

Musical Acoustics Sessions (total six sessions, 50 abstracts)

1aMU Monday AM, 14 May 2012 **Room 228** (capacity 100-120)

Special Session: Asian string instruments (5)

Organizers: C. Waltham and T. Hua

1aMU1 09:40-10:00 (I) Acoustic Radiation from the Pipa and Yueqin, Chris Waltham et al.

1aMU2 10:00-10:20 (I) Measurement and analysis of sound radiation patterns of the chinese Ruan and the Yueqin, F. Pfeifle

1aMU3 10:20-10:40 (C) Tonal features of Chinese plucked string instruments extracted from constant-Q transform spectrum, J. Liu et al.

10:40-11:00 Coffee Break

1aMU4 11:00-11:20 (C) Tonal characteristics of a wooden resonance box, X. Wang et al.

1aMU5 11:20-11:40 (C) Sound Power Level Measurement of Chinese Bowed Stringed instrument, Gaoyinbanhu, N. Li et al.

2aMU Tuesday AM, 15 May 2012 **Room 228**

Special Session: Asian wind instruments (6)

Organizers: J. Cottingham, S. Yoshikawa, and Y. Wu

2aMU1 09:40-10:00 (I) The resonance hole with membrane; a distinctive feature of East Asian transverse flutes, A. Odaka

2aMU2 10:00-10:20 (I) Vibro-acoustic analysis of wind instruments with membranes on resonance Holes, T. Samejima et al.

2aMU3 10:20-10:40 (I) Relating the harmonic-rich sound of the Chinese flute (dizi) to the cubic nonlinearity of its membrane. Chen-Gia Tsai

10:40-11:00 Coffee Break

2aMU4 11:00-11:20 (I) Changes in acoustical design from ancient shakuhachi to modern shakuhachi S. Yoshikawa

2aMU5 11:20-11:40 (I) Sound production in Asian free reed mouth organs, J. P. Cottingham

2aMU6 11:40-12:00 (I) Bamboo pipe wall vibrations in Asian free reed instruments M. Faaborg et al.

2pMU Tuesday PM, 15 May 2012 **Room 228**

Special Session: Acoustics of traditional musical practices and instruments (10)

Organizers: J.-P. Hermand, S. Weisser, and Q. Zheng

2pMU1 14:00-14:20 (I) Culture specific approaches in music content analysis, X. Serra

2pMU2 14:20-14:40 (I) Computational analysis of Maqam music: from audio transcription to

structural and stylistic analyses, everything is tightly intertwined,

O. Lartillot

2pMU3 14:40-15:00 (I) Differences in instrument construction and performance practices among Musical traditions reveal and guide different aesthetic attitudes towards Timbre, P. Vassilakis

2pMU4 15:00-15:20 (I) Dynamics of the Himalayan singing bowl, B. August, et al.

2pMU5 15:20-15:40 (C) The Ethiopian Lyre Bagana: An ethno-acoustical study, S. Weisser, et al.

2pMU6 15:40-16:00 (C) Shaping the resonance. Sympathetic strings in Hindustani classical instruments, S. Weisser, et al.

16:00-16:20 Coffee Break

2pMU7 16:20-16:40 (C) Outside-instrument coupling of resonance chambers in the New-Ireland friction instrument 'Lounuet', R. Bader

2pMU8 16:40-17:00 (C) Test Study on The Recording Acoustics of Urheen, J. Zhang, et al.

2pMU9 17:00-17:20 (C) Motion analysis for emotional performance of snare drums using a Motion Averaging Method, M. Miura, et al.

2pMU10 17:20-17:40 (C) Vibrotactile music systems for co-located and telematic performance, D. Egloff

3aMU Wednesday AM, 16 May 2012 Room 228

Special Session: Singing voice in Asian cultures (12)

Organizers: J. Sundberg, K. Sakakibara, and B. Han

3aMU1 08:20-08:40 (I) The Tuning and Vocal Formant Features of Chinese Folk Song Singing: a Case Study of Hua'er Music, Y. Yang et al.

3aMU2 08:40-09:00 (I) Acoustical study of classical Peking opera singing, J. Sundberg et al.

