre for the Arts (New Smyrna Beach, FL, USA), and Kunitachi College of Music (Tokyo, Japan). She is currently Senior Lecturer in Music at Liverpool Hope University (England, UK).

Sergio Blardony is a Spanish composer (Madrid, 1965), with numerous awards: Spanish Authors Society (SGAE) Composition first price, the International "City of

Tarragona" Award for Musical Composition, Shut Up And Listen! Award (Viena), “Joaquín Turina” Prize, or Space Laboratory Contest 2016. Almost all his works premiered have been recorded by various radio stations and television channels: Radio Clasica-RNE, Catalunya Radio, RTVE-La 2, Radio France, Deutschlandfunk Köln... His compositions are published by various music publishers: Bèrben Edizioni Musicali, Pygmalion, EMEC-Spanish Editor of Contemporary Music, Periferia Sheet Music, Babel Scores, UME (Music Sales Group). He is director of the on-line magazine Sul Ponticello, director of EPOS Laboratory of Creation and Research Music-Word, codirector of the cycle TRASHUMANCIAS - Interdisciplinary Conference, and co-director of the Doble Fondo radio art project, besides participating in other initiatives and cultural and educational projects. http://www.sergioblardony.com/en/.

Daniel Blinkhorn is an Australian composer, sound and new media artist currently residing in Sydney. He has worked in a variety of creative, academic and research contexts, and is a lecturer in composition at the Conservatorium of Music, University of Sydney. He is an ardent location field recordist, where he has embarked upon a growing number of recording expeditions throughout Africa, Alaska, Amazon, West Indies, Northern Europe, Middle East, Madagascar, Australia and the high Arctic/ North Pole region of Svalbard. His creative works have received various international and national composition citations, and whilst he is self-taught in electroacoustic music Daniel has formally studied composition and the creative arts at a number of Australian universities. More information about Daniel, as well as samples of his work can be found www.danielblinkhorn.com.

Georg Boenn studied composition at the University of Music in Cologne, Germany. His teachers include Jürg Baur, Krzysztof Meyer and Clarence Barlow. After graduation, he joined the Cursus d’Informatique Musicale at IRCAM, Paris. In 2011, Georg completed his PhD in Computer Science at the University of Bath, UK, where he worked in the areas of Algorithmic Composition and Automated Music Transcription. In 2015, he joined the Music Department at the the University of Lethbridge, Alberta, Canada. Georg’s main areas of research are algorithmic composition, rhythm, and expressive timing. His latest book, *Computational Models of Rhythm and Meter,* published by Springer Nature, explores new methods for the composition, analysis, and transcription of musical rhythms, meter, and form. By taking into account music perception, psychology, and mathematics, it develops a new process for the automated transcription of rhythms from musical performances. He wrote numerous algorithms for music analysis and composition that are implemented in his open source software project called chunking.

Jason Bolte is a composer and educator. He currently resides in Bozeman, Montana with his wife Barbara, their two beautiful daughters Lila and Megan, and friendly dog Allie. Jason teaches music technology and composition at Montana State University where he directs the Montana State Transmedia and Electroacoustic Realization (MonSTER) Studios and coordinates the B.A. in Music Technology. Jason earned a B.M. with an emphasis in Music Engineering Technology and a M.M. in Music Composition from Ball State University. He holds a D.M.A. in Music Composition from the University of Missouri - Kansas City Conservatory of Music and Dance. Jason’s music explores the North American Mountain West, modular synthesis and live performance, intersections of music, art, and science, and other areas he finds compelling. His music is available on New Focus, Beneficence, ABLAZE, Thrmnphon, ELECTRO<>ACÚSTICO, SEAMUS, Irritable Hedgehog, Vox Novus, SoundWalk, and Miso Records labels.

Yaroslav Borisov was born in 1982 in Voronezh, Russia. Pianist, composer, poet, and bandleader in various bands such as HAPPY55, Droogoe Delo, Tsyoy, Abstracktor, he plays a wide spectrum of styles from chamber and avant garde to art pop. He worked for several years at Voronezh Chamber Theater as a composer, arranger, and actor, and has written music for several plays. He also composed music for the short film Nathaniel, dedicated to the tragic period of Samuel Marshak’s life. In 2017, he moved to Fayetteville, North Carolina with his family - his wife (pianist, piano teacher) and daughter. In 2018 he created an original soundtrack for the Marc Chagall ”Exodus” exhibition at David McCune Gallery (Fayetteville, NC) and opening music set for Lope Max Diaz and Luke Miller Buchanan exibition at Lee Hansley Gallery. In September 2018 participated in Sao Paulo Contemporary Composers Festival introducing solo piano and orchestra works.

Francesco Bossi is a composer whose work includes acoustic and electroacoustic music, video and multimedia installations. He holds degrees from University of Bologna and Conservatorio di Milano where he graduated with highest honours. His research is currently focused on the production of algorithmic/ computer based custom synthesizers. His effort is to share contemporary music beyond academic audiences. His works are performed by orchestras and ensembles, and selected by international festivals and concerts.

Paul J. Botelho is a composer, performer, developer, and artist whose work includes acoustic and electro-acoustic music, multimedia installation pieces, visual art works, vocal improvisation, and a series of one-act operas. He performs as a vocalist primarily with extended technique and incorporates the voice into much of his music. His work has been performed, presented, and exhibited in concerts, festivals, galleries, and museums across the Americas, Europe, Oceania, and Asia. Botelho received a Ph.D. and M.F.A. in Music Composition from Princeton University, an M.A. in Electro-Acoustic Music from Dartmouth College, and a B.F.A. in Contemporary Music Performance and Composition from the College of Santa Fe. Currently he is Associate Professor of Music at Bucknell University

where he teaches music composition. www.pauljbotelho.com

Jeffrey Bowen is a composer whose work explores the role of memory in establishing and traversing musical space. His compositions have been performed by Pascal Gallois, Maja Cerar, Beta Collide, Ensemble DissonArt, among other ensembles in the USA and Europe. In 2013 his orchestral work Stalasso was chosen by conductor Ludovic Morlot for the Seattle Symphony Orchestra's New Music Works program, and he has recently presented work at the Darmstadt Summer Courses for New Music, the University of Nebraska's New Music Festival, and the New York City Electroacoustic Music Festival. Jeffrey is currently based in Seattle, where he has taught courses in music theory at Cornish College of the Arts and the University of Washington, and is co-director of Seattle's Inverted Space Ensemble. He recently completed a DMA in composition at UW under Joël-François Durand.

Nathan Bowen is a composer, instrument designer, and educator based in southern California. He received his doctorate in music composition at the CUNY Graduate Center, studying with Douglas Geers, Amnon Wolman, and Tania León. His dissertation on mobile phone music received the Barry Brook Dissertation Award. His work on mobile phone music has garnered invitations to conduct research at IRCAM with the Real Time Interactions Team in Paris and Goldsmiths in London. He has presented at Expo '74 Brooklyn, SEAMUS, ICMC, and NYCEMF, where he is an original member of the steering committee. His interests in custom hardware-plus-software configurations with mobile phones has lead to an interest in electronic music performance practice(s), audience interaction and participation, and establishing strong sight-to-sound correlations in electronic music performance. He currently teaches music technology and theory at Moorpark College.

Zachary Boyt is a composer and multimedia artist residing in Eugene, OR. His work explores the musicality of data-driven instruments and data sonification. He holds degrees in Cello Performance and Music Research from Western Michigan University where he specialized in gesture-sensing technology applied to traditional string instruments. His music performance and research have been presented internationally at conferences and venues including EMM (Electronic Music Midwest); SCI (Society of Composers Inc.); EABD (Electroacoustic Barn Dance); Stetson University; FMO (Future Music Oregon); SEAMUS; KISS (Kyma International Sound Symposium); and Ramificaciones. Currently, Zachary is pursuing a doctorate in Data-Driven Instrument Performance at the University of Oregon where he builds, composes for, and performs with new digital instruments. Zachary is also a co-artistic director and co-founder of Ensemble Kalamazoo, a new music ensemble performing works of the late 20th and early 21st centuries.

Matthew Briggs is currently a doctoral candidate in music composition at Florida State University. He is a graduate of Texas Christian University with a Master of Music in Composition, and has previously taught as an Adjunct Instructor of Music at Texas Christian University (TCU) and Music Theory Instructor at Southwestern Adventist University (SWAU). His compositional style is constantly evolving as he matures and learns. He has recently been utilizing quarter-tones and other techniques inspired by spectralism, and has been making his first forays into the world of electronic music. Some other interests include fishing, collecting old books, and language study.

Brazilian-American composer and pianist **Paulo Brito** draws from influences ranging from Western opera to East Asian music drama that invest his work with a distinct sense of theater. His music has won awards internationally, most notably in Tokyo, where his orchestral work Staring Wei Jie to Death won First Prize of the Toru Takemitsu Composition Award in May 2018. Brito's recent works include Deadweight of Love, written for traditional Japanese Noh theatre performer Ryoko Aoki based on the play Koi no Omoni, premièred in Tokyo in September 2018. Currently pursuing a D.M.A. in composition at the University of Toronto, Brito previously studied comparative literature at the University of Chicago (M.A. 2016) and classics and German literature at Columbia University (B.A. 2013). His present and former composition teachers include Alla Zagaykevich, Anthony Cheung, Christos Hatzis, Dennis Patrick and Norbert Palej.

Lars Bröndum, PhD, is Composer and a Musician. He is also a Senior Lecturer in Music at the University of Skövde at the Department of Media, Aesthetics and Narration (School of Informatics). Bröndum composes electro-acoustic music as well as chamber music and orchestral music. He often explores the interaction between acoustic and electronic instruments and integration of improvisation into through-composed music. Bröndum performs live as a solo artist and in several ensemble configurations using analogue modular synthesizers, Theremin and effect pedals. His album Fallout (2015) was awarded 'Best Experimental Music Album' at the SOM (Independent Music Labels of Sweden) Manifest Awards. He recently released the concept album Chimera Cadence. Bröndum completed his PhD in Music Theory and Composition at University of Pittsburgh in 1992. He also has a masters degree in Composition and Music Theory and a Bachelors of Music degree in Guitar. Bröndum runs the independent record label, Antennae Media www.antennaemedia.se

Julius Bucsis is an award-winning composer, guitarist, and music technologist. Since beginning serious efforts with composition in 2011, his works have been included in almost 150 events (most of which were juried) worldwide. He has performed original compositions featuring electric guitar and computer generated sounds nationally and internationally. His compositions have

been included on CDs released by Ablaze, PARMA, RMN Classical, and Soundiff. His artistic interests include using computer technology in music composition and performance, developing musical forms that incorporate improvisation, and composing music for traditional orchestral instruments. He is currently pursuing a DA in music at Ball State University.

Rainer Bürck, born 1953, is a freelance pianist and composer. As a pianist, he concentrates on contemporary repertoire and has premiered numerous works by composers from several countries in Europe and North America. Since 1995, he has focused on collaborative improvisation projects. As a composer, Rainer Bürck works mainly in the field of electroacoustic music, creating acousmatic works, and works for performers and live electronics. His music has been broadcast on radio in various countries and has been performed at international festivals such as the New York City Electroacoustic Music Festival, the Florida Electroacoustic Music Festival in Gainsville,, the International Computer Music Conference in Gothenburg and Berlin, the NYYD Festival in Tallinn, the Soundings Festival in Edinburgh, the Festival Beast Feast in Birmingham, the Kontakte Festival in Berlin etc.

Rodrigo F. Cádiz is a composer, researcher and engineer. He studied composition and electrical engineering at the Pontificia Universidad Católica de Chile in Santiago and he obtained his Ph.D. in Music Technology from Northwestern University. His compositions, consisting of approximately 50 works, have been presented at several venues and festivals around the world. His catalogue considers works for solo instruments, chamber music, symphonic and robot orchestras, visual music, computers, and new interfaces for musical expression. He has received several composition prizes and artistic grants both in Chile and the US. He has authored around 50 scientific publications in peer reviewed journals and international conferences. His areas of expertise include sonification, sound synthesis, audio digital processing, computer music, composition, new interfaces for musical expression and the musical applications of complex systems. He has obtained research funds from Chilean governmental agencies, such Fondecyt and CNCA. He recently received a Google Latin American Research Award (LARA) in the field of auditory graphs. In 2018, Rodrigo was a composer in residence with the Stanford Laptop orchestra (SLOrk) at the Center for Computer-based Research in Music and Acoustics (CCRMA), and a Tinker Visiting Professor at the Center for Latin American Studies, Stanford University.

Cédric Camier is a researcher in acoustic and music technology, and an electroacoustic composer. Graduated in Mechanical Engineering specialized in Acoustics from University of Poitiers, he completed his doctoral dissertation in 2009 in Paris working on the non-linear vibrations of cymbals. As post doctoral fellow at Groupe d'Acoustique de l'université de Sherbrooke,his researches focused on sound-field restitution with transducer/loudspeaker arrays and moving source identification via microphone arrays. He works now as an R&D Engineer at Saint-Gobain Research Paris on the topic on Auralization and acoustic comfort. A graduate of the CRR of Poitiers (FR) in piano and drums in 2005 and an experienced stage performer, he completed a Master degree in electroacoustic composition at Université de Montréal, studying the perspectives of compositional processes based on scientific inspiration.

Juan Parra Cancino (b. Chile, 1979) studied Composition at the Catholic University of Chile and Sonology at The Royal Conservatoire The Hague (NL), where he obtained his Masters degree with focus on composition and performance of electronic music. In 2014, Juan obtained his PhD degree from Leiden University with his thesis “Multiple Paths: Towards a Performance practice in Computer Music”. Founder of The Electronic Hammer, a Computer and Percussion trio and Wiregriot, (voice & electronics), he collaborates regularly with Ensemble KLANG (NL) and Hermes (BE), among many others. His work in the field of live electronic music has made him recipient of numerous grants such as NFPK, Prins Bernhard Cultuurfonds and the International Music Council. Since 2009 Parra is a fellow researcher at the Orpheus Institute (Ghent, BE), focused on performance practice in Computer Music.

Nicola Cappelletti was born in Todi, Italy. After the junior studies of violin and a master degree in communication, that leaded him to work in the in the field of design, semiotics and visual communication, he’s currently attending the bachelor degree in Electronic Music and New Technologies at the F. Morlacchi Conservatory of Perugia. Both composer and performer, his research deals with electroacoustic music, video, theatre and poetry. He attended workshops and master classes with Curtis Roads, John Chowning, Bjarni Gunnarsson, Alberto Novello, Carmine Emanuele Cella, Nicolas Bernier, Marco Momi, Nicholas Isherwood. He’s part of the Ensemble A23, an electroacoustic research collective.

Tate Carson is a composer and upright bassist from New Orleans, Louisiana. He studied jazz composition and performance at both Loyola University New Orleans and the University of New Orleans. Carson was active in the New Orleans jazz improvisation scene from 2009 until 2015 when he moved to Oakland, California. While in Oakland, he earned an MFA in Electronic Music and Recording Media at Mills College. He is now pursuing a PhD in Experimental Music and Digital Media at Louisiana State University. Living and working in New Orleans, where traditional jazz remains culturally predominant, gave Carson an appreciation for rhythm as a guiding force in his compositions. He experimented with electronic music after feeling hindered by the timbral limitations of acoustic instruments. As a result, many of his electronic compositions use both acoustic and electronic instruments, creating dynamic sound environments. He often draws from his interests in self-similarity, the rough geometry of nature, and

generative processes.

In 1977, **Leng Censong** entered the attached middle school of Wuhan Conservatory Of Music with the violin. In 1989, he studied composing at the Composition Department of Wuhan Conservatory Of Music. He has been teaching since Graduation. Now he is the associate professor and supervisor of postgraduate of Wuhan Conservatory of Music. His wide array of Compositions includes orchestral, ballet, choral, pianos and piano concerto, Electronic Works, such as electronic music The Five Elements Metal, and the interactive computer music Simplicity, JiangXue, The Jazz in Miao Nationality Style For Clarinet and piano (Golden Bells Award), Mountian Song--for YangQin and Chinese National Instruments 16 (Singapore international Composition competition For Chinese Chamber Music 3rd Prize) etc. He was invited several times to the Seminar of Music and Sound, the annual meeting of ICMC and the Young and middle-aged Composer Seminar(2001 and 2003) in China.

Born in Buenos Aires in 1964, **Gustavo Chab** is a composer of mostly electroacoustic works that have been performed in the Americas and Europe. He composed his first electroacoustic piece in 1993, specializing in composition techniques in electroacoustic. His compositions, including works for instrumental, electronic music, and performances. Frequently explores the spacialization of sound in composition, mixing fixed media acousmatic and sound generation in real time. His compositions have been performed at numerous festivals and has received-among many awards – Prize Exhibitronic 2018/International Festival of Sound Arts (Strasbourg-France); First Prize of the FNA /Juan Carlos Paz (Buenos Aires, Argentina); a special Mention of the Municipality of Buenos Aires and a honourable Prize-Residence of the International Competition of Electroacoustic Music GMEB (Bourges-France, 1993) /Artist in Residence CCMIX, Center for the Composition of Music Iannis Xenakis.

Ding-Lian Chen comes from Taiwan, graduated from National Sun Yat-sen University, majoring in creation and application of music, now studying at National Chiao Tung University Music Institute, majoring in acousmatic music.

Bin Cheng, born in Fuyang City, Anhui Province, China, member of the Electronic Music Association of China . Cheng Bin was admitted to Wuhan Conservatory of Music with the first place in the country in 2016 and studied postgraduate program in Computer Music Composition with Professor Li Pengyun. In 2017 and 2018, he won three awards from the MUSICACOUSTIC-BEIJING Composing Competition. In November 2018, he was awarded the National Scholarship.

Xiaohan Chen is now studying for the first year in the Master of Music at National Chiao Tung University. I majored in electronic music and studied under the guidance of Professor YuChung Tseng.

Kyong Mee Choi, composer, organist, painter, poet, and visual artist, received several prestigious awards and grants including John Simon Guggenheim Memorial Foundation Fellowship, Robert Helps Prize, Aaron Copland Award, John Donald Robb Musical Trust Fund Commission, Illinois Arts Council Fellowship, First prize of ASCAP/SEAMUS Award, Second prize at VI Concurso Internacional de Música Eletroacústica de São Paulo among others. Her music was published at Ablaze, CIMESP (São Paulo, Brazil), SCI, EMS, ERM media, SEAMUS, and Détonants Voyages (Studio Forum, France). She is the Head of Music Composition at Roosevelt University in Chicago where she teaches composition and electro-acoustic music. Samples of her works are available at http://www.kyongmeechoi.com

Marcel Chyrzyński was born in 1971 and earned his Master's degree from the Academy of Music in Kraków in 1995, where he studied composition with Marek Stachowski, orchestration with Kryzstof Penderecki, and computer music with Marek Choloniewski. He received his doctorate in composition in 1998. He became Associate Professor at the Academy of Music in Kraków in 2010. In 2016, Chryzyński became president of the Kraków branch of the Polish Composers' Union. Since 2014, he has been Director of the International Festival of Kraków Composers. www.chyrzynski.com.

Se-Lien Chuang is a composer, pianist and media artist, 1965 born in Taiwan, since 1991 residence in Austria. The artistic and compositional emphases range from contemporary instrumental composition/improvisation, computer music to audiovisual interactivity. International productions, research stays and lectures as well as numerous representations of compositions in Europe, Asia, North- and South America: ICMC, SICMF Seoul, NIME, ISEA, IAMAS Japan, Ars Electronica Linz, among others. Lecturer at Computer Music Studio, Institute of Composition, Conducting and Computer Music at the Anton Bruckner Private University. Since 1996 jointly with Andreas Weixler running Atelier Avant Austria, with key aspects in development of audiovisual interactive systems and audio/visual realtime/non-realtime processing, computer music and algorithmic composition.

Nicolas Chuaqui's recent works have been heard at many prominent festivals, including June in Buffalo, Diffrazioni Multimedia Festival (Florence, Italy), The Florida Electroacoustic Student Festival, The National Student Electronic Music Event, and The Deer Valley Festival. He has also recently had his first opera, The Forest of Dreams, premiered in a fully-staged production by New Voices Opera (Indiana; 2016). His music draws on his childhood training as a chorister and pianist, his interest in musical memory and time, and the sound world existing around us. He has received degrees from Dartmouth College and Indiana University, and now studies at Eastman.

Leo Cicala acousmatic composer, performer, live performer, teacher. Graduated in Electronic Music " cum laude" and instrumentation for band at the Conservatory "T.Schipa" of Lecce, Italy, holds a Bachelor's degree in biology and in nursing and studied Drums and Jazz music. He studied sound projection to the acousmonium with Jonathan Prager and interpreted the acousmonium more than 100 works in Italy and abroad. In 2015 published "Manuale di Interpretazione Acusmatica" for Salatino Edizioni Musicali. In 2014 has released the cd "Rust" for the label "Art & classic", in 2016 has released the cd "Punto di Accunulazione" for the label " Creative Sources Recordings". He composed the soundtrack for the short film "Io sono qui" directed by Pierluigi Ferrandini and " Storia di Valentina" and "E' raro (umanum est)" directed by Antonio Palumbo. Grand Prize winner "Bangor Dylan Thomas Prize" in the UK in 2014. www.acusma.it

Martina Claussen is a mezzo-soprano, vocal artist, composer and performer. The focal point of her work lies in the interaction of her own voice, which is also the main sound source of her electroacoustic compositions and live electronics. She studied voice, vocal pedagogy, computer music and electronic media at the University of Music and Performing Arts Vienna and Composition at the Bruckner University Linz. Her compositions have been broadcasted by various radio stations in Europe and have been selected to be played at international festivals such as: Festival Futura 2015 and 2017 (Crest, France), Ars Electronica 2017 and 2018, Wien Modern 2017 Austria, the BIMESP XI Bienal Internacional de Música Electroacústica 2016 de Sao Paulo (Brazil) and the New York City Electroacoustic Music Festival 2016, 2017 and 2018. She works at the University of Music and Performing Arts Vienna where, since 2009, she holds the position of Associate Professor of Voice. www.martinaclaussen.at

Chris Corrigan is an audio engineer, composer and lecturer based at the Sonic Arts Research Centre, Queen's University in Belfast. As an audio engineer Chris specialises in the recording of contemporary acoustic and electro-acoustic music and has particular interest in the use of recording techniques for spatial audio reproduction. His recordings have been released on the Delphian, Metronome, RTÉ Lyric FM and Diatribe labels featuring artists such as National Symphony Orchestra of Ireland, Cora Venus Lunny, The Fidelio Trio, Kate Ellis, The Vanburgh Quartet, Mary Dullea and Yurodny. Chris' compositions explore the intersection between traditional / folk music forms, in particular the Irish and Scandinavian traditions, and contemporary compositional practice. His music has been performed by the acclaimed Nordic ensemble Baltic Crossing, Irish pianist Ryan Molloy and Franziska Schroeder and Tanya Houghton.

Rob Cosgrove is percussionist with a practice focused on experimental music and collaborative projects. Seen in performances from EMPAC to Carnegie Hall, his recent work focuses on creating immersive experiences through use of digital/analog electronics, amplification and spatialization. Rob is currently a doctoral candidate at SUNY Stony Brook studying with Eduardo Leandro and Margaret Schedel.

Tiernan Cross (b. 1991) is a composer, sound artist, and researcher based in Sydney, Australia. As the current recipient of the University of Sydney's Eleanor Dunne Scholarship, Tiernan is completing postgraduate research at the Sydney Conservatorium of Music, focusing on neurological conditioning, composition, and post-biological sound aesthetics. This composition was originally created for a 36.6 multi-channel surround sound system and had its premiere at MONOM in Berlin for CTM Festival 2019.

Flannery Cunningham is a composer and musicologist fascinated by vocal expression, illusion, and auditory perception. She aims to write music that surprises and delights. She is attracted the very old and very new; she has presented at the International Medieval Congress and performed at ICMC 2014. In addition to acoustic ensembles she writes for players with real-time electronics. Flannery holds a BA from Princeton University, an MA from University College Cork, an MA from Stony Brook University, and is currently pursuing a PhD in composition and musicology at the University of Pennsylvania.

Antonio D'Amato graduated at conservatory in Piano, Harpsichord, Music for Multimedia, Music Pedagogy, Electronic Music and in 2017 in Audio Engineering. He also studied Composition for eight years, Bassoon for three years, Baroque Organ, Ondes Martenot in Strasbourg and Paris, and later Sonology at ESMUC in Barcelona. Some of his instrumental works are published by Forton Music, U.K. His first electronic composition was selected for a performance during the ICMC 2012 Conference. In summer 2015 he was trainee at ExperimentalStudio des SWR in Freiburg, and in 2016 at ZKM in Karlsruhe. His works have been performed in Australia, Austria, Belgium, Brazil, Canada, France, Germany, Greece, Ireland, Italy, Japan, Korea, Mexico, Slovenia, Sweden, Taiwan, UK and USA.

James Dashow was awarded the prestigious Prix Magistere at the 30th Festival International de Musique et d'Art Sonore Electroacoustiques in Bourges in 2000. In 2011, Dashow was presented with the distinguished career award "Il CEMAT per la Musica" from the Federazione CEMAT (Roma) for his outstanding contributions to electronic music. A pioneer in the field of computer music, Dashow was one of the founders of the Centro di Sonologia Computazionale at the University of Padova, where he composed the first works of computer music in Italy; he has taught at MIT, Princeton University, the Centro para la Difusion di Musica Contemporanea in Madrid, the Musica Viva Festival in Lisbon, and the Conservatorio di Musica Benedetto Marcello in Venezia.

He was composer in residence at the 12th Florida Electroacoustic Music Festival, and he continues to lecture and conduct master-classes extensively in the U.S. and Europe. He is the author of the MUSIC30 language for digital sound synthesis, and the Dyad System, a compositional method and technique for developing pitch structures and integrating them in electronic sounds. Dashow makes his home in the Sabine Hills north of Rome.

Mario Davidovsky (1934 -) is an Argentine-American composer who is best known for his series of electroacoustic works titled *Synchronisms.* From his studies with Milton Babbitt and Aaron Copland at what is now the Tanglewood Music Center, Davidovsky was invited to join Babbitt at the Columbia-Princeton Electronic Music Center where he was appointed associate director in 1960. The *Synchronisms* series began with *Synchronisms No. 1* for Flute and Electronic Sound in 1963 and concluded in 2006 with *Synchronisms No. 12* for Clarinet and Electronic Sounds. Notably, *Synchronisms No. 6* for Piano and Electronic Sounds was awarded a Pulitzer Prize in 1971.

Krissy Dejuri (b. 1996) is a composer from Kings Park, New York. Her music seeks to reach audiences of all levels of musical knowledge by exploring rhythm and harmony in inventive ways. Her music also utilizes a mix of contemporary compositional techniques and memorable melodic material to develop a reaction from the listener. While her predominant passion focuses on film and video game scoring, she has developed a wide range of compositional styles that vary from post-minimalism and other modern genres to jazz and electronic music. Krissy Dejuri is currently has a B.M. in composition under the directions of Dr. Paul Coleman and Dr. Rob Deemer at the State University of New York at Fredonia.

