

HARVARD UNIVERSITY STUDIO FOR
ELECTROACOUSTIC COMPOSITION



HYDRA

December 11, 2021, 7:30pm

December 11, 2021, 9:30pm

December 12, 2021, 7:30pm

John Knowles Paine Concert Hall

About our Studios

The core mission of Harvard University Studio for Electroacoustic Composition (HUSEAC) is to provide technology for graduate composition students, particularly those working with live electronic processing. Undergraduate students are encouraged to join us in sonic exploration by enrolling in our electroacoustic classes.

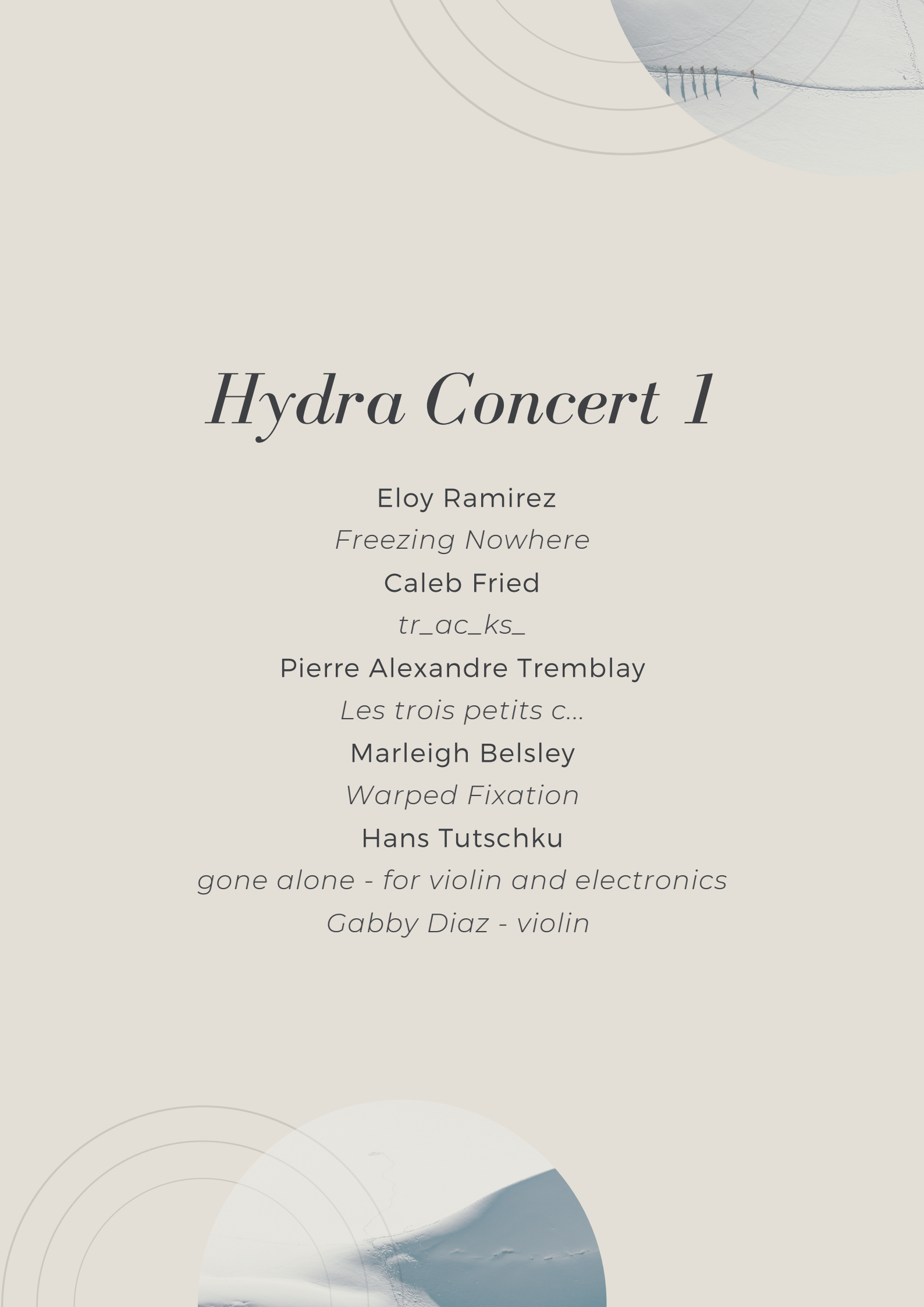
Leon Kirchner established the Harvard Electronic Music Studio (HEMS) in 1968 in consultation with Morton Subotnick. In 1972, Ivan Tcherepnin (1943–1998) became the Director of HEMS and remained at this post until his passing. In 1999, Kurt Stallman bridged HEMS and Mario Davidovsky's Harvard Computer Music Center (HCMC) to form Harvard University Studio for Electroacoustic Composition. In 2004, composer Hans Tutschku joined the Music Department as Fanny P. Mason Professor of Music and HUSEAC Director and premiered HUSEAC's sonic monster, HYDRA, in 2005.

