

- ▷ *Étienne Corteel*
- 16:40 Detection of Room Reflections from a Binaural Room Impulse Response
- ▷ *Sampo Vesa and Tapio Lokki*
- 17:00 Archaeological Acoustic Space Measurement for Convolution Reverberation and Auralization Applications
- ▷ *Damian T. Murphy*

19:00 Banquet / Social Event

Day 3 Wednesday, Sept. 20, 2006

08:00 Registrations

09:00 Keynote 3:

- A Meta-Analysis of Acoustic Correlates of Timbre Dimensions
- ▷ *Stephen McAdams* (CIRMMT, McGill University)
 - [in collaboration with *Bruno Giordano* (CIRMMT), *Patrick Susini*, *Geoffroy Peeters* (IRCAM), and *Vincent Rioux* (Confluences, Maison des Arts Urbains)]

Session 9 - Source Separation

- ▷ *Session chair: Robert Hoeldrich*
- 10:00 Improved Cocktail-Party Processing
- ▷ *Alexis Favrot, Markus Erne and Christof Faller*
- 10:20 A Source Localization/Separation/Respatialization System Based on Unsupervised Classification of Interaural Cues
- ▷ *Joan Mouba and Sylvain Marchand*

10:40 DAFx-07 in Bordeaux, France

- ▷ *Sylvain Marchand*

11:00 Coffee/Tea Break

Session 10 - Audio Analysis and Low Level Features 2

- ▷ *Session chair: Geoffroy Peeters*
- 11:20 Assessing the Quality of the Extraction and Tracking of Sinusoidal Components: Towards an Evaluation Methodology
- ▷ *Mathieu Lagrange and Sylvain Marchand*
- 11:40 Sinusoidal Extraction Using an Efficient Implementation of a Multi-Resolution FFT
- ▷ *Karin Dressler*
- 12:00 High Accuracy Frame-by-Frame Non-Stationary Sinusoidal Modelling
- ▷ *Jeremy J. Wells and Damian T. Murphy*

12:20 Lunch & Poster Session 3

- P.1 Granular Resynthesis for Sound Unmixing
- ▷ *Gunnar Eisenberg and Thomas Sikora*
- P.2 Extraction and Removal of Percussive Sounds from Musical Recordings
- ▷ *John Usher*
- P.3 Representations of Audio Signals in Overcomplete Dictionaries: What is the Link Between Redundancy Factor and Coding Properties?

- ▷ *Emmanuel Ravelli and Laurent Daudet*
- P.4 A Spatial Interface for Audio and Music Production
- ▷ *Mike Wozniowski, Zack Settel and Jeremy R. Cooperstock*
- P.5 Streaming Frequency-Domain DAFx in Csound 5
- ▷ *Victor Lazzarini, Joe Timoney and Tom Lysaght*
- P.6 Real-Time Corpus-Based Concatenative Synthesis with CataRT
- ▷ *Diemo Schwarz, Grégory Beller, Bruno Verbrugge and Sam Britton*
- P.7 Multichannel Signal Representation in PWGLSynth
- ▷ *Mikael Laurson and Vesa Norilo*
- P.8 Using Faust for FPGA Programming
- ▷ *Robert Trausmuth, Christian Dusek and Yann Orlarey*

Session 11 - Audio Coding & Audio for Multimedia

- ▷ *Session chair: Caroline Traube*
- 14:20 Parametric Coding of Stereo Audio Based on Principal Component Analysis
- ▷ *Manuel Briand, David Virette and Nadine Martin*
- 14:40 Exact Discrete-Time Realization of a Dolby B Encoding/Decoding Architecture
- ▷ *Federico Avanzini and Federico Fontana*
- 15:00 Real-Time Bayesian GSM Buzz Removal
- ▷ *Han Lin and Simon Godsill*
- 15:20 Application of Raster Scanning Method to Image Sonification, Sound Visualization, Sound Analysis and Synthesis
- ▷ *Woon Seung Yeo and Jonathan Berger*

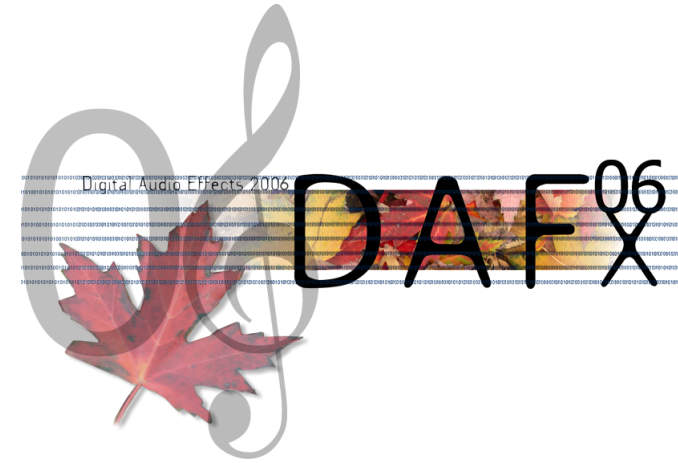
15:40 Coffee/Tea Break

Session 12 - Software Implementation

- ▷ *Session chair: Sean Ferguson*
- 16:00 Cecilia and TclCsound
- ▷ *Jean Piché and Victor Lazzarini*
- 16:20 A New Paradigm for Sound Design
- ▷ *Ananya Misra, Perry R. Cook and Ge Wang*
- 16:40 Sound Processing in OpenMusic
- ▷ *Jean Bresson*

Non-DAFx Related Free Events

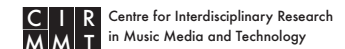
- Mid-autumn Harvest Moon Festival III, Sept. 20–22, 2006 (Concordia University).
- CONSONNES Talk: On the role of the vocal tract in clarinet breath attacks: Natural sounds analysis and model-based synthesis, *Philippe Guillemain*, Sept. 21, 11:00–12:00 (Music Tech, Room 521, Suite 500, 5th Floor, East Tower, 550 Sherbrooke St. W).
- CIRMMT Distinguished Lecture: Dimensional Analysis and Psycho-mechanics, *Antoine Chaigne*, Sept. 21, 2006, 16:30–18:00 (Clara Lichtenstein, Room C-209, 555 Sherbrooke St. W).



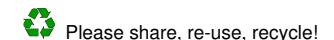
Program of the
9th International Conference
on Digital Audio Effects

Montreal, Quebec, Canada
Sept. 18–20, 2006

organized by the Music Technology Area



Last update: Sept. 2, 2006



About margin notes:

- × cancelled (1 item)
 - * moved (0 item)
-

Day 1 Monday, Sept. 18, 2006**07:30 Registrations****08:40 Welcome!****09:00 Keynote 1:**

- Sparse Time-Frequency Transforms and Applications
- ▷ *Bruno Torrèsani (LATP, Université de Provence, Marseille)*

Session 1 - Filter Design for Audio

- ▷ *Session chair: Udo Zölzer*

10:00 Discretization of the '59 Fender Bassman Tone Stack

- ▷ *David T. Yeh and Julius O. Smith*

10:20 On the Use of Volterra Series for Efficient Real-Time Simulations of Weakly Nonlinear Analog Audio Devices: Application to the Moog Ladder Filter

- ▷ *Thomas Hélie*

10:40 Robust Design of Very High-Order Allpass Dispersion Filters

- ▷ *Jonathan S. Abel and Julius O. Smith*

11:00 Coffee/Tea Break**Session 2 - Performance and Gestural Control**

- ▷ *Session chair: Jan Tro*

11:20 Consistency of Timbre Patterns in Expressive Music Performance

- ▷ *Mathieu Barthe, Richard Kronland-Martinet and Sølvi Ystad*

11:40 Real-Time Detection of Finger Picking Musical Structures

- ▷ *Dale E. Parson*

12:00 Using Visual Textures for Sonic Textures Production and Control

- ▷ *Jehan-Julien Filatriau, Daniel Arfib and Jean-Michel Couturier*

12:20 Lunch & Poster Session 1

P.1 Graphic Equalizer Design Using Higher-Order Recursive Filters

- ▷ *Martin Holters and Udo Zölzer*

P.2 Performance-Driven Control for Sample-Based Singing Voice Synthesis

- ▷ *Jordi Janer, Jordi Bonada and Merlijn Blaauw*

P.3 Parameterized Morphing as a Mapping Technique for Sound Synthesis

- ▷ *Chinmay Pendharkar, Michael Gurevich and Lonce Wyse*

P.4 Examining Design Goals of Digital Musical Instruments

- ▷ *Joseph Malloch, David Birnbaum, Elliot Sinyor and Marcelo M. Wanderley*

P.5 The Modified Chamberlin and Zölzer Filter Structures

- ▷ *Duane K. Wise*

P.6 Smooth and Safe Parameter Interpolation of Biquadratic Filters in Audio Applications

- ▷ *Victor Kalinichenko*

P.7 Identifying and Analyzing Relevant Characteristics of Dynamic Range Compression

- × ▷ *Andrés Cabrera*

P.8 X-Micks - Interactive Real-Time Content Based Audio Processing

- ▷ *Norbert Schnell, Diemo Schwarz and Remy Müller*

Session 3 - Sound Synthesis 1

- ▷ *Session chair: Georg Essl*

14:20 Dispersion Modeling in Waveguide Piano Synthesis Using Tunable Allpass Filters