J Diaz is a Sound Artist currently based in Spokane, WA. He designs sound for a variety of mediums—including theatre, dance, and the concert stage. During his tenure in New York, J completed projects with the RadioTheatre Company, Poetic Theatre Productions, Stella Adler Studio of Acting, and Wide Eyed Productions, where he served as the Resident Sound Designer from 2014 - 2017. After leaving New York, J was appointed Assistant Sound Designer at the Oregon Shakespeare Festival for the summer of 2015. He served as the Assistant Sound Designer for the world premier of Lynn Nottage's *Sweat.* In May of 2017, J released his debut album of electroacoustic music, *Sic Pilot*. The album explores the ambiguity in J's Mexican American identity. His second album, *Triptych of the Naked Boy*, was released on November 5th, 2018. It is a meditation on the arrival and departure of love. He was the runner up for the Anderson & Roe piano duo's New Music New Video composition competition in 2018.

Paul Dibley is a composer and sonic artist, and is also Principal Lecturer in Music and Programme Lead for Media Arts at Oxford Brookes University, UK. He is Co-Director of the Sonic Art Research Unit and co-founder of the Audiograft festival. In 2003 Paul completed a PhD in Musical Composition at the University of Birmingham, UK, where he studied with Professor Jonty Harrison. As well as composing electroacoustic compositions (often specializing in using the human voice), he creates compositions for instruments and live electronics. Recent projects include working with Okeanos, Jane Chapman and Jos Zwaanenburg.

Stylianos Dimou is a Greek composer born in Thessaloniki in 1988. He is currently a Doctoral Fellow at Columbia University in the City of New York (DMA in Music Composition). Dimou has pursued advanced practical training in Electronic Music, at the Cursus program at the Institute for Research and Coordination in Acoustics/Music (IRCAM) in Paris, France (2017-2018). He is concurrently a Composer and Music Researcher at the OeAD organization closely affiliated with the University of Music and Performing Arts Graz. His music has been premiered in festivals, composition competitions in Europe and the USA as part of residencies and commission projects.

Lanqing Ding's music training experience began with keyboard, classical dance, children choral since she was 5 years old. When she was 15 years old she began to study composition with Professor Huang Lv. In 2009 she followed professor Guohui Ye to continue to study composition in Shanghai Conservatory of music which she met François Paris and Tristan Murail. In 2013-2014, she studied electronic music with professor Chengbi AN. Her works involved in Voice, Acoustic Music and Electronic music. Pieces had been performed in some music festivals in Europe, Asia, and America, like MANCA festival (Nice,France), Chinese art and culture festival (University of Michigan, USA), ManiFest(Paris, France), etc. Her pieces cooperated with 'Shanghai opera symphony', 'Insomnia ensemble' of Holland, 'LAPS ensemble' of Belgium , 'Regards ensemble' 'Orchestre Philarmonieque de Radio France', 'Meitar' of Israel, and 'Neue vocalsolisten' of stuttgart etc.

Andy Dolphin is a digital artist, composer and part time lecturer. He has a keen interest in composing for fixed media, creating multichannel works, and developing interactive composition systems and noisy toys incorporating game engine technologies for sonic purposes.

Xiao-Jiao Dong was born in 1989. In 2005, she entered the composition department of Shanghai Conservatory of music and studied composition with Prof. Jian-Qiang Xu and Prof. Huang LV. In 2008,she has won the distinction award of the chamber music composition held by the Shanghai conservatory of music for the work "Water knows the answer". In 2009, her work "Mosaic"gained the first prize in the group A of the MUSICACOUSICE-Beijing Electronic music competition. In 2014, she began

her doctoral studying majoring in Electric music composition with Prof. Cheng-Bi An. 2009 “Mosaic”-- for electronic music was selected by international electronic music week, participating. 2013 June, “ Expression "-- for double bass was premiered in the Shanghai Conservatory. November 2013 this work as the academic exchange in Taiwan National Normal University for performance.

Jacob Duber is a composer and violinist from Cleveland, OH who also deals with electronic music and recording technology. As a violinist, Jacob enjoys playing primarily contemporary music, and has premiered numerous pieces as well as attending the SPLICE festival as a performer. He has also premiered other composer’s works as a soloist and in several ensembles. As a composer, Jacob mostly writes and produces electroacoustic music as well as fixed media works studying at the Center for Computer Music in the College-Conservatory of Music, University of Cincinnati with Dr. Mara Helmuth. He will be performing his music at the N_SEME and SEAMUS festivals in 2019.

Melissa Dunphy is a Philadelphia-based composer best known for her political and theatrical vocal music. She has a B.M from West Chester University and a Ph.D. in composition from the University of Pennsylvania, and teaches composition at Rutgers University. More information at www.melissadunphy.com

David Z. Durant (b. 1957, Birmingham, Alabama, USA) is a Professor of Music at the University of South Alabama where he is the Director of the Music Theory and Technology Program. He joined the faculty of USA in 2003. Durant received his BM and MM from the University of Florida and his DMA from the University of Alabama. His composition teachers have included Andrew Imbrie, Edward Troupin, John D. White, Fred Goossen, Harry Phillips, Marvin Johnson, and James Paul Sain. Durant is active as a composer, and he occasionally performs as a pianist. Durant is a frequent contributor to ICMC, NYCEMF, SEAMUS, and other music festivals.

Gerald Eckert, born 1960 in Nuremberg, studied Mathematics at the University of Erlangen, violoncello and conducting at the conservatory of Nürnberg, composition with Nicolaus A. Huber and electroacoustic composition with Dirk Reith at the Folkwang-Hochschule Essen. He also attended composition courses with Brian Ferneyhough und Jonathan Harvey. In 1996/97 he was a visiting scholar at CCRMA in Stanford University/ USA. From 2012 to 2014, he was professor of composition at the Chung-Ang University Seoul/ Anseong Korea. Eckert works with orchestras, ensembles and musicians including the NDR-Philharmonie, Klangforum Wien, Ensemble Modern, Ensemble Aventure, Ensemble Recherche, Ensemble SurPlus, Formalist Quartet/ Los Angeles, Divertimento Ensemble (Italy), etc. In 2013 a monograph with the title *An den Rändern des Maßes - der Komponist Gerald Eckert* was released by the publisher Wolke. CDs have been released by different major labels, e.g: col legno 2000 and 2004, NEOS, 2008, mode records 2016 and 2019.
http://www.geraldeckert.com

Sebastian Edin (b. 1991) is a Swedish-Finnish sound artist and composer, who obtained a master’s degree in electronic composition at DIEM (Danish Institute of Electronic Music) in 2017. His work includes fixed media compositions, sound installations, performance pieces, music for modern dance and theatre and pieces for instruments and electronics. His work has been presented in Denmark, Sweden, Finland, the Faroe Islands, England, Belgium and Germany at venues and festivals such as L'Espace du Son in Brussels, Belgium; LAK Festival, Rum 46 and Den Sorte Diamant in Denmark; Norbergfestival and NyMus Live in Sweden; G! Festival and The National Art Gallery of the Faroe Islands; North Atlantic Flux Festival in England and Errant Sound in Berlin. He was recently awarded first prize in category A of the 10th biennial *Métamorphoses* competition for his piece Vestiges (Belgium, 2018). He is currently based in Aarhus, Denmark.

Jacob Elkin is a trombonist, composer and educator based in Brooklyn, New York. Mr. Elkin’s piece Things that might have been for improviser and live-electronics won third prize in the Electrobrass Conference at Brooklyn College in November ‘18. As a freelance trombonist, Mr. Elkin is an advocate for new music in both chamber and solo settings. In 2017, he performed as soloist for New York Composer’s Circle, Make Music New York and the Variousound Sessions. Mr Elkin has premiered works with Mimesis Ensemble, Contemporaneous, Mise-en Scene, NYMF, David Taylor and the New York Trombone Consort and many others. Jacob Elkin is on faculty at the United Nations International School as brass instructor.

Brian Ellis is an Austin based composer, researcher, and guitarist. His musical drive lies in using code to realize his larger compositional vision: that technology should be used toward divesting musical agency from the composer to the environment, the performer, or ultimately, the listener. He is a Music and Computer Science Honors Undergraduate studying at the University of Texas at Austin. As a Computer Scientist and Computational Biologist, he is a researcher in Dr. Howard Ochman's Microbial Evolution Lab, which is part of the Department of Integrative Biology. Brian's most recent publication is in the Journal Bioinformatics, and discusses classifying prokaryotic species based on gene flow.

ReVerse Bullets is an audiovisual collective conceived by filmmaker **Jon-Carlos Evans** as musical alias Klaas von Karlos in Brooklyn in 2009. The debut release, 2012’s *Drapetomania!* was an audiovisual album fusing twisted samples of capitalist, western & religious propaganda against syncopated industrial drums, ambience, and dialectic imagery to create a sensory experience that is

part sonic essay, improvisational electronica, and dissonant Revival. The release was nominated for “Best Mashup” at the MashRome 2013 Film Festival. Since inception, ReVerse Bullets has performed at media arts festivals and venues in Austria, France, Germany, Italy, Portugal, Spain, and the United States. In 2016, New York native Engineer/Guitarist Kevin Ramsay joined ReVerse Bullets as a full-time co-producer. The group's forthcoming release, *Dreampop Dysphoria* was supported by artist residencies at Elektronmusikstudion (Stockholm) and Harvestworks Media Center (New York City).

Marc Evanstein is a composer currently residing in the Santa Barbara Area. He music has been featured at festivals in the US and internationally, including the Seoul International Computer Music Festival, the Atlantic Music Festival, and the Bowdoin International Music Festival, where he won the Composition Contest in 2015. His collaborated with artists such as Aperture Duo, Ignition Duo, Hocket Duo, the Formalist Quartet, and the Now Hear Ensemble. A musician and composer since a young age, he chose to pursue his undergraduate degree at Stanford University, where he studied with Jaroslaw Kapuscinski. Marc is currently working on his PhD dissertation and studying composition with Professors Clarence Barlow, Joel Feigin, and Curtis Roads. In addition to composing, Marc is also a pianist, and he has studied with Thomas Schultz at Stanford and Charles Asche at UC Santa Barbara.

Libby Fab is an intermedia artist and drummer based in NYC. She completed an M.Phil in Music and Media Technologies at Trinity College Dublin in 2004. In 2005, Libby became a founding member of noise-punk duo, The Paranoid Critical Revolution, in which she played drums until 2011. From 2006-2008 she was the technical director and rehearsal drummer for Glenn Branca’s Symphony 13: Hallucination City. From 2009-2014 she was the drummer for the Glenn Branca Ensemble, performing The Ascension: The Sequel in the US and Europe.

Hongshuo Fan is a Chinese sound artist and multimedia composer. He is currently doing his PhD at the NOVARS sound research centre (University of Manchester). He was a faculty of the Electronic Music Department at Sichuan Conservatory of Music and member of Sichuan Key Laboratory of Digital Media Arts. His research and creative interests include New Media Art, Interactive art and Multimedia Design. Hongshuo’s works have been selected for performance in China, United States, Poland, Netherlands, Sweden, Korea and many other international events. He is the winner of the 2015 Shanghai International Electronic Music Week "Best Works Award" and the 2016 ICMA (International Computer Music Association) Asia-Oceania Regional Award.

Yuan-Yi Fan studied computer music, media art, and multimedia engineering in Media Arts & Technology at University of California Santa Barbara. His research has evolved from new interfaces for musical expression, to audiovisual synthesis techniques, to creative music information retrieval applications. Currently he leads product research at a Hollywood-based A.I. startup. He made creative projects with natural user interfaces and connected devices at industrial research labs, including Nokia Research Center, Oblong Industries, and Nokia Advanced Design Studio. His works have been presented and exhibited at festivals, museums, and conferences, including ACM MM, ACM UIST, ISMIR, ICMC, NIME, ICAD, Leonardo, Leonardo Music Journal, WOCMAT/IRCAM Forum, The 1st L.A.S.T. Festival, ISEA, IEEE VIS, Currents New Media Festival, ZERO1 Biennial, DDP, and ZKM Globale: inSONIC. Before UCSB, he built MEMS ultrasound array transducers at the Ultrasound Imaging Lab in Taiwan.

Epa Fassianos is a Greek composer of electroacoustic music. He was born in Athens in 1982, attended both the University of York (MA in Music Technology) under the supervision of Professor Andy Hunt and the University of Sussex (MA in Composition for Media and Film and MPhil in Musical Composition) under the supervision of Professor Ed Hughes. He also obtained his Piano Diploma in 2003 with Professor Dimitris Toufexis. He is currently a PhD student in acousmatic music (submission period) at the University of Manchester (NOVARS Research Centre), under the supervision of Professor David Berezan. His main area of interest is Creating works of acousmatic music based on aspects of Greek Culture (Religion, Traditional Greek Instruments, Mythology).

Jinshuo Feng is a composer and a Ph.D. in China. His composition interests include interactive music, sound synthesis and design of data-driven instruments. He has won twice the first prize at the Electronic Music Composition Competition of MUSICACOUSTICA-BEIJING in China. In 2011 to 2013, he worked as research assistant in the China Ministry of Culture project — Interactive Music Light Sensitive Instrument. The installation was in exhibition during Beijing Design Week which is a major art festival in China. Jinshuo also specializes in film music. His sound track works include Carpooling Shock, The Eighth House, and The Blue Knight. He worked as an arranger of TV show music on a regular basis.

Mark Ferguson is a wildlife sound recordist and electroacoustic composer, whose work explores the unique and intricate sonic detail of the natural world. Currently a full-time PhD student at the University of Birmingham, his research focuses on multichannel acousmatic composition. Drawing exclusively from an ever-growing, personal recording library of species, soundscapes and abiotic phenomena, he deconstructs, processes and rearranges sounds from nature, creating intricate, large-scale audio works using programming languages and other specialised software. Mark holds a BMus from Queen's University Belfast and MusM from the University of Manchester.

Iván Ferrer-Orozco (Mexico City, 1976) is a composer, laptop improviser, and electronics sideman. His music, interactive installations and projects of acousmatic music, sound art and new media have been performed in Mexico, Spain, Canada, Argentina, Chile, South Korea, Vietnam, Germany, Italy, Cyprus and USA. He has been awarded at several calls of works: IV and II Electroacoustic Music Festival UC (Chile, 2016, 2018), Seoul International Computer Music Festival (South Korea, 2016), Sonosintesis Festival (Mexico, 2016), LEMATS (Spain) and the University of Montreal (2014), the MATA Festival (USA, 2011), the San Diego New Music Festival and the NOISE Ensemble (2010), and at the Seattle Latin American Music Festival (2008). Iván is musician, production and new media manager of NEOPERCUSION, Madrid based ensemble; arts consultant at Acelerador de Artistas; and lecturer on digital arts, sound design and interactivity at IED-Madrid (Spain).

Massimo Fragala graduated in Electronic Music and Classical Guitar. His music has been performed in many festivals and conferences worldwide including ICMC 2003, ICMC 2005, Festival Zèppelin 05, EAR Sounds Electric 2005, LAC06, ICMC 2006, Festival Mùsica Viva 2008 (Sound Walk), NWEAMO 2008, Taukay 2008 (FrammentAzioni), Vox Novus 2008 (60x60 project), LAC 2011, Emufest 2011, 60x60 2012 (PianoForte Mix), Csound Conference 2013, LAC2015, Csound Conference 2015, Csound 30, WOCMAT 2016, LAC 2017, LAC 2018, ICMC 2018, MusLab 2018, etc.. .

Enrico Francioni graduated in Electronic Music and Double bass at the Conservatory "G. Rossini" in Pesaro. He is the author of chamber instrumental music, musical theater, electronic music, didactics, writings of musical interest and generative code written with Csound for the App SOLO [Nr. 19] dedicated to the homonymous work of K.Stockhausen. His works have been selected and executed at: Festival cinque giornate (CMC, Milano-Italy), C.I.M. (LaBiennale, Venezia-Italy), VoxNovus 60x60 and UnTwelveMix, EMUFest (Roma-Italy), ICMC (NYC), Bellagio Festival (Italy), Sguardi Sonori and DI_stanze (Foligno-Italy), Estudio de Musica Electroacustica (Montevideo-Uruguay), Acusmatiq 9.0 (Ancona-Italy), Suoni inauditi (Livorno-Italy), Festival di musica contemporanea 2015 (Cagliari-Italy), International Prize for Non-Conventional Score Music Writing (Lucca-Italy), Csound.30 (Maynooth-Ireland), International Csound Conference (Hannover - Boston - St.Petersburg - Montevideo), BASS 2010 and 2018 (Berlin-Germany and Lucca-Italy), 15th International Music Theory and Analysis Conference-GATM2018 (Rimini-Italy). He has dedicated himself to teaching years and has been a professor of Contrabass at the Conservatory "G. Rossini" in Pesaro.

Born in Perugia, **Nicola Fumo Frattegiani** graduated from D.A.M.S. (Academy of Arts Music and Show) at the University of Bologna, with a thesis on Luigi Nono's work "Intolleranza 1960". Later he has achieved first level Master degree on "The musical cultures of 1900's" at the University of Tor Vergata in Rome, and bachelor's degree on "Electronic Music and New Technologies" at the "F. Morlacchi" Conservatory of Music of Perugia. Currently Nicola is attending the Master's degree of "Electronic Music and New Technologies" at the "L. Refice" Conservatory of Music in Frosinone. Author and performer, his research deals with electroacoustic music, soundtracks of images, video, and in particular theatre. Since 2016, Nicola collaborates with Alessandro Fiordelmondo in several productions of live electroacoustic music, with whom he experimented many types of generation and manipulation of sound dimension. Both are part of the Ensemble A23, a research group in the field of sound installations and audiovisual performances.

Jacob Frost is a composer, guitarist, and vocalist based in Norman, Oklahoma. His music is based around stylistic and conceptual fusion, weaving together disparate musical genres as well as extra-musical elements to create fresh interpretations of traditional musical media. His recent works have explored the intersection between art song and the blues tradition (Dusk) and between musical and literary structure (For Dappled Things). Jacob earned his Bachelor of Arts in Music from Drury University, where he studied with Carlyle Sharpe. He is currently pursuing his Master's Degree in Music Composition from the University of Oklahoma, where he studies with Marvin Lamb and Konstantinos Karathanasis. Jacob currently performs with the New Century improv! Ensemble. He is the co-host with Zach Daniels of Composer Talk, a weekly videocast exploring current issues and events in new music.

Larry Matthew Gaab is a native of the United States. His body of works are for tape alone and for mixed acoustic and electronic instruments. The pieces utilize improvisation, composition, and computer generation. His works have been selected for music festivals and concerts in the United States, the Americas, Asia and in Europe.

Dr. Javier Alejandro Garavaglia is a composer and performer (viola/electronics) born in Buenos Aires, Argentina; he shares also the Italian and German citizenships. He lives between London (UK) and Köln (Germany). Compositions profusely performed in Europe, the Americas and Asia include: acousmatic/ audiovisual music and compositions for solo instrument, ensembles & big orchestra with and/or without the inclusion of electronic media/live-electronics. Electroacoustic works on commercially available CD releases (Germany, USA, Argentina , Denmark). Research published in several journals, books and also online in Spanish, German and English. World leader in full automation of live-electronics. Latest research about spatial audio: Granular Spatialisation and sound diffusion for high-density loudspeakers arrays (HDLA), with a long article in Vol. 40:4 of the Computer Music Journal.

http://icem.folkwang-uni.de/~gara/

Through some 150 works composed for a wide range of performance genres many premiered at major festivals by renowned performers, **Orlando Jacinto Garcia** has established himself as an important figure in the new music world. The distinctive character of his music has been described as "time suspended haunting sonic explorations" qualities developed from working with Morton Feldman among others. Born in Cuba, he came to the US in 1961. His works are recorded on 7 solo CDs and numerous compilations on respected labels here and abroad. In demand as a guest composer, he has received recognition from among others the Fulbright, Rockefeller, and Cintas Foundations, recently being the recipient of 4 Latin Grammy nominations. Founder of the New Music Miami Festival, the NODUS Ensemble and resident composer for the Miami Symphony, Garcia is a dedicated educator, and Professor of Music and Composer in Residence for the School of Music at Florida International University.

Douglas Geers is a composer who uses technology in nearly all of his works, whether in the compositional process, as part of their sonic realization, or both. He has created concert music, installations, and several large multimedia theater works. He has also performed as an improviser, playing laptop and his own custom electronic instruments. Reviewers have described his music as "glitchy... keening... scrabbling... contemplative" (New York Times), "kaleidoscopic" (Washington Post), "fascinating...virtuosic...beautifully eerie" (Montpelier Times-Argus), "Powerful" (Neue Zuericher Zietung), "arresting... extraordinarily gratifying" (TheaterScene.net), and have praised its "virtuosic exuberance" (Computer Music Journal) and "shimmering electronic textures" (Village Voice.) Geers completed his DMA at Columbia University, where he studied with Brad Garton, Tristan Murail, Fred Lerdahl, and Jonathan D. Kramer. His works have been performed widely, and he has won numerous awards and grants, including from the Jerome, McKnight, Argossy, and Bush foundations, among others. Today Geers is a Professor of Music Composition at Brooklyn College, a campus of the City University of New York (CUNY). There he is Director of the Center for Computer Music and the MFA program in Sonic Arts. He also serves on the Ph.D. composition faculty of the CUNY Graduate Center. www.dgeers.com

Marta Gentilucci is a composer of instrumental, vocal and electronic music. She pursued in Italy a Master in vocal arts as a soprano, and in English and German literature. She completed her Master in composition and composition/computer music at the University of Music Stuttgart, and the two years Ircam program in computer music (Cursus 1, Cursus 2). She held a Ph.D. in composition from Harvard University. Her electronic and instrumental music has been performed in renowned international Music Festivals and venues. Among her recent activities, the Artistic Research Residency at IRCAM (2017), the artistic residency at the Experimetalstudio des SWR Freiburg (2018), and the ongoing collaborative project Voi[e,x,s] Chapelle Charbon. In 2018-19, she will be a Harvard Radcliffe Institute for Advanced Studies Fellow (US).

Zuriñe F. Gerenabarrena studied composition with C. Bernaola and Franco Donatoni (Scuola Cívica, Milan). She has written pieces for orchestra, chamber ensembles, theatre, dance, animation, acousmatic, sound installations and multidisciplinary shows. She has commissions from Basque Government, INAEM (Ministry of Culture), CDMC, Quincena Musical, Basque Symphony Orchestra, Author Foundation, Bilbao Symphony Orchestra, Author Foundation, BBVA Foundation, Konstnärsnämnden, ZHdk/Zurich University of the Arts, Ministra Kultury i Dziedzictwa Narodowego (Poland), Ensemble Noh. She was Artist in residence: EMS(Stockholm 2017), ZHdkICST(Zurich 2016), Shiro-Oni (Japan2015), Tokyo Wonder Site (Tokyo, Japan 2013), Studio Alpha, VICC (Visby, Sweden 2011, 2016), USF/Verfet (Bergen, Norway 2010), Studio LEC(Lisbon 2009). Professor of Counterpoint and Harmony (MUSIKENE), Higher School of Music Basque Country. www.zfgerenabarrena.com

Nate Ghormley is a Senior in the Music Technology Program at Montana State University in Bozeman, Montana. He is an accomplished sound designer and music composer in the area and plans to continue focusing on this area of study in the future. He is a live sound engineer as well as a studio engineer doing voice overs and recording musicians in his down time. Nate grew up in Belgrade Montana. Just 8 miles out of Bozeman. He has been a musician his entire life. Picking up the guitar at age 10 and never looking back. Nate will say he has found a niche in an ever expanding industry right now. Grateful to have chosen to follow his dream and go to college for music and push for what he believes in.

Nicola Giannini is a Sound Artist and an Electroacoustic Music Composer, focussing on acousmatic and live immersive music. He is interested in sounds that evoke physical materials and living organisms. In July 2017 he has been a guest composer at the EMS in Stockholm. He played at the Toronto International Electroacoustic Symposium, at the SoundsLikeThis in Leeds, at the TEDxLondon, at the Serge Postgraduate Conference in Aberdeen, at the Palazzo Strozzi Museum in Florence, and at Sound Spaces Festival in Malmö. *For Hannah* was chosen as finalist at the International composition competition Città di Udine 2018 and it was performed at the festival “Contemporanea”. Giannini has a master’s degree in Electroacoustic Composition from the Conservatory of Florence, and he is currently a doctoral student at the Université de Montréal under the supervision of Robert Normandeau. He also joined the Groupe de Recherche en Immersion Spatiale (GRIS) as research assistant.

John Gibson composes acoustic and electroacoustic music that has been performed worldwide and is

available on the Centaur, Everglade, Innova, and SEAMUS labels. He seeks to complement and extend the musical inflections of performers using vivid electronic sound, sometimes generated on the fly by the software he develops. His music embraces influences ranging from contemporary classical to jazz, funk, and electronica. He has received significant awards from the Guggenheim Foundation, the American Academy and Institute of Arts and Letters, IMEB Bourges, the Tanglewood Music Center, and the Camargo Foundation. He is an associate professor at the Indiana University Jacobs School of Music. For more, please visit www.john-gibson.com.

Michael Gogins was born in 1950 in Salt Lake City, Utah. His father was an inventor, my mother was a fine artist and commercial artist. He has pursued poetry, photography, music performance, and music composition. He has lived in Salt Lake City, Los Angeles, Seattle, and now New York. He has a B.A. in comparative religion from the University of Washington, 1984. At the same time as he was studying comparative religion, he was taking seminars in computer music with John Rahn, which gradually became his major interest. Currently, he contributes code to Csound, maintain the vst4cs opcodes for hosting VST plugins in Csound, maintain the Csound for Android app, and maintain the csound-extended package incorporating various facilities for algorithmic composition in JavaScript, C++, and Common Lisp. He has a special interest in algorithmic composition and is currently working to bring new developments in mathematical music theory into algorithmic composition software.

Matthew Goodheart is a composer, improviser, sound artist, and educator. Following an early career as a free-jazz pianist in the fertile San Francisco Bay Area, he has developed a wide body of work that explores the relationships between performer, instrument, and listener. His diverse creations range from large-scale microtonal compositions to open improvisations to immersive sound installations – all unified by the analytic techniques and performative methodologies he has developed to bring forth the unique and subtle acoustic properties of individual musical instruments. Goodheart's approach results in a "generative foundation" for exploring issues of sound in relation to physicality, perception, technology, and cultural ritual. His current work focuses on "reembodied sound," a technique in which small transducers are attached to resonant objects, such as gongs and cymbals, causing them to resonate autonomously. He is currently a Lecturer in the Arts at Rensselaer Polytechnic University.

Gerard Gormley (aka being strangers) creates noise-based works that explore various forms of microsound. Gormley works in electroacoustic music, audiovisual installation and sound design for film. In addition to his work as a composer, he is active as a sound engineer and has an ongoing research project that examines the history of 3D audiovisual systems. Gormley was awarded a PhD in composition from Queen's University Belfast, and he is currently a senior lecturer in Audio and Music Production at Buckinghamshire University.

