

" Ambisonics-Xchange Concert"

19.5.2008 - 20h

Institute of Electronic Music and Acoustics

IEM-CUBE, Inffeldgasse 10/II, 8010 Graz, Austria

In connection with the Ambisonics Xchange meeting for exchanging ideas on distribution, dissimination, streaming and perfoming Ambisonics art between different implementations of Ambisonics systems, a concert will be prepared including works from Martin Neukom and Jan Schachner.

program:

martin neukom: studien 18 (bandstücke in ambisonics 2D, 5. Ordnung)

- break -

Jan Schachner: Live Performance

in Studie 18, Neukom takes a natural and mathematical phenomenon, the golden ratio, as the basis for the patterns in his thirteen studies, all 3.19 minutes in length. The golden ratio, a mathematical constant, is at the centre of many aspects of beauty and regularity in nature, science, art and architecture, as well as being a core component of the minimalism, preciseness and refined aesthetics of Neukom's compositions. The golden ratio has fascinated many artists and scientists over the past 2400 years, from Leonardo da Vinci to Erik Satie, who has used the golden ratio in many of his compositions. Studie 18 is being published as the first work on domizil in mp3 surround format.

In the 18.x studies, series of sounds are arranged regularly in space and in the parametric sound space. The rules that generate pitches, spectra, time and location of the individual sounds are very simple but are chosen in such a way that structures emerge out of the regular stream. In all the studies, the organization of the pitches is the same: it follows the same principle as the arrangement of the seeds, leaves or thorns of certain plants. The arrangement of sound in space is realized with the Ambisonics surround system. In the different studies, duration, loudness, spectrum, location and movement of the individual sounds and various parameters of the arrangement of the pitches and of the density are varied.

Martin Neukom was born in 1956. He studied musicology, mathematics und psychology at the University of Zurich, music theory at the Musikhochschule Zürich and choral conducting at the Kantorenschule Zürich. He works as a teacher of music theory and as a composer. He is engaged in sound synthesis and composition with computers. He was commissioned by the HMT (Hochschule Musik und Theater Zürich) to write the book "Signale, Systeme und Klangsynthese - Grundlagen der Computermusik", which was accepted as his doctoral thesis by the University of Zurich. He is head of the Computer Music department at the Institute for Computer Music and Sound Technology ICST.

Jan Schachner

Doublebass-player, composer and digital artist. Active in electronic and improvised music, jazz and contemporary music, performance and installation art. Music for chamber-ensembles, theatre and film. Main focus on works combining digital sound and images, abstract graphics and digital video, electro-acoustic music or mixed-media projects for the stage and in installations.

Invited as guest-artist and lecturer to various cultural and academic institutions. installations, performances and concerts in galleries, clubs and at festivals throughout Europe, North America and Japan.

Studies in contrabass and composition. Diploma as professional musician from lucerne jazz school majoring in contrabass. (1994)

Master in digital arts (european media masters) from pompeu fabra university in barcelona/spain. (2002).





