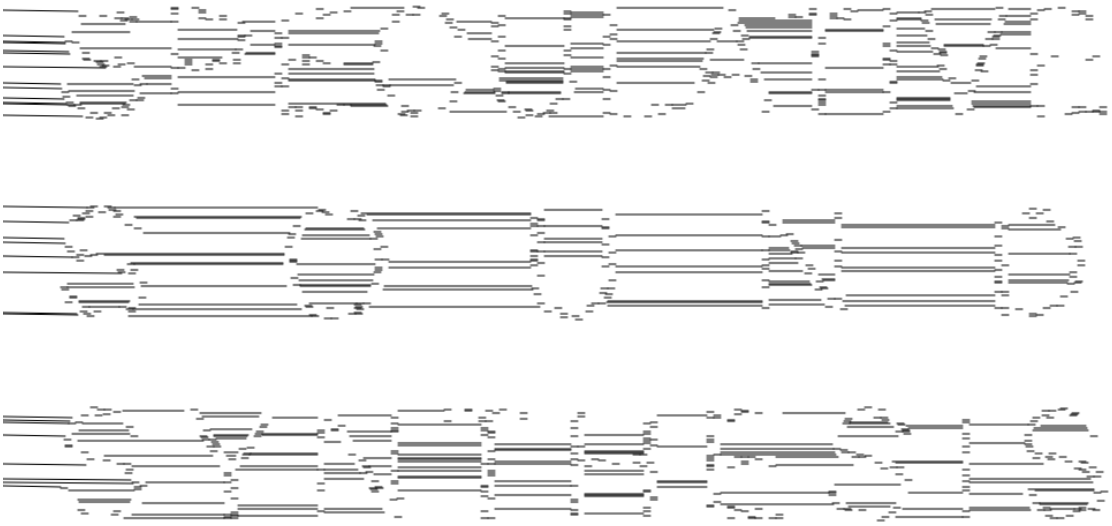
institut für elektronische musik und akustik

kunst uni graz

Open CUBE

Speculative Sound Synthesis



Donnerstag, 06.04.2023, 18:00 Uhr, IEM CUBE, Inffeldgasse 10/3, 8010 Graz

In Zusammenarbeit mit der Gesellschaft zur Förderung von Elektronischer Musik und Akustik – GesFEMA

“Speculative Sound Synthesis” is an artistic research project by David Pirrò, Ji Youn Kang, Leonie Strecker and Luc Döbereiner. The project challenges established patterns of interaction between technology and artistic practice. Standardized processes in computer music are probed, destabilized and reshaped through speculative re-questioning, thus allowing new aesthetic potentials for experimental musical practice to emerge. The project started at the IEM in November 2022 and is funded by the Austrian Science Fund (FWF) for a period of three years.

This event will for the first time briefly introduce the project’s central research questions, aims and its methodology. It will present related past and current artistic works. The event includes an informal moderated discussion. The audience is invited to participate and ask questions.

Contingency and Synchronization: Iteration 2b (Installation)

“Contingency and Synchronization: Iteration 2b” is part of a series of artistic research works by Luc Döbereiner and David Pirrò exploring the interaction between the determinism of synchronization algorithms and the contingency of their material performance. Each iteration in this series renegotiates this relation and attempts to re-compose computation, site and listening in ways specific to the format.

In this iteration, six phase and frequency synchronizing oscillators that are each played back over one loudspeaker in the room are being set up. Each oscillator reacts to the the signal picked up by one microphone, adapting and changing its behavior. Thereby, spatially distributed pairs of input and output interfere with each other in an endless process of synchronization. The oscillators are sonified using sine waves modulated with band-limited Gauss pulses. Instead of being completely contained in simulation, this model of connected oscillators is opened to the exterior, turned inside out and so connects to the specificities of the site, its acoustics and the noises made by the audience.

Speculative Sound Synthesis: Synchronization (Performance)

“Speculative Sound Synthesis: Synchronization” is a live electronic performance by four interlinked players exploring ways of coupling sound synthesis systems. Rather than focusing on making the instruments produce specific results, the performers aim to make their instruments' material qualities, assumptions, errors, and even failures sensible and experienceable. By putting their instruments and their respective developers in interaction with each other, creating a feedback loop of sorts, the quartet performance explores questions of interplay, materiality of digital and analog sound synthesis, interaction with algorithms and machine learning, employing combinations of nonlinear oscillators and analog circuits based on fundamental digital components. The instruments flow into each other and this opening enables new sonic and musical spaces, thus creating a laboratory where the performers can experiment, manipulate, observe and speculate on different aspects of the artistic practice of sound synthesis they consider crucial.

Program:

17:00: Installation: Contingency and Synchronization: Iteration 2b

18:00: Lecture Performance: Speculative Sound Synthesis

Open CUBE – Kalendarium

27.04.2023 17h00 – CUBE Lecture & Open CUBE - Kristina Warren
“Composing Space”

23.05.2023 19h00 – CUBE Lecture - Paulo Chagas,
„Klang, Wahrheit und Paradigma: Das elektroakustische Paradigma“ &
Open CUBE „Migration und Metamorphose“
on “Speculative Sound Synthesis”

20.06.2023 14h00 – CUBE Lecture - Thomas Gerwin
„Sinn und Präsenz in konkreter Musik“

20.06.2023 19h00 – Open CUBE - Thomas Gerwin
„PHENOMENON“

03.07.2023 17h00 – Open CUBE – Semesterkonzert
Studierende der Computermusik und Klangkunst präsentieren ihre Semesterarbeiten

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Details zur Open CUBE Konzertreihe unter:

https://iem.kug.ac.at/veranstaltungen/veranstaltungsreihen/open-cube-cube-lecture/