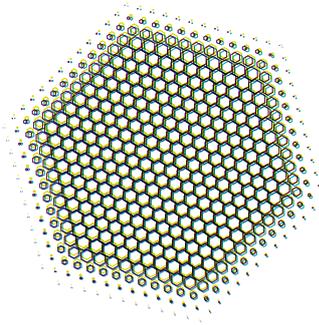# 4FOR8

TAI STUDIO — CONCERT

Welcome

The TAI Studio of the Media Lab provides a framework for scientific and artistic research on tangible and auditory interfaces between digital media and the physical realm. Researchers as well as students of the media department are invited to share their knowledge and competencies in order to creatively work on their ideas.

Today, we are happy to have the second 4fo8 concert. Enjoy!

Till Bovermann

Program

- » 'all the chords in the keys of c' by Tom Hall
- » Space Bass?! by Callum Goddard
- » Convoluted creatures by Juan Duarte
- » Rooms of Elements by Paola Livorsi
- » \ch1p1n1erpre1a110n by Till Bovermann
- » 4>8>24>8>4 by Julian Parker
- » Ice cream by Markus Koistinen
- » I am not sitting in a room by Archontis Politis and Symeon Delikaris-Manias
- » Awakening of the Landscape by Aki Päivärinne
- » "2.9>r<3.9" by Simon Lysander Overstall
- » Teleportation by Tommi Koskinen

Live performances

- » GestureWatch - Untitled #1 by Chi-Hsia Lai
- » CJJT by JCTJ

Sonido Oriente (aka) Juan Duarte: Convoluted creatures

This is a live performance that represents an artificial environment populated with sound creatures. It is controlled with a table of fiducial objects that works as an interface to control synthesis, and sound location for instruments. The sequence of how objects are performed is improvised, in order to creates a plunder phonic & chaotic experience.

'Sonido Oriente' is one of my sound projects inspired in the lo-fi sound systems in Mexico City, that merge several layers of old tapes of tropical music, making to humble monster sized speakers that shake walls around several blocks around. On the other side my background in audiovisual post production, has developed projects from radio broadcast to experimental live cinema. Nowadays im doing my MA Degree in New Media, in search for develop some projects around the idea of Participatory Composition.

Markus Koistinen: Ice cream

"Ice cream" is a live performance exploring concert space artifacts.

Frequency modulated sound material is simultaneously played through loudspeakers and captured with microphones.

Applying demodulation process to captured audio reveals artifacts in concert space dimensions and modulated noises from audience.

Markus Koistinen (born 1982). Markus is a wood technician - musician from Helsinki, working at Aalto University wood workshop.

With history in lo-fi beat making and sound design, Markus is currently interested in experimenting with organ pipes and sound manipulation through acoustic spaces.

Since 2002 Markus has released records and performed live under various aliases, including Earkus and Dubbing Mixers.

Simon Lysander Overstall: "2.9>r<3.9"

This is a sonification of the logistic map or logistic equation programmed in Csound. It uses the formula: $X_{next} = r \cdot X_{prior} \cdot (1 - X_{prior})$. Over the course of the duration "r" increases from ≈ 2.9 to 3.9 exploring the bifurcation patterns and the fractal and chaotic nature of the output.

Simon Lysander Overstall is an artist working in digital arts and new media, in particular audio art and music. He has a BFA in Music Composition from the School for Contemporary Arts at Simon Fraser University, and an Associate in Music (Jazz) Diploma from Malaspina University-College. He has produced sound designs and compositions for dance, theatre, and installations. In addition, he designs software for both performance systems and installations. Currently, he is working on his MA in Sound in New Media at Aalto University in Helsinki.

Tommi Koskinen: Teleportation

Experimental and absurd 4 minute voyage that takes you to the heart of many places and sources of field recordings.

Tommi Koskinen is a musician, sound designer and media artist from Helsinki, Finland. His background is in computer science, media technology and design and he currently studies in the Sound in New Media MA program in MediaLab Helsinki.

Paola Livorsi: Rooms of Elements

Rooms of Elements (2006-07) is a set of electronic sounds especially conceived for the Nordic textile art exhibition « 1 : ?», Helsinki Forum Box gallery 2006, Trondheim Konstmuseum and Reykjavik ASI Museum 2007.

