

## Sunday May 2

### Papers & presentations

#### **General-purpose Ambisonic playback systems for electroacoustic concerts - a practical approach** - *Jörn Nettingsmeier*

Concerts of electroacoustic music usually feature works written for various speaker layouts. Except in the most luxurious of circumstances, this implies compromises in placement, frequent interruptions of the concert experience to relocate speakers, and/or errorprone equipment rewiring or reconfiguration during the concert. To overcome this, an Ambisonic higherorder playback system can be used to create virtual speakers at any position as mandated by the compositions. As a bonus, the performer can then be given realtime control of the source positions in addition to their levels, increasing the creative freedom of live sound diffusion. Deployments at LAC 2009 and the 2009 DEGEM concert at musikFabrik in Cologne have yielded very good results and been met with general approval. More detailed listening tests are scheduled and will be reported upon.

#### **How the Real-Time Kernel Helps Audio and Video Applications** - *John Kacur*

Many of the Linux Distributions that are dedicated to audio and video make use of the Linux realtime kernel. This paper explores some of the advantages and disadvantage of using real time. It explains how the realtime kernel achieves lowlatency and shows how userspace can take advantage of realtime capabilities. This talk is presented by one of the realtime kernel programmers, and gives an overview of the realtime kernel for audio and video.

#### **Indonesian Gamelan / Creative Commons** - *Maarten Brinkerink*

A presentation about restoring traditional Indonesian folk music and Gamelan in particular.

#### **Re-Generating Stockhausen's "Studie II" in Csound. A Study About Algorithmic Composition** - *Joachim Heintz*

Stockhausen's "Studie II" (1954) is one of the classical works of electronic music. Written at a time when Computers played no role in the production of sound, it exhibits a way of composing which is quite similar to programming. This can be shown by re-programming the complete piece just with the input of five numbers. Beside this reduction - which is made in Csound - the compositorial decisions come to the fore, showing a flexibility and variability of algorithms which can be inspiring and challenging still today.

Using open source music software to teach live electronics in pre-college music education - *Hans Roels*

A basic course of live electronics is needed in pre-college music education to enable children to learn how to perform on a digital musical instrument. This paper describes the basic components of such a live electronic course, examines whether open source music software is suited to realize these components and finally presents Abunch, a library in Pure Data created by the author, as a solution for the potential educational disadvantages of open source music software.

#### **Education on music and technology** - *Jeroen van Iterson, Marcel Wierckx, Marc Groenewegen*

We describe the development and the maintenance of a program for a professional education at the Utrecht School of Music and Technology. The program covers most of the field and offers various degrees up to PhD level. The program was developed over the last 23 years and is updated on a yearly basis. We deliver about 80 graduates every year to work, survive and keep up with developments. 92 % of our students develop a healthy career after graduation. Music technology as a field of studies is in constant and rapid development and because of that the characteristics of the professional in the field are changing very rapidly too. For this reason we have built in mechanisms to enforce regular updates of the program and to develop the knowledge and skills of the teaching staff.

#### **Open Media / Creative Commons** - *Björn Wijers*

### Workshops

#### **Supercollider beginners** - *Jan Truttschler, Marije Baalman*

Take the first steps in SuperCollider!

SuperCollider has been up and running on Linux since shortly after it was released as open source software. In the past two years, it has become really easy to install on Linux, and is packaged in distributions such as PlanetCCRMA and Pure:Dyne. On Linux there is a choice between three editors: emacs, vim and gedit.

#### **Supercollider advanced** - *Jan Truttschler, Marije Baalman*

For more advanced users of SuperCollider we offer another workshop covering specific advanced topics. Topics could include:

- \* Input and output to devices or other programs
- \* Patterns (a different paradigm of composing based on musical sequences)
- \* Extending SuperCollider (writing your own classes)
- \* Livecoding with SuperCollider
- \* Using the JITLib

For this workshop, please sign up, and let us know what topics you would like to see covered.

#### **Using ambisonics as a production format in ardour** - *Jörn Nettingsmeier*

### Other activities

#### **Key Signing I** - *Robin Gareus*

#### **Tools** - *Yann Orlarey*

An expert group performs a comparative study of several sound processing tools. Tools possibly included in the study: Pure Data, Supercollider, Csound, ChucK, FAUST, CLAM, Nyquist, Common Music and Fluxa. The outcome is presented later that day.