HYDRA Loudspeaker Diffusion System has grown into a 40-channel performance instrument designed explicitly to render electroacoustic works. The system has been installed for the final concerts of Music 167, Introduction to Electroacoustic Composition, nearly every semester since its debut. In addition, HUSEAC's advanced seminars often culminate in live performance or improvisation with HYDRA. The system's sound field is comprised of five discrete loudspeaker arrays and two subwoofers. Each array contains a ring of 8-channels specifically placed around or above the audience.

Each speaker is selected for its voice, color, and utility. These qualities allow our composers to explore their work's materials in relation to the natural acoustics of the performance space. Rehearsals allow each composer to refine their interpretation and prepare for the concert performance.

HUSEAC invites the public to join us for our Spring and Fall concerts each year. All event invitations are sent through our low-traffic mailing list. To sign up, read more information about our studios, or view performance and documentary footage, visit our website: huseac.fas.harvard.edu

Music 167 & 264 provide Harvard college and graduate students with the opportunity to learn essential repertoire and skills from the last 70 years of electronic music. The concerts present new fixed-media works composed over the past semester. The composers diffuse them with the HYDRA 40-loudspeaker system. In addition, students from Music 264 have been learning techniques for real-time audio processing and computer performance, using the Max programming environment, leading to sound installations and concert pieces.



Hydra Concert 1

Eloy Ramirez

Freezing Nowhere

Caleb Fried

tr_ac_ks_

Pierre Alexandre Tremblay

Les trois petits c...

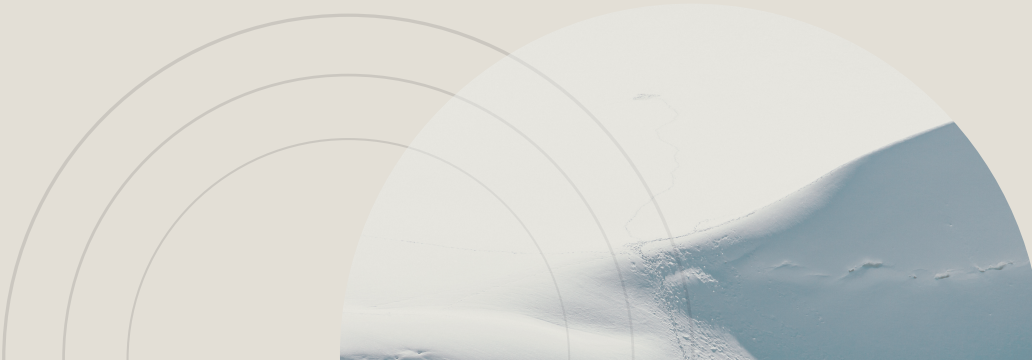
Marleigh Belsley

Warped Fixation

Hans Tutschku

gone alone - for violin and electronics

Gabby Diaz - violin



Eloy Ramirez / *Freezing Nowhere*

When what is expected is not what it seems, panic ensues, and the mind begins to spin. *Freezing Nowhere* is a second-hand tale, an experience of uncertainty. The endless loops and constant change come together to create a feeling of tension that is only relieved through moments of silence—but not before the chaos returns. The beginning establishes a sense of false hope, but what you think you know is not what meets the eye. Distorted sounds represent difficulties in vision and communication, while the eerie friction foreshadows trouble to come. The sounds create an icy, wet soundscape with ice cracking under your feet, sleds traversing the snow, and boots striking rocks. The work is a gestural journey through pressure, grit, and friction.

