



11th International Conference on Digital Audio Effects DAFX-08

Welcome Reception Concert

by Helsinki Mobile Phone Orchestra

Monday 1 September 2008
18:00
Odeion Hall
Helsinki University of Technology

PROGRAM

PROGRAM 25'00

Mandala 8 – Greg Schiemer
TamaG – Georg Essl
Orbits: Ready-made No. 4 – Jonathan Middleton
Phones and the Fury – Jeff Cooper and Henri Penttinen
Drone Out – Ge Wang

Helsinki Mobile Phone Orchestra

Ensemble
Tapani Lehtimäki
Raine Kajastila
Henna Tahvanainen
Tuuli Luoma
Tuomo Raitio
Julia Turku
Olli Santala
Antti Jylhä
Henri Penttinen
Mikko Ojanen

Directors
Henri Penttinen
Antti Jylhä

Mandala 8 – Greg Schiemer

Mandala 8 is the latest in a series of works for the Pocket Gamelan. In performance phones are swung to produce Doppler shift or used as remote control devices to affect sound made by flying phones. The music uses a 35-note-per-octave microtonal scale devised by contemporary tuning theorist Erv Wilson.

TamaG – Georg Essl

TamaG is a piece that explores the boundary of projecting the humane onto mobile devices and at the same time display the fact that they are deeply mechanical and artificial. It explores the question how much control we have in the interaction with these devices or if the device itself at times controls us. The piece works with the tension between these positions and crosses the desirable and the alarming, the human voice with mechanical noise. The alarming effect has a social quality and spreads between the performers. The sounding algorithm is the non-linear circle map which is used in easier-to-control and hard-to-control regimes to evoke the effects of control and desirability on the one hand the loss of control and mechanistic function on the other hand.

Orbits: Ready-made No. 4 – Jonathan Middleton

Orbits: Ready-made No. 4 is a collaborative work by Jonathan Middleton and Henri Penttinen. Orbits was composed from a harmonograph designs based on the ratio 5:3 or the interval of a major sixth. The melodies were combined in a canonic fashion to create an ethereal texture. In this collaboration Jonathan provides the pitch and durations and Henri provides the color palette.

Phones and the fury – Jeff Cooper and Henri Penttinen

Phones and the fury explores the possibilities to create rhythmic and melodic patterns with 8-12 phones. Each phone has a set of loops that can be started/stopped. Also, the volume and the speed of the samples are controlled by the orientation of the phone.

Drone Out – Ge Wang

This piece explores the depth of sonic space that can be formed by an ensemble of mobile phone players. Each phone uses one of various FM drone setting and the players slowly vary modulation. This creates a coherent soundscape that fills the room. By difference in individual gestures beating is induced and the sensed sound often is perceived to be very rich despite the limited bandwidth of mobile devices.

BIOS

Georg Essl is currently Senior Research Scientist at Deutsche Telekom Laboratories at TU-Berlin, Germany. He works on mobile interaction, new interfaces for musical expression and sound synthesis algorithms that are abstract mathematical or physical models. After he received his Ph.D. in Computer Science at Princeton University under the supervision of Perry Cook he served on the faculty of the University of Florida and worked at the MIT Media Lab Europe in Dublin before joining T-Labs.

Antti Jylhä received the M.Sc. degree in telecommunications from Helsinki University of Technology in 2007. He is currently working in the same institute as a researcher and pursuing a doctoral degree in acoustics and audio signal processing. His current research interests include auditory and multi-modal interfaces in human-computer interaction, and modeling and analysis of multiple interacting sound sources. He has a long history in (un)popular music both as a performer and a composer, and has a strong interest in new technologies for musical expression.

Jonathan Middleton is the Assistant Professor of Theory and Composition at Eastern Washington University. He teaches undergraduate and graduate courses in composition, counterpoint, theory, orchestration, and computer music. Dr. Middleton has studied composition with numerous teachers including Fred Lerdahl, Jonathan Kramer, Emma Lou Diemer, William Kraft, Frederic Rzewski, Ann Kearns, Daniel Warner, Peter Golub and two Pulitzer Prize winners Roger Reynolds and Lewis Spratlan. He also studied twentieth century compositional techniques with Kyle Gann and Tristan Murail. He obtained his Doctor of Musical Arts in 1999 from Columbia University where he was an Andrew W. Mellon Fellow at the School of the Arts. His creative interests include spontaneous approaches to composition through stream of consciousness and algorithmic composition. Dr. Middleton's music has been performed throughout the Pacific Northwest and many areas of the U.S. and Europe. In 2000, Dr. Middleton became Washington State's "Composer of the Year," an award sponsored by the Washington State Music Teachers Association. In 2004, he was awarded a regionally competitive grant to develop a Web-based application to explore algorithmic composition and interdisciplinary learning: <http://musicalgorithms.ewu.edu/>. The program provides a creative environment where composers can create music from integer sequences and DNA. In 2005 he completed the first movement of Redwoods Symphony, a work that uses themes created from DNA of redwood trees. The first movement of Redwoods Symphony has been recorded by the Kiev Philharmonic under the direction of Robert Winstin. The recording will be available on ERM Media's "Masterworks of the New Era" vol. 11. The "musicalgorithms program was also used to complete Dreaming Among Thermal Pools and Concentric Spirals, which will be available on "Soak," sold through CD Baby (www.cdbaby.com) and iTunes.

Henri Penttinen was born in Espoo, Finland, in 1975. He completed his M.Sc. and PhD (Dr. Tech.) degrees in Electrical Engineering at the Helsinki University of Technology (TKK) in 2002 and 2006, respectively. He conducted his studies and teaches about digital signal processors and audio processing at the Department of Signal Processing and Acoustics (until 2007 known as Laboratory of Acoustics and Signal Processing) at TKK. Dr. Penttinen was a visiting scholar at Center for Computer Research in Music and Acoustics (CCRMA), Stanford University, during 2007 and 2008. His main research interests are sound synthesis, signal processing algorithms, musical acoustics, real-time audio applications in mobile environments. He is one of the co-founders and directors, with Georg Essl and Ge Wang, of the Mobile Phone Orchestra of CCRMA (MoPhO). He is also the co-inventor, with Jaakko Prättälä, of the electro-acoustic bottle (eBottle). His electro-acoustic pieces have been performed in Finland, in the USA, and Cuba.

Greg Schiemer is an Australian composer and instrument-builder whose work has involved the development of new electronic musical instruments for over three decades. His most recent design, the Pocket Gamelan, is a collection of mobile phones reprogrammed as performing instruments that allow groups of non-experts to play music.

Ge Wang received his B.S. in Computer Science in 2000 from Duke University, PhD in Computer Science (advisor Perry Cook) in 2008 from Princeton University, and is currently an assistant professor at Stanford University in the Center for Computer Research in Music and Acoustics (CCRMA). His research interests include interactive software systems for computer music, programming languages, sound synthesis and analysis, music information retrieval, new performance ensembles (e.g., laptop orchestras) and paradigms (e.g., live coding), visualization, interfaces for human-computer interaction, interactive audio over networks, and methodologies for education at the intersection of computer science and music. Ge is the chief architect of the Chuck audio programming language and the Audicle environment. He was a founding developer and co-director of the Princeton Laptop Orchestra (PLOrk), the founder and director of the Stanford Laptop Orchestra (SLOrk), and a co-creator of the TAPESTREA sound design environment. Ge composes and performs via various electro-acoustic and computer-mediated means.



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