

Program

Monday 10.10 Room B Opening of Congress

Monday 11.00 Room B Plenary Chair: Neville Fletcher

The Multi-channel Cochlear Implant: Psychoacoustics and Speech Perception Graeme Clark

Monday 13.00-15.00 Room B Acquisition of Speech Perception Skills 1

Chair: Anne Cutler Denis Burnham

- 13:00 Ability to segment words from speech as a precursor of later language development: insights from electrophysiological responses in the infant brain
Junge, Caroline; Cutler, Anne; Hagoort, Peter
- 13:20 Vocabulary size predicts the development of phonological constancy: An eyetracking study of word identification in a non-native dialect by 15- and 19-month-olds
Mulak, Karen E.; Best, C. T.; Tyler, Michael D.; Kitamura, Christine; Bundgaard-Nielsen, Rikke L.
- 13:40 Co-option of ancillary articulatory parameters in the prevention of near-neutralisation of multiple coronals
Bundgaard-Nielsen, Rikke L.; Baker, B.; Harvey, M.; Kroos, C.; Best, C. T.

Monday 13.00-15.00 Room 101 Physiological acoustics 1

Chair: James Harte Andrew Bell

- 13:00 Modeling human auditory evoked brainstem responses based on nonlinear cochlear processing.
Harte, J. M.; Rønne, F. M.; Dau, T.
- 13:20 Improving musical streaming for cochlear implant users using visual cues.
Innes-Brown, Hamish; Marozeau, Jeremy; Grayden, David B.; Burkitt, Anthony N.; Blamey, Peter
- 13:40 The cochlea as a graded bank of independent, simultaneously excited resonators: Calculated properties of an apparent travelling wave
Bell, Andrew
- 14:00 Relation between fine structures in hearing thresholds and distortion product otoacoustic emissions
Hammershøi, Dorte; Ordoñez, Rodrigo; Torrente, Marina; Kochendörfer, Felix
- 14:20 Measurement of children_ear canal impedances using small impedance probes
Fels, Janina; Jensen, Mads Jakob Herring; Rung, Martin; Vorländer, Michael

Monday 13.00-15.00 Room 102 Sonoprocessing 1

Chair: Hao Feng Bogdan Zisu

- 13:00 Sonoprocessing of dairy ingredients at a semi-industrial scale
Zisu, Bogdan; Bhaskaracharya, Raman; Palmer, Martin; Kentish, Sandra; Ashokkumar, Muthupandian
- 13:20 The generation of particulate fluids using power ultrasound
Kentish, Sandra; Leong, Thomas; Vo, Hung Si; Wooster, Timothy J.; Ashokkumar, Muthupandian
- 13:40 Power ultrasound as a new food processing and preservation modality
Feng, Hao
- 14:00 Kinetic and microstructural changes induced by sonoprocessing on convective drying of eggplant
Garcia-Perez, J. V.; Puig, A.; Perez-Munuera, I.; Carcel, J. A.; Riera, E.
- 14:20 Fundamentals of acoustic cavitation and ultrasonic processing: The effect of surfactants
Leong, Thomas; Kentish, Sandra; Ashokkumar, Muthupandian
- 14:40 Ultrasonic processing and synthesis of nanomaterials
Sonawane, Shirish. H.; Bhanavase, B. A.

Monday 13.00-15.00 Room 103 Structural acoustics and vibration 1

Chair: Diemer de Vries Kamel Amichi

- 13:00 Regularized imaging methods for defect detection using flexural waves
Hörchens, Lars; de Vries, Diemer
- 13:20 Dynamic properties of damping materials for reducing heavyweight floor impact sounds
Kim, Jae Ho; Yoo, Seung Yup; Jeon, Jin Yong
- 13:40 Sound radiation of orthotropic curved sandwich structures using a mixed boundary element/finite element approach
Amichi, Kamel; Atalla, Noureddine; Sgard, Franck
- 14:00 Air gap influence on the vibro-acoustic response of solar arrays in stowed configuration of satellites during launch
López-Díez, Jesús; Chimenó-Manguán, Marcos; Simón Hidalgo, Francisco; Santiago Prowald, Julián; Wijker, Jaap J.; García Echebarria, Joseba; Fernández, María José
- 14:20 Acoustical diagnosis of concrete crack depth based on its resonance
Iwase, Teruo; Horiguchi, Yuuta; Yasuoka, Hirohito
- 14:40 Methods and tools used in paper machine supercalender vibration diagnostics
Menon, Arun

Monday 13.00-15.00 Room 104 Environmental Noise 1

Chair: Larry Finegold Francesco Borchì

- 13:00 Are Western noise policies appropriate for developing and emerging countries?
Finegold, Lawrence S; Schwela, Diète
- 13:20 A 70 dB(A) limit proposal for façade exposure to urban noise, based on research
Baring, João
- 13:40 The H.U.S.H. project - The geographical data platform for city noise action planning
Borchì, Francesco; Carfagni, Monica
- 14:00 The H.U.S.H. project - Database of noise reduction measures for city noise action planning
Bellomini, Raffaella; Luzzi, Sergio; Recenti, Sara
- 14:20 Are there more definitive ways to manage environmental noise?
Wilson, C. W.

Monday 13.00-15.00 Room 105 Architectural Acoustics 1

Chair: Ingo Witew Yoshiharu Soeta

- 13:00 Archaeoacoustics: Chichen Itza acoustic effects
Jorge, Antonio Cruz Calleja
- 13:20 Error and uncertainty of IACC measurements introduced by dummy head orientation using Monte Carlo simulations
Witew, Ingo; Dietrich, Pascal; Vorländer, Michael
- 13:40 Effect of microperforation on sound insulation of double-leaf structures
Mu, Ruilin; