

# Space & Time

May 18, 2023 – 7 p.m.

CPMC 122

Ecospherical (2023)

Charles Deluga

MC Sax + MAX/MSP Improv (2023)

Forestsaurus

Ballast & Priority (2023)

Dante Escrofani

MC OSC + iPad + MAX/MSP Concat. Syn. Improv (2023)

Douglas Osmun

Ambisonic Etude No. 2: Krispy Kreme (2023)

Nathaniel Haering

Ecospherical (2023)

Charles Deluga

“Ecospherical” is an ambisonic multichannel installation immersing listeners in natural and hybrid soundscapes of California and the Pacific Northwest. This project is based on extensive field recordings taken with a third-order ambisonic microphone array, documenting diverse ecosystems in the face of a rapidly changing climate. The spherical soundfields captured with this technology are decoded to the 32-channel speaker system of the CPMC Experimental Theatre to acoustically transport listeners to these remote locales teeming with life. In collaboration with UC San Diego performers, instrumental improvisations have been spatialized to become integral parts of these soundscapes, communicating in the natural cadences of their surroundings. Using custom, multichannel convolutions, environment and performance merge to envelop listeners in surreal, textural worlds. This project functions as both an experiment in the creative potential of spatial field recording and an effort in soundscape preservation, with a forthcoming soundscape archive making the raw field recordings available to artists and environmentalists. “Ecospherical” aims to bring awareness to the character and fragility of the ecosystems around us by exploring their unique musicality.

Ballast & Priority (2023)

Dante Escrofani

This piece explores the capabilities and limitations of realtime ambisonic performance using open-source software. It is comprised of 8 channels of synthesized rhythms, harmonies, and textures that each have their own placement as an ambisonic "object". By manipulating each channel's placement individually, I am able to demonstrate the effect of ambisonic algorithms on different classes of sounds. As you are carried through pulsing, glitchy textures, shimmering harmonies, and slippery arpeggios, pay attention to the localization of sounds and what allows them to be placed accurately. The soundscape is inspired by events in my personal life causing me to question deep motivations behind what purpose I tie myself to, and learning how to tell when it's time to move on, to shed old skin and grow anew.

Ambisonic Etude No. 2: Krispy Kreme (2023)

Nathaniel Haering

This work will use 3D spatial audio recording technology (Higher Order Ambisonics) to investigate the interiors of everyday objects such as cardboard boxes, plastic bags, shipping envelopes, and other tiny

spaces and listening perspectives that are usually inaccessible to humans and expand them to the massive, encompassing size of the UC San Diego Experimental Theater. In this way, the miniscule dimensions of these claustrophobic spaces become the architectural tectonics of a new, vast, engulfing, dynamically morphing, projected/virtual space and allow the audience to experience these enveloping sounds, reflections, and unique spatial perspectives for the first time, encouraging renewed contemplation of the myriad of “disposable” items that perpetually surround us. These explorations and manipulations of tiny interior spaces synthesized into an approximately 6 minute immersive sonic experience; a musical work composed of spatial audio environments and perspectives that humans were never meant to hear.

### **Charles Deluga**

Charles Deluga is an audiovisual artist and systems designer focused on translating signals across sensory domains. His creative practice combines spatial audio, ecoacoustics, synthesis, and signal processing to produce immersive contexts for experiencing the intersection of nature and math. Under the alias Geometric Primitive, he uses oscilloscopes, lasers, and multichannel sound to express geometry as a sentient, primordial presence. Deluga has designed and produced A/V systems for architectural media installations across North America, including the Statue of Liberty Museum and MoMA PS1. He is currently pursuing a Ph.D. in Computer Music at UC San Diego after earning a master’s in Music Technology from New York University.

### **Forestsaurus**

Tornike Karchkhadze (computer, live processing). Paul Nicholas Roth (alto saxophone, computer, live processing). Georgian-American duo <<forestsaurus>> slithers through thickets of surrealist sonic space; at once meditative and weird, lush and fractured, psychedelic and a little disturbed.

### **Dante Escrofani**

My avid curiosity in sound & musical technology has led my professional career through live, studio, and technical fields for over 10 years. As I cycle through my roles as a live and studio sound engineer to software developer and pro audio repair tech, I pay special attention to what designs work well in live, studio, and home music settings. My aim is to create innovative tools for artists to augment their expressivity and output, and seek a position that allows me to unify my range of experience into consistent, relevant, boundary-pushing results.