Caleb Fried / *tr_ac_ks_*

"Railway Ecology" refers to the study of the ecological communities that arise in and around railroad tracks, and their interactions with the natural ecology around them.

Pierre Alexandre Tremblay / *Les trois petits c...*

"Woman is the future of man." —Louis Aragon, *Le fou d'Elsa*

This piece, the title of which may imply humour at first glance, is an ode to the resilience of women. With its working title being "A Woman in Berlin," the project is born of an immense admiration for a young woman of my surrounding that now lives in this very city, and that has won two fights against cancer. Around the same time, I was reading the famous book bearing the same title, this diary of another young woman through the occupation of Berlin by the Russian army in 1945, and I could not stop being astonished by the capacity of women to find a place for happiness in these times of immense hardship.

I hope to give a hint at the contagious happiness of these exceptional beings who faced adversity. They are forever my models.

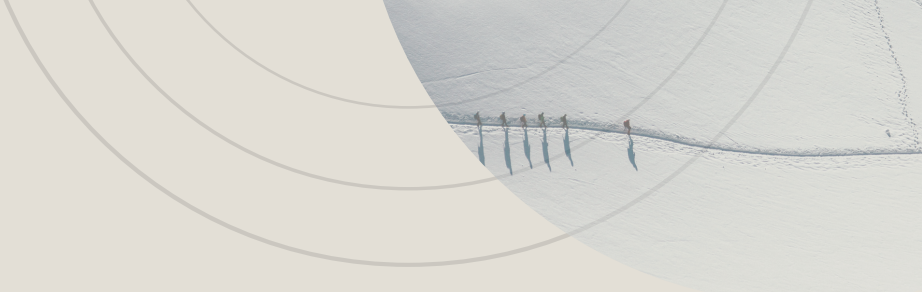
Marleigh Belsley / *Warped Fixation*

Warped Fixation is a window into an obscured reality through blending everyday sounds to the point of abstraction. The listener is both hyper-fixated on an overwhelming landscape of material and lost within it. I hope this piece will challenge listeners to find the ambiguity and whimsicality in the mundane.

Hans Tutschku / *gone alone - for solo violin and electronics*

Commissioned by the Fromm Music Foundation

In memory of those who left us too early.



Hydra Concert 2

Harry Lee-Rubin

Two Staircases

Isabel Haro

Waking up

Maximilian Mueller

LIGHT GOLIATH

Weilu Ge

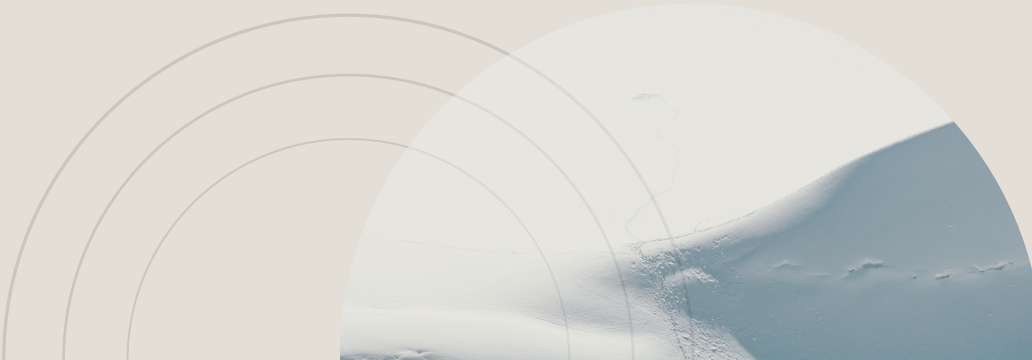
Tell

Charlotte Daniels

Crash Kringle: The Christmas Beast

Yvette Janine Jackson

Test Flight No. 1



Harry Lee-Rubin / *Two Staircases*

While composing this piece I sought to slowly reveal elements of rhythm and language. As you ascend one staircase, language becomes clear to you. All the while, rhythm disappears as the opposite staircase fades from view

Isabel Haro / *Waking up*

I'm always half asleep but I hate dreaming.