Joel Gressel (b. Cleveland, 1943) received a B.A. from Brandeis University and a Ph.D. in music composition from Princeton University. He studied composition with Martin Boykan and Milton Babbitt, and computer music with Godfrey Winham and J.K. Randall. His computer music has been recorded on the Odyssey and CRI labels. He currently lives in New York, working as a computer programmer, maintaining and extending software that models tax-exempt housing-bond cash flows. Several recent sound files can be heard at https://soundcloud.com/joel-gressel.

Ragnar Grippe studied cello at the Royal College for Music Stockholm, Musicology at Stockholm University, and musique concrète at Groupe de Recherches Musicales and privately with Luc Ferrari in Paris and electronic music at McGill University Montreal. He lived in Paris 1972 – 1994 with dance productions at the Royal Opera in Stockholm, La Scala bi-centennial Milan, Espace Cardin Paris, research at IRCAM, film scores and a big production of electronic music. He now lives and works in Stockholm. The collaboration with soprano Madeleine Kristoffersson 2017 has resulted in TRANSEAMUS a work with ten songs with words by Seneca the Younger. Kristoffersson and Grippe have earlier worked on Requiem (BIS Records) and Signorum Amor, both available on Apple Music. Lumière Ètrange, a work for light and electronic surround composition in collaboration with light designer Tobias Rylander http://www.tobiasrylander.com, was presented 2018. www.ragnargrippe.com

Nathaniel Haering is deeply interested in the use of live electronics to expand the artistic capabilities of traditional instruments and augment their timbral horizons while enriching their expressive and improvisational possibilities. This perspective is also highly influential and represented in the gestural power and extended sound worlds of his purely acoustic work. He has collaborated with and had works performed by Grammy Award-winning Vietnamese performer and composer Vân Ánh Võ, Trio Accanto, Ensemble Mise-En, Mivos string quartet, and members of WasteLAnd and Ensemble Dal Niente. A winner of the Ensemble Mise-En call for scores and official runner up for the Tribeca New Music Award, Nathaniel's work can also be found on Volume 27 of Music from SEAMUS. Nathaniel is pursuing a PhD in Music Composition at the University of California San Diego.

Fede Cámara Halac studied Licenciatura en Composición Musical at La Universidad Nacional de Córdoba (Argentina). He is a PhD Candidate in Music Composition & Theory at New York University (GSAS) with Jaime Oliver La Rosa and Elizabeth Hoffman. His research focuses on Database Multimedia Composition. His work is available at https://fdch.github.io/tv

Charles Halka's works have been performed in North America, Europe, Asia, and Brazil by the Cabrillo Festival Orchestra led by Marin Alsop, the Mexican National Symphony Orchestra, Lviv Philharmonic, Odessa Philharmonic, Mivos Quartet, counter)induction, Volti, Callithumpian Consort, ÓNIX Ensamble (Mexico), PRO ARTE eNsemble (Russia), Aquarius (Belgium), and Jauna Muzika (Lithuania), among others. Performances have taken place at venues and events such as the Cabrillo Festival of Contemporary Music, The Kennedy Center, Carnegie Hall, ISCM World Music Days, Foro Internacional de Música Nueva, the Coolidge Auditorium of the Library of Congress, and the Intimacy of Creativity partnership led by composer Bright Sheng. Halka earned undergraduate and master's degrees from The Peabody Conservatory and a doctorate from Rice University. He is Assistant Professor of Composition and Theory at Western Washington University.

Bruce Hamilton (b. 1966, Philadelphia) composes and performs music in a variety of genres. He has performed as a percussionist, improviser, and electronic musician for over 30 years. His music is published by Non Sequitur Music and can be heard on the Albany, Amaranth, and/OAR, black circle, Capstone, Aural Films, Ilse, [ink | fuel], Linear Obsessional, Memex, Parma, Phill, SEAMUS, Spectropol, split-notes, Three Legs Duck and Mark labels. A graduate of Indiana University (BM, MM, DM), Hamilton is Professor of Music at Western Washington University, where he teaches music theory, composition, and directs the electroacoustic music studio (WWEAMS). He is a co-organizer of the Sound Culture Adventures Festival, the Bellingham Electronic Arts Festival, and the Microtonal Adventures Festival.

James Harley is a Canadian composer teaching at the University of Guelph. He obtained his doctorate at McGill University in 1994, after spending six years (1982-88) composing and studying in Europe (London, Paris, Warsaw). His music has been awarded prizes in Canada, USA, UK, France, Austria, Poland, Japan, and has been performed and broadcast around the world. Recordings include: Neue Bilder (Centrediscs, 2010), ~spin~: Like a ragged flock (ADAPPS DVD, 2015). As a researcher, Harley has written extensively on contemporary music. His books include: Xenakis: His Life in Music (Routledge, 2004), and Iannis Xenakis: Kraanerg (Ashgate, 2015). As a performer, Harley has a background in jazz, and has most recently worked as an interactive computer musician.

Jing He was born in Hibei, China.(1989-), graduated form Showa University of misic(japan), and is now teaching composing at Wuhan Conservatory of music. Night Rain was included in ICMC2018 Daegu, Korea. Main research direction is algorithm composition, acoustic synthesezing and selctro acoustic music.

Mara Helmuth composes music often involving the computer, focussing recently on environmental issues and wildlife. Her recordings include Irresistible Flux on Esther Lamneck's Tarogato Constructions, from O on Open Space CD 33 Benjamin Boretz 9x9, Lifting the Mask on Sounding Out! (Everglade), Sound Collaborations, (CDCM v.36, Centaur CRC 2903), Implements of Actuation (Electronic Music Foundation EMF 023), and works included on Open Space CD 16 and the 50th Anniversary University of Illinois EMS collection. Her research includes software for composition and improvisation has involved granular synthesis (StochGran), wireless sensor networks, user interfaces, performance over Internet2, Unity musical game environments and contributions to the RTcmix music programming language. She is Professor of Composition at the College-Conservatory of Music, University of Cincinnati and Director of the CCM Center for Computer Music. She holds a D.M.A. from Columbia University, and earlier degrees from the University of Illinois, Urbana-Champaign. http://www.marahelmuth.com and https://ccm.uc.edu/music/cmt/composition/programsactivities/computermusic.html

Oliver Hickman is a composer currently residing in Brooklyn, New York. He holds a Bachelor of Music degree in composition from Columbia College Chicago and a Master of Music degree in Music Theory and Composition from NYU Steinhardt where he studied under Robert Honstein, Julia Wolfe, and Tae Hong Park. Oliver has written works for soloists to large ensembles including Dal Niente, the JACK Quartet, Chicago Composers Orchestra, Mocrep, the NYU Contemporary Music Ensemble, and Stony Brook University's SynthBeats. His works have been performed throughout the United States and Europe and he has presented research at the International Computer Music Conference. He also has worked within the theatre and dance worlds acting as both a composer and sound designer on various productions in Chicago and NYC since 2014. His current interests include timbre, economy of means as it pertains to music, and the relationship between composer control and player freedom.

American composer **Hannah Hitchen** (b. 1997) writes for a wide range of genres, including various chamber ensembles and solo works, as well as works for fixed media. Hitchen is presently pursuing a Bachelor of Music in Acoustic and Electronic Composition at the University of South Florida, where she studies with Paul Reller and Dr. Baljinder Sekhon. Her electronic music has been presented at several juried festivals, including Osaka University of Arts Electroacoustic Music Festival, MUSLAB's International Exhibition of Electroacoustic Music, Electroacoustic Barn Dance (EABD), Electronic Music Midwest (EMM), and the New York City Electroacoustic Music Festival (NYCEMF). Her music has been presented internationally in Mexico and Japan. In the spring of 2018, she was awarded a Merit Award for Electronic Music from the University of South Florida School of Music.

Pinda Ho is an American born Taiwanese who has lived in Taiwan for most of his life; he is now a composition doctoral student in the University of Illinois at Urbana Champaign and a contract artist for SaliArt Studio, Taiwan. He has studied in Taiwan under Shu-Yin Guo and Chao-Ming Tung, and in the US under Erik Lund, Steve Taylor, Sever Tipei and Scott Wyatt. His pieces have been performed in both the US and Taiwan, participating in festivals and conferences such as WOCMAT, SEAMUS, EMM, NYCEMF, CUBE Fest and others. In a rare opportunity having a master class with Vinko Globokar in 2014, the old meister asked him a single question, "for whom do you write your music?" This question resonated deeply in Pinda's self-identity and has thereafter served as a compass for his compositional process.

Ulf A. S. Holbrook is a composer, sound artist and researcher who works at the intersection between composition, sound art and sound design. A central aspect to his project is an interest in algorithmic applications for composition and spatialisation. Ulf is currently a PhD researcher at the RITMO Center for Interdisciplinary Study of Rhythm, Time and Motion at the University of Oslo.

Devoted to exploring and furthering the intersections of music and technology, **Eric Honour's** work as a composer and saxophonist has been featured in numerous international conferences and festivals like ICMC, SEAMUS, MUSLAB, Sonorities, EMM, and NYCEMF. A member of the Athens Saxophone Quartet, he performs regularly in Europe and the United States, and has presented lectures and masterclasses at many leading institutions. Honour's music has been described as "fast, frenetic, and fiendishly difficult" and performed around the world by such notable artists as Quintet Attacca, Shanna Gutierrez, Stephan Vermeersch, Elisabeth Stimpert, the Thelema Trio, and Quartetto Musicattuale. Professor of music, head of the music department, and director of the Center for Music Technology at the University of Central Missouri, his work as an audio engineer and producer appears on the Innova, Centaur, Ravello, Irritable Hedgehog, Weighter, Orpheus Classical Music, Everview, North Star Appli, and E.M.E. Action labels.

Having had instrumental lessons in playing the recorder, piano and oboe **Daniel Kurosch Höpfner** first came into contact with electronic music through self study with PureData and SuperCollider. Now studying music informatics in master's degree at the Institute for Music Informatics and Musicology at HfM Karlsruhe, his interests lie in auditive perception, algorithm derived synthesis and structure, improvised computer music, etc.

Christopher Hopkins is a composer and performer with special interests in the integration of electroacoustic composition, instrument design, and graphical notation, dialectics of historical musical styles, and performing Renaissance and Baroque music for the viola da gamba. He is Associate Professor of Music at Iowa State University of Science and Technology where has been Director of the Center for Excellence in the Arts and Humanities and led research developing 3D haptic (virtual touch) virtual reality designs for musical composition and performance. His compositions have been performed at major festivals in Athens, Basel, Grenoble, Hong Kong, Honolulu, Melbourne, New York City, Tanglewood, Toronto, Vienna, and Zu¨rich, and from concert stages in Belgium, England, the Netherlands, and Switzerland. Media broadcasts including his work have been heard over the Australian Broadcasting Corporation, CBC, O¨stereichischer Rundfunk, Radio Canada, WNYC, and Public Radio International.

Hubert Howe was educated at Princeton University, where he studied with J. K. Randall, Godfrey Winham and Milton Babbitt, and from which he received the A.B., M.F.A. and Ph.D. degrees. He was one of the first researchers in computer music, and became Professor of Music and Director of the Electronic Music studios at Queens College of the City University of New York. He also taught at the Juilliard School from 1974 to 1994. In 1988-89 he held the Endowed Chair in Music at the University of Alabama in Tuscaloosa. From 1989 to 1998, 2001 to 2002, and Fall 2007, he was Director of the Aaron Copland School of Music at Queens College. He is a member of the Society of Composers, Inc., the American Composers Alliance, the International Computer Music Association, SEAMUS, the Long Island Composers Alliance, and the New York Composers Circle. In 2009, he founded the New York City Electroacoustic Music Festival, and he continues as Director. Recordings of his computer music have been released by Capstone Records (Overtone Music, CPS-8678, Filtered Music, CPS-8719, and Temperamental Music and Created Sounds, CPS- 8771) and Ravello Records (Clusters, RR 7817). Www.huberthowe.org

Hsien-Te Hsieh got the Master of Music from the University of Taipei National University of the Arts, now studying electronic music at the Institute of Music, National Chiao Tung University, and the major faculty advisor is the Professor Yu-Chung Tseng. Hsien-Te Hsieh shows many talents in Music. He once served as a member of the Ju Percussion 2 and toured more than 50 performances. In 2018, the fixed media work *Rain Capriccio* was selected into the Wocmat Sound Gallery. In 2017, he participated in the TIPC Competition and won the first place in the Quartet.

Nicholas J. Hubbell graduated Magna Cum Laude from Oberlin Conservatory, studying composition with Randolph Coleman, and electronic and computer music with Gary Lee Nelson. After college, he immersed himself in the jazz fusion and experimental music scene in the New York City area, writing and performing in a number of ensembles, and was active in studio session work. Hubbell writes for a vide variety of instrumental

combinations that often include an electronic (fixed media) component. His work has been described as a: "highly developed artistic voice, capable of engaging audiences both in and beyond the academic and concert halls" - Dr. Mike McFerron, Director, Electronic Music Midwest.

Peter Hulen is a composer whose works are heard at conferences and festivals across the USA and abroad. He is Professor of Music Emeritus at Wabash College in Indiana, USA where he taught theory, composition, and electronic music. He lives in St. Louis, and teaches theory and computer music courses at Webster University. He received a B.M. from the University of Tulsa, an M.M. from Southwestern Theological Seminary in Fort Worth, Texas, and a Ph.D. from Michigan State University. He composes, sings in a choir, gardens, cooks, and tries to maintain some kind of contemplative practice.

Hiromi Ishi studied composition in Tokyo. Having taught at the Institute of Sound Technique and Shobi University, she studied electroacoustic music in Dresden and later at City University London where she was conferred her PhD. Her research, “Composing electroacoustic music relating to Japanese traditional music”, was supported by an ORS Award Scheme scholarship of the UK. Her pieces have been presented at music festivals and institutes worldwide, and broadcast by the WDR, MDR. In 2006 (ZKM grant) and 2013 she was Guest Composer at ZKM Karlsruhe. Her recent works focus on multi-channel acousmatic, and visual music for which she composes both music and moving images in parallel. She has two CDs from Wergo (Wind Way ARTS 8112 2, sai-ji-ku ARTS 8121 2). She has some papers published by Routledge, MINT Sorbonne, EMS Conference. Ishii is currently living in Cologne.

Pianist **Marija Ilić** is an active performer of the traditional repertoire and new music in New York City and has been praised as a “clear and decisive musician,” “compelling,” and “poetic,” and noted for her “quiet intensity” (New York Times). Her performances include recitals at the Weill Recital Hall at Carnegie Hall, the Smithsonian Institute in Washington, DC, Musica Viva, Kolarac Hall, and the Parliament Building in Belgrade, the Clark Studio Theater at Lincoln Center, the 92nd Street Y, as well as the Music Festival of the Hamptons, Aldeburgh Festival in England, Norfolk Contemporary Music Festival, Hoch Chamber Music Series, and Trinity Church. She has an ongoing collaboration in a piano duo with Milica Jelača Jovanović, playing concerts in Europe and the United States. Ms. Ilić has worked with composers William Bolcom, Martin Bresnick, George Crumb, Oliver Knussen, Joan Tower, Vykintas Baltakas, Meredith Monk, and Bunita Marcus, among others. She has collaborated in recitals with violist Lawrence Dutton of the Emerson String Quartet for more than ten years. She is the founding principal pianist of Christopher Caines Dance, with which she has appeared regularly since 2000, and is a member of the Dan Joseph Ensemble as a harpsichordist. A native of Belgrade, Serbia, Ms. Ilić holds an undergraduate degree from the Belgrade Music Academy, a graduate degree from the Mannes College of Music, and a doctorate in piano performance from Rutgers University, where J. S. Bach’s The Art of Fugue was the focus of her doctorate. She is on the faculty at Vassar College and Concordia College, where she is also the artistic director for Concerts at OSilas Gallery music series. Her solo CD featuring music by Bach will soon be released by MSR Music.

Wilfried Jentzsch was born in 1941. He studied composition at the Musikhochschule Dresden, the Akademie der Künste Berlin, and electronic music in Cologne. From 1976 to 1981 he studied at the Sorbonne in Paris under Xenakis where he was awarded a degree of doctorate in the field of musical aesthetics. He conducted at the same time a research of digital sound synthesis at IRCAM and the CEMAMu. He was the professor of composition and the director of the Electronic Studio at the Musikhochschule Dresden from 1993 to 2006. He is a member of the ISCM and a founding member of the DegeM. He was composer in residence at the Capital University Colombus (Ohio), IMEB Bourges, GRM Paris, Centre Musiques & Recherches Brussels, actually at the ZKM. He has received international composition prizes in Boswil, Paris, Bourges and ZKM Karlsruhe, and was invited for numerous festivals worldwide.

Man Jie was born in Inner Mongol, China. She got her second master's degree in Composition from Tokyo University of Arts and is currently pursuing a Ph.D. degree in composition for electro-acoustic and instrumental music. Her work has been collected by Tokyo University of Arts Museum, and her work was invited from Contemporary Music Festival Present of Orchestral Asia 2015 , the 2016 International Workshop on Computer Music and Audio Technology (FORUM IRCAM-WOCMAT Taiwan 2016) Seoul International Computer Music Festival 2017,SMC2018 ICMC2018. Her music is regularly performed mainly in China and Japan.

Wang Jun, Chinese youth electronic music composer, music producer, interactive design artist , young teacher of Communication University of Zhe Jiang. Obtained the master's degree of wuhan Conservatory of music.

Sergio Kafejian has obtained his Masters from the Brunel University (London), PhD from UNESP and in 2017 has developed a Postdoctoral Research at NYU Steinhardt. As a composer has won several composition prizes as Concurso Ritmo e Som (1994 and 1998), Bourges International Electroacoustic Music Contest (1998 and 2008), Gilberto Mendes Contest for Orchestra (2008), FUNARTE Classical Composition Prize (2009 and 2015) and Funarte Prize for arts interactions (2008). Kafejian has been the artistic director of the Brazilian Contemporary ensemble Camerata Aberta from 2010 to 2015. During this period the ensemble has performed

more than 40 concerts in Brasil and has performed in EUA (2010, 2011 and 2014), Belgic (2012), Holland (2012) and Portugal (2015). Kafejian is intensively involved in pedagogical projects related to contemporary music, contemporary improvisation and composition. Since 2001, has worked at Santa Marcelina College teaching composition, electroacoustic music and contemporary music.

Shine Kang is a composer and multimedia artist, currently research student at Tokyo University of the Arts. She holds Bachelor of Music degree in Music Composition in Musashino Academic Musicae, Japan. She recently graduated Masters degree course in Electronic Music Composition at Dongguk University, Seoul, studying with Prof. Kim Jun. She endeavors to show new arena of music by merging Computer music with other new genres. She tries to accommodate new technology into music in her recent works, such as Composition applying Artificial intelligence theory, and current in-depth research on Algorithmic composition. Recently, She is researching, enlarging her interests into audiovisual art.

Konstantinos Karathanasis, as an electroacoustic composer, draws inspiration from modern poetry, artistic cinema, abstract painting, mysticism, Greek mythology, and the writings of Carl Jung and Joseph Campbell. His compositions have been performed at numerous festivals and received awards in international competitions, including Bourges, Musica Nova, SEAMUS/ASCAP, SIME and Música Viva. Recordings of his music are released by SEAMUS, ICMA, Musica Nova, Innova and HELMCA. Konstantinos holds a Ph.D. in Music Composition from the University at Buffalo, and is a Professor of Composition & Music Technology at the University of Oklahoma. http://karathanasis.org

Natsuki Kawakami was born in Tokyo in 1997. Since 2016, he is studying composition and computer music with Takayuki Rai, Kiyoshi Furukawa and Shintaro Imai at the Sonology Department, Kunitachi College of Music.

Daisuke Kawashima's (b. 1993 in Japan) work focuses on themes such as "connection" and "emphasis". He was awarded in Japan Media Arts Festival Jury Slections, Grand Prix CCMC2018 (Jury President: Masahiro Miwa) etc. Graduated from Tokyo University of the Arts Master of Music department of creativity of music and sound. https://daisukekawashima.tumblr.com/about

Jordan Alexander Key (b. 1990) currently pursues his PhD in composition and musicology at the University of Florida. He earned bachelor's degrees in music composition, mathematics, and Eastern Asian philosophy from The College of Wooster (2013), as well as a master's degree in music composition from the University of Arizona (2015). His significant recent projects include a collaboration with the Vancouver Queer Arts Festival for his Art Song, *God Ourselves.* His performance repertoire focuses primary on music from the Middle Ages, Early Renaissance, and Early Baroque. He has been a bagpiper for 15 years as of 2018. www.jordanalexanderkey.com

Jack Kilgore states: "I hear and I hear and I hear and I hear, but do I hear. I hear with a laughable resolution. Luckily, recordings allow me to listen at a better resolution through repetition. I start to get the idea that I can control sound completely, I dangerous idea. I begin to explore my love for the natural and uncontrollable sounds, while also diving into that anxious desire to control the medium through granular manipulations. One walk on one night, can I have one walk for myself, please oh infinitley variabled world? Can I completely capture that nice, crisp walk? The drunk people arguing over trap music; what about the time I slapped a couple of sticks against a fire hydrant? Will Roads, Xenakis, Gabor, etc..."

Deborah Kim is a Korean-born Australian composer and performer whose works focus on aesthetics of Korean traditional music and music communication through audiovisual scores. Kim graduated B/Mus Composition at the Sydney Conservatorium of Music where she developed her work entitled "Cognitive Sound Image" for the Motion Graphics Score and Janggu (the traditional Korea drum). Kim received the Grand prize from the Ministry of Unification Minister's Award in South Korea in 2015. Kim is a current PhD student at the Sydney Conservatorium of Music researching Korean musical traditions and implementation of the contemporary music technologies with a combination of audiovisual scores.

Jihyun Kim composed *Micro Klang* for Ensemble and Electronics, *BA-bel* for Soprano and Electronics, and *Does Spring Come even on Frozen Ground?* for 2 Flutes and Electronics. She also wrote the paper "A Study on the Analysis of the Songs of the Composers Using Noise." She is very interested in Acoustic – Electronic music Composition and sound-escape sound effects.

Kwangrae Kim is a composer based in Seoul, Korea and Aberdeen. His research interests lie in real-time sound visualisation with spatial sound fields by higher order Ambisonics based on the study of human perception and consciousness. His works have been played at various countries including Korea, Japan, US, France and UK. He holds B.M. and M.A. in composition and musical technology degrees from Chugye University and Korea National University of Arts. He is currently a PhD candidate in Musical Composition at the University of Aberdeen with an Elphinstone Scholarship.

Connor Kirts is a composer, an audio engineer, and a senior in the Bachelor of Arts in Music Technology program at the University of Nebraska at Omaha. He is active in the Omaha arts community doing technical support and presenting his own creative work at the Kaneko Museum's contemporary music programs. He is also an IATSE apprentice, working in various capacities of sound reinforcement at Omaha venues such as the

Holland Performing Arts Center. He is also on the student technical staff for University of Nebraska at Omaha's School of Music, where he has provided support for approximately 300 events, helps maintain the recording studio, and built up the technical infrastructure. He is the recipient of a F.U.S.E. undergraduate grant from the University of Nebraska at Omaha, for his Soundtrack+ research project. He performs as a percussionist in UNO's university band and wind ensembles, and he performs as an electronic musician in UNO's Technology Assisted Performance Ensemble (T.A.P.E.).

Shelly Knotts produces live-coded and network music performances and projects which explore aspects of code, data and collaboration in improvisation. Based in Newcastle Upon Tyne, UK, she performs internationally, collaborating with computers and other humans. She studied for a PhD in Live Computer Music at Durham University with a focus on collaboration in Network Music. She is currently a Post-doctoral Researcher at Durham University working on AHRC project: Musically Intelligent Machines Interacting Creatively. As well as performing at numerous Algoraves and Live Coding events, current collaborative projects include algo-pop duo ALGOBABEZ (with Joanne Armitage), OFFAL (Orchestra For Females And Laptops), and live coding performance [Sisesta Pealkiri] with Alo Allik. In 2017 she was a winner of PRSF The Oram Awards for innovation in sound and music.

A native of Nara Japan, **Mizuki Kobayashi** (b. 1993) is a music composer, pianist and vocalist(mezzo). She has been studying composition since 2009. She has graduated from composition and vocal music in 2016. She has studied composition with Osamu Katsuki, Hitomi Kaneko, Fukushi Norio, Eisuke Tsuchida and Takayuki Rai. Currently, She has been a student at the graduated course of Toho Gakuen College of Music. She is a member of the Music Information Intelligence Team at RIKEN Center for Advanced Intelligence Project (AIP) since 2017.

Yuriko Hase Kojima was born in Japan in 1962. After studying piano at Osaka College of Music, she continued her studies in music composition in the United States for ten years. She received her Master's and Doctor's degrees from Columbia University. Her former teachers include Tristan Murail, Jonathan Kramer, Fred Lerdahl, Brad Garton, Philippe Leroux and Isao Matsushita. Her music combines different styles and techniques from contemporary Classical music and Asian music traditions, including computer music techniques. Currently, Ms. Kojima serves as the Chair Professor of Composition at Shobi University. She also teaches as a lecturer at Toho Gakuen School of Music and Senzoku Gakuen College of Music. She is the founder and the artistic director of a non-profit organization Glovill (www.glovill.jp/english.html) established for introducing new music to Japan.

Jack Langdon (b. 1994, Madison, WI) is a Chicago-based composer/performer and media artist. His work utilizes instrumental performance, theater, new media, and installation in concert, site-specific, and digital contexts. He is an improviser who performs on piano, organ, and guitar, and occasionally other instruments. His compositional work engages with the Midwestern pastoral tradition, communization, film and media theory, intermedia, and materialist aesthetics. Langdon works as a piano and composition teacher, as well as an arts administrator and organizer. He fights for equality and inclusivity in the various institutions he works in. He writes on music, art, politics, and culture. He is a curator for Score Follower for the 2018/2019 season. www.jacklangdon.info

Silvia Lanzalone, composer, graduated in Flute performance, Composition and Electronic Music from the Salerno, L'Aquila and Rome Conservatoires. Her works are oriented towards experimentation and research into new expressive and linguistic forms, primarily using computer technology in order to process sound in real time. Her music is mainly focused on the creation of acousmatic, electroacoustic and audiovisual works, that use live electronics, augmented instruments, sonorous sculptures, interactive and adaptive installations. Since 1997 she has been working at CRM – Centro Ricerche Musicali (Rome) as a composer and researcher. She is currently Professor of Electroacoustic Composition at the 'F. Morlacchi' Conservatoire of Perugia.

Reuben de Lautour composes music for solo or ensemble instruments and electronics, and writes about music, technology and listening practices. He is currently Senior Lecturer and Head of New Music at the School of Music, University of Canterbury. Prior to this he taught instrumental and electroacoustic composition at Istanbul Technical University's Center for Advanced Studies in Music, where he founded the Program in Sonic Arts in 2012. His music has been performed and recorded by artists such as Evelyn Glennie, the Nash Ensemble, and UMS 'n JIP. Before coming to Istanbul he studied composition at Princeton University with Paul Lansky and Steven Mackey, and piano and composition at the University of Auckland with Bryan Sayer, John Rimmer and John Elmsly.

