Programm

14.00 Uhr
Albert Gräf (Universität Mainz):
Functional Multimedia Programming with Q

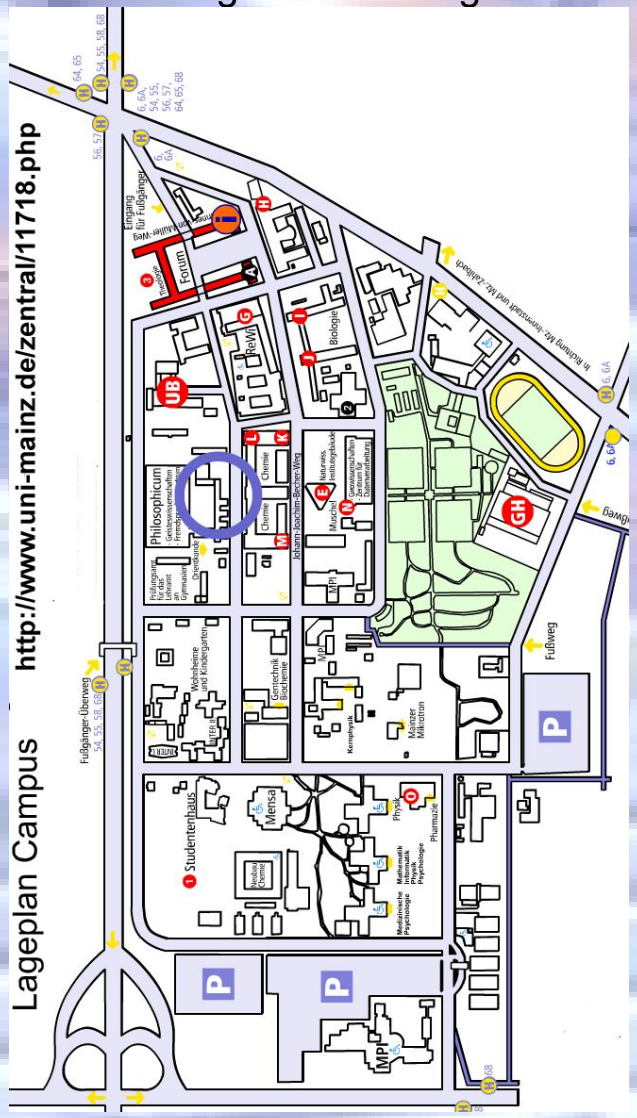
15.00 Uhr
Yann Orlarey (Grame):
FAUST

Kaffeepause

16.00 Uhr
Stefan Kersten (TU Berlin):
SuperCollider

18.00 Uhr
Ende

Wegbeschreibung



www.musikinformatik.uni-mainz.de

IAK Musik-& Kunstinformatik

Workshop:

Modern Computer Music and DSP Programming Tools

Ort:

Johannes Gutenberg-Universität Mainz,
Philosophicum, Jakob-Welder-Weg 18,
Alter Fakultätssaal
(Raum-Nr. P 01-185)

Zeit

Dienstag, 20.12.2005,
14.00 bis 18.00 Uhr

Teilnahme nur nach Voranmeldung
- keine Teilnahmegebühr -

Anmeldung
Tel.: 06131/3925142
Email: volke@uni-mainz.de

Workshop-Sprache: Englisch

14.00 Uhr
Albert Gräf: Functional Multimedia Programming with Q

This presentation gives a hands-on introduction to the equational programming language “Q”, and some of its facilities for multimedia programming. Q can best be described as a kind of modern-style “functional scripting language.” Q's multimedia library comprises interfaces to Grame's MidiShare and Faust, as well as an OSC-based SuperCollider interface, and thus provides the necessary tools to create advanced computer music applications in the context of a very-high-level, nonimperative programming language.

Albert Gräf is head of the Dept. of Musicinformatics at the Institute of Musicology of the Johannes Gutenberg University Mainz. His research interests include the mathematical theory of music and advanced functional programming tools for computer music and other real-time multimedia applications.

15.00 Uhr
Yann Orlarey: FAUST

FAUST (Functional AUdio STreams) is a programming language for real-time signal processing and synthesis that targets sample-level high-performance signal processing applications and audio plugins. FAUST proposes an innovative approach to signal processing that combines two programming models: functional programming and block diagram composition, in a highly structured textual syntax that can be compiled into efficient C/C++ code. The presentation will give an overview of the main features of the language and its compiler through several simple and practical examples.

Composer and researcher in computer music, *Yann Orlarey* is currently the Scientific Director of Grame - Centre National de Création Musicale in France. His main research interests are music programming languages, with a particular focus on lambda calculus and functional programming, and real-time distributed systems. He is the author and coauthor of various musical softwares and systems including MidiShare.

16.00 Uhr
Stefan Kersten: SuperCollider

SuperCollider is a real-time synthesis engine and object oriented composition language. This course introduces the architecture and the working environment on OSX and Linux and provides an introduction to basic synthesis techniques and sequencing strategies.

Stefan Kersten (*1978) is currently studying communication and computer science at the Technical University of Berlin. He has ported SuperCollider to Linux and is the author of SCUM, SuperCollider's GUI module for Linux. He uses SuperCollider for most of his projects in research and music.