The philosophical issue involved in the title made me turn rather to our world than to any metaphysical idea. Reality may be closer to poetry than pure imagination. Human beings can experience infinite when in contact with nature. Nature sounds have been worked out with a program, Modalys, which simulate surfaces made of different materials (different kinds of metal, wood, skin and so on). Further ideas came from the collaboration with Kristiina Wiherheimo and Agneta Hobin: in Fiery are present recordings of silk cloths and little glass objects, from Kristiina?s materials; in Watery the elements used are mostly mica, steel and bronze, from Agneta?s works. Earthly has been inspired by the warm, natural fibres and colours of Marianne Mannsåker?s tapestries: there appears also the fourth element, air, and human voices (from Eskimo?s throat riddles). Human beings are bridges between earth and air.

The relation with space has been central in this work: the sounds were played in three different rooms, in different combinations according to the main element of the room (water, fire, earth/air).

Paola Livorsi free-lance composer/sound artist, lives and works in Helsinki since 2001.

After the BA from the University of Turin (1994) and the diploma in composition (1996), she followed the computer music classes of Philippe Manoury at the Conservatory of Lyon.

She attended masterclasses at the Siena Chigiana Academy with Franco Donatoni (1995), in Novara with György Ligeti (1996), in Paris at IRCAM (1997-2001).

In 1997 she studied at the Sibelius Academy in Helsinki with Kaija Saariaho and Jean-Baptiste Barrière, with a CIMO grant. In 1999-2001 she went to Paris to follow the computer music courses at CCMIX (Centre de Création Musicale Iannis Xenakis) and IRCAM.

Music by Livorsi has been performed in Paris (Agora 2002), Helsinki (Musica Nova 2003, 2011), Saarbrücken (Musik im 21. Jahrhundert 2003, Klangforum Wien), Takefu (Japan, 2004-05, Arditti Quartet), Berlin (März Musik 2007, DSO Orchestra), Venice (Biennale 2007), Turin (De Sono 2010, Quatuor Diotima) and Milan

(Milano Musica 2011).

On May 7th at 6 pm her work Lamenti will be premièred by the Helsinki Chamber Choir at Musiikkitalo.

She is interested in collaborating with other arts, as in the projects « Rooms of Elements » (Northern textile art exhibition « 1 : ? », 2006-07) and « Self-portraits, silent voices » (Silvia Reichenbach photography, Saila Susiluoto prose poems, 2011-12). She is a member of MUU ry.

Her work has been acknowledged by the Finnish Cultural Foundation (2004-05) and the Arts Council of Finland (2006, 2010). Since 1997 she is correspondent from abroad for the Italian review « Il Giornale della Musica ».

Tom Hall:
all the chords in the keys of c

Much music is the result of choosing from among many possibilities of musical material, other music works through all the possibilities within given constraints. 'all the chords in the keys of c' presents the totality of available notes and chords within the C major and minor keys (in the sense of pitch-class collections). A temporal constraint is that these combinatoric references to tonality are heard in a fixed sequence as determined by the 'powersets' algorithm within the software SuperCollider. In its multi-channel form, the chords are spaced around the available channels of audio according to the position of their component notes on a chromatically ordered 'pitch clock'. This aspect of the piece is displayed visually using PitchCircle, a custom made SuperCollider class. (This visual presentation also embeds a version of Alberto de Campo's useful SpatioScope class). 'all the chords in the keys of c' is a live algorithmic composition in which each performance is slightly different. An earlier stereo version of this piece was first performed at the 2009 SuperCollider Symposium Kickoff Show, The Tank, New York, NY.

Tom Hall is a Cambridge-based Australian composer, musicologist and performer. With interests in electroacoustic music combing composed, algorithmic and improvisatory elements using multichannel sound, Tom likes to integrate principles from the 'slow code movement' into collaborative and practice-based research projects. Musicological interests include early tape, electronic and computer music, and the music of Morton Feldman. Tom is a lecturer in creative music technology at Anglia Ruskin University. http://www.ludions.com

Aki Päivärinne:
Awakening of the Landscape

I wanted to recreate the sensation of waking up in the moving train and then felling asleep again. This piece simulates the moving landscape behind the frames of train window.