3aMU3 09:00-09:20 (I) Vocal Fold Vibratory and Acoustic Features in Fatigued Karaoke Singers University of Hong Kong

3aMU4 09:20-09:40 (I) Abrupt register changing technique "Atari" in traditional Japanese singing, T. Saitou et al.

3aMU5 09:40-10:00 (I) Excitation source structural analysis of Japanese traditional singing voices, H. Kawahara

3aMU6 10:00-10:20 (C) Timbral and melodic characteristics of Persian and Kurdish singing, H. J. Biglari et al.

3aMU7 10:20-10:40 (C) Easy Confusion Issues For Non-Chinese Scholar Studying China Traditional Singing Voices (CTSVs), L. Gu

10:40-11:00 Coffee Break

3aMU8 11:00-11:20 (C) Analysis of Chinese singing voices and its application to singing voice

synthesis, K. Ota et al.

3aMU9 11:20-11:40 (C) A system for developing a series of interactive tests of vocal production requiring on-line audiovisual recording, B.-Y. Pan et al.

3aMU10 11:40-12:00 (C) Body Radiation Patterns of Singing Voices, O. Takada et al.

3aMU11 12:00-12:20 (C) Changes in the vocal tract shape of sopranos at high pitch, H. Takemoto et al.

3aMU12 12:20-12:40 (C) Analysis of high-frequency energy in singing and speech, B. B. Monson et al.

4aMU Thursday AM, 17 May 2012 Room 228

Special Session: Musical timbre: Perception and analysis/synthesis I (8)

Organizers: J. Beauchamp and A. Horner

4aMU1 09:40-10:00 (I) Real-time segmentation of the temporal evolution of musical sounds, J. Glover et al.

4aMU2 10:00-10:20 (I) Impact of MP3-compression on timbre space of sustained musical instrument tones, C. Lee et al.

4aMU3 10:20-10:40 (I) Investigation of Timbre Saliency, the Attention-Capturing Quality of Timbre, S. H. Chon et al.

10:40-11:00 Coffee Break

4aMU4 11:00-11:20 (I) Toward an effective use of timbre in data sonification, H. Terasawa

4aMU5 11:20-11:40 (I) Wind instrument sound design with centroid-controlled spectral template synthesis, S. Wun et al.

4aMU6 11:40-12:00 (I) Relating timbre discrimination to perceptual distances between interpolated percussive timbres, W. L. Martens et al.

4aMU7 12:00-12:20 (C) Individual differences in the relative salience of percussive timbre dimensions, M. McKinnon-Basset et al.

4aMU8 12:20-12:40 (C) A new sinusoidal model for synthesis of musical instruments, S. R. Shama

4pMUa Thursday PM, 17 May 2012 Room 228

Special Session: Musical timbre: Perception and analysis/synthesis II (3)

Organizers: J. Beauchamp and A. Horner

Lunch Break (Room is changed from 223 to 224)

4pMUa1 14:00-14:20 (C) Spatial variability of timbre for an electric guitar amplifier, A. Case

4pMUa2 14:20-14:40 (C) Synthesis of Performance Expression of Bowed String Instruments Using "Expression Mark Functions", Y. Koizumi et al.

4pMUa3 14:40-15:00 (C) Data collection for individuality analysis on subjective music similarity

evaluation, S. Kawabuchi et al.

4pMUB Thursday PM, 17 May 2012 **Room 228**

Contributed session: Musical instrument acoustics (6)

Chairs: T. Moore and J. Kergomard

4pMUB1 15:20-15:40 (C) Open-loop control of a robotized artificial mouth for brass instruments,
T. Helie, et al.

4pMUB2 15:40-16:00 (C) Minimum models for self-sustained oscillations of conical reed
instruments, J. Kergomard et al.

16:00-16:20 Coffee Break

4pMUB3 16:20-16:40 (C) Investigation of optimum shape for an acoustic guitar by electroanalysis
of tone quality, K. Itako et al.

4pMUB4 16:40-17:00 (C) Simulation of 'Suikinkutsu' sound considering sound radiation from water
surface, Y. Fujita et al.

4pMUB5 17:00-17:20 (C) Strike notes and their pitches of some kinds of bells, S. Yoshikawa et al.

4pMUB6 17:20-17:40 (C) Gabor domain analysis of membranophones, R. Ferguson