Nick Lavigne is a composer focusing on acousmatic and experimental electronic music, audio-visual works, and sound design for film and animation. He is currently enrolled in Concordia University's Electroacoustic Studies program in Montreal, QC.

Erik T. Lawson is a sound designer and composer, based in the New York area. Recent design and composition projects include productions at Barrow Street Theatre, New World Stages, Asolo Repertory Theatre, Brown-Trinity Rep, Massachusetts Institute of Technology, Shakespeare & Company, and Miami Cultural Arts Center. His designs and original scores have been exhibited internationally in the Czech Republic, at the 2011 and 2015 Prague Quadrennial, and

at World Stage Design 2013 in Cardiff, UK. Erik is a proud member of United Scenic Artists Local USA 829, and the Assistant Professor of Sound Design at University of Connecticut.

Dohun Lee was born in South Korea and majored in composition at Seoul national University College of Music. He moved to Germany in 2003 and studied with Wolfgang Rihm in Karlsruhe. He has won several prizes in South Korea and Europe. He is a member of the ISCM German section, Frankfurt (FGNM) and artistic director of Koreanisches Musikfest in Deutschland. He lives in Frankfurt am Main, Germany. www.dohunlee.com.

In 1977, **Leng Censong** entered The attached middle school of Wuhan Conservatory Of Music with the violin. In 1989, he studied composing at the Composition Department. He has been teaching since Graduation. Now he is the associate professor and supervisor of postgraduate of Wuhan Conservatory of Music. His wide array of Compositions includes orchestral, ballet, choral, pianos and piano concerto, Electronic Works, such as electronic music *The Five Elements Metal,* and the interactive computer music Simplicity, JiangXue, The Jazz in Miao Nationality Style For Clarinet and piano (Golden Bells Award),Mountian Song--for YangQin and Chinese National Instruments 16 (Singapore international Composition competition For Chinese Chamber Music 3rd Prize) etc.

Andrew Lewis studied composition with Jonty Harrison at the University of Birmingham, England, where he was one of the founding members of BEAST. As well as composing acousmatic music, he has recently spent more time on chamber and orchestral works. In 2014 he composed 'Fern Hill' for the BBC National Orchestra of Wales, and in 2016 this work won first prize in the KLANG competition, Montpellier. Prizes, awards and mentions include Bourges 'Euphonie d'Or' France, PRS Prize UK, Stockholm Electronic Arts Sweden, Prix Ars Electronica Austria, Noroit France, Hungarian Radio, ARTS XXI Spain, CIMESP Brazil, Destellos Argentina. Andrew Lewis lives in Bangor, North Wales, where he is Professor of Composition at Bangor University and directs the Electroacoustic Music Studios. He is married with four grown-up daughters.

Junzuo Li, master candidate in Electroacoustic music composition at the China Conservatory of Music in Beijing, China. He graduated from Sichuan Conservatory of Music in 2017, and admitted to the China Conservatory of Music in the same year, supervised by Professor Ping Jin. He studied Electroacoustic music composition with Annette Vande Gorne. His current research and composition interests include electroacoustic music composition and multimedia composition research. His pieces have performances in Chengdu, Beijing, Shanghai, Japan and Ukraine.

Of the Siraya people, **Wuan-Chin Li** (Sandra Tavali) is a former keyboardist of the well-known metal band "Chthonic" and the composer for the TV documentary Unknown Taiwan , Discovery Channel. Her musical works crossover between classical, fine art, film and documentaries. She earned the Master of Music degree in Computer Music from the Peabody Conservatory of Johns Hopkins University, where she studied with Dr. Geoffrey Wright. Her compositions Ban Shan was featured at 2017 New York City Electroacoustic Music Festival and 2016 klingt gut! Symposium on Sound, Hamburg, Germany; Dirge was featured at the International Computer Music Conference 2015 (ICMC, USA), and The Wind Bloweth Where It Listeth was featured at WOCMAT-IRCAM 2016. She is currently one of the curators of sound and music in Guling Street Avant-Garde Theatre Taipei, and also composition faculty at Fu-jen University and National Tsing Hua University.

Yingzi Li, born in Jiangxi province in China, began learning Chinese traditional musical instrument Erhu at 8 years old. She took part in many competitions and won rewards. In 2007 she went to live in Japan where she engaged in Erhu performances, and teaching activities. She acquired her master's degree in Musical Creativity and the Environment major from Tokyo University of the Arts in 2016 . She was the assistant in the education research in Tokyo University of the Arts. She devoted herself to the study of electronic music and working assiduously on musical works of her own style which were admitted to 2015 and 2016 CCMC (Contemporary Computer Music Concert), 2016WOCMA-IRCOM Forum Conference, Prix Presque Rien 2015 and other competitions and musical festivals. Some electronic music pieces were recorded in CD Prix Presque Rien Prize.

Li Yunpeng, a composer, and a lecturer in computer music at Wuhan Conservatory of Music. He engages in electronic music composing, producing, and teaching. There are a wide range of his different work styles, including electroacoustic music, film music, musical music and dance music. Most of his students had won the different level awards, such as National Undergraduate Computer Design Competition, and the MUSICACOUSTICA-BEIJING Composition Competition.

Originally from the Pacific Northwest, **Stephen Lilly** is a composer, performer, audio engineer, and sound artist. His music ranges from "just dark" and "so demanding on the listener" (The Retriever) to "really more 'performance art'...the sort of thing you are very glad to have experienced without necessarily wanting to revisit it" (The Washington Post). Stephen has degrees from the University of Idaho (composition/bass performance: BM) and the University of Maryland (composition: MM, DMA). Amateur poetics, theatricality, and satire are the trappings of much of his work. His writings on contemporary experimental music have been published in *Organised Sound, Performance Research, Perspectives of New Music,* and *Computer Music*

Journal. Recordings of his compositions are available from ink&coda, the SEAMUS Electroacoustic Miniatures Recording Series, the SCI CD Series, and C7 Music. Stephen used to teach but now just lives in Minneapolis, where he composes and performs.

Sohyun Lim (b.1991) is South Korean composer currently based in Tampa, FL. Her music has been featured at the Electroacoustic Barn Dance Festival at Jacksonville University, Florida; Space City New Music Festival, Houston, TX; International Computer Music Conference, Daegu, Korea; Oregon Bach Festival, Eugene, Oregon; and Sao Paulo Contemporary Composers Festival, Sao Paulo, Brazil. In Korea, she worked as a full-time conductor, arranger, and accompanist at Jeomchon Jae-il Church. Also, she worked as a production intern for K-pop Star (similar to American Idol) at Seoul Broadcasting System. She received her bachelor's degree in Music Composition and Arts; Television and Film from Ewha Womans University where she studied with American composer Dr. Michael Sidney Timpson in addition to private studies with Korean Composer Dr. KyungShin Im. She is currently a master's composition student at the University of South Florida under the tutelage of Dr. Baljinder Sekhon and Paul Reller.

Cort Lippe studied composition and computer music with Larry Austin; followed composition seminars with Boulez, Donatoni, K. Huber, Messiaen, Penderecki, Stockhausen, and Xenakis; spent three years at the Institute of Sonology working with G.M. Koenig and Paul Berg; three years at Xenakis' studio CEMAMu; and nine years at IRCAM. His compositions have received numerous prizes, been performed at major festivals, and recorded on more than 30 CDs. Since 1994 he has taught in the Department of Music of the University at Buffalo, where he is associate professor of composition and director of the Hiller Computer Music Studios. www.cortlippe.com

Philip Liu (KR/US) is a sound artist/composer based in Berlin. He is especially interested in the actual world and virtual worlds, interactions between the two systems, and their differences which would become exponentially vaguer in the near future. In the context, he mainly gets ideas from various digital culture related subjects. He does not only limit to sound but often uses videos and other resources to express. Currently he is studying at Berlin University of the Arts and also working as a programmer/artist at Technical University Berlin Electronic Music Studio. He studied Computational Art at Goldsmiths University of London (MA), Acoustics and Music Technology at University of Edinburgh (MSc Candidate), Sonology at Royal Conservatoire Hague (Postgraduate course) and Economics/Music at Ohio State University (BA).

Aldo Lombera is a Mexico City-based creator. He obtained his bachelor's degree in Composition and Music Theory from the Centro de Investigación y Estudios de la Música (CIEM) and took a Diploma Course in Composition for Film, Theater, and Dance at the Núcleo Integral de Composición (NICO). Since 2017, I have been studying my master's degree in Music Composition at the Music School of the National Autonomous University of Mexico (UNAM). His work has been recognized nationally and internationally by different individuals, festivals and creation programs. www.aldolombera.com

Peiyue Lu is an electronic music and intermedia composer and performer. Her musical creation and research focuses on electroacoustic music, data-driven-instrument performance, and audio visualization. Peiyue's pieces have been presented internationally including Future Music Oregon concerts, performances by the Taihei Ensemble, concerts in the Radziejowice Electronic Music Series in Poland, concerts in Musicacoustica in Beijing, conference presentation in SEAMUS and performances at the National Center of Musical Creation(GRAME) in France. Peiyue received her B.M. in Recording Art and Computer Music from Sichuan Conservatory of Music in 2016. She is currently pursuing her Master of Music degree in Intermedia Music Technology from the University of Oregon.

Elliott Lupp is a composer, improvisor, visual artist, and sound designer whose work invokes images of the distorted, chaotic, visceral, and absurd. This aesthetic approach as it relates to both acoustic and electroacoustic composition has led to a body of work that, at the root of its construction, focuses on the manipulation of extreme gesture and shifting timbre as core musical elements. Elliott is native to Chicago and holds a Bachelors of Music in composition from Columbia College Chicago where his primary teachers included Kenn Kumpf, Eliza Brown, and Francisco Castillo-Trigueros. Elliott is currently pursuing his master's degree in composition at Western Michigan University, where he holds an assistantship in research. His primary teachers at WMU include Dr. Chris Biggs and Dr. Lisa Renee Coons.

Eric Lyon's work focuses on articulated noise, chaos music, spatial orchestration, and computer chamber music. He is the author of "Designing Audio Objects for Max/MSP and Pd." His publicly released software includes FFTease and LyonPotpourri, collections of externals for Max/MSP and Pd. His music has been recognized with a Giga-Hertz prize, MUSLAB award, the League ISCM World Music Days program, and a Guggenheim Fellowship. Lyon has composed for such artists as Sarah Plum, Margaret Lancaster, The Noise Quartet, Ensemble mise-en, String Noise, The Crash Ensemble, Esther Lamneck, Kathleen Supové, Marianne Gythfeldt, Seth Parker Woods, and the String Orchestra of Brooklyn. Lyon has taught computer music at Keio University, IAMAS, Dartmouth College, Manchester University, and Queen's University Belfast. He currently teaches in the School of Performing Arts at Virginia Tech, and is a faculty fellow at the Institute for Creativity, Arts, and Technology.

Sai Ma is currently studying for a master's degree in the composition department of Wuhan Conservatory Of Music, majoring in computer music composition, and studying interactive electronic music and sound design. At the same time, he also engages in the game music composition, game sound design and commercial songwriting.

Rob Mackay is currently a Reader in Music at the University of Hull where he is director of HEARO (Hull Electroacoustic Resonance Orchestra) which is a collective of artists at the University of Hull, dedicated to public presentation and engagement with sonic arts and electronic music, ranging from concert and gig performances, to gallery installations, public interventions, talks, and workshops. He is also the Chair of UKISC (UK and Ireland Soundscape Community), an affiliate of the WFAE (World Forum for Acoustic Ecology). Rob is an award-winning composer, sound artist and performer. He has been a reviewer for numerous international conferences, including ICMC, NIME, DHRN (Digital Humanities Research Network), Balance/UnBalance, and journals (*Organised Sound*, Cambridge University Press). He is also on the editorial board for *Interference, a Journal of Audio Cultures,* and is currently guest editor for *Soundscape* and *Ideas Sónicas/Sonic Ideas.*

Kristopher Magnuson is a composer from Cleveland, OH. Recent works have seen performances at the AMOK Experimental Music Platform in York, UK; the Sound Thought Festival in Glasgow, Scotland; the Canadian Music Centre in Toronto, Canada; and the SoundSCAPE Festival in Maccagno, Italy. He has also completed works for guitarist Rob MacDonald in affiliation with the Canadian Music Centre, the Genkin Philharmonic at SUNY Buffalo, and multiple electronic works for the Cleveland Ingenuity Festival. His Palos for string quartet, based on flamenco song forms, won first prize in the University of Toronto String Quartet Composition Competition, and received its world premiere with the Cecilia Quartet at the 2015 University of Toronto New Music Festival. He received his DMA in composition from the University of Toronto in 2018, where he studied with Gary Kulesha. His dissertation, Gambier Mass, was scored for winds, percussion, electric guitar & delay pedal, and men's chorus.

Dave O Mahony is a PhD student at the University of Limerick, Ireland. His compositions have been performed at the Sines & Squares Festival 2014 & 2016 (Manchester, UK), The Hilltown New Music Festival (Ireland), the Daghda Gravity & Grace Festival (Ireland), the Society of ElectroAcoustic Music United States (Eugene Or.), New York ElectroAcoustic Music Festival (NY), ElectroAcoustic Barn Dance (Jacksonville Fl.). He is a member of Irish Sound Science and Technology Association (ISSTA) and has an interest in the brainwave manipulation of modular synthesizers.

Chris Malloy is a composer and sound artist in Denver, Colorado, USA. His work has been presented throughout Asia, Europe, and the Americas. His Ph.D. is from Brandeis University, where his principal teacher was Martin Boykan. He has taught at Brandeis University, the University of Surrey, and the New England Conservatory at Walnut Hill, and currently chairs the Composition Department at the University of Denver. His portfolio ranges from fully notated scores for traditional instruments to cutting-edge experiments in algorithm, multimedia, and score animation.

Linda Marcel's compositions have been performed internationally; New York City, Rome, Milan, Adria, Perugia, Bevagna, and Bari, Italy; Potsdam Germany; Malaga, and Seville, Spain; Paris, France; and Oxford, England. She is a music professional, who graduated from Brigham Young University, Crane School of Music, State University of New York at Potsdam, receiving a doctorate in music from Columbia University. She is an adjunct music professor at the University of Rome, Tor Vergata 2011-present. Awards have included the National Institute for Staff and Organizational Development – Excellence in Teaching Award, and the MCFP Princeton University Fellowship Program. Linda is an active member of the New York Women Composers and the New York Composers Circle. Her work supports digital media, dance, drama and music performance while exploring techniques of multi-media performance. She is dedicated to educational collaborations with institutions world-wide.

Devin Maxwell, PhD, is a composer, percussionist, and music technology entrepreneur. His chamber music has been described as "amiably strident…clusters hammered insistently" by the New York Times and orchestral works "a beautiful puzzle, … fitting between plucks and pedals that build pyramid melodies" by the American Record Guide. Awards for composition include the Nief-Norf Composition Prize, the Leroy Robertson Prize, "Best Experimental Film" New York Independent Film Festival, New Music USA/Commissioning Music USA and an Honorable Mention at the American Composer's Orchestra 2013 Underwood Readings. His creative work is critically examined in the book *Boring, Formless Nonsense; Experimental Music and the Aesthetics of Failure* by Eldritch Priest, and the 2012 journal *Postmodern Culture.* He is currently building out a music technology program at Westminster College and is an Adjunct Assistant Professor of Composition at the University of Utah.

Composer and violinist **Andrew May** focuses on the drama of chamber music interaction, sometimes including invisible computer-based "performers." His works have been performed in 32 of the United States and in 15 other countries. May has taught at the University of North Texas since 2005, and has been assistant director of the Sounds Modern series since it began in 2007. Born and raised in Chicago, May studied at Yale, CalArts, and UCSD. His music can be heard on CDCM, SEAMUS, EMF Media, and Ravello Records

(including an album of his works for instruments and electronics, Imaginary Friends).

Dariusz Mazurowski is a Polish electroacoustic music composer born and currently residing in Gdansk. His works combine analog instruments with digital technology, computers and sampling. His compositional approach is dynamic in that it involves live electronics and sound diffusion across multi-speaker systems. Mazurowski's music has been broadcast by radio stations all over the world, and he has performed at festivals in Europe, North America, South America and Asia. Recent performances include : Audio Art (Krakow), MUSICACOUSTICA (Beijing), Echofluxx (Prague), LEMESG (Saint Petersburg), ICMC / SMC (Athens), Cross-Art (Saint Petersburg), CIME (Lisbon), MUSLAB (Buenos Aires), NYCEMF (New York), Visiones Sonoras (Morelia), MUSLAB (Mexico), TIES (Toronto), CIME (Moscow), the Brussels Electronic Marathon, Screen&Sound (Krakow), Festival de Arte Nuevo (Chihuahua) and others. His compositions has been released on numerous discs, including Non Acoustic Symphony by American label Neuma.

Robert McClure's music attempts to discover beauty in unconventional places using non-traditional means. Visual art, poetry, the natural world, neurological and mathematical concepts are all elements that influence McClure's works. His work has been featured at festivals including NYCEMF, the Beijing Modern Music Festival, the Toronto International Electroacoustic Symposium, SEAMUS, IDRS, ISCM, and ICMC. His works may be found through ADJ•ective New Music LLC, Bachovich Music Publications, Imagine Music Publications, Innovative Percussion, Media Press, Inc., Resolute Music Publications, and Tapspace Publications as well as on the ABLAZE, Albany, and New Focus Record labels.

Robin Meeker-Cummings is a composer, sound artist, and improviser who is studying Composition at New England Conservatory. They spent years active in the Philadelphia experimental and new music scenes organizing concerts and performing improvised electronics. At school, they has been writing electronic, electroacoustic, and acoustic classical music many of which have been performed at New England Conservatory. In the Summer of 2018, they attended at 9-day long Program in the country side of Barcelona focused on sound art with found sounds. During this time, they Created their first installation and they are planning their 2nd to be shown at New England conservatory.

A native of Ohio, **Joshua Michal** is Assistant Professor of Horn at the University of Massachusetts in Amherst, MA. He is a member of the Hartford Symphony Orchestra, the Eastern Connecticut Symphony Orchestra, the Lancaster Music Festival and he is on faculty at the Interlochen Summer Arts Academy. Currently, Dr. Michal is recording his first solo album of world premieres for horn and electronics by Peter Van Zandt Lane, Mark Oliveiro, Salvatore Macchia, and Gordon Green with additional pieces by Tyler Ogilvie. The album is due out in 2019. Dr. Michal received his degrees from Indiana University (B.M.), Northwestern University (M.M.), The Ohio State University (D.M.A.), and he completed additional studies at Bowling Green State University and the IES Institute in Vienna, Austria. His principal teachers include Rosemary Williams, Michael Hatfield, Michael Höltzel, Richard Seraphinoff, Jeff Nelsen, Volker Altmann, Gail Williams, Liz Freimuth, and Bruce Henniss.

Scott D. Miller studied composition with Milton Babbitt and Paul Lansky, as well as clarinet with David Krakauer. A graduate of Oberlin Conservatory, Miller also earned an MFA in composition from Princeton University and an MA in music education from Teachers College, Columbia University. He has received numerous awards and grants including ASCAP, NJSCA, Meet the Composer and the New York Composers Circle Award. Miller is a New York City-based composer and Artistic Director of the Tilted Head Ensemble, which he founded in 2016. Miller has written extensively for various classical ensembles and has long explored diverse genres. He has composed musique concrète, electroacoustic music, experimental jazz, structured improvisation and works in collaboration with poets, dramatists and visual artists. Starting in 1989, Miller founded and directed the Inner Ear Music Series at the Brecht Forum and at Greenwich House, producing over seventy concerts of new music by many prominent experimental composers and improvisers.

Scott L. Miller is a composer described as "a true force on the avant-ambient scene" and of "high adventure avant garde music of the best sort" (Classical-Modern Music Review). Best known for interactive electroacoustic chamber music and ecosystemic performance pieces, his recent work experiments with virtual reality applications in live concert settings. Raba is his latest album of audio visual (and VR) music, available on New Focus Recordings. Three time McKnight Composer Fellow and Past-President of the Society for Electro-Acoustic Music in the U.S., his work is frequently performed by soloists, ensembles, and festivals throughout North America and Europe. Recordings of his music are available on New Focus Recordings, Panoramic, Innova, Eroica, CRS, rarescale and SEAMUS, and his music is published by ACA (American Composers Alliance), Tetractys, and Jeanné. Miller is a Professor of Music at St. Cloud State University, Minnesota, where he teaches composition, electroacoustic music and theory.

Asako Miyaki is a sound artist, sound curator and composer lives in Tokyo, who studied at Toho Gakuen College of Music and its graduate school. She got a master's degree from doctoral course in interdisciplinary cultural studies at the Graduate School of Arts and Sciences,University of Tokyo. She is currently researching the perceptual cross ability of

electro-acoustic music as part of her doctoral course. She is a full-time lecture at the Faculty of Informatics for Arts of Shobi University. Recent works:Shadow Rays(2013),sound for permanent installation at “Kankaku museum”(museum for five senses);opera acousma#2 Teleceptor(2014),for light, sound and incense; the flower of afterimage,(video:Baba Fusako), Blaue Blume Award at Jena FullDome Festival 2015, selected for performance at ICMC 2016 and SAT (La Société des arts technologiques) Festival 2016; Afterimage(2017), 5.1ch surround work,Grand Prize at ”Sakamoto Ryuichi| Installed Music Exhibition Contest”.
https://miyaasako.wixsite.com/soundartist

Takashi Miyamoto (b. 1992) is an artist of computer music, visual, and media art. In 2014, he graduated from Kunitachi college of music at sonology department and got the Arima award. He studied composition and computer music in the master course of Kunitachi College of Music from 2014 to 2017. He graduated from the master course and he is active as freelance based in Tokyo. His works were selected at the Prix Presque Rien 2013, at the International Computer Music Conference 2015, at the New York City Electroacoustic Music Festival 2016, at Seoul International Computer Music Festival 2016, at Sonorities Festival of Contemporary Music 2016 and at the Muestra Internacional de Música Electroacústica 2016. He also won the third prize at the Shanghai International Electronic Music Week in 2015. He performed a commissioned work at ICMC/EMW 2017. In 2017, He attended at the Northern Alps International Art Festival for the sound operation of “Sizzle Otaka with Takayuki Fujimoto “Koei”.

Mikako Mizuno graduated from Tokyo University (aesthetics) and Aichi Prefectural College of Arts and Music. Master degree for composition. Dr. of Engineering concerning the theme "Space Concept in the Contemporary Music". The pieces were performed in France(Bourges, Paris) Austria(Salzburg), Hungary(Budapest), Germany(GEDOK), Italy(Venice, Alba, Treviso, Udine) Republic of Moldova(Ars Poetica), ISEA2000 and 2002, ISCM2003 and 2010, EMS2010 Changhai, Musicacoustica2010 (Beijing), ACMP2011, 2012, 2013, 2016 , WOCMAT2013 and in several cities in Japan. Suntory Saji-Keizo prize for the NympheArt vol.10 concert (2014). Writings were published including The History of Japanese Contemporary Music After WW (2006), Space Concept in the Contemporary Compositions (2001). Co-chair of EMS2017 in Nagoya.

Benjamin Montgomery (b. 1991) is originally from Bellefonte, Pennsylvania and started his musical studies as a saxophonist. He began composing at 16 and went on to receive a B.M. in music composition from Ithaca College (Ithaca, NY) where he studied with Dana Wilson and Jorge Villavicencio Grossmann. He continued his studies at Michigan State University (East Lansing, MI) where he received M.M. degrees in music composition and in theory, studying under Ricardo Lorenz and Jere Hutcheson. He is currently continuing his studies and teaching at the University of Miami (Coral Gables, FL) where he is pursuing a D.M.A. in music composition, working closely with Dorothy Hindman, Charles Mason, and Juraj Kojs.

After her musical studies and diplomas obtained in Italy (piano, composition, choral music direction, score reading), **Lara Morciano** continued her training and artistic activities in France, especially at IRCAM and at PSL Research University (PhD SACRe, Research Unit EA7410). Her compositions have been performed in many festivals (Cité de la Musique/Philarmonie – Paris; IRCAM-Centre Pompidou; Présences, Création Mondiale – Radio France; The Venice Biennale; ZKM – Karlsruhe…). She has received commissions from the French Ministry of Culture, IRCAM, the Ensemble Intercontemporain, ZKM, the Venice Biennale, Radio France, Grame… She won the Tremplin 2008 competition (EIC and IRCAM) and in 2012 the International Composition Competition Giga-Hertz Award in Germany.

Takeyoshi Mori is a composer, programmer, and educator whose works have been performed at Musica Viva 2007 in Portugal, ICMC 2008 in Belfast, DengakuIII in Tokyo, NYCEMF 2009, 101Tokyo in Iceland, ICMC 2012 in Ljubljana, Taiwan Sonic Arts Festival 2015, Asia Computer Music Project 2016 in Tokyo, and Musicacoustica 2017 in Beijing. He studied composition and sound programming in Japan and moved to New York in 2000 for his master’s degree in Music Technology at New York University. His recent activities have ranged from composing electroacoustic music to organizing lecture classes and exchange concerts in East Asian countries. He is Associate Professor at Music Design Course at Senzoku Gakuen College of Music, an adjunct lecturer at Tokyo University of the Arts, International Computer Music Association (ICMA) Asia/Oceania Regional Director, and the Vice- President of Japanese Society for Electronic Music. He has been involved in Japanese Society for Sonic Arts and Asia Computer Music Project as a board member.

Kairi Nagashima was born in Tokyo in 1997. He is a student of sonology department at Kunitachi College of Music. He is studying computer music with professor Shintaro Imai, Shu Matsuda, Kiyoshi Furukawa and Takayuki Rai. In 2017, he was selected at OUA Electroacoustic Music Festival 2017.

Dafna Naphtali is a electronic-musician and vocalist, who composes/performs experimental, interactive electro-acoustic music using her custom Max/MSP programming for live sound processing of voice and other instruments, and works for multi-channel audio and musical robots. She draws on an eclectic musical background in jazz, classical, rock and near-eastern music, and interprets Cage, Stockhausen and contemporary composers. Fellowships and awards include: New York Foundation for the Arts, NYSCA, Brooklyn Arts Council, Franklin Furnace, American Composers, Foundation for Contemporary Arts,

American Music Center, Brecht Forum, and Signal Culture in Owego, NY. Recordings and collaborations include work with “What is it Like to be a Bat?” digital punk trio w/Kitty Brazelton (Tzadik), “Pulsing Dot” duo with Gordon Beeferman (piano/voice/live- processing, Clang), Chatter Blip with Chuck Bettis (Acheulian Handaxe). She’s currently also creating audio-augmented reality soundwalks as free apps (iOS/Android) for U-GRUVE AR platform. http://www.dafna.info/

Dream pop vocalist Mimi Goese and composer/ mutantrumpeter **Ben Neill** create an otherworldly blend of sensual lyricism and technology in their unique musical collaboration. Their new music explores the musical and poetic qualities of mathematics and science through collaborations with chaos mathematician Ralph Abraham and the Beacon Institute for Rivers and Estuaries. The new songs combine the interplay of Goese’s captivating vocals and the electro-acoustic explorations of Neill’s self-designed mutantrumpet with sounds created from fractal mathematics and Hudson River environmental data. The reflective, sometimes surreal lyrics find poetry in numbers over glitchy beats, deep sub bass, and ambient textures.