I am a Helsinki-based freelance composer, sound & interaction designer and saxophonist with a broad and international experience of live- as well as recorded performance. Currently I am doing my master degrees in Sound in New Media at the Aalto University and Sound

design at the Theatre Academy. I have played and collaborated with various performance artists; choreographers, dancers, film makers and musicians and have appeared on the sax on various albums. Lately, I have found it increasingly interesting to work with sound in an interactive relationship with movement and choreography on multimodal platforms. In my art, I am inspired by my kids, nature, architecture, media art, people, love, contemporary dance and visual art forms. I am keen on continuously exploring new ways of expression.

Julian Parker:
4>8>24>8>4

4>8>24>8>4 is a piece about analogies. The work started with a set of B-Format ambisonic recordings which were cut and arranged in the style of musique concrète. This collage was then decomposed into 8 individual spatially distributed channels. Various kinds of time-varying statistics and event locations were derived from these 8 channels, converted to control voltages and triggers, and used to control the synthesis of 8 parallel compositions realised vs analog modular synthesizer. The intention is that when performed simultaneously over an 8 channel loudspeaker system, the 8 compositions merge to form a larger composition whose temporal and spatial structure is dictated by the structure of the original recordings.

Julian Parker is a researcher and doctoral student at Aalto University's Department of Signal Processing and Acoustics. In a previous life

he graduated from the University of Cambridge, having studied Astrophysics. His research focuses on trying to inject the unpredictability, serendipity and emergent behaviours of analog processes into musical DSP systems. His artistic work within the academic realm strives towards a form of intuitive and holistic composition by employing generative processes. He also performs and records improvised electronic music under the name 'Lapin'.

Callum Goddard:
Space Bass?!

Is it a bird? is is a plane? No. This is a solo bass performance that has sounds filling the whole room. How you ask? Some supercollider magic, semiotic conceptual interpretations and creative liberties. Why? Because why not?... seriously?! Ok...there is this idea of space within musical semiotics, also can be argues is inherent within cognition and the music composition process - seems logical to try and physically extract this information and use it to position sounds and the music in real space. Idea to creating different experiences provide other perspectives on the sound etc. etc. etc.

Musically Callum has played bass for 11 odd years, within many bands within many genres notably recording with Overreact on the band's debut album ambulance. The past couple of years he began experimenting with more solo compositional approaches to the bass guitar and acoustic performance, regularly playing open mic nights with local singer songwriters

in the city of York before moving to Finland to continue his studies. Currently Callum is a doctoral researcher within the SOPI research group after graduating from University of York as an Electronic Engineer with a primary focus on music technology. This focus has narrowed into methods of interaction with sound and music through technology. When preforming the knowledge and techniques gained through his educational studies are applied within musical compositions and performances - sometimes subtly, sometimes not. Cool.

'He's pretty Funky' - Till Bovermann

Till Bovermann: Chip interpretation 2r11

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01100101  01110011  01100011  01110010  01101001
01110000  01110100  01101001  01101111  01101110
00100000  01100001  01110110  01100001  01101001
01101100  01100001  01100010  01101100  01100101
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Till Bovermann is a researcher on tangible and auditory interfaces at Media Lab Helsinki. In his artistic work he often deals with the relationship between digital and physical realms. He also develops software, mostly in SuperCollider.

Archontis Politis and Symeon Delikaris-Manias: I am not sitting in a room

The current composition reinterprets and enhances the seminal work of Alvin Lucier on sound, space and feedback "I am sitting in a room" (1969), by using new synthetic processes that simulate the generation of the original work. The original work was realised by reading a piece of text and recording the result at some position of the room in a magnetic tape recorder. The recording was then played back and subsequently re-recorded. The process can be repeated for an arbitrary length. Gradually, the natural resonances and reverberation of the room begin to affect the recording to such an extent that the speech becomes intelligible and what remains is the ringing of the resonances. The original text was in itself a functional description of the process.

Even though the gradual spectral morphing of the recording shows effectively the effect of reverberation augmented through feedback, there are certain sonic dimensions that are lost in the process, such as the distribution of the reverberation with direction which gives a true sense of space. In our proposition we switch the focus from the feedback to the reverberation itself. The original concept is transformed into a virtual domain where: a) physical spaces can be interchanged at will, b) the reverberation of the room is captured with complete spatial information, c) the audio is enhanced by

correctly distributing it to multiple loudspeakers, and d) the main direction of the incoming sound can be spatialised at will.

