

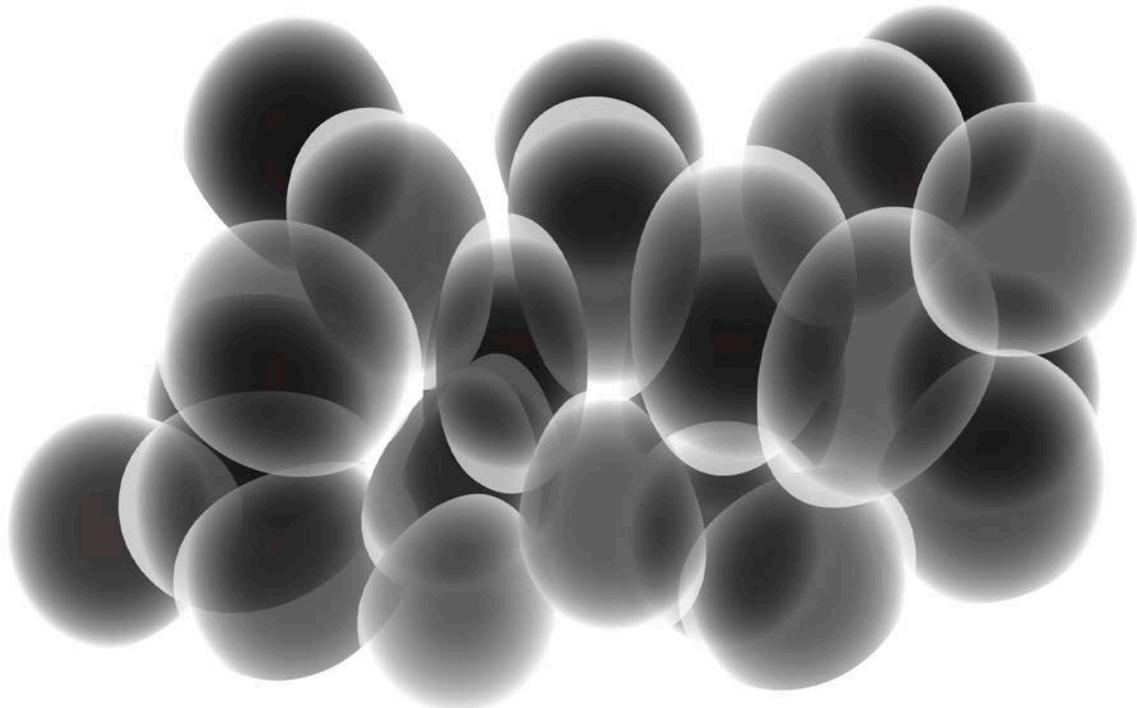
institut für elektronische musik und akustik



## **Open CUBE**

**Erik Nyström**

**Lecture-Performance „Speculative Terrains:  
syntheses of space in live performance“**



**Dienstag, 17.04.2018, 19:00, IEM CUBE, Inffeldgasse 10/3, 8010 Graz**

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

## **Program:**

The complex of synthesis, generative algorithms, and performance in computer music can present a form of ecology where sound evokes a speculative, postnatural environment. In this lecture/concert, I explore the spatiality of such conditions, discussing aesthetic and technological approaches to spatial texture, and performing some recent music in CUBE-specific versions.

### **Shale (2016, Live, 36ch)**

The title is a geological metaphor for vertical layering of sound in both physical and spectral space. The distribution of texture motion affects the emphasis on global spatial architecture, on one hand, and a stratified, sedimentary interior, on the other. The work is composed of real-time multichannel synthesis processes, which combine live performance and internal algorithmic structuring.

### **Texton Mirrors (2018, Live, 36ch)**

The neuroscientist Bela Julesz proposed that visual texture perception relies on the processing of aggregates of small elements he termed *textons*. If we consider the multimodality of spatial sound experience, sonic grains and blots may also be perceived as spatial shapes and colours in cluster formations. In this work, textons are connected to both the physicality of performance and the spatial materiality of texture. They also have an active role in shaping texture since they are connected in a structural network. A texture montage is created by improvised performance in collaboration with machine learning algorithms which cluster and connect morphologies to create a heterogeneous texture. Textures are also controlled and animated by the use of spatial feedback networks and cellular processes. The work is a free form improvisation.

### **Spheroid (2017, Live, 36ch)**

The spine of the work is an irregular loop which synthesises, sequences, deforms and attracts material as it revolves in symbiosis with performance. Developing the piece I was compelled by the idea of a synthetic ecology where unnamed organisms elasticate and reposition categorical conceptions of species, nature, and technology in a posthuman morphogenesis.

## **Biography:**

Erik Nyström is a composer whose output includes electroacoustic works, live computer music, and sound installations. The majority of his works are created for multichannel sound projection, and among the recurring interests in his practice are spatiotemporal deformations and transformations, texture perception, entropic processes, and visual and physical listening experiences.

He is currently a Leverhulme Research Fellow at BEAST (Birmingham Electroacoustic Sound Theatre), University of Birmingham Department of Music, working on a computer music project entitled Synthesis of Spatial Texture Topology in Composition and Performance. The research develops polymorphic real-time synthesis approaches to spatial texture and structuring processes, proposing an aesthetic and technological alternative to conventional fixed-media composition and diffusion performance in electroacoustic music. The work builds on his PhD research, Topology of Spatial Texture in the Acousmatic Medium ([download pdf](#)), undertaken at City University London under the supervision of Denis Smalley.

His music has been published by empreintes DIGITALes.

## Open CUBE – Kalendarium

**24.04.2018, 18h00** – Tag der offenen Tür

**26.04.2018 19h00** – Lorenzo Derinni (Violine) und Davide Gagliardi (Live-Elektronik)

**09.05.2018 20h00** – Digital:Analog (Werke von Gloria Amesbauer, Alyssa Aska, Artemi-Maria Gioti, Brian Questa, Sebastian Scholz, Alexandru Tudor Spanu, Ina Thomann und Andreas Trenkwalder)

**23.05.2018 19:30** – Laborkonzert - Responsive Space mit Raimund Vogtenhuber (künst./wiss. Doktoratsschule)

Details zur Open CUBE Konzertreihe unter: <http://opencube.iem.at>