Maximilian Mueller / *LIGHT GOLIATH*

LIGHT GOLIATH is a living composition, and like all living things it must eat. Light emitted in the darkened hall nourishes the piece via ethereal sonic veins. When night falls again, LIGHT GOLIATH returns with renewed, yet constantly decaying strength.

Weilu Ge / *Tell*

Tell is a soundscape composition and part of a documentary media project exploring the culture and music of the ethnic group Qiang in Central China. The project is based on the composer's experience visiting a Qiang village in 2014. As a prelude, the composition blends abstract and concrete sound, man and nature, noise and silence. It documents the most touching and beautiful musical moments hidden in the trivial, bland, subtle sound in the everyday experiences of Qiang and the meaning behind them.

Charlotte Daniels / *Vexation*

A piece using only "found" and recorded sounds, Vexation is focused on creating an uncomfortable and at times disorienting soundscape. Using Max MSP to edit and manipulate sounds, I tried to pull apart the calm and comfort in common instruments and deploy cringe-worthy, goosebump-inducing feelings of anxiety and imbalance in sound.

Yvette Janine Jackson / *Test Flight No. 1*

Test Flight No. 1 was released as a stereo composition on Longform Editions and has been adapted for the HYDRA system. It is an etude for a new radio opera series themed around the impacts of commercial space tourism.



Interactive Installations

Room 9, Studio 33, and in front of the
concert hall

Audrey Watkins

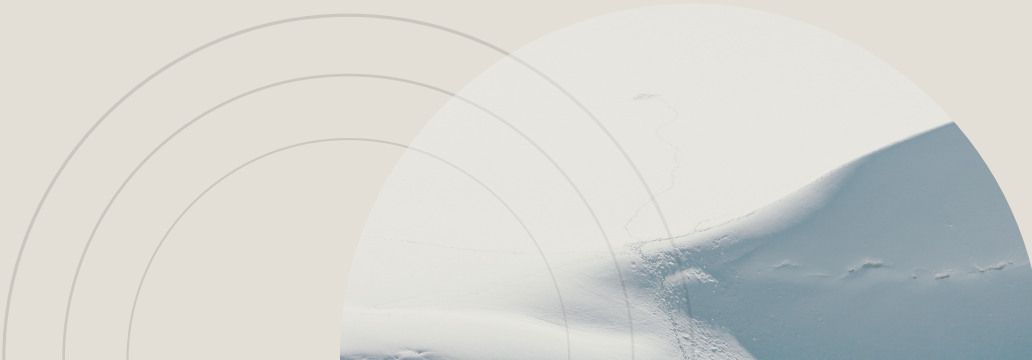
Wall Dissection

Weilu Ge

Entanglement - an XR installation

Albert Zhang

what???



Audrey Watkins / *Wall Dissection*

This project takes standard elements of building surfaces, including drywall, tile, wood trim, and glass, and removes them from the typical composition in which they are interpreted to test their singular material qualities. Each element has the capacity to vibrate and create sound, and this capacity is tested by sending a seminal text, Jan Turnovsky's "The Poetics of a Wall Projection," through the material in the form of vibration. Please feel free to say hello to these materials at the provided microphone, as you may find they talk back.

(presented in front of the concert hall)