The original concept can be represented as a feedback loop, where between the input and feedback there is the modification that the room enforces on the speech. In our rendition, the process is re-imagined as open loop where the sound is traveling sequentially across an infinite number of different spaces, connected through a portal, and the character of each one of them is imprinted on the original sonic event.

Archontis Politis studied obtained a MEng degree in civil engineering along with a degree in classical music theory and composition, both in Thessaloniki, Greece, in 2006. Aiming to combine engineering and sound, he continued with studies in acoustics, in which he holds an MSc degree in from the University of Southampton, UK, completed in 2008. From 2008-2010, he worked as a researcher in architectural auralisation and audio virtual reality in a joint collaboration between the Digital Design Studio of Glasgow School of Arts and Arup Acoustics.

From 2010 until present, he is pursuing his doctoral degree in spatial audio recording and reproduction methods with applications to sound design, auralisation and sonification, in the Department of Signal Processing and Acoustics, Aalto University, Finland.

Symeon Delikaris-Manias (S-DM) Since 2011 S-DM is a researcher in spatial audio in the Department of Signal Processing and Acoustics, Aalto university. His research interests are spatial sound recording, processing and reproduction using parametric audio coding. He holds an M.Sc. in sound and vibration from the ISVR, Southampton and a B.Sc. in mathematics from the university of Crete. During his master degree he studied the reproduction of binaural soundfields using only a pair of loudspeakers.

After finishing his studies and during the period between 2008-2010, he lived in London and worked as an acoustician for PGacoustics. One of his main responsibilities was concert hall modeling and auralization using the ambisonics technology and the 3DAudioscape spatialization system. In 2010 he moved to France in the European centre for Virtual Reality in Brest in the research and development department being responsible for surround sound recording techniques with microphone arrays, funded by the national engineering school of Brest and France Telekom's Orange Labs.

He is a trumpet player in Biri Biri band (biribiriband.com <http://www.biribiriband.com/>). Biri Biri is an eight member band who all met in Crete in 2003. Soon after that, they started performing in Crete and all over Greece with more than 80 gigs. Their debut album was released in 2010 under Spinalonga Records in Athens. Since last year he uses Supercollider for composing electronic music mostly for multichannel speaker layouts.

Most important works of S-DM are:

1. documentary filming and recording in Phoenix Halle, Dortmund, 2009: (teaser: http://goo.gl/T0Ffl)

2. surround recordings and processing using microphone arrays for a ship simulator in Toulon, France, 2010: (http://goo.gl/YDR2g)

3. production and surround renderings for the audience09 dark cinema festival in Red House Arts Centre, New York and Delhi, 2009

4. surround sound installation with the Obscurity, Braunarts in Trafalgar square in London, 2009: (http://goo.gl/Zm3R7)

Chi-Hsia Lai:
GestureWatch - Untitled #1
For objects and live
electronics.

GestureWatch – Untitled #1 is a structured improvisation and sound performance work for a soloist. The performer wears a custom-made wristwatch-like wireless device, GestureWatch that enables the performer to have full control of the live electronics and musical structure. This work is centred on the performance design, which explores the performance space beyond the idea of the traditional stage setup by taking body, movement, space and time into account. The picked up acoustic sound is processed and organised in real-time. With the possibilities of turning musical gestures into control parameters, the body position and movement of the soloist become significant to the process of music making. For this piece, the soloist is free to choose anything to play and make sounds with.

Special thanks to industrial designer, Ying-Ju

Percussionist/Media Artist, Chi-Hsia Lai was born in Taichung, Taiwan. Chi-Hsia has a strong interest in expanding her performance experience beyond the conventional instrument playing. After completing her undergraduate studies in Percussion Performance, Chi-Hsia undertook postgraduate studies in New Media Art at ANU in Australia. Her research focused on the convergence of percussion performance practice and Media technology. Chi-Hsia's new media works have been performed and presented in Australia, USA, Portugal, Switzerland, Paris, Helsinki and Taiwan. Moreover, she was Artist-in-Residence at Taipei Artist Village in 2010, and she has received grants for her collaborative media projects from Australia and Finland. Currently, Chi-Hsia is a doctoral student at Media Lab, Aalto University School of Arts, Design and Architecture in Helsinki, and her research explores sound and physical interaction to creating an engaging media performance space.

JCTJ:
CJJT

4 players, 8 speakers, some modules.

JCTJ is an on the fly performance group established in mid 2012.