



DET KONGELIGE
DANSKE
MUSIKKONSERVATORIUM

STUDIEKONCERT – IMMERSIV SOIRÉ (#4)
ONSDAG D. 1. MAJ 2024 KL. 17.00
NY SAL

Live elektronik og nye 3D værker af :

Hans Peter Stubbe Teglbjærg:
(f.1963)

PROGRAM

This One? (2020)

(varighed 8:25 min)

Sophie Hesse (Pre-recorded cello)

INTRODUKTION

The Pendular Cello (2019-2024) - uropførelse

(varighed 15:00 min)

Andrew Power (cello), Hans Peter Stubbe Teglbjærg (elektronik)

A Coronian Ring (2022)

(varighed 15:00 min)

3D elektro-akustisk værk.

One Sound (2024) - uropførelse

(varighed 18:25 min)

3D elektro-akustisk værk.

Medvirkende:

Andrew Power, cello
Hans Peter Stubbe Teglbjærg, elektronik, teknik

Projektet er støttet af Koda Kultur/with support from Koda Culture.





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This One? (2020)

Preceding the Pendular Cello was a study in the harmonic overtones of the cello including so-called “string multiphonics” that may produce ambiguous or conflicting pitch sensation. The string as a pure vibrating object, no preconceived pitch scale is imposed. We hear instead the odd numbered divisions of the string, sometime clearly audible, sometimes mixing with neighbour overtones in rich spectras. The atmosphere is harmonious and spacious, developing its inner qualities pointing inwards and upwards.

The cello was performed by Sophie Hesse (Germany), recorded at ZKM (Zentrum Kunst- und Medientechnologien, Karlsruhe) and mixed for octophonic speaker setup in ZKM’s studio 4.

The Pendular Cello (2019-2024)

A study in the nonlinear behaviour of a string for cello, electronics and active control system originated from an artistic research co-jointly supported by RDAM and IRCAM entitled “the timbral coupling”.

“Why coupling”? Coupling various vibrations produce what we perceive as “timbre” or tone colour. But how? A “spring” for instance acts as a coupling element between vibrating objects. It equals a harmonic pendulum when excited weakly. If “forcing” a second pendulum to excite the first one strongly then spectrally rich vibrations arises.

A large palette of timbres is thus possible augmenting sonorities from the acoustic domain into the digital domain. On a string instrument so-called “multiphonics” also known as as “false” natural harmonics may be performed. Sculpting these in the digital domain using a model a “forced pendulum” the richness of string-multiphonics may be extended beyond what can be controlled acoustically.

For instrumental and electronic sources to “fuse” into a unified percept an “active control” system has been included allowing the instrument to be amplified through it own resonant body. Blending electronic sounds and auto-amplification the instrument thus reveals its design as simultaneously being a transmitter and receiver. Boundaries become blurred. No one will ever know who was first.

A Coronian Ring (2022)

An electro-acoustic composition whose sound material where developed during the early Corona period using nonlinear physical modelling synthesis and 3D spatialisation. Nonlinear synthesis was explored in a number of hard-to-predict yet deterministic “electronic instruments” as well as a functions at higher hierarchical levels. As such nonlinear models where explored to mimic the unpredictable nature of Corona. Models in the geometrical form of rings or crowns where spatially and timbrally mixed to form a sense of “coronation”. There are many links to the companion work “The Anamorphic Circle” (2019) allowing the two works to be performed jointly. Taken as a whole, the two works “crown” my work over the years with physical modeling synthesis software “Genesis” (ACROE, Grenoble, France).

After Corona where did we go? Forward or in a (nonlinear) ring?

One Sound (2024)

The Japanese composer Toru Takemitsu was inspired by the mystic “ma” of zen buddhism and transformed it into the term “One Sound” - to signify a musical and perceptive entity of pitch, tonecolor and expression. A single low bamboo flute tone in all its detailed splendor is recorded to shape a pitch, a tone colour, a spectrum, a gesture, a space, a life journey into one sound.