Not the 'new' for novelty's sake, but an open mind and extreme curiosity for what's happening around her plus a need to evolve and renew a personal aesthetic are the motivations behind **Christina Oorebeek's** work. A trip to Las Vegas to record one-arm bandits for a music-theatrical piece; developing new instruments 'the soundwheel', plexiphone, midi-toy piano; writing story and libretto for her chamber opera "The Pitchshifter", making music for kite, percussion and live electronics "tempus fugit" belong to the work of someone from the 1960's, loving experimentation and with a lack of adherence to convention. An American-Dutch composer leaving the US in '69 after singing in the 60's band Dan Hicks and his Hot Licks, she tried her hand at writing songs. Having alighted in Amsterdam in '72, and after years as an improvising dance musician and 'rhythm for dance' teacher, she started composing autonomous music. At 50, she embarked on a career in composition, studied with Klaas de Vries in Rotterdam, graduated with the Composition Prize and has been composing ever since.

Naotoshi Osaka is a composer and acoustics researcher. He received an M.S. degree in electrical engineering from Waseda University in 1978. He worked at the Electrical Communication Laboratories, NTT, Tokyo, Japan, from 1978 to 2003. He received a Doctor of Engineering in 1994. His main research interest is timbre synthesis for both sound and speech. Since 1990 he has focused mainly on composing computer music and related sound synthesis technologies. His representative works include “Sound textile” for piano and computer (’98), “Shizuku no kuzushi” for violin, computer and orchestra (’99), and “Kibi Takibi …” for computer and orchestra. He joined the ICMC 1993 and ICMC 2003. Besides composition, he has also organized computer music concerts, such as the NTT Computer Music Symposium I (1997) and II (2001). From 1996 to March 2003, he led a computer music research group at NTT Communication Science Laboratories in Atsugi, Kanagawa. He is presently a professor at Tokyo Denki University.

Felipe Otondo studied composition at the University of York in England with Ambrose Field and Roger Marsh, focusing on electroacoustic composition and experimental theatre. His music has received various international composition awards and has been played in festivals in more than 30 countries across Asia, Europe, North and South America. Felipe is currently a Senior Lecturer at Universidad Austral in Chile. www.otondo.net

Dr. **Zeynep Özcan** is a Michigan-based sonic artist, singer, and published writer. She holds a Ph.D. in Music, an M.A. in History of Architecture, and a B.A. in Philosophy. Her works have been performed and presented throughout the world in concerts, exhibitions, and conferences. Her current research focuses on the design and composition of interactive virtual sound environments and the applications of animal behavior to sound art works. http://ozcanzeynep.com

Cristiana Palandri (M.A. Painting, Bachelor’s Degree Electronic Music) is a visual artist and music electronic composer based in Milan. Since 2007 she participated in several exhibitions : Reverse (Fondazione Merz, Turin), Noiseless (Scaramouche Gallery New York), Time and materials (Horton Gallery Berlin), Springs in white (Art Center Bangkok), Arimortis (Museo del 900 Milano). In 2015, under the pseudonym YokoKono, she released Sub Umbra EP on SØVN Records and in 2017 the track Psychopompe on Various self-identified non-male artists making experimental electronic music (Hylé Tapes).

Theocharis Papatrechas (b.1988) is a Greek composer currently a PhD candidate at the University of California, San Diego (UCSD) studying with Rand Steiger. He holds degrees from the Ionian University, the Eastman School of Music, and a certificate from the Sibelius Academy in Finland. Theocharis has participated in several renowned venues and workshops such as ManiFeste l’Academie at IRCAM with ensemble Intercontemporain, FORUM with Nouvel Ensemble Moderne, Shanghai New Music Week with Mivos Quartet, Workshop for Young Composers in Tchaikovsky City, Etchings Festival with ECCE, IDEA Young Composers Workshop with Divertimento ensemble. Since 2016, Theocharis, collaborating with the Italian ensemble Suono Giallo, is running ilSUONO Contemporary Music Week, a summer composition academy, which takes place annually in Città di Castello, Italy.

Sue Jean Park was born in Seoul, Korea, in 1980. She received her B.A. in music composition at Chungnam National University in Deajon, South Korea, earned her M.M. in music composition at Eastern Michigan University, and a post graduate Doctoral studies at WVU,

school of music. She has studied composition with Soon Hee Park, Anthony Iannaccone, John Beall, and David Taddie. Her compositions cover a variety of genres that include solo, vocal, chamber, and orchestral pieces as well as electroacoustic works. Her musical style is a mix of contemporary Asian, American, and European influences. In 2006, she won prizes from two composition competitions: the 38th Seoul Music Festival, (Drums for Soprano and Piano) and the Pan Music Festival, (I danced for solo violin). Her recent piece, Dialogue for flute and electronic accompaniment was played on the West Virginia Public Radio broadcast network in 2016. Recently, Dialogue was performed for the SCI National Conference at the University of Puget Sounds in Tacoma Washington, 2018 NSEME (National Students Electronic Music Events) at the University of North Texas in Denton, 2018 NYCEMF (NYC Electroacoustic Music Festival) in New York City, and 2018 ICMC (International Computer Music Conference) in Deagu, Republic of Korea. Currently, she is a freelancer composer in Seoul, Republic of Korea.

Juan Parra Cancino (b. Chile, 1979) studied Composition at the Catholic University of Chile and Sonology at The Royal Conservatoire The Hague (NL), where he obtained his Masters degree, andi n 2014, Juan obtained his PhD from Leiden University with his thesis *Multiple Paths: Towards a Performance practice in Computer Music*. His compositions have been performed in Europe, Japan, North and South America in festivals such as ICMC, “Sonorities”, “Synthese”, and “November Music”. His acousmatic piece *Serenata a Bruno* obtained a special mention at the Bourges electroacoustic music competition of 2003 and in 2004, his piece *Tellura* was awarded with the residence prize of the same competition. Since 2009 Parra is a fellow researcher at the Orpheus Institute (Ghent, BE), focused on performance practice in Computer Music.

Philippe Pasquier works on creative AI and generative systems. He is both a scientist specialized in artificial intelligence, a multidisciplinary artist, an educator, and a community leader. His contributions range from theoretical research in Creative AI, affective computing, and machine learning to applied artistic research and practice in digital art, computer music, and generative art. Philippe is an associate professor in the School for Interactive Arts + Technology at Simon Fraser University. www.philippepasquier.com.

Jingran Peng graduated from the Wuhan Conservatory Of Music with a Bachelor Degree of Theory of composition technology and currently learning electronic composing technology at postgraduate level.

Sylvia Pengilly has always been fascinated by the correlation between what the ear hears and what the eye sees. Because of this, many of her works integrate both musical and visual elements. Mathematics and physics, including Chaos Theory, Quantum Mechanics, and Superstrings, are of particular interest and frequently provide the basis for her works. These have been presented both nationally and worldwide at several major festivals, including many SEAMUS National Conferences, several New York City Electroacoustic Music Festivals, ICMC, the “Not Still Art” Festival, the “Visual Music Marathon” and "MUSLAB." Her work has also been screened at the Downtown Film Festival, Los Angeles and she was recently awarded first prize in the "Fresh Minds" festival. She was formerly professor of theory and composition in the College of Music at Loyola University, New Orleans, where she also founded and directed the electronic music composition studio. She is now "retired" and presently lives in Atascadero, California, where she composes music and creates “Visual Music” videos.

Li Pengyun, associate professor of Composition Department, Wuhan Conservatory Of Music; postgraduate supervisor; dean of The Research Office of Recording Art. Member of electronic Music Association of China EMAC Main works include "lotus in wire" “Breathe like lily” (composed for bass bamboo flute and max/MSP) "Sprouting "(composed for two pickups and realtime effects) "Under the cover "(composed for one percussionist and max/MSP) "Shennongjia in ink paintings" (composed for bass bamboo flute and live electronic music). His major theoretical works include "From studio to stage — form of performance of electronic music and its features".

Omar Peracha is a composer, performer, choral director and software developer based in London. He holds an MA in composition & acoustics research from the University of York. Omar has studied in London with Sinan Savaşkan and in York with Thomas Simaku, Roger Marsh, Martin Suckling and Ambrose Field. His work has been performed in the UK, USA, Brazil, Canada, Italy, South Korea, Japan, Cyprus and Taiwan, featuring in festivals such as SMC, NYCEMF, Leeds iFIMPaC, soundSCAPE New Music Festival, Roundhouse Rising, ISSTA Festival & Conference, MUSLAB International Festival of Electroacoustic Music and the Joint WOCMAT-IRCAM Forum Conference. Omar currently leads the software engineering team at Humtap, a tech company researching the creation of music with Artificial Intelligence. Besides composing and computer coding, Omar also directs and performs for London-based vocal ensemble, Vox London Collective.

Erik Peters (b. 1970) is a composer and performer living in Stockholm, active in the field of experimental music and sound art. His output is often found in an interdisciplinary context and includes for example text/sound-pieces, electronic music, chamber music, video and sound installations, radiophonic works and sound theatre pieces. Erik Peters has worked with artists such as Mats Gustafsson, John Butcher, Mark Fell, Lucy Railton, POING, Theatre of Voices and many others. He also runs a long term collaboration with Swedish lute player Peter Söderberg, performing original works, improvisations, as well as interpretations of american experimental composers such as John Cage, James

Tenney and Alvin Lucier. Erik Peters' music has been released on labels such as Fylkingen Records, Phono Suecia, Caprice Records and Alice Musik Produktion, and he occasionally writes for Swedish journals such as *Nutida Musik* and *Kritiker.*

Mark Phillips is a Distinguished Professor Emeritus at Ohio University and current President of the Society of Composers. He has won numerous awards, including the Barlow International Competition for Orchestral Music, which lead to collaborations with conductor Leonard Slatkin. In 2017, his *Breaking News* was premiered in Carnegie Hall. His music has received hundreds of performances throughout the world — including numerous orchestra performances by groups such as the St. Louis Symphony Orchestra and the Cleveland Orchestra — and has been recorded by Richard Stoltzman, the Warsaw Philharmonic Orchestra, the Lark Quartet, and several solo artists. www.coolvillemusic.com

Jean Angelus Pichardo (b. 1984) is a Mexican composer, arranger and producer who has worked on the creation and promotion of artistic projects, where music is combined with other arts and disciplines. Most of his music is distinguished by promoting interdisciplinary and multidisciplinary approach, incorporating sociology, literature, theater and sound art in their works. His catalog includes music for orchestra, chamber ensembles, solo works, and also music theater workshop. He earned his Master in Musical Composition at the Music Faculty of UNAM under the guidance of recognized composer Gabriela Ortiz. Pichardo's works include orchestral, small ensemble, choral music and arrangements. He was a resident composer for the VocalEssence ¡Cantaré! program in 2014-2015, working with schools in the Minneapolis/St. Paul area. Pichardo has won awards and grants including the National Endowment for the Arts Young Artist grant by the National Fund for Arts and Culture (FONCA) in its edition 2012 and 2015. On 2011 and 2014, he received the Young Artist grant (Endowment for the Arts and Artistic Development) by State Fund for Arts and Culture (FOCAEM). He is the recipient of Project Support Program for Innovation and Improvement Teaching (PAPIME).

Russell Pinkston is Professor Emeritus of Music Composition and former Director of Electronic Music Studios at The University of Texas at Austin. He holds degrees from Dartmouth College (BA 1975) and Columbia University (MA 1979, DMA 1984). He is active both as a composer and as a prominent pedagogue and researcher in the field of computer music. His compositions span a wide range of different media, including symphonic, choral, and chamber works, electronic music for modern dance, and interactive performance pieces. He has received a number of significant honors, including a Guggenheim Fellowship, the Charles Ives Fellowship from the American Academy and Institute of Arts and Letters, and a senior Fulbright Fellowship to Brazil. He is a founding member and former President of the Society for Electro-Acoustic Music in the U. S., and has served as an ICMA Regional Representative for the Americas.

Michael Pounds began his career as a mechanical engineer, but returned to the academic world to study music composition with a focus on computer music and music technology. He studied at Bowling Green State University, Ball State University, the University of Birmingham in England, and the University of Illinois. He specializes in computer music composition/performance and collaborative intermedia projects. His awards include the ASCAP/SEAMUS Student Commission Award, a Residence Prize at the Bourges International Electroacoustic Music Competition, a Rotary Foundation Ambassadorial Scholarship for studies in England, and residencies at the MacDowell Colony and I-Park. His work was awarded the 2014-2015 #wildsound Music Contest First Prize at the University of Notre Dame and third place in the Musicworks 2016 Electronic Music Composition contest. Michael teaches composition, acoustics, music perception, recording and computer music at Ball State University, and co-directs the Music Media Production program.

Mahoor Pourmoghadam (b. Iran, 1990) graduated with a bachelor of music in Iranian traditional music from the Art and Architecture of Tehran Azad University. Pourmoghadam started learning music from the age of seven with Setar and after four years started taking violin lessons with Mojdeh Jahangiri and also the same time took Iranian traditional singing courses. Her other teachers include Ardeshir Kamkar, Hamidreza Nourbakhsh, Davoud Ganjeie. She learned harmony with Vartan Sahakian and mohamadreza Tafazoli.
Since 2015 she has been taking contemporary and electronic music lessons with Amir Sadeghi Konjani. Her piece *Another World* won the second prize of the "Reza Korourian Awards (2016)".

Daniele Pozzi is an electronic musician and artist living in Graz, Austria. Among his works are live electronics performances, audiovisual improvisations, sound installations and electroacoustic music, often involving the design of original computer programs and physical interfaces aimed at resolving creative or performative issues. His most recent practice investigates the interconnections and synergies existing between all the elements involved in improvised human-machine performances, adopting non-hierarchical strategies to build highly reconfigurable and adaptive networks of non-linear sonic relations. Daniele earned a BA in Electroacoustic Music Composition from the Conservatory of Padua, Italy, and he is currently involved in the Computer Music master program at the Institute of Electronic Music and Acoustic, Graz, studying with Gerhard Eckel.

Bob Pritchard is a West Coast composer and media artist, developing and using gesture-tracking and sensing

systems. His works are performed internationally, and he is the recipient of numerous awards, grants, and commissions in music, film and applied research. He directs the University of British Columbia laptop orchestra, and coordinates the UBC Applied Music Technology program. Both RUBS and KiCASS that form the TaSTE system are part of his ongoing work in gesture tracking

Qi Mengjie (Maggie) is a composer and sound artist. Her works have been performed at international festivals, including ICMC, Audio Arts Festival, WOCMAT, CIME, International Electronic Music Festival of New York, SEAMUS, ISCM, SPLICE, and others. She has been commissioned by MUSICACOUSTICA-BEIJING and is the Composer in Residence of Love for Music Ensemble in Beijing. QI Mengjie is a doctoral candidate at Central Conservatory of Music under the guidance of Professor Zhang Xiaofu. She is currently visiting scholar at CUNY - Brooklyn College under the supervision of Professor Douglas Geers. Her doctoral dissertation is on interactive sound installation. She received her master degree in 2015 at the Central Conservatory of Music while studying electroacoustic music composition with Professor Ping Jin, and her Bachelor's degree in recording and sound design at the National Academy of Chinese Theater Art in 2012.

Meihui Qiao graduated from NYU and received her master degree in Music Technology. She is a sound designer, music composer, audio engineer, and performer (musical instruments includes saxophone, keyboards, and guitars). She got her M.M. degree in Music Technology from New York University and received her B. A. degree in Recording Arts at Shanghai Normal University.

Shuang Qu is now studying for the second year of the Master of Music at National Chiao Tung University. She majored in electronic music and studied under Professor YuChung Tseng.

Laurie Radford is a Canadian composer, sound artist, music technologist, educator and researcher who creates music for diverse combinations of instruments and voices, electroacoustic media, and performers in interaction with computer-controlled signal processing of sound and image. His music fuses timbral and spatial characteristics of instruments and voices with mediated sound and image in a sonic art that is rhythmically visceral, formally exploratory and sonically engaging. Radford's music is available on empreintes DIGITALes, McGill Records, PeP Recordings, Clef Records, Eclectra Records, Centrediscs and Fidelio Audiophile Recordings. He has taught composition, electroacoustic music and music technology at McGill University, Concordia University, Bishop's University, University of Alberta, City University (London, UK), and is presently an Associate Professor at the University of Calgary.

Raphael Radna is a composer, pianist, and electronic musician specializing in live electroacoustic music. He has performed at such venues as The Hollywood Bowl, The REDCAT, CounterPulse, The Center for New Music, and festivals including Time-Based Art. Raphael is currently pursuing a PhD in Music Composition at UCSB, studying with Clarence Barlow, Curtis Roads, and Andrew Tholl.

David Rafferty graduated from Mount Allison University with a B.A. in philosophy (2000). In 2009-10, he studied at the Royal College of Music in London, where he received the "Cobbett and Hurlestone" prize for composition. He completed his Doctor of Music at McGill University (2013-18). He studied with Jonathan Cole and Brian Cherney. He presented his thesis "Structured Cell" at ICMC 2018. He is a member of the Interdisciplinary Art Group Oneness in South Korea. www.davidrafferty.com

Lucas Rei Ramos (Muros, Galicia, Spain) started his music studies as a jazz pianist, but soon he started to gain interest in composition. Because of this, he started to make music for audiovisual media and to work with vocal ensembles as an arranger and conductor.
He is currently finishing his Bachelors in Music Composition at ESMAE, where he is developing works in the area of electronic and interactive music. Some of his works have been already exhibited in international events, like the Cerveira Bienal, the Semibreve Festival of Braga and the Lisbon Música Viva Festival (all of them in Portugal). He also wrote works for big ensembles like the ESMAE Symphonic Orchestra and the ESMAE Big Band, and had a work commissioned for a project with the Portuguese Foundation for Science and Technology, which was performed in several concerts in Lisbon and Porto.

Kory Reeder's music investigates meditative and atmospheric qualities, ideas of objectivity, place, immediacy, and quiet stasis while maintaining activity and constant development of material that unfolds slowly and creates its own sonic world. In an effort to achieve this, his work experiments with compositional techniques found in visual art and media. Kory has frequently collaborated with theater, dance, and opera programs. His music has been performed in festivals and concerts across North America, Australia, and Europe and was awarded by The Kennedy Center American College Theater Festival. He has been an ASCAP Morton Gould Award finalist, and artist-in-residence at Arts Letter and Numbers, and the Kimmel, Harding, Nelson Center for the Arts. Kory is currently pursuing a PhD. in music composition at the University of North Texas and holds a BM from the University of Nebraska at Kearney, and a MM Bowling Green State University.

Leah Reid is a composer of acoustic and electroacoustic music. Her primary research interests involve the perception, modeling, and compositional applications of timbre. In her works, timbre acts as a catalyst for exploring new soundscapes, time, space, perception,

and color. Reid received her D.M.A. and M.A. in music composition from Stanford University and her B.Mus from McGill University. Reid's principal teachers include Mark Applebaum, Jonathan Berger, Brian Ferneyhough, and Sean Ferguson. She has taught at Stanford University (Stanford, CA), University of the Pacific (Stockton, CA), and at Cogswell Polytechnical College (San Jose, CA). Reid is currently an Assistant Professor at the University of Virginia, where she teaches courses in music composition and technology. Additional information may be found at www.leahreidmusic.com.

Clemens von Reusner (b. 1957) is a composer and sound artist based in Germany, whose work is focused on electroacoustic music. He studied musicology and music-education - drums with Abbey Rader and Peter Giger. At the end of the 1980s development of the music software KANDINSKY MUSIC PAINTER. Clemens von Reusner is a member of the German Composers' Society (Deutscher Komponistenverband, DKV), the German Society for New Music (Gesellschaft für Neue Musik, GNM) and of the German Society For Electroacoustic Music (Deutsche Gesellschaft für Elektroakustische Musik, DEGEM). He also worked as a curator and served as a jury member at international electroacoustic festivals. He has been commissioned to compose works for radio and his compositions have received numerous international broadcasts and performances in Americas, Asia, Europe. Invitations to ISCM World New Music Days 2011, Zagreb Croatia, and ISCM World New Music Days 2017, Vancouver, Canada.

ReVerse Bullets: See Jon-Carlos Evans.

Composing from a contemporary Musique Concrète perspective augmented by various score synthesis techniques, **Michael Rhoades** elicits musical events from generative algorithms and an ever-expanding Csound sample playback instrument. Numerical representations of aural quanta are mixed and blended into formal elements via a variety of catalysts such as tendency masks, mathematical equations, sonifications, cellular automata, score based sampling and other paradigms in an unbending quest for emergent quanta. After receiving his BFA in Creative Technologies at Virginia Tech in the spring of 2018, Michael is now pursuing an Interdisciplinary PhD at Virginia Tech. His ongoing practice-based research in the areas of Holography, Holophony, Algorithmic Composition, and Super Computing is the focus of his curriculum.

Carter John Rice, a native of Minot, North Dakota, is a composer, audio engineer, and music educator currently based in Kalamazoo, MI. As a composer, Rice draws inspiration from a wide array of sources including acoustic phenomena, cognitive science, and classical mechanics. His music has been featured at venues such as the national SEAMUS conference, the national conference for the Society of Composers Inc. (SCI), the International Computer Music Conference, Electronic Music Midwest, and the Electroacoustic Barn Dance. Rice holds a Bachelor's degree in music theory and composition from Concordia College, a Master's degree in music composition from Bowling Green State University, and a Doctor of Arts in music composition from Ball State University. He has studied with Elainie Lillios, Christopher Dietz, Michael Pounds, Jody Nagel, Keith Kothman, Daniel Breedon, and Steven Makela. Rice currently works as an assistant professor of multimedia arts technology at Western Michigan University.

Brad Robin composes and conducts music in a multitude of styles for soloists and ensembles ranging from jazz bands to contemporary chamber groups and orchestras. Compositions have included computer components designed to manipulate and augment the sound of acoustic instruments. As a pianist and keyboardist, he composes and performs music for dance, theatre, film, and multimedia performance art. Performances include various national and international festivals including ICMC, NYCEMF, SEAMUS. After completing a PhD at the University of North Texas, he currently resides in Chicago with his wife Nicole and teaches at DePaul University. He also holds masters degrees from DePaul and Northwestern University in composition and sound art, respectively.

Claudia Robles-Angel is an audiovisual and new media artist born in Bogotá-Colombia, currently living in Cologne-Germany. Her work and research cover different aspects of visual and sonic art, which extend from audiovisual fixed-media compositions to performances interacting with bio-data via the usage of interfaces such as EEG (electroencephalogram) and EMG (electromyography). Her work is constantly featured in not only media and sound-based festivals/conferences but also in group and solo exhibitions around the globe, for example, the ZKM Center in Karlsruhe; the International Computer Music Conferences ICMC in Copenhagen, Montréal and Utrecht; Festival Internacional de la Imagen in Manizales, NYCEMF; ISEA International Symposium on Electronic Art Istanbul, Manizales and Durban (2011/2017/2018); at MADATAC 07 Madrid (2016), Sound/Image colloquium in London (2016) Digitale Duesseldorf (2016), the ADAF Athens Digital Art Festival (2018), Heroines of Sound Berlin (2018) and more recently at the EI Experimental Intermedia NYC. http://www.claudearobles.de.

Silvia Rosani studied composition in Italy, at Mozarteum Universität in Salzburg (Austria) and completed a PhD at Goldsmiths, University of London. Silvia's music is performed internationally by ensembles such as Neue Vocalsolisten, ÖENM, Ensemble Platypus and United Instruments of Lucilin. Some of the venues and festivals which hosted her music are Salzburg and Venice Biennale, MATA (NY), Music Current (Dublin), ECLAT (Stuttgart), Teatro de la Zarzuela (Madrid) and Rhialto Theater (Limassol). In 2017, Silvia was in residence at Le Vivier in Montréal through the New Music / Québec –

UK (hcmf) Exchange and, later, was recipient of the IMRO/Music Current commission. Silvia is currently Lecturer in Composition at Cardiff University School of Music and Associate Lecturer at Goldsmiths, University of London. In Silvia is currently collaborating with percussionist Tom Jacques on the Augmented Vibraphone project.

Robert Rowe received degrees in music history & theory (B.M. Wisconsin 1976), composition (M.A. Iowa 1978), and music & cognition (Ph.D. MIT 1991). From 1978 to 1987 he lived and worked in Europe, associated with the Institute of Sonology in Utrecht, the Royal Conservatory in the Hague, the ASKO Ensemble of Amsterdam, and with IRCAM in Paris. In 1991 he became the first composer to complete the Ph.D. in Music and Cognition at the MIT Media Laboratory and is currently Professor of Music and Director of the Music Technology program in the Department of Music & Performing Arts Professions at New York University. His music is performed throughout North America, Europe, and Japan and is available on compact discs from Urlicht, Innova, Bridge, New World, Roméo, Quindecim, Harmonia Mundi, and the International Computer Music Association, and his book/CD-ROM projects *Interactive Music Systems* (1993) and *Machine Musicianship* (2001) are available from the MIT Press.

Timothy Roy composes music steeped in imagery and allusion, which often seeks to conjure a sense of time, place, and feeling. Roy has received honors and awards from ASCAP/SEAMUS, Sigma Alpha Iota Inter-American Music Awards, the International Competition of Electroacoustic Composition “Prix Destellos," Musicacoustica-Beijing Composition Competition, the First International Jean Sibelius Composition Competition, and the International Composition Competition “Città di Udine." Roy was most recently awarded an Artist-In-Residence fellowship through the I-Park Foundation. He is currently on faculty at Western Michigan University, where he teaches composition as well as undergraduate and graduate courses in music theory. He is also completing a doctorate at Rice University’s Shepherd School of Music. Roy’s primary teachers have been Kurt Stallmann, Karim Al-Zand, Pierre Jalbert, James Mobberley, Chen Yi, and Paul Rudy.

Born and raised in Iran, **Bahar Royaee** is a composer of concert and incidental music. The Boston Arts Review praised Bahar’s “haunting sound design” in her work with live theatre. In 2017, Bahar was awarded from the Krourian Electroacoustic Competition in Iran and won the Roger Sessions Memorial Composition Award. She is the first recipient of The Walter W. Harp Music and Society Award, and the John Bavicchi Memorial Prize both from Berklee College of Music. Her compositions are a mixture of timbral and sound-based atmospheric structures, interspersed with lyrical influences derived from her Iranian background (specifically Iranian lullabies). Bahar holds degrees in composition from Berklee College of Music and Boston Conservatory. Starting fall 2018, she is pursuing a Ph.D. in composition from the Graduate Center of the City University of New York, where she studies under Jason Eckardt.