- ▷ *Jukka Rauhala and Vesa Välimäki*

14:40 Prepared Piano Sound Synthesis

- ▷ *Stefan Bilbao and John ffitch*

15:00 Digital Synthesis Models of Clarinet-Like Instruments Including Nonlinear Losses in the Resonator

- ▷ *Philippe Guillemain and Jonathan Terroir*

15:20 A Stable Acoustic Impedance Model of the Clarinet using Digital Waveguides

- ▷ *Gary Scavone and Julius O. Smith*

15:40 Coffee/Tea Break**Session 4 - Audio Effects**

- ▷ *Session chair: Sylvain Marchand*

16:00 The Mellin Pizzicator

- ▷ *Antonio De Sena and Davide Rocchesso*

16:20 Fractal Modulation Effects

- ▷ *Gianpaolo Evangelista*

16:40 An Interdisciplinary Approach to Audio Effect Classification

- ▷ *Vincent Verfaillie, Catherine Guastavino and Caroline Traube*

17:30 Visit of CIRMMT and Music Tech**20:00 Concert**

Day 2 Tuesday, Sept. 19, 2006**08:00 Registrations****09:00 Keynote 2:**

Digital Audio Synthesis and Effects based on Physical Models

- ▷ *Julius O. Smith (CCRMA, Stanford University, Stanford)*

Session 5 - Perceptual Issues and Psychoacoustics

- ▷ *Session chair: Catherine Guastavino*

10:00 On the Dynamics of the Harpsichord and its Synthesis

- ▷ *Henri Penttinen*

10:20 Musical Sound Timbre: Verbal Description and Dimensions

- ▷ *Jan Štěpánek*

10:40 Musical Key Estimation of Audio Signal Based on Hidden Markov Modeling of Chroma Vectors

- ▷ *Geoffroy Peeters*

11:00 Coffee/Tea Break**Session 6 - Audio Analysis and Low Level Features 1**

- ▷ *Session chair: Gianpaolo Evangelista*

11:20 Onset Detection Revisited

- ▷ *Simon Dixon*

11:40 A New Analysis Method for Sinusoids+Noise Spectral Models

- ▷ *Guillaume Meurisse, Pierre Hanna and Sylvain Marchand*

12:00 Adaptive Noise Level Estimation

- ▷ *Chunghsin Yeh and Axel Röbel*

12:20 Lunch & Poster Session 2

P.1 Categories of Perception for Vibrato, Flange, and Stereo Chorus: Mapping Out the Musically Useful Ranges of Modulation Rate and Depth for Delay-Based Effects

- ▷ *William Martens and Marui, Atsushi*

P.2 Inter Genre Similarity Modeling for Automatic Music Genre Classification

- ▷ *Ulaş Bağcı and Engin Erzincan*

P.3 Variable Pre-Emphasis LPC for Modeling Vocal Effort in the Singing Voice

- ▷ *Karl I. Nordstrom and Peter F. Driessen*

P.4 Frequency-Dependent Boundary Condition for the 3-D Digital Waveguide Mesh

- ▷ *Antti Kelloniemi*

P.5 Some Physical Audio Effects

- ▷ *Edgar Berdahl and Julius O. Smith*

P.6 Table Lookup Oscillators Using Generic Integrated Wavetables

- ▷ *Günter Geiger*

P.7 Error Compensation in Modeling Time-Varying Sinusoids

- ▷ *Wen Xue and Mark Sandler*

P.8 A Stochastic State-Space Phase Vocoder for Synthesis of Roughness

- ▷ *Doug Van Nort and Philippe Depalle*

Session 7 - Sound Synthesis 2

- ▷ *Session chair: Gary Scavone*

14:20 Fast Additive Sound Synthesis Using Polynomials

- ▷ *Matthias Robine, Robert Strandh and Sylvain Marchand*

14:40 Synthesis by Arcs on the Unit Circle

- ▷ *Vittorio Cafagna and Domenico Vicinanza*

15:00 Circle Maps as a Simple Oscillators for Complex Behavior: II. Experiments

- ▷ *Georg Essl*

15:20 Feedback Implementation Within a Complex Event Generation System for Emergent Sonic Structures

- ▷ *Sinan Bökösöy*

15:40 Coffee/Tea Break**Session 8 - Spatialization**

- ▷ *Session chair: Stefan Bilbao*

16:00 Joint Acoustic Source Location and Orientation Estimation Using Sequential Monte Carlo

- ▷ *Maurice Fallon, Simon Godsill and Andrew Blake*

16:20 On the Use of Irregularly Spaced Loudspeaker Arrays for Wave Field Synthesis, Potential Impact on Spatial Aliasing Frequency