Weilu Ge / *Entanglement - an XR installation*

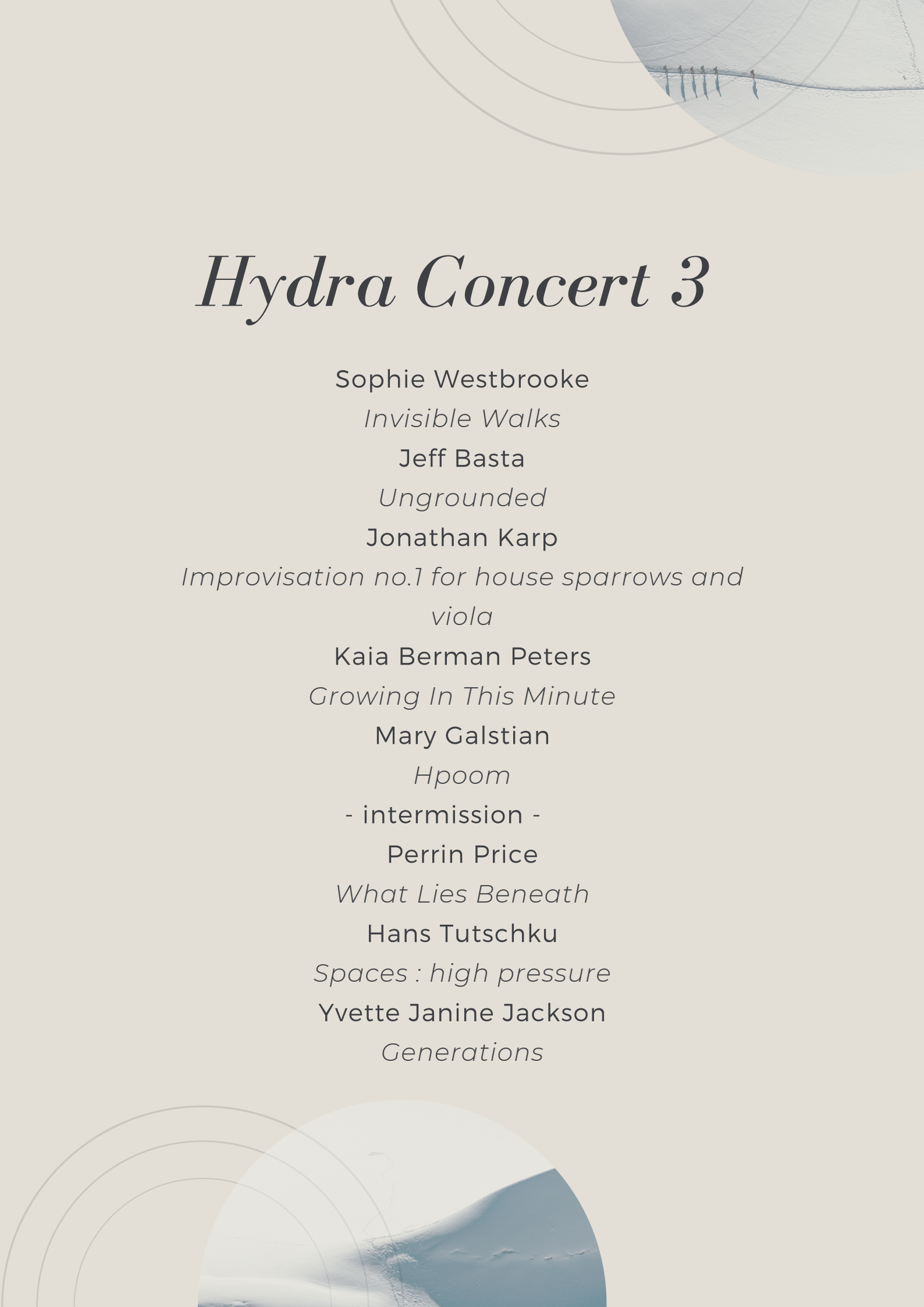
It's a media experiment exploring the relationships between space, sound, listening and movements.

(presented in room 9)

Albert Zhang / *what???*

This is an experiment that explores the relationship between sound, space and the voice. Please enjoy!

(presented in room 33)



Hydra Concert 3

Sophie Westbrooke

Invisible Walks

Jeff Basta

Ungrounded

Jonathan Karp

*Improvisation no.1 for house sparrows and
viola*

Kaia Berman Peters

Growing In This Minute

Mary Galstian

Hpoom

- intermission -

Perrin Price

What Lies Beneath

Hans Tutschku

Spaces : high pressure

Yvette Janine Jackson

Generations

Sophie Westbrooke / *Invisible Walks*

Invisible Walks charts a journey through hostile spaces. It charts what sounds in the mind when hostile space and home are compounded into one. It charts a journey that goes unseen and unbelieved, and yet repeats itself infinitely.

Jeff Basta / *Ungrounded*

A struggle to find consonance amidst various voices we encounter.

Jonathan Karp / *Improvisation no.1 for house sparrows and viola*

A family of house sparrows used to live in a pipe that runs across my bedroom, suspended a few feet from the ceiling. The pipe amplified and filtered their sounds and those from just outside, like the screams of children in the playground across the street. In this piece, recordings of the pipe mix with viola, improvised and processed live.

Kaia Berman Peters / *Growing In This Minute*

We are not in the least afraid of pots. We are going to inherit the kitchen; there is no doubt about that. The bourgeoisie might blast and ruin its own kitchen before it leaves the stage of history. We carry a new kitchen here, in our hearts. That kitchen is growing in this minute.

Mary Galstian / *Hpoom*

“Hpoom” (HUH-POOM) is an Armenian word, meaning to approach, to come near, to touch, it is that very near moment where tactile touch begins. This composition explores the layers of contact and communication throughout what appears to be a protagonist’s narrative.

Perrin Price / *What Lies Beneath*

Fear, anticipation, longing and relief- just a few of the feelings one experiences when deeply connected to a person. What Lies Beneath explores the intense emotional journey that overwhelms people when they are in love, but apart, for whatever reason it may be. It is a sonic landscape that intends to capture the fragile stability of love that is fraught with doubt and anxiety, but also hope and happiness at the very same time. In the end, contentment and peace is the ultimate goal and where the journey ends.

Hans Tutschku / *Spaces : high pressure*

24-channel electroacoustic composition

Improvised sound sequences with objects on a large frame drum explore the interaction of gestural energy and tonal richness. In the dialogue with recorded voices and instruments, layers of great intensity were created that move, meet, mutually reinforce, and erase each other in the multi-channel sound space.

Yvette Janine Jackson / *Generations*

Generations premiered as a 3-hour composition for 4-channel fixed media and cello at the Semibreve Festival in Braga, Portugal. Members of the Harvard New Music Ensemble reinterpret an excerpt from the larger composition.

HUSEAC Future Courses

Fall 2022

Music 179: Improvisation with Live Electronics

The course is aimed at improvising musicians and composers working with electronics. We will explore different existing improvisation strategies from the 20th century and develop new pieces using the Max/MSP sound processing environment.

Composers and interpreters alike will contribute to the concepts from solo to ensemble works.

Music 168: Analog Synthesizers and the Digital Age

Vintage and modern copies of many legendary synthesizers are again exciting musicians across stylistic borders. The course explores their use and covers concepts like voltage control, oscillators, filters, envelopes, and step-sequencers.

The Harvard University Studios for Electroacoustic Composition started their journey in 1968, using Serge and Buchla instruments. Students will compose on those historic synthesizers and use music software to create non-beat-based drone music.

Spring 2023

Music 167: Storytelling with sounds

The main goal of this course is individual creative work in composition with electronic sound media. Projects will be realized using recording gear and computers. We will study relevant aspects of acoustic and electronic theory, compositions of musique concrete and acousmatic music written since 1948, and sampling and digital recording techniques. In addition, the course will cover theoretical topics, the basics of recording, and the use of audio software. The final project will be composed based on a self-developed sound story.

Acknowledgements

HUSEAC would like to thank all those who have helped to make our concerts possible, especially the staff of Harvard University Department of Music and the Teaching Fellows for the two courses.

Seth Torres

HUSEAC Technical Director

Kelley Sheehan

Music 167 Teaching Fellow

Christopher Lock

Music 264 Teaching Fellow

Ingrid Monson

Quincy Jones Professor of African American Music

Chair of the Music Department

Hans Tutschku

Fanny P. Mason Professor of Music and Director of HUSEAC

Chaya Czernowin

Walter Bigelow Rosen Professor of Music

Nancy Shafman

Director of Administration

Kalan Chang

Manager of Administration and Finance

Bríd Coogan

Alex Crosett

Christopher Danforth

Kyra Davies

Eva Kim

Jonathan Savilonis

Music Department Staff