Anna Rubin's music engages audiences with a dramatic intensity and lyrical beauty. She has composed for a variety of musical genres including chamber, choral, wind and orchestral ensembles. Her love of story-telling often informs her electroacoustic works — richly layered narrations embedded in digital sound, which reflect her environmental and social justice concerns. She is the recipient of awards from the New York Foundations for the Arts, the National Orchestral Foundation and the New York, Ohio and Maryland State Arts Councils. She has also received commissions from New American Radio, New England Foundation for the Arts, WNYC Radio, the Northern Ohio Youth Orchestra, the California EAR Unit and such virtuoso performers as Airi Yoshioka, Marlow Fisher, Thomas Buckner, F. Gerard Errante, Margaret Lucia, and Madeleine Shapiro. Her works are recorded on the Neuma, Sony and SEAMUS labels and she is published by Neuma.

Jessica Rudman is a Connecticut-based composer whose recent works engage with contemporary social themes through realistic or fantastical frames. Described as a “new music ninja” (Hartford Advocate), her style unifies melodic development and narrative structures with extended techniques to create an intense emotional expression. Rudman is the Director of the Hartt Preparatory Academy and the Head of the Creative Studies Department at The Hartt School Community Division. She previously served on the faculty at Baruch College and Central Connecticut State University. Rudman is also an active theorist and arts advocate, who volunteers with the Women Composers Festival of Hartford. She holds degrees from the CUNY Graduate Center, The Hartt School, and the University of Virginia. http://www.jessicarudman.com.

Bruno Ruviaro, composer and pianist from São Paulo, Brazil, was born in 1976, and has lived in 22 different places: Rua Theodureto Souto, Rua Cajati, Casa do Seu Demétrio, Rua São Borja, Rua James Adam, Alameda dos Uirapurus, Avenida Modesto Fernandes, Avenida Santa Izabel, Rua Nuno Álvares Pereira, Rua Prof. Djalma Bento, Rua Dr. Nestor Esteves Natividade, Rua Major Diogo, North Park Street, Jericho Street, Olmsted Road, Thoburn Court, Comstock Circle, Via Parma, Rue de l'Hôtel de Ville, Greenoaks Drive, Miramar Street, 26th Street.

Michele Samarotto studied at the Vivaldi Conservatory of Music Alessandria (Italy), where he obtained diplomas both in classical saxophone and jazz. He's currently pursuing a master's degree in music informatics at the Institute for Music Informatics and Musicology - HfM Karlsruhe. His interests lie in sound synthesis, audio visual composition, improvisation in computer music, etc. He's active in a diverse variety of musical areas such as

Jazz, Contemporary Classical Music and Electronic Music.

Riccardo Santoboni is an Italian composer. He teaches Computer Music and Multimedia Composition at S.Cecilia Conservatorio of Music and is chair of Musical Composition at Frosinone Conservatorio of Music. He also teach acoustic and Psychoacoustic at Master Courses in Rome University of Tor Vergata. He has also taught computer music at summer course of Accademia Musicale Chigiana in Siena. He won several musical competition in computer Music and in acoustic Music among whom the first prize of international competition "Luigi Russolo". His works are available at Capstone Records (NY), Twilight Music (Rome), Cbmusic (NY), XXI Musicale (Rome).

Timothy Sapp is a composer, improviser, and doctoral student studying at the University of Illinois at Urbana-Champaign. He has studied composition with Jacob Bancks, Reynold Tharp, Erik Lund, and Sever Tipei. In addition he has studied electro-acoustic composition with Scott Wyatt and Eli Fieldsteel and improvisation with Joe Ott and Randall Hall.

Ayako Sato is a doctoral student at Tokyo University of the Arts. She composes and researches electroacoustic music. Her works have been selected for performances at international conferences and festivals including FUTURA, WOCMAT, NYCEMF, SMC, ICMC, ISSTC, ISMIR, and so on. She was awarded the third prize of International Electroacoustic Music Young Composers Awards at WOCMAT 2012 (Taiwan), the honorary mention at WOCMAT 2013 (Taiwan), the honorary mention of CCMC 2012 (Japan), the honorary mention of Destellos Competition 2013 (Argentina), the third prize of Prix PRESQUE RIEN 2013 (France), and Acanthus Prize at Tokyo University of the Arts (Japan).

Dimitrios Savva was born in Cyprus, 1987. He received his Bachelor degree in music composition from the Ionian University of Corfu and his Master degree in Electroacoustic composition from the University of Manchester. In January 2015 he started his PhD in Sheffield University under the supervision of Adrian Moore and Adam Stanovic. He has also participated in live electronic concerts with the EPHMME student ensemble. His compositions have been performed in Greece, Cyprus, United Kingdom, Germany, Italy, Belgium, France, Mexico, Chile, Brazil and USA. His acousmatic composition Erevos won the first prize ex aequo in the student category of acousmatic composition competition Metamorphoses 2012 and his composition Balloon Theories has been awarded with the Franz List residency-scholarship and the public prize at the composition competition Metamorphoses 2014.

Antonio Scarcia graduated in Electronic Engineering from the University of Padua and holds a postgraduate diploma in Signal Processing from the University of Bari and an academic diploma in Electronic Music cum laude from the Conservatory of Bari. He is interested in computer-aided composition for electro-acoustic music and multimedia. His works for digital media have been included in programs of many important events such: International Computer Music Conference (Copenhagen, Stony Brook NY, Perth, Ljubljana, Athens), Sound and Music Computing (Oporto, Barcelona, Stockholm), Colloquio di Informatica Musicale (Udine, Torino, Trieste, Cagliari), EMuFest (Roma), CSound Conference (Boston); awarded at Musica Nova Competition (Prague). Currently, he is external faculty professor at Genoa Conservatory of Music

Margaret Anne Schedel is a composer and cellist specializing in the creation and performance of ferociously interactive media whose works have been performed throughout the United States and abroad. As an Associate Professor of Music at Stony Brook University, she serves as Co-Director of Computer Music and ran SUNY's first Coursera Massive Open Online Course (MOOC), an introduction to computational arts. Schedel holds a certificate in Deep Listening and is a joint author of Cambridge Press's Electronic Music. She has been commissioned by the Princeton Laptop Orchestra the percussion ensemble Ictus, the reACT duo and the Unheard-of//Ensemble. Her research focuses on gesture in music, the sustainability of technology in art, and sonification/gamification of data. She sits on the board on nCoda and NYCEMF is a regional editor for *Organised Sound* and an editor for *Cogent Arts and Humanities.*

Robert Seaback is a composer and sound artist exploring the semiotic differences between acoustic and synthetic or digitally mediated sources—an approach inspired by the dualistic nature of digitized sound when conceptualized both as an informational entity and an acoustic phenomenon. He holds a Ph.D. in music composition from the University of Florida and degrees in music and technology from Northeastern University and Mills College. He currently teaches courses in music technology at the University of Florida.

Composer **Kyle Shaw** writes colorful, energetic music tailored to its occasion and informed by his experiences as a performing artist. He has been a finalist for the ASCAP Morton Gould Young Composer Award, a Belvedere Chamber Music Festival Composition prize winner, and 1st-prize winner of the Iowa State University Carillon Composition Competition and the Vera Hinckley Mayhew Creative Arts Contest. He has been commissioned by the Barlow Endowment commission, the 17th-annual 21st-Century Piano commission, and has been a resident fellow at the Osage Arts Community's Mid-Missouri Composers Symposium. He earned his DMA from the University of Illinois and is currently assistant professor of music at California State University, Bakersfield. www.kyleshawmusic.weebly.com

Lin Shen is associate professor of the Shanghai Normal University - Music College, Director of the Music

Technology Department. He studied music at Shanghai Conservatory of Music and School of Music of Bangor University, and now doing the PhD electroacoustic music project with Andrew Lewis. He is a composer of several Electroacoustic music pieces. He participated in the 2016 IRCAM Forum-WOCMAT Joint Conference. He participated in ICMC/EMW 2017 Concert Series II Music New Media Alliance Concert.He participated in the 10th CONCOURS INTERNATIONAL DE COMPOSITION ACOUSMATIQUE Métamorphoses 2018. He also is an active musician

Taiwanese composer **Mei-fen Shih** was born in 1980. She has a western classical music background. After returning to her hometown, she began looking for Taiwan's unique musical language. Her music mixes western classical music theory and Taiwan traditional music. She has studied piano performance and composition at Staatliche Hochschule für Musik Trossingen in German. She currently works for Ampai Artificial Intelligence Music Company, Taiwan.

Shine Kang is a composer and multimedia artist, currently research student at Tokyo University of the Arts. She holds Bachelor of Music degree in Music Composition in Musashino Academic Musicae, Japan. She recently graduated Masters degree course in Electronic Music Composition at Dongguk University, Seoul, studying with Prof. Kim Jun. She endeavors to show new arena of music by merging Computer music with other new genres. She tries to accommodate new technology into music in her recent works, such as Composition applying Artificial intelligence theory, and current in-depth research on Algorithmic composition. Recently, She is researching, enlarging her interests into audiovisual art.

Patric Simmerud graduated in 1999 from the Royal College of Music in Stockholm, Sweden, where he studied for, among others, Sven-David Sandström, Pär Lindgren, Magnus Lindberg, Daniel Börtz. From 1993/94 his teachers include Jaques Charpentier (Conservatoire Supérieur de Paris) and Ennio Morricone (Fondazione Accademia Chigiana, Siena). He is currently a freelance composer. Since 1993, Simmerud has taken part in contemporary music festivals in Europe as well as in USA and Japan, and his music has been performed in concert halls all over the world.

Domenico De Simone is Professor of Electroacoustic Composition at the "Umberto Giordano" Music Conservatory of Foggia. Graduated in Piano, Jazz, Composition and Electronic Music. He also graduated in Composition at the Accademia Nazionale of Santa Cecilia under the guidance of Azio Corghi and Giorgio Nottoli. He was awarded the diploma of merit in Music for Film by Ennio Morricone and in Composition by Franco Donatoni at the Accademia Chigiana in Siena. In 1995, 1996 and 1997 he was awarded by the S.I.A.E. His compositions have been performed in more than one hundred concerts in Italy and abroad (China, Latvia, Canada, Chile, Argentina, Romania, Malta, etc.) and broadcasted by RADIOTRE.

Nikhil Singh (b. 1994) is a composer, media artist, and researcher from Mumbai, India. Most recently, he is interested in the development of new interfaces and interactive systems intended to facilitate and encourage playful explorations of and experiences with sound and music. Singh has performed on guitar, electronics, and in other capacities. As a technologist, Singh has worked on live productions. His technological work has also involved areas such as augmented reality, data sonification and data-driven composition, and more. As a producer and audio engineer, Singh has worked on records by a number of artists from India and around the world. Singh is currently a research assistant and graduate student in the Opera of the Future group at the MIT Media Lab. He holds a Bachelor of Music degree from the Berklee College of Music (2017), studying composition and music technology.

Much of **Phillip Sink's** music is inspired by social awareness, the human experience, science, and art. In addition to traditional composition for voice and acoustic instruments, he composes audiovisual works that combine video with electronics. Phillip received degrees in music composition/theory and music education from Appalachian State University and Michigan State University. He earned a DM in music composition with minors in electronic music and music theory at Indiana University, where he served as an associate instructor of composition. In 2016-2017, he was a Post-Doctoral Fellow of Music Composition at University of Missouri. He is now Assistant Professor of Music Composition Theory at Northern Illinois University.

Johannes S. Sistermanns stages his compositions as electroacoustic, SoundPlastic exhibition, music theatre, urban environment, and radiophonic sound plays. He studied the "Tao of Voice" method with Stephen Cheng in New York and classical North Indian singing at the BHU Banares Hindu University. 1976 to 1984, he studied Piano, Rhythmik, and New Music Theatre with Mauricio Kagel at the Cologne Conservatory of Music. 1989 Doctorate in Musicology [PhD]. Since 1983 touring, living, teaching, performing, exhibiting, stipes and residencies in Paris, New York, Japan, China, Hong Kong, Europe and Australia. Performances, soundart exhibitions, teachings, and fellowships have taken him to Japan, China, Australia, and the USA. He has received numerous prizes and awards including Prix PRESQUE RIEN/Luc Ferrari Paris 2015, 1. Prize LEIBNIZ HARMONIES 2016 Hanover and the GERMAN SOUNDART AWARD 2008. http://www.sistermanns.eu.

Daniel W Smith (b. 1993) is a composer and arranger currently pursuing a master's degree in music composition at Ball State University. With a focus on rhythmic energy, Dan combines elements of contemporary classical music with the rich harmonies and textures of the jazz idiom, attempting to create

audience experiences that are both familiar and exciting to listeners of all levels. Dan has studied under composers such as Patrick Chan, Daniel Swilley, Jody Nagel, Eleanor Trawick, and Derek Johnson.

Drew Smith (b. 1999, they/them) is an American electroacoustic composer, multi-instrumentalist, and multimedia artist. Smith now focuses on writing electroacoustic works that explore the relationship between analog/digital electronics with acoustic instruments, as well as multimedia work that includes installation, video, sculpture and dance. He is currently attending Oberlin Conservatory, working towards a BM in Technology in Music and Related Arts, where they study with Peter Swendsen and Tom Lopez. He is also the recipient of a 2018 Flint Initiative Grant to travel abroad to compose and record a new piece for Ondes Martenot and electronics.

Jorge Sosa is a Mexican-born composer, and Chairperson of the Music Department at Molloy College. He has recently been commissioned to write a new opera *I am a Dreamer Who No Longer Dreams* in collaboration with librettist Cerise Jacobs. It will be premiered in September 2019 in Boston. He has also been commissioned to write the opera *Monkey,* based on a Chinese legend. His first full-length opera, *La Reina,* was performed in a concert version as part of the 2016 "PROTOTYPE" festival in NY. Jorge has been composer in residence with the NYU New Music Ensemble since 2015, collaborating on a number of works for chamber ensemble, free improvisation, and electronics. Jorge's CD's *Plastic Time* and *Enceladus* are available on all the major music download sites and through the website www.jorgesosa.com.

Adam Stanović started composing electronic music some twenty years ago. Early experiments with tape machines and a four-track mini-disc recorder led him discover the potential of recorded sounds, and he quickly started using computers as a tool for music-making. Ever since, Adam has considered the fixed medium as a canvass for his works which. In all cases, his music explores ways in which both pitch and noise coexist within recorded sound, with musical form often delivering one from the other. Adam's music has been heard in over 400 festivals and concerts around the world. His works are available on 12 different CDs. He is currently directing a number of MA programmes, and supervising a group of PhD students, at The University of Sheffield, UK.

Ewan Stefani is a composer and academic based in the UK. He has been composing with synthesizers, computers and tape recorders since the 1980s. As a composer and performer in the last few years he has worked closely with a broad cross-section of collaborators including Christophe de Bezenac, Stephen Altoft, Paul Hession, Will Baldry, and Centre de vidéo-danse de Bourgogne. His solo pieces have been performed on BBC Radio 3 and at various international conferences and festivals.

Michael N. Starck (b. 1982 in Münster) is a German sound designer, producer and multi-instrumentalist. In 2013, he graduated from the University of Cologne with a Master's degree in Musicology (with a strong focus on electroacoustic music) and has since been involved in numerous projects and artistic collaborations ranging from popular electronic music to contemporary music. He lives in Cologne, Germany.

Rand Steiger's music has been commissioned and performed by many ensembles. Many of Steiger's works combine orchestral instruments with real-time digital audio signal processing and spatialization. They also propose a hybrid approach to just and equal-tempered tuning, exploring the delicate perceptual cusp between a harmony and a timbre that occurs when tones are precisely tuned. Steiger has also conducted many premieres and recordings. His compositions and performances are recorded on the Cambria, Centaur, CRI, Crystal, Einstein, EMF, Koch, Mode, Neuma, New Albion, New Dynamic, New World, Nonesuch and Tzadik labels. After serving on the Faculty of California Institute of the Arts from 1982 through 1987, Steiger joined the Music Department at U.C. San Diego. In 2009 he was a Visiting Professor at Harvard University. For further information please see http://rand.info.

Eli Stine is a composer, programmer, and educator. Stine is currently pursuing a Ph.D. in Composition and Computer Technologies as a Jefferson Fellow at the University of Virginia. He is a graduate of Oberlin College and Conservatory with degrees in Technology In Music And Related Arts and Computer Science. Stine's work explores electroacoustic sound, multimedia technologies (often custom-built software, video projection, and multi-channel speaker systems), and collaboration between disciplines (artistic and otherwise). Most recently Stine has been exploring different strategies for the computational modeling of ecologicial systems in electroacoustic sound. His work has been features at many festivals and conferences. www.elistine.com.

Jeffrey Stolet is a professor of music and director of the Intermedia Music Technology at the University of Oregon. He received a PhD in Music at the University of Texas at Austin. In 2012 Stolet completed the first book about the sound-specification programming language Kyma, entitled *Kyma and the SumOfSines Disco Club* that is available in English and in Chinese. More recently Stolet was inducted into China's prestigious DeTao Masters Academy which brings "eminent professionals and experts to China, where they share the tacit knowledge that brought them to world leadership in their fields with high-level Chinese colleagues." Stolet holds honorary professorships at two important music conservatories and has received a lifetime achievement award for his contributions to interactive music at Musicacoustica and for his extensive work lecturing at Chinese institutions of higher education about

electroacoustic music.

Robert Strobel (b. 1988) composes art music and invites you to listen. His music has been broadcast on WPRB Princeton in Marvin Rosen's 25-hour new music marathon, and on Hawaii Public Radio, in the program "Singing and Other Sins." Commissions he has received include an LDS Barlow Commission with the Missouri Quintet, Mizzou New Music Initiative-funded work for some string players of the St. Louis Symphony, among others. His symphonic work *From the Book of the Dead* was a winner in the Missouri Orchestra Composer's project. The recording of his work *Refugees* was also selected for the SCI CD Series vol. 32. Robert has a doctorate degree in composition from Florida State University, as well as degrees from the University of Missouri-Columbia (MM Composition), and the University of Northern Colorado (MM Oboe Performance, BM Composition and Oboe Performance).

Chenyu Sun is an interactive designer and musician based in Brooklyn. Generally, the purpose of her work is to influence people in arts ways and make people aware of nature and their surroundings. By exploring the innovative and technical possibilities of media production and musical works, her works let viewers physically engage with different media that include both individual and cooperation works with music, videos, interactive technology installations, games, animations and electromechanical sculptures.

Hua Sun, a Chinese electronic musician, audio engineer and sound designer in China National Opera and Dance Drama Theater. Hua received Master of Music at University of Oregon in United States and Bachelor of Arts at Xing Hai Conservatory of Music in China. His works include opera "Liu San Jie", "Phyllis Lin", "Peasant Takes a Wife", "Horn", "Sparks of Fire", and dance drama "Zhaojun Outside the Frontier", "Confucius", "Sacrifice". Hua's music presentation includes International Computer Music Conference, Kyma International Sound Symposium, Beijing Muiscacoustica Festival, Electronic Music Midwest of United States, and Digital Audio China (Shanghai).

Stevie J. Sutanto (b. 1992) is an Indonesian composer/sound artist whose works are mostly influenced by his surroundings, in a social context, revealing the impression and thought he encountered. His interest in other kinds of arts emerged since the last year of his study, which then gave him more expanse to express himself, in addition to sound. The outcomes include music for musicians in the context of contemporary music, acousmatic music, spatial music, and experimental media performance. Stevie currently resides in Linz, Austria, studying Interface Culture in Kunstuniversität Linz. His works have been performed on several events including Manila Composers Lab, Yogyakarta Contemporary Music Festival, Ruang Suara - Frankfurt Lab, Asian Composers League, Holland Festival, Ars Electronica Festival, Shanghai New Music Week, Crossroads'17, WeSA Audiovisual Festival, and International Computer Music Conference.

Kotoka Suzuki is a composer focusing on both instrumental and multimedia practices. She has produced several large-scale multimedia works, including spatial interactive audio-visual work for both concert and installation settings, often in collaboration with artists and scholars from other disciplines. Her work reflects on life, breath and wind and often conceives of sounds as physical form to be manipulated through the sculptural practice of composition. She received a B.M. degree in composition from Indiana University and a D.M.A. degree in composition at Stanford University, where she studied with Jonathan Harvey. She taught at the University of Chicago and is currently an Associate Professor at Arizona State University School of Music. Her works are published on Edition RZ, EMF Media, IMEB records.

Daniel Swilley (b. 1980) is a German-American composer of acoustic and electroacoustic music. His music and research have been presented at festivals and conferences such as June in Buffalo, SEAMUS, Toronto Electroacoustic Symposium, Understanding Visual Music Symposium, NoiseFloor, New York City Electroacoustic Music Festival, Electronic Music Midwest, Studio 300, Audiograft, Electroacoustic Juke Joint, College Music Society, as well as Society of Composer's Inc. Swilley holds degrees in composition from University of Illinois Urbana-Champaign (DMA), Georgia State University (MM), and Valdosta State University (BM). His primary composition teachers have included Heinrich Taube, Sever Tipei, Robert Scott Thompson, and Scott Wyatt. Swilley is currently an Assistant Professor of Music Theory and Composition at Ball State University.

Tibor Szirovicza was born 1981 in Zagreb, Croatia. He studied composition with Željko Brkanović Music Academy in Zagreb. His works are performed by various ensembles and soloists including Zagreb Philharmonic Orchestra, Ensemble Modern, Ensemble Cantus, Zagreb Flute Ensemble, TAJJ String Quartet, Dian Tchobanov, Alun Francis, Rosen Gergov, Monika Leskovar, Gordan Tudor, Ana Batinica and others. His works received awards such as 'Rudolf & Margita Matz' (2011) prize for young composers, 'Stjepan Šulek' Prize (2016) and are regularly supported by the Ministry of Culture of Republic of Croatia. He is a regular member of the Croatian Society of Composers and the Croatian Community of Independent Artists. He works as Assistant Professor at Department of Composition and Music Theory at the Music Academy in Zagreb. Szirovicza is a Member of Management Board of Croatian Composers Society and Artistic Director of Music Tribune in Opatija.

Fred Szymanski is a New York-based sound and image artist. In his work, he investigates the relations between nonlinear forces and applies the results in sound diffusion and multi-screen installations and

performances. His electroacoustic work has been performed at many festivals, including 2018 Città di Udine (Italy), 2018 International Festival of Experimental Music (Bratislava), Musica Nova 2017 (Prague), 2016 Matera Intermedia Festival (Italy), 2015 Monaco International Electroacoustic Festival, and the ICMC 2015 (Denton, Texas). His image and sound work has been featured at SonicLIGHT (Amsterdam), the European Media Art Festival (Osnabruck), Mutek (as part of RML's CineChamber) (Montreal), and Club Transmediale (Berlin). His music has been recognized with several awards: First Prize Musica Nova (2017), Premier Prix Monaco Electroacoustique (2015), Special Mention Città di Udine, Italy (2018), Honorary Mention Destellos X (2017), and IMEB Bourges (2007).

David Taddie received his BA and MM in composition from Cleveland State University and his PhD from Harvard University. He has written music for band, orchestra, choir, solo voice, piano, and a wide variety of chamber ensembles as well as many electroacoustic compositions. His music has been widely performed in the United States, Europe, Asia, and Australia by numerous soloists and ensembles. Among his awards are those from the American Academy of Arts and Letters, the Koussevitzky Foundation, the Fromm Foundation, and the Music Teachers National Association. He currently resides in Morgantown, West Virginia, where he is Professor of Music, Coordinator of Composition, and director of the Electronic Music Studio at West Virginia University. His music can be heard on Ravello, New Focus, and SEAMUS CD's. In his spare time he enjoys hiking, gardening and speaker building.

Akira Takaoka is a composer and music theorist. He is currently Professor of Music at J. F. Oberlin University in Tokyo, Japan. His compositions have been selected for performance at major festivals such as NYCEMF, ISCM World Music Days, ICMC, SEAMUS, and SMC. As a music theorist, he specializes in atonal theory and music cognition and has read papers at professional conferences such as ICMPC, SMPC, and ICMC. He studied music theory with Jonathan D. Kramer and Joseph Dubiel, computer music with Brad Garton and Mara Helmuth, composition with Masayuki Nagatomi, Kazumi Yanai, and Joseph Dubiel, and philosophy with Akira Oide and Isaac Levi. He received a BA and an MA in philosophy from Keio University in Tokyo, Japan and an MA and a PhD in music from Columbia University in New York, where he was a Fulbright scholar. http://music.columbia.edu/~akira/

Keiichi Tanaka is a light/laser artist and currently Professor of Fine Arts at J.F. Oberlin University in Tokyo, Japan. He has presented his works at many art and science museums and won many prizes internationally. His works are featured in art textbooks in Japan. His "Space Art" presenting an organic form and an original interpretation of time was highly acclaimed by critics at art festivals such as the Sao Paulo Biennial, IMAGE DU FUTURE 1994 in Canada, ICMC 2007 in Denmark, and the European Media Art Festival in Germany. http://www.ne.jp/asahi/k-one/space/.

Kıvanç Tatar is "a worker in rhythms, frequencies, and intensities;" playing trumpet and electronics, composing experimental music, and researching Creative Artificial Intelligence for Music and Multimedia . His work has been exhibited in Germany, Italy, Romania, Austria, Brazil, Australia, USA (New York and Atlanta), Canada (Vancouver and Montreal), South Korea, and Turkey; including the events the cultural program at Rio Olympics 2016, the Ars Electronica Festival 2017 (with the theme Artificial Intelligence), CHI 2018, and Mutek Montreal 2018. Currently, he is a Ph.D. candidate at the School of Interactive Arts and Technology, Simon Fraser University. In the Metacreation Lab, he researches Musical Metacreation, Machine Learning, Artificial Intelligence, Audio Synthesis, Generative Art, and Musical Composition & Performance.

Jørgen Teller received a Master in Electronic Music 2004-06 at Jysk Musik Konservatorium-DK. A professional since 1980, his works have been performed by live bands and ensembles he often started or co-started, including Tzarina Q Cut, Temper, 21st Guitars, David Thomas & Foreigners, JeSo, Capote, The Ghettoblaster Ensemble, Slope, Jazz'n'Noise Ensemble, Jørgen Teller & The Empty Stairs, Static Teller. Works have been performed for 49 Danish and international dance-theater-productions, conceptual events, inter-media, multi speaker-concerts and communications-actions at clubs, festivals and theatre. He has released numerous works on CD/Vinyl and cassette. www.jorgenteller.dk.

Matt Test is a Chicago-based composer, writer, and interdisciplinary sound artist whose work has been featured everywhere from living rooms and community gardens to Steppenwolf Theatre and the Museum of Contemporary Art Chicago. As an ensemble member with the Curious Theatre Branch, one of the city's oldest fringe companies, he has created and/or helped devise a number of experimental operas, new music theatre works, and soundscapes that play in the spaces between surrealist thought games and structural absurdity. Matt holds a BA in Communication from UC San Diego, MFA in Creative Writing from the School of the Art Institute of Chicago, and an MA in Sound Arts and Industries from Northwestern University.