### **Douglas Osmun**

Douglas Osmun is a composer and improviser working largely in the domain of digital media, exploring how contexts shape interactive experiences or improvisatory structures, and how they blur the boundaries between composer, performer, audience, and artificial intelligence. Osmun's work is permeated by recurring themes of digital materiality, speculative interfaces, generating forms, structure bearing contexts, techno-pessimism, techno-optimism, communitarian interactivity, AI mediation, and human/AI/cybernetic subjectivities. Osmun is a Ph.D. Candidate in Composition at the University of California San Diego studying under the advisorship of Michelle Lou. His music has been performed internationally, being heard at the SEAMUS National Conference, the SCI National Conference, NYCEMF, Neofonía Festival de Música Nueva de Ensenada, NSEME, the BGSU Graduate Conference in Music, and the Big Sky Documentary Film Festival. He has written works for Alarm Will Sound, the St. Louis Symphony, and SPLICE Ensemble, and has pursued numerous close collaborations with colleagues and friends including Will Yager, Peter Ko, Berk Schneider, and Joey Bourdeau.

### **Nathaniel Haering**

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 Anh Võ, Trio Accanto, Ensemble Mise-En, Mivos Quartet, Wild Up, and members of WasteLAnd, Ensemble Ipse, Ensemble Dal Niente, the International Contemporary Ensemble, and the LA Phil. Winner of the 2019 ASCAP/SEAMUS Student Award, the 2019 PRIX CIME Residency Prize, and the Mixed Media Award of Distinction from MA/IN festival in Matera, Italy, Nathaniel's work can be found on flux, vol. 33 as well as multiple volumes of Music from SEAMUS. His pieces have recently been featured at the International Computer Music Conference in Shanghai, Seoul, and NYC; the Toronto International Electroacoustic Symposium in Toronto; Noisefloor Festival at Staffordshire University, UK; VIPA in Valencia, Spain; WOCMAT in HsinChu City, Taiwan; SONIC MATTER in Zürich, Switzerland; and at numerous other international venues. Nathaniel is currently pursuing a Ph.D. in Music Composition at the University of California San Diego.

### **Gabriel Zalles Ballivian**

Gabriel Zalles Ballivian is a 5th year PhD student from UC San Diego interested in education, spatial audio, open-source software and multimedia arts. Over the last five years, Gabriel has been developing his own ambisonic arrays using low-cost components in an attempt to democratize this technology. He has also been creating musical material with open-source ambisonic tools and developing web apps that function as low-cost artistic examples of spatial music. Gabriel is originally from Bolivia but has lived

and studied in the U.S. for over a decade. In such time, he received a BA from UC San Diego and an MA from NYU, both in music. His research and music have been shown worldwide in conferences such as NIME, EDAM, SMC, AES, and NYCEMF. In the past, Gabriel has also worked for Adobe, Birch Aquarium, and composer Lei Liang.

### **Space and Time**

Space and Time is the last SElectOr concert curated by founder and creative director of the group Gabriel Zalles Ballivian. The concert is a collection of spatial music propositions by graduate students and alumni of the music department. This event will feature multichannel music performances using small and large speaker arrays, including large-scale surround sound compositions using the newly installed Meyer Sound system in CPMC122, the Experimental Theater. Composers involved include: Charles Deluga, Forestsaurus (Paul Roth/ Tornike Karchkhadze), Dante Escrofani, Douglas Osmun, and Nathaniel Haering, with technical support from Jeremy Olson.

### **UCSD SElectOr**

UC San Diego SElectOr is a music collective and creative incubator which connects undergraduate and graduate students in collaborative creative endeavors focused on sound and multimedia art-making. In the past, our group has curated concerts, performed live, and developed spatial audio experiences for the web. In addition to concerts and performances, the team also submits these artworks to conferences world-wide and holds workshops open to the public. The group is intended to give graduate students mentorship opportunities as they work closely with undergraduates, alumni, staff and prospective students. It is a miniature, grassroots version of the IDEAS series by long-time UC San Diego faculty Shahrokh Yadegari. Given its unofficial capacity, the group is able to operate efficiently within and outside the confines of the university.

For more information see: [ucsdselector.com](http://ucsdselector.com)

**Audience members are reminded to please silence all phones and noise-generating devices before the performance. As a matter of courtesy and copyright law, no unauthorized recording or photography is allowed in the hall.**

**UC San Diego is a non-smoking campus.**

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Department of Music