Maxwell Tfirn is composer and performer based in Newport News, Virginia, where he holds the position Director of Composition and Creative Studies at Christopher Newport University. He holds a Ph.D. and M.A. from the University of Virginia, an MA in Music Composition from Wesleyan University, and a BM in Music Education as well as a performance certificate in percussion from the University of Florida. He also performs live improvised noise music using digital and analog electronics. Maxwell has had works performed at ICMC, SEAMUS, Electro Acoustic Barn Dance, Society of Composers, FEAST Festival, Technosonics,

N_SEME, and Subtropics Music festival and was a featured composer for Share and more. He has studied with Judith Shatin, Anthony Braxton, Ted Coffey, Matthew Burtner, Paula Matthusen, James Sain and Ronald Kuivila.

Zach Thomas is a composer and media artist whose work is characterized by impulse, restlessness, and precision. He is a PhD candidate at the University of North Texas where he works as a teaching fellow at the Center for Experimental Music and Intermedia and as a researcher at the xREZ Art+Science Lab. Zach is a co-director of the new music non-profit, ScoreFollower, which curates and produces online content for the promotion of contemporary music. He works regularly with instruments, electronics, and video components in his compositions and has exhibited throughout North America and Europe.

John Thompson teaches, composes and conducts research in the areas of computer music and music technology. He directs the Music Technology program at Georgia Southern University where he is Professor of Music. He has a continuing interest in interdisciplinary studies, and seeks to highlight and follow new paths in music. John is an advocate for music that explores otherness, contemplation and alternate paths toward beauty.

Robert Scott Thompson is a composer of instrumental and electroacoustic music and is Professor of Music Composition at Georgia State University in Atlanta. Thompson's work in the area of computer music is oriented toward high modernism in the tradition of the founders and pioneers of the field such as Pierre Schaeffer, Stockhausen, and Xenakis. His music is also informed by the naturalistic soundscape and importantly notions of contemporary expressions in chamber and orchestral music. Thompson's aesthetics attempts to blend and meld the real and imaginary into a musical context that invites deep listening and engagement in the listener. The music – the tonality, sonority, transformation of materials – is the primary focus rather than the outworking of a specific technique or technology. In recent years Thompson has become an adherent of the techniques of ambisonic spatialization and increasingly creates work that is based in this approach to both multi-channel and stereophonic presentation.

William A Thompson IV or "WATIV" is a composer, keyboard artist, Hammond organist and electronic musician. Born in the Mississippi delta and raised on New Orleans music, Thompson would study on full scholarship at the University of New Orleans Jazz Program, founded by Ellis Marsalis. His work has been most profoundly impacted by his one year tour of duty spent in Baghdad during the Iraq War in 2004 as a Counter-intelligence Agent. He was unexpectedly deployed to Baghdad in 2004 Thompson to serve as an interrogator and Counter Intel Agent. While in Iraq, Thompson drew from his experiences as a soldier to record, produce and release the first record of all time released from a combat theater, Baghdad Music Journal. Today, William Thompson lives and works as a professional musician in New Orleans, LA, and he is a PhD candidate at Louisiana State University with concentration on Experimental Music and Digital Media.

Dr. Seth Thorn is an American composer-performer specializing in violin, viola, computational media, and philosophy. The interface he developed, alto.glove, has been presented at NIME, SEAMUS, TEI, NYCEMF, and the Guthman Competition at Georgia Tech. He has published with NIME, TEI, Qui Parle, and Leonardo Music Journal. Seth currently teaches electronic and digital audio in the School of Arts, Media and Engineering (AME) at Arizona State University. He has received fellowships from the Tisch Foundation, DAAD, Fulbright Foundation, and Brown Open Graduate Education. He holds PhD and MA degrees in Computer Music and Multimedia from Brown University, an MA in German studies from Brown University, an MA in political theory from the Goethe- University Frankfurt am Main, and a BA from Northwestern University. He has also studied music at the Hochschule für Musik und Darstellende Kunst Frankfurt am Main.

Adam Tindale is an electronic drummer and digital instrument designer. He is an Associate Professor of Human-Computer Interaction in the Digital Futures Initiative at OCAD University. Adam performs on his E-Drumset: a new electronic instrument that utilizes physical modeling and machine learning with an intuitive physical interface. He completed a Bachelor of Music at Queen's University, a Masters of Music Technology at McGill University, and an Interdisciplinary Ph.D. in Music, Computer Science and Electrical Engineering at the University of Victoria.

Sever Tipei was born in Bucharest, Romania, and immigrated to the United States in 1972. He holds degrees in composition and piano performance from the University of Michigan and Bucharest Conservatory. He has taught since 1978 at the University of Illinois where he also manages the Computer Music Project. Most of his compositions were produced with software he designed: MP1 - a computer-assisted composition program first used in 1973, DIASS for sound synthesis, and M4CAVE for visualization of music in an immersive virtual environment. More recently, Tipei and his collaborators have developed DISSCO, software that unifies computer-assisted (algorithmic) composition and (additive) sound synthesis into a seamless process. Between 1993 and 2003 Tipei was also a visiting scientist at Argonne National Laboratory where he worked on the sonification of complex scientific data. Tipei regards the computer as a collaborator whose skills and abilities complement those of the human artist.

Brian Topp makes noise, and things that make noise. He is a Vancouver BC based composer, creative

programmer, sound designer and audio engineer, who writes music for video games, film and experimental concert works. He is also a programmer who likes to make cool toys and tools for making music and developing different ways for making or interacting music in new and exciting ways. And he's finishing a doctorate in composition.

Yu-Chung Tseng is a professor of electronic music composition at Institute of Music, and division director of Music Technology Master Program at National Chiao Tung University in Taiwan. He has served as the conference chair/music chair of international computer music conference- WOCMAT. His music has been recognized with selection/awards from Bourges Competition (Finalist, 2005), Pierre Schaeffer Competition (1st Prize in 2003, 3rd Prize in 2007), Cittàdi Udine Competition (2006), Musica Nova Competition (1st Prize in 2010, Mention award in 2009, Mention award in 2012), Metamorphoses Competition (2006, 2008, 2010), ICMC 2011 Asia-Oceania Regional Best Music Award and ICMC 2015 Asia-Oceania Regional Best Music Award. His works have also received performances at many festivals and conferences. His music can be heard on labels including CDCM (U.S.A.), Discontact iii (Canada), Pescara (It.), Contemporanea (It.), Metamorphoses (Belgium), SEAMUS (USA), KECD2 (Demark), Musica Nova (Czech), ICMC 2011 DVD and ICMC 2015 CD.

Hans Tutschku (1966) has been a member of the "Ensemble for intuitive music Weimar" since 1982. He studied composition in Dresden, The Hague, Paris and Birmingham and participated in concert cycles with Karlheinz Stockhausen. Improvisation with electronics has been a core activity over the past 30 years in many different collaborative projects. He taught in Weimar, Berlin, at IRCAM and has been working as composition professor and director of the electroacoustic studios at Harvard University since 2004. In 2005 he received the culture prize of the city of Weimar. He is the winner of many international competitions, among others: Bourges, CIMESP Sao Paulo, Prix Ars Electronica, Prix Noroit, Prix Musica Nova, ZKM Giga-Hertz, CIME ICEM and Klang!. Besides his regular courses at the university, he is regularly teaching international workshops for musicians and non-musicians on aspects of art appreciation, listening, creativity, composition, improvisation, live-electronics and sound spatialization. www.tutschku.com.

Kari Vakeva (b. 1957) is a Finnish composer and sound artist whose oeuvre includes orchestral works such as Symphony (1976-1979) which was partly recorded by Finnish RSO/Jorma Panula in 1982 and Elegia (1989-1990) performed by RSO Frankfurt/ Diego Masson in 2005, and electroacoustic works like *Ray 6* (2002), *Halo* (2005-2007), *p(X)* (2011), *Sundog i* (2012-2015), Sundog ii (2012-2015), *I saw Eternity* (2016), and *I kiss the Sky* (2017-2018). Electroacoustic works have been performed in ICMC, EMM and NYCEMF. An installation was exhibited in Blacksburg, VA. Early works are acoustic. From 2001 onward the electroacoustic works use computer to synthesize the sound: Csound, and from 2003 with MAL-d, an evolving synthesis software. He is a self-educated composer.

Composer **Kyle Vanderburg** (b. 1986) grew up in southeast Missouri where the Ozark foothills meet the Mississippi River valley. Raised on southern gospel and American hymnody, his music tries to walk the line between eliciting nostalgia and devising innovative sonic worlds. His electronic works often play with familiar sounds in new contexts, his acoustic works feature catchy melodies and too many time signatures.
He holds degrees from Drury University (BA) and the University of Oklahoma (MM, DMA), and has studied under composers Carlyle Sharpe, Marvin Lamb, Konstantinos Karathanasis, and Roland Barrett. He has participated in composition masterclasses with David Maslanka, Chris Brubeck, Benjamin Broening, and others. When not composing, Kyle runs the musical workshop NoteForge where he creates and maintains Liszt, a web-based conservatory management application. He'd be delighted if you checked out https://kylevanderburg.com/.

Juan Carlos Vasquez is an award-winning composer, sound artist, and researcher from Colombia. He has received creation grants and/or commissions by numerous institutions, including the Nokia Research Center, the Ministry of Culture of Colombia, AVEK (Promotion Center for Audiovisual Culture in Finland), the Finnish National Gallery, the University of Virginia, the Sibelius Birth Town Foundation, Aalto University, the Arts Promotion Centre in Finland and the CW+ in partnership with the Royal College of Music in London, UK, among others. Vasquez received his education at the Sibelius Academy (FI), Aalto University (FI), the University of Virginia (USA). As a researcher, Vasquez' writings can be found at the *Computer Music Journal* and the proceedings of conferences. www.jcvasquez.com.

Mark Vaughn is a Ph.D. student in music composition at the University of North Texas. He received his Master's degree from UNT and his bachelor's in Music Technology from Montana State University. His music has been performed throughout the United States, at conferences including SEAMUS, NSEME, and Electronic Music Midwest.

Amber Vistein (b.1984) is a composer and sound artist who delves deeply into the poetics of timbre, texture, and gesture. She has been praised for her conceptual “acuity” (Big, Red, and Shiny) and “blooming phrases” (New Music Box). She has composed for Ensemble Dal Niente (2018), the International Contemporary Ensemble (2017), Russel Greenberg of Yarn/Wire (2016), and the Boston Modern Orchestra Project (2016). She created several site-specific sound installations. *Man Will Not Outlive the Weather*—her chamber opera for mezzo-soprano, ensemble and electronics—premiered

in 2017. Amber holds a B.A. in Music & Philosophy from New College of Florida and an MFA in Sonic Arts from Massachusetts College of Art. She is currently a 4th-year PhD student in the Music department at Brown University and a 2017-19 Composition Fellow with American Opera Project's Composers and the Voice program.

Andrew Walters was born in Topeka, Kansas but spent most of his beginning years in Farmington, Missouri. Walters has received degrees from Millikin University, Northern Illinois University, and a Doctor of Musical Arts degree in composition from the University of Illinois. Walters' music has been performed at various conferences throughout the world including SEAMUS, SCI, ICMC, Spark, Electronic Music Midwest, NYCEMF, and the Electroacoustic Barn Dance. His music appears on volume nine and sixteen of the "Music from SEAMUS" compact discs. Currently he is Associate Professor of Music Theory and Music Technology at Mansfield University in Mansfield, Pennsylvania.

Chi Wang is a composer and performer. Her research and compositional interests include sound design, data-driven instruments creation, and musical composition and performance. Her compositions have been performed internationally. One of Chi's compositions has been selected for the music from SEAMUS CD Volume 28. She is the recipient for the Best Composition from the America at the 2018 International Computer Music Conference. Chi is also an active translator for electronic music related books. Chi received her D.M.A. at the University of Oregon in the Performance of Data-driven Instruments. She previously received M.Mus. in Intermedia Music Technology from the University of Oregon and graduated with a B.E. in Electronic Engineering focusing on architecture acoustic and psychoacoustics from Ocean University of China. Chi currently serves on the music technology faculty at the University of Oregon.

Wang Jun, Chinese youth electronic music composer, music producer, interactive design artist, young teacher of Communication University of Zhe Jiang. Obtained the master's degree of Wuhan Conservatory of Music.

Yang Wanjun is an engineer, programmer, sound designer, researcher and electronic music musician. Now he is an associate professor of Electronic Music Department, Sichuan Conservatory of Music. In the recent 20 years, he lives at Chengdu City, Sichuan Province, Southern of China. His research and creative interests lie in Acoustics and Psychoacoustics, Sound Design, Software Developing, New Media Art, Multimedia Design. He has taught at Sichuan Conservatory of Music for over 19 years.

Steve Wanna is a multi-disciplinary sound and visual artist whose work includes music, sound design for dance collaborations, sculpture, installation, photography, and works for mixed media. Born and raised in Lebanon, he immigrated to the United States with his family at the age of 15, receiving a doctorate in Music Composition from the University of Maryland in 2004. His chief research and creative interest is the phenomenon of emergence. His works often incorporate electronics and interactive software to create pieces that exist in a state of becoming rather than being. In contexts both visual and sonic, the artist often relinquishes total control to become a contributing agent in a larger ecosystem that gives rise to the work. He has been teaching Sound Recording and Music Technology at the college level for the past decade.

Rodney Waschka II is probably best known for his algorithmic compositions and his unusual operas such as Saint Ambrose and Sappho's Breath. His music has been called "astonishing" and "strikingly charismatic" by Paris Transatlantic Magazine, "a milestone in the repertoire" by Computer Music Journal, "fluent and entertaining" by Musical Opinion of London, and "oddly moving" by Journal Seamus. Waschka's music is regularly performed and broadcast throughout the world. Two-dozen recordings of his compositions and performances appear on record labels based in the USA, Canada, Portugal, England, Poland, and Australia. Waschka studied at Brooklyn College, The Royal Conservatory of The Netherlands, and earned his doctorate at the University of North Texas. His teachers include Larry Austin, Robert Ashley, Paul Berg, Clarence Barlow, Konrad Boehmer, Thomas Clark, Charles Dodge, and George Lewis. Waschka is Director and Professor of Arts Studies at North Carolina State University.

Andreas Weixler (b. 1963 in Graz, Austria) is a composer of contemporary instrumental composition and computer music with a special emphasis on audiovisual interactivity, virtuoso chances and interactive score. He is teaching currently as a senior lecturer at the mdw - University of Music and Performing Arts in Vienna, a lecturer at InterfaceCulture of the University of Arts in Linz and serves as studio director and associate university professor at the CMS computer music studio at Anton Bruckner Private University where he initiated the development of the computer music studios and intermedia multichannel computer music concert hall, Sonic Lab. Andreas Weixler founded intermedia concert series like Sonic Intermedia (ars electronica center Linz), electronic access and is running Atelier Avant Austria together with Se-Lien Chuang. Currently he is specializing in intermedia concerts of improvisation and contemporary composition. http://avant.mur.at.

Caleb Westby is an Arizona-based composer who holds a Bachelor of Music degree in music education from Northern Arizona University as well as a Master of Music from the University of Oklahoma. Presently a doctoral student at the University of Oklahoma, he has had the pleasure of learning from several great composers; among them Marvin Lamb, Bob Thurston, and Michael Markowski. His influences include many prominent modern composers in both the wind band and choral realms, but his music is also heavily inspired by video

game soundtracks both old and new.

John Wiggins is an award winning sound designer for TV and films and in 2017 won honorable mention at MA/IN InterMedia and Luc Ferrari's "Presque Rien" competition. Using only sounds he records himself, he assembels short "sound films", made from everyday objects.

Adam James Wilson is a composer, guitarist, and software developer who programs computers to improvise with human musicians. His work incorporates music information retrieval, algorithmic music composition, and data sonification. Wilson performs with his software experiments on the fretless electric guitar, an instrument that caters to his penchant for microtonality. He has performed/presented his work in Tokyo, New York, Paris, Montreal, San Diego, Washington D.C., Boston, Baltimore, Atlanta, Belfast, Palo Alto, and elsewhere. Wilson co-founded and serves as director of the New York City Electroacoustic Improvisation Summit, an annual concert series featuring music by artists focused on the integration of music improvisation and real-time interactive computer systems. He is currently Assistant Professor of Emerging Media Technology, specializing in Music Technology and Media Computation, at New York City College of Technology (CUNY City Tech).

The works of composer **Jonathan Wilson** have been performed at the Ann Arbor Film Festival, European Media Art Festival, the Experimental Superstars Film Festival, the Big Muddy Film Festival, SEAMUS, NYCEMF, NSEME, the Iowa Music Teachers Association State Conference, and the Midwest Composers Symposium. He is the winner of the 2014 Iowa Music Teachers Association Composition Competition. Jonathan has studied composition with Lawrence Fritts, Josh Levine, David Gompper, James Romig, James Caldwell, Paul Paccione, and John Cooper. In addition to composition, Jonathan has studied conducting under Richard Hughey and Mike Fansler. Jonathan is a member of the Society of Composers, Inc., SEAMUS, the Iowa Composers Forum, and the American Composers Forum.

Alyssa Wixson is a composer whose catalogue of works includes music for chamber ensembles and choirs, as well as music for film and multimedia. Her arrangements and original choral works have been performed by the Conspirare Youth Choirs. As a film composer, she attended the annual NYU Film Scoring Workshop in 2017, assisted film composer Brian Satterwhite during the summer of 2018, and has scored numerous short films and documentaries. She is currently earning her BM in composition from the Texas Tech University School of Music, where, as an active member of the school's SCI chapter, she works to bring about and maintain a culture of new music in the school. A storyteller at heart, Wixson's music is often programmatic, informed by themes of literature, mythology, history, nature, philosophy, and the human consciousness. She is currently based in Austin, TX.

Yifan Wu is a composer and performer. His research and compositional interests include sound design, data-driven instruments creation, musical composition and performance, projector mapping, and interactive installation. Yifan's compositions have been performed internationally including EMD Concerts at Sichuan Conservatory of Music(2013), International Computer Music Conference (2018), Future Music Oregon Concerts (2015-18), ArtCityEugene BEAM (2018). Yifan is also actively serving as a volunteer for spread electronic music and interactive installation art for the local community. His installations were presented in art events host by the City of Eugene and the City of Shijiazhuang, China.

Sunhuimei Xia, computer music composer, sound designer, current faculty member at Department of Composition of Wuhan Conservatory. MM of Computer Music Composition at Peabody of Johns Hopkins University. Her music have been selected for international and domestic professional conferences, such as: ICMC, ICMC-SMC, ISMIR, WOCMAT-IRCAM, Music-Acoustica Beijing. She have been selected in the Creative Talent Pool of the Ministry of Culture of China. Her work Oriental China won the "Golden Bell Award" in the 7th Hubei Music Award 2017, Smooth won the First-class Award in the 3rd Computer Design Contest of China. Works and papers published at conferences and journals, such as ICMC, Musical Works, Art Evaluation and GeQu.

Du XiaoHu, Lecturer of Composition Department of Wuhan Conservatory of Music,graduated from the Central Conservatory of Music. Electronic music works *Changing*, *The lute and psaltery* were selected for the 2017, 2018 ICMC.

Yang Wanjun is an engineer, programmer, sound designer, researcher and electronic music musician. Now he is an associate professor of Electronic Music Department, Sichuan Conservatory of Music. In the recent 20 years, he lives at Chengdu City, Sichuan Province, Southern of China. His research and creative interests lie in Acoustics and Psychoacoustics, Sound Design, Software Developing, New Media Art, Multimedia Design. He has taught at Sichuan Conservatory of Music for over 19 years.

Visual artist **Woon Seung Yeo** is a bassist, media artist, and computer music researcher. He is Associate Professor at Ewha Womans University, Seoul, Korea, and leads the Audio and Interactive Media (AIM) Lab. Dr. Yeo has received B.S. and M.S. degrees in Electrical Engineering from Seoul National University, M.S. in Media Arts and Technology from University of California at Santa Barbara, and M.A. and Ph.D. in Music from Stanford University. His research interests include audiovisual art, cross-modal display, musical interfaces,

mobile media, and audio DSP. Results of his research are commonly shared by exhibitions and performances in the public interest.

Composer **Ji Won Yoon** is interested in artistic applications and realizations of various computer music technologies, emphasizing multi-modality with sound at the center. She earned her B.A. and M.A. degrees in Music (Composition) from Yonsei University, completed doctoral courses in Computer Music Composition at Dongguk University, and studied at the Center for Computer Research in Music and Acoustics (CCRMA), Stanford University as a visiting researcher. Currently she is Assistant Professor at the Department of Music Production, Artech College, Keimyung University, and is active as a composer of both acoustic and electric music.

Gayle Young's music includes electronic and orchestral instruments. She develops notational systems for unusual tunings, and designs and builds instruments to facilitate explorations in tuning and timbre. Young combines her interests in tuning and soundscape (Tonal Soundscapes) by incorporating harmonic components in her recordings of environmental noise (highways, railways, rivers, waterfalls, and shorelines). She has worked with Pauline Oliveros, R. Murray Schafer, Michael Snow, James Tenney, Don Wherry of the Newfoundland Sound Symposium, and many other prominent names in contemporary new music. Young is also active as a writer, exploring the histories and intentions of innovative composers and instrument designers. She authored the biography of Hugh Le Caine (1914-1977), an early inventor of electronic instruments from the 1940s to the 1970s. She has written extensively about tunings, soundscape, improvisation and sound exploration, bringing attention to the listener's experience of sound. She edited *Musicworks* Magazine from 1987 to 2008.

Li Yunpeng, a composer, and a lecturer in computer music at Wuhan Conservatory of Music. He engages in electronic music composing, producing, and teaching. There are a wide range of his different work styles, including electroacoustic music, film music, musical music and dance music. Most of his students had won the different level awards, such as National Undergraduate Computer Design Competition, and the MUSICACOUSTICA-BEIJING Composition Competition.

Composer and violinist **Mark Zaki's** work often considers how modes of perception are changing in modern life. Probing subjects such as identity, self-curation, and virtual anonymity, these works question our view of interactive personal histories in a contemporary world. Many of his pieces are populated with uncanny characters that become fragmented in their relationships to their environment and their own identity. His work is influenced by visual music practice and music composition, aesthetically referencing visual abstraction, non-conventional film, and montage. On the faculty at Rutgers University, Camden - he lives and works in Princeton, NJ and divides his time between New York City and Philadelphia.

Qian Zhou, Associate Professor of Shanghai Conservatory of Music, studied as the Visiting Scholar of UC Berkeley CNMAT in 2012, and did research for 3D sound spatialization at CCRMA Stanford 2013, Qian kept interesting in the aesthetics of electronic sounds which made by modern technology and the sounds made from the ancient eastern instruments, tried to compose electronic music with oriental philosophy and spirit.

Performers

Clarinetist **JongHyun An** is a member of El Music Group, received a BM from Hanyang University and École Normale de Musique de Paris (Diplôme Supérieur) CNR de Saint-maur (Medaille D'or) F. Arthur Uebel Artist, Regere Artist, currently a member of Contemporary Music Ensemble Sori, music director of Korea Jade Philharmonic Orchestra and a Professor at Canada Christian College.

Pianist **Jung-Ah An** is a graduate of Yonsei University (BM), Cleveland Institute of Music (MM & AD) and Yonsei University (DMA). Awards include 1st prize at Seoul Educational University Competition, 1st prize at the Junior Hankookilbo Competition, Winner of Seoul Symphony Orchestra Competition, Winner of Seoul Philharmonic Orchestra Competition, Winner of CIM Concerto Competition in the USA. Dr. Joseph and Bess Scharff Leven Prize in Piano. An has participated in the Aspen Music Festival as Collaborative Pianist, and the Kent Blossom Music Festival. Formerly, Lecturer at Wonkwang University & Suwon Women's University Currently, a member of El Music Group Ensemble.

Jen Baker, trombonist/composer, has collaborated with artists all over the world in site-specific mixed media performance, concert halls, solo and chamber commissions. As an improviser she is featured on the soundtrack to Werner Herzog's Oscar-nominated Encounters at the End of the World. She has performed internationally in festivals and has toured with Arijit Singh, Karole Armitage, and Mansour, and new music ensembles S.E.M., TILT brass, and the mobile ensemble Asphalt Orchestra (founding member). Her well received new book, Hooked on Multiphonics, is treatise on extended techniques for trombone for composers and trombonists to aid in understanding and executing the deep complexities of multiphonics.

JooYoung Bang, Soprano, is a graduate of the Manhattan School of Music (MM) and University of Illinois Urbana-Champaign (DMA). She has been the recipient of 1st Prize at Southern Illinois Young Artist Organization, Grace Elizabeth Wilson Memorial Award, Illinois Opera Enthusiasts Award. She was a finalist in

the New York Lyric opera competition. Currently she is lecturer at Dongduk Women's University.

Cellist **Andrew Borkowski** performs regularly as a soloist/chamber musician and with orchestras throughout New York City and the Hudson Valley area. He has participated in master classes with such respected cellists as Eric Bartlett, Fred Sherry, and Chris Finckel, and his principal teachers include Jonathan Golove, Benjamin Karp, Stephen Harrison, and Marcy Rosen. An ardent supporter of contemporary music, he has appeared with such groups as the Argento Chamber Players and New York Composer's Circle, and was the co-founder and director of Innovox Contemporary Ensemble. He was a teaching artist for Associated Solo Artists from 2013-15, giving concerts and lectures in schools throughout the Adirondack Region of New York, and has taught at the annual summer festival Chamber Music Institute at the University of Maine since 2012. He is currently a member of The Orchestra Now, a new orchestra in residence at Bard College under the direction of Leon Botstein.

Born and raised in Georgetown, SC, **Jonathan Lamar Britt** is currently pursuing a Master's of Music Degree in Trumpet Performance at Bowling Green State University. Jonathan holds a Bachelor's of Music Degree in Trumpet Performance from the University of South Carolina. Jonathan has studied under the tutelage of Dr. Gary Malvern, James Ackley, and Allen Vizzutti. He currently studies with Charles Saenz, the Associate Professor of Trumpet at BGSU. Through the South Carolina Governor's School for the Arts and Humanities and the University of South Carolina, Jonathan has traveled and performed throughout the United States, Italy, China, and Spain. With the University of South Carolina Wind Ensemble, Jonathan has recorded two CD's. The first CD under the Naxos recording label recorded in 2011 released in 2013 and the second CD under the Mark Record's label recorded and released in 2013.

Violinist **Maja Cerar's** repertoire ranges from the Baroque to the present, and her stage experience includes performances with live electronics as well as theater and dance. Since her debut in the Zürich Tonhalle in 1991, she has performed internationally as a soloist with orchestras and given recitals with distinguished artists. Her collaborative works have been featured at the "Re:New Frontiers of Creativity" symposium celebrating the 250th anniversary of Columbia University, "LITSK" festival at Princeton University, and the SIGGRAPH 2007 multimedia conference/festival in San Diego. Since 2014 she has also created her own works, fostered by The Tribeca Film Institute's "Tribeca Hacks" and by the Future Music Lab at the Atlantic Music Festival, involving robotics and wearable motion sensors. Maja Cerar has premiered and recorded numerous works written for and dedicated to her. She has worked with many composers, including Jean-Baptiste Barrière, Sebastian Currier, Beat Furrer, György Kurtág, Tania León, Alvin Lucier, Katharine Norman, Morton Subotnick, and John Zorn. She graduated with honors from the Zurich-Winterthur Conservatory, and earned a Ph.D. in Historical Musicology from Columbia University, where she is currently a member of the Music performance faculty. www.majacerar.com

Andrea Cheesman is a clarinetist and teacher living in Columbia, SC. Throughout her career, she has been committed to playing good music and collaborating with inspiring people who challenge her. Although she regularly performs traditional repertoire, she is an advocate of new music and a sought-after performer of electroacoustic music written for clarinet and bass clarinet. Wishing to promote electroacoustic music, she has toured extensively, giving recitals and masterclasses throughout the country. Additionally, Andrea has been a featured performer at festivals such as the Third Practice Electroacoustic Music Festival and the Electroacoustic Barn Dance and has appeared at EMM and SEAMUS conferences. When not teaching or performing, spends her time gardening, swimming and practicing ashtanga yoga.

Phyllis Chen has been described by the New York Times as "spellbinding" and "delightfully quirky matched with interpretive sensitivity," Phyllis is a composer, keyboardist and creative force whose music draws from tactile exploration of objects and sound. Phyllis is a founding member of the International Contemporary Ensemble and the director-founder of the UnCaged Toy Piano. Most recently, Phyllis was named one of the 2019 Cage-Cunningham Fellows by the Baryshnikov Arts Center.

Soprano **Elenora Claps** was born in Basilicata (Italy), she studied at the Salerno Conservatory with E.Scatarzi and perfected her studies with A.Caiello. Her repertoire ranges in different vocal areas primarily concerned with the figure of the interpreter singer/actress. She regularly participates in courses aimed at the study and deepening of the contemporary musical language, collaborates with emerging composers, specialized Ensemble and performs regular concerts. Courses: Fondation Royaumont (J.Fraser), Darmstadt Summer Courses (M.D.-Dansac); Awards: "Scholarship Michiko Hirayama 2017", finalist of the "Premio Bucchi Interpretazione – Parco della Musica 2015"; World premieres: "MA/IN-Spaziomusica commission 2017" for voice&electronics multimedia, "ScarlattiLab/Electronics" (Art Director: G.Turaccio, A.Di Scipio), International Festivals and Composition Competitions; Repertoire: "Laborintus II", "Sequenza III" (L.Berio), "József-Attila Töredékek" (G.Kurtág), "Aventures" (G.Ligeti) as well as numerous world premieres; Recordings: Stradivarius, Ed. Scientifica.

Patti Cudd is a percussion soloist, chamber musician and educator, who teaches at the University of Wisconsin-River Falls and the College of St. Benedict/St. Johns University. Dr. Cudd is also a member of the Twin

Cities based new music ensemble Zeitgeist. As an active performer of the music of the 20th and 21st centuries, she has given concerts and master classes throughout the United States, Korea, Thailand, China, Mexico and Europe. Patti has worked closely with some of the most innovative composers of our time including Brian Ferneyhough, Morton Feldman, Roger Reynolds, Martin Bresnick, Pauline Oliveros, Jay Aaron Kernis, John Luther Adams, John Zorn, Michael Colgrass, Cort Lippe, Harvey Sollberger, Julia Wolfe, Christian Wolff, Vinko Globokar and Frederic Rzewski. She has premiered over 200 new works and has had the opportunity to be involved in a number of recordings found under such labels as Hat Hut, Bridge, New World, CRI, Innova, EMF Media and Mode. Patti is a Yamaha Performing Artist, an endorser of Sabian Cymbals and a member of the Vic Firth and Black Swamp Education Teams.

Dr. **Daniel D'Addio** is Professor of Music at Central Connecticut State University (CCSU) where he teaches Trumpet, Chamber Music, and Music Theory. He is Music Director of the Connecticut Youth Symphony, Artistic Director of the Hartford Independent Chamber Orchestra, Music Director of the Classic Brass Band, and has been recently appointed as Music Director of Capitol Symphonic Winds. In addition to conducting, he is active as a trumpet soloist and chamber musician. D'Addio holds a Doctor of Musical Arts degree from the University of Michigan, a Master of Music degree from Ohio State University, and the Bachelor of Music degree from the University of Hartford's The Hartt School. D'Addio currently serves as Professor of Music at Central Connecticut State University. Daniel D'Addio is a Yamaha Performing Artist and a Wedge Mouthpiece Endorsing Artist.

Yunsuk Eom (gayageum) received her B.A. and M.M. degrees from the Department of Korean Traditional Music at Kyungbuk National University and also completed the doctoral course at the same school. She is an initiate of The Royal Ancestral Ritual in the Jongmyo Shrine and its music is an important intangible cultural heritage No.1. Eom has given lectures at Kyungpook National University, Chinju National University of Education and the Academy of Lifelong Education at Kyungpook National University. Currently she teaches at the Kyungbuk Arts High School, the Goryeong Cultural Center, the Korea arts and culture education service and is a member of 'GoodMori' which is a modern Korean traditional music

Enzo Filippetti is a professor of Saxophone at the Conservatory of Music “S. Cecilia” in Rome. For more than thirty five years he has been playing in concerts all over the world. He has performed at Biennale di Venezia, Mozarteum of Salisburgo, Rome, Milan, Paris, London, Birmingham, Berlin, Köln, Wien, Madrid, Bruxelles, New York, Montreal, Buenos Aires, Caracas, Riga, Lyon, Principaute-Monaco-Monte-Carlo, Yeosu (Korea), Kawasaki, Adis Abeba, Chisnau, Taormina, Ravello. He is very active in the field of Contemporary music of which he is a valued performer and many of the most important composers such as E. Morricone, G. Nottoli, J. Dashow, M. Lupone, L. Zielinska, D. De Simone, H. Howe who wrote for him about one hundred fifty works. As a soloist and with the Quartetto di Sassofoni Accademia he has recorded for the Nuova Era, Dynamic, Rai Trade, Sconfinarte and Cesmel. He has published studies for Riverberi Sonori and he directs a collection for Sconfinarte editions.

Percussionist **June Hahn** studied at The Juilliard School (BM & MM) and CRR de Paris (AD). She is a Lecturer at Seoul Arts High School, Yewon School, Sunhwa Arts Middle School and is Adjunct Professor at Hanyang University. Currently she Percussionist of Ensemble TIMF, Percussion Duo Moitié.

Harpist **Seunghee Han** was educated at Seoul National University (BM & MM). She was awarded the grand prize of Korean Music Competition and 1st prize of the Baroque Music Competition. She gave a Solo Harp recital at the Kumho Young Artist concert and has performed with National Police Symphony Orchestra, Prime Philharmonic Orchestra and Pan Asia Philharmonic Orchestra. She is harpist at main stages of Seoul Philharmonic Orchestra, Ditto Orchestra and Seoul Youth Orchestra.

Jing Hu, Guzheng performer, Lecturer of Chinese Instrument Department of Wuhan Conservatory of Music, Instructor for Master program, Director of Guzheng Society of Chinese Musicians Association, Secretary of Hubei Chutian Guzheng Association. She have studied under Professor Qing Wu and Professor Yan Gao. She have won the second Hubei Music Golden Bell Award, published "Affectionate Fantasia - Hu Jing Guzheng Performance Album". She has been awarded the “Excellent Instructor Award” by the conservatory many times, and her students have won awards in major competitions nationwide.

SooJung Hur, pianist, graduate from University of Suwon (BM), Peabody Institute of the Johns Hopkins University (MM) and University of Illinois at Urbana Champaign (DMA). Awards include: 1st Prize at American Protégé International Competition, 1st Prize at UIUC Concerto Competition, 1st Prize at The Piano Society of Korea Piano Competition, 2nd Prize at Busan MBC Competition, and Finalist at Seattle International Competition. Currently SooJung Hur is lecturer at Young Musicians Academy of Konkuk University.

Zhou Keqi, associate professor of Chinese Instruments Department in Wuhan Conservatory of Music, master student supervisor, director of the teaching and research office of wind music, editorial board member of the magazine named China Bamboo Flute, director of the Flute Society in the Chinese Musicians Association, vice chairman of the Panflute Society, was born in Changsha, Hunan. As a flute concert performer, he had paid visits to the United States, Hungary, Austria, Czech, Poland, Germany, Ireland, Hong Kong and other countries. His

performance and works cover a variety of wind instruments such as the flute, xiao (a vertical bamboo flute), xun (an ancient egg-shaped, holed wind instrument), and cucurbit flute. In recent years, he has written and published more than 20 instrumental music works such as "the Ancient Road", "Loneliness", "Hunan Ballad", "Spring Scene", and "Autumn Meditation". As an educator, serval students he trained have been teaching in a number of domestic colleges and universities. In the field of teaching and research, he has written and published many papers.

Clarinetist **Marianne Gythfeldt** has distinguished herself in chamber music, orchestral and contemporary music performance on the international stage. She has played a central role in the new music scene of New York City over the past 25 years. Winning the Naumburg chamber music award with New Millennium Ensemble in 1995 launched a wide-ranging career as clarinetist with various groups such as Talea Ensemble and Zephyros Winds, Ensemble Sospeso, Ensemble Sequitur, and SEM ensemble. As a freelance performer, she has enjoyed collaborations with Orpheus Chamber Orchestra and the Orchestra of St. Luke's, and many others. She is currently Associate Professor and head of Woodwinds at the Conservatory of Music at Brooklyn College and her scholarly activities include a solo CD-recording of commissioned electroacoustic pieces for clarinet, to be released on the New Focus label in 2018.

Eun Hye Kim, percussion, was educated at Korea National University of Arts (BM) CNR de Paris (Diplome de Concertiste). Participated at Pyeongchang Music Festival, Tongyeong International Music Festival, Seoul International Computer Music Festival, International Percussion Festival in Seoul, Taiwan International Percussion Cenvention (Asian Women Concert), Solo recital at Perkumania international percussion festival in Paris, Attacca! Concert with Jean Geoffroy and CREAMA, CREAMA & IRCAM concert. Performed as a solo marimbist with Suwon Philharmonic, Seoul Symphony, Korean Symphony, Seoul Philharmonic, KNUA Orchestra, Chungnam Philharmonic, Kwangju Philharmonic. Formerly, lecturer at KNUA, Pusan National University, Yeungnam University, Chonnam National University, Seoul Arts High School, Yewon School. Currently, a member of Percussion Duo Moitié, Ensemble TIMF & Seoul Percussion Ensemble Professor at Korea National University of Arts.

Violinist **Jihye Kim** graduated from the St.petersburg State Conservatory in Russia. She began her studies in the preparatory course and followed through her studies at the same conservatory until she completed her B.Mus. M.A. and Ph.D in violin performance. Also, she received a degree in the Art of Teaching. She has performed in many international contemporary music and experimental art festivals in Asia and Europe and plays baroque, contemporary music, computer music, jazz and impromptu art performances. Presently, she is actively giving many performances in Asia and Europe and works as a director of the Interdisciplinary Art Group Oneness, leader of 4Tones Jazz, Modern Ensemble and an event curator of TEDxDaegu. She is co-directing and organizing several interdisciplinary performances, contemporary art festivals, and is collaborating with the Daegu Contemporary Artists Association.

Electro-acoustic Sound Assistant **SuJin Kim** is a graduate of Busan Arts Middle School & Busan Arts High School, Sungshin Women's University (BM). SuJun Kim was selected and performed at ICMC 2018. Presently Assistant at Electro-acoustic Music Studio of Sungshin Women's University.

Sung-Yun Kim, a native Korean pianist, has won many piano competitions in South Korea, the first prize winner in the American Protégé International Competition in New York, and the third prize winner in the International Piano Workshop Competition in Varna, Bulgaria. He has performed with the Keimyung University Orchestra, the Keimyung Chamber Orchestra, the Daegu New Philharmonia Orchestra, the Su-Seong Youth Orchestra, the TWU Jazz Ensemble, and the Bulgaria Varna Philharmonic Orchestra. He received his bachelor of music degree in piano performance at the Keimyung University with First Prize, in Daegu, South Korea. Under the tutelage of Joseph Banowetz, he earned his master of music and doctor of musical arts degree in piano performance from the University of North Texas. He is an adjunct faculty at Keimyung University, Kyungpuk University, and Daegu Arts University in Daegu, South Korea.

Taehi Kim, Artistic Director of EL MUSIC GROUP is currently director of Prosound Lab & El Music Group She is a lecturer at Seoul National University and Kyunghee University, Adjunct Professor at Hanging University and Hongik University. She was educated at Seoul National University (BM) and Computer Music at Peabody Conservatory of Johns Hopkins Univ.(MM). She is a DMA candidate at University of Illinois at Urbana-Champaign. She is a winner of Prix d'ete competition, nominated and performed at ICMC, SICMF, ACL, etc. convergent audio visual works & sound installation including Dynamic & Fluid Exhibition (ARKO Museum) 2014 the best composition award, KOCOA Sulae by Korean Composers Association.

Pianist and composer **Keith Kirchoff** has performed throughout North America, Europe, and the Pacific Southwest. A strong advocate for modern music, Kirchoff is committed to fostering new audiences for contemporary music and giving a voice to emerging composers, and to that end has premiered over 100 new works and commissioned over two dozen compositions. Specializing on works which combine interactive electro-acoustics with solo piano, Kirchoff's Electroacoustic Piano Tour has been presented in ten countries, and has spawned three solo albums. Kirchoff is the co-founder and a director of SPLICE and the founder and Artistic Director of Original Gravity Inc. Kirchoff has won awards from the Steinway Society,

MetLife Meet the Composer, the Foundation for Contemporary Arts, and was named the 2011 Distinguished Scholar by the Seabee Memorial Scholarship Association. He has recorded on the New World, Thinking outLOUD, Zerx, Ravello, Tantara, New Focus, and SEAMUS labels. Kirchoff is also an accomplished homebrewer and has published multiple articles on the topic.

Andrew Koss (b. 1994) is a New York City based composer and saxophonist. His work reflects a passion for exploring unique timbre and harmony in an engaging and approachable context. He also is influenced by funk and jazz idioms. His music has been performed at the International Saxophone Symposium in Fairfax, VA and the 2017 National Trumpet Competition in Denver, CO. As a saxophonist, Andrew is an active performer and advocate of new music. He has studied under Keith Young and Paul Cohen. Andrew holds a Bachelor's Degree in Music Theory and Composition from Indiana University of Pennsylvania. At IUP he studied Composition under David Martynuik and John Levey. Andrew holds a Master's Degree in Theory and Composition at New York University, he studied under Robert Honstein and Julia Wolfe.

The New York Times calls **Esther Lamneck** "an astonishing virtuoso". She has appeared as a soloist with major orchestras, with conductors such as Pierre Boulez, with renowned chamber music artists and an international roster of musicians from the new music improvisation scene. A versatile performer and an advocate of contemporary music, she is known for her work with electronic media including interactive arts, movement, dance and improvisation. Ms. Lamneck makes frequent solo appearances on clarinet and the tárogató at music festivals worldwide including ICMC, (International Computer Music Conference), SEAMUS, (Society for Electro-Acoustic Music in the United States) NYCEMF, (New York City Electroacoustic Music Festival) Il Corpo, La luce, Il Suono and the Diffrazioni Festival. Many of her solo and Duo CDs feature improvisation and electronic music and include "Cigar Smoke"; " Tárogató "; "Winds Of The Heart"; "Genoa Sound Cards"; "Stato Liquido" etc. Numerous performances have been selected for the SEAMUS CD Series. Computer Music Journal calls her "The consummate improvisor." Dr. Lamneck is a full professor at New York University's Department of Music and Performing Arts Professions and is artistic director of the NYU New Music Ensemble, an improvising flexible group which works in electronic settings using both fixed media and real time sound and video processing. http://steinhardt.nyu.edu/faculty/Esther_Lamneck.

SungJun Lee is a flutist with El Music Group. Her studies include Gennevilliers Conservatory (Perfectionnements). Saint-Maur Conservatory (Supérieur) and Issy-Les-Moulinneaux Conservatory (D.E.M). She is currently flute principal at Seoul National Symphony Orchestra and a local artist of A.T.P.

Kourtney Newton is currently pursuing a Doctor of Musical Arts degree in cello performance at the University of North Texas where she studies with Professor Nikola Ruzevic. She has performed domestically and internationally at prestigious venues in Austria, England, Germany and Thailand. Kourtney's passion for new music began when she joined the Northern Colorado Soundpainting improvisation ensemble in 2011. She has been a feature performer for numerous festivals and conferences and is active in the contemporary music scene in Dallas/Fort Worth, having recently performed with Dallas Open Classical "39 Philip Glass" project and the Sounds Modern recital series at the Fort Worth museum of Modern Art. She has played in masterclasses for Eighth Blackbird, JACK quartet and Dal Niente. Kourtney is currently a member of the Amorsima string trio which specializes in experimental repertoire.

Pansori singer **Youngji Oh** started her training in pansori at the age of 10, learning the schools of Manjeong, Chunhyang-ga and Heungbo-ga from Myung-hee Lee, the school of Dongcho of Shimcheong-ga from Eunsuk Chu and the school of Dongch'o of Chunhyang-ga, the school of Parkbongsul of Cheokbuk-ga and the school of Heungbo-ga from Sun-seop Song. And studied Heungbo-ga from Chung Sumnim. Her recent activities include the media-art Pansori Ballet composed by Eunsil Kwon, 'Golden Apple', and a collaboration with Leehye Cheon in the video art 'Sisters'. She has also been performing at the Daegu Contemporary Art Festival, Daegu Contemporary Art Festival, Jeju Seogwipo Cultural Classical Concert: ONENESS, and at the Kyoto University of Performing Arts. In addition, she is making inroads to expand the scope of p'ansori in the community through performances at Daegu Concert House called 'Korean Classic' series, the Daegu Culture and Arts Centre, and with the Daegu Yajang in the traditional comedy 'K'unjangbyulgok'. Currently, she is spreading the beauty and spirit of Korean music by being a scholarship recipient of the Gyeongsangbuk-do Intangible Cultural Heritage, a lecturer of Keimyung University Lifelong Education Centre, a CBS Music Ambassador for the Daegu CBS FM radio program "Park Jun-sang's afternoon vitamins" and MC in the program 'Ulsso'.

Called a "cello innovator" by *Time Out NY,* **Madeleine Shapiro** has long been a recognized figure in the field of contemporary music. She was the founding director of the internationally known ensemble The New Music Consort, and presently directs ModernWorks. Madeleine performs extensively as a solo recitalist throughout the United States, Europe and Latin America. Her concerts have included numerous premiere performances of recent works for cello, and cello with electronics, many written for her. Madeleine's first solo CD, *Electricity: Works for Cello and Electronics* was greeted as "focused and cohesive...a polystylistic collection of pieces that individually push the instrument and technology in unique ways" (*Time Out New York*). In addition to her

performing, Madeleine is the director of the NewMusicMannes ensemble at New York's prestigious Mannes College of Music, where she also teaches a seminar in new music performance techniques. A dedicated and involved teacher, she presents new music workshops and master classes at universities both nationally and internationally, and has had numerous residencies at a wide range of institutions.

Violinist **SungHee Shin** was educated at Seoul National University (BM), Eastman School of Music (MM and Performer's Certification) and University of Illinois at Urbana Champaign (DMA). SungHee Shin debuted at age 10 with Dae-jeon Philharmonic Orchestra, performed with Seoul Philharmonic and Korean chamber ensembles and won prizes at Ewha & Kyunghyang concours and Dong-A music competition including a fellowship at Rochester Philharmonic Orchestra. SungHee Shin performed as a soloist at Kodak Hall in Rochester, NY and Krennert center in Champaign, IL as a concerto competition winner. 2017-2018 a permanent member of Milwaukee Symphony Orchestra. Currently a member of Korean Chamber Orchestra.

Jooyeon Song, cellist received degrees from Hanyang University (BM), Indiana University (MM) and University of Illinois at Urbana-Champaign (DMA). Presently a Lecturer at Incheon Arts High School, Sehwa High School, Sunhwa Arts Middle school & Sunhwa Arts High School and Adjunct Professor at Hanyang University.

Ann Stimson made her professional debut at the age of eighteen as a member of the Debut Orchestra in Los Angeles, and has gone on to perform with various ensembles and as a soloist throughout the US and Europe. Although she performs both traditional and contemporary repertoire, she has long been an advocate for new music. Her work explores the extension of traditional instruments and modes of performance into new, imaginative realms of action and interaction. She holds an MM in flute from USC, and a PhD in music theory from The University of California, Santa Barbara. She has received performance/research grants from the Esperia Foundation and the Interdisciplinary Humanities Center for research at the Getty Center, and in Florence and Paris. Dr. Stimson currently teaches music theory at The Ohio State University and flute at Kenyon College. She has also served on the faculties of UCSB and Westmont College.

David Valbuena is a NYC based clarinetist and educator. As a performer of new music, he has premiered dozens of works for clarinet and bass clarinet and most recently performed in the Canadian premiere of Stockhausen's final work, Klang, at the Montreal Nouvelles Musiques Festival. As a chamber musician, David has appeared in the Sarasota and Bowdoin International Music Festivals and is looking forward to joining the Lucerne Festival Academy Orchestra in the summer of 2019. David is a teaching artist with the CUNY Harmony Program and is proud to be a woodwind instructor at PS 107x in the South Bronx and at the Castle Bridge School in Washington Heights, He holds degrees from the Manhattan School of Music and Queens College.

Adam Vidiksis is a composer, conductor, percussionist, improviser, and technologist based in Philadelphia whose music often explores sound, science, and the intersection of humankind with the machines we build. His work is frequently commissioned and performed throughout North America, Europe, and China in r--ecitals, festivals, and major academic conferences. Vidiksis's music has won numerous awards, including recognition from the Society of Composers, Incorporated, the American Composers Forum, and ASCAP. His works are available through HoneyRock Publishing, EMPiRE, New Focus, PARMA, and SEAMUS Records---. Vidiksis currently serves as composer in residence for the Chamber Orchestra of Philadelphia for its 2017-2018 season. Vidiksis is Assistant Professor of music technology and composition at Temple University, and a performance and composition faculty at the SPLICE Institute. He is conductor of the Temple Composers Orchestra and Ensemble N_JP, and director of the Boyer Electroacoustic Ensemble Project (BEEP). www.vidiksis.com.

Samuel Wells is a composer, performer, and music technologist based in New York City. As an advocate for new and exciting music, he actively commissions and performs contemporary works. Sam has performed throughout the United States, as well as in Canada and France. He has performed electroacoustic works for trumpet and presented his own music at the Chosen Vale International Trumpet Seminar, Electronic Music Midwest, Electroacoustic Barn Dance, NYCEMF, N_SEME, and SEAMUS festivals. Sam and his music have also been featured by the Kansas City Electronic Music and Arts Alliance (KcEMA) and Fulcrum Point Discoveries. He is a member of Arcus Collective, Kludge, and SPLICE Ensemble. His work (dys)functions is published by qPress. Sam has degrees in both performance and composition at the University of Missouri-Kansas City, and graduate degrees in Trumpet Performance and Computer Music Composition at Indiana University. He has studied composition with Sven-David Sandström, Jeffrey Hass, John Gibson, James Mobberley, Paul Rudy, Chen Yi and Zhou Long, and trumpet with Keith Benjamin and John Rommel. He is currently on faculty at Molloy College.

Yong Xu, Sheng player. Sichuan Conservatory of Music. Works: "Galaxies", "Dream palace" for Sheng and Electronic Music.

Peng Xu, a Chinese Xiao and bamboo flute player, associate professor and master supervisor at Wuhan Conservatory of Music. He has concentrated mainly on the research of teaching methods and the standardized basic training. Most of his students had also won the

national level awards. And also he had won the distinguished teachers rewards by the Ministry and the Chinese Musicians' Association. He has published several books, such as Progressive Studies for Chinese Flute, The Original Chinese Flute Works in Wuhan Conservatory of Music.

Jamie Yoo is a flutist with El Music Group. He has studied at Indiana University (BM & MM) and University of Illinois at Urbana-Champaign (DMA). Her performances include “New Music Brandeis” at Brandeis University and Spoleto Music Festival Orchestra, Soloist with Sofia Philharmonic Orchestra, Spoleto Music Festival Orchestra, and Seoul Symphony Orchestra. Recent concerts include College of Staten Island (CUNY), Harvard University, Cape Cod Community College, and Chicago Cultural Center (International Music Foundation sponsorship) Artist, Bailu Chamber Ensemble. He is Scholar-in-Residence at the New York Classical Players and a member of the Flute faculty of Blue Lake Summer Music Festival and Metropolitan Music Academy. He is a Radio presenter on “The Classic” New York Radio Korea FM 87.7.

Mara Zaki was born in 2003 in Los Angeles. She started to play piano at the age of 4, and is currently in the Young Artist Program at the Westminster Choir College Conservatory in Princeton where she studies with Alison Neely. A fan of Mozart and Stravinsky in equal measure, she is also an avid writer and film maker and is interested in art and performance technology.

Marc Zyla is the Director of Education and Community Outreach and Orchestra Personnel Manager for Quad City Symphony Orchestra. He has been principal horn of the QCSO since 2011. Prior to his appointment, Zyla had been the Consortium Instructor of Horn at the University of Evansville and principal horn of the Evansville Philharmonic Orchestra. Zyla has been a featured performer in both the QCSO’s Masterworks and Signature Series programs. He has also been a featured soloist with the American Wind Symphony Orchestra, performing the world premiere of Kaoru Wada's Toone for Horn and Wind Orchestra. He has also soloed with the Urbana Pops Orchestra and was a frequent guest on WILL-FM radio. He has performed with the Illinois Brass Quintet, the Pittsburgh Brass Project and the Looking Glass Wind Quintet at the Banff Chamber Music Festival. He frequently performs with ensembles such as the Grant Park Music Festival Orchestra, the Champaign-Urbana Symphony, the West Virginia Symphony, the Youngstown Symphony Orchestra, the Westmoreland Symphony Orchestra, the Peoria Symphony and the Heartland Festival Orchestra. Internationally, he has performed as principal horn of the Philhamonie der Nationen (DE) and the Orquesta Filarmonica de Jalisco (MX). Mr. Zyla earned a Bachelor of Musical Arts degree from West Virginia University and a Master's degree in Horn Performance from Carnegie Mellon University. He is currently pursuing a doctoral degree in Horn Performance and Literature at the University of Illinois. His teachers include William Caballero, Thomas Jostlein, Bernhard Scully, Robert Lauver, Virginia Thompson, C. Scott Smith and Luke Zyla. Away from the QCSO, Marc resides in the Rock Island, IL with his fiancée, Rachel Price, and their team of rescued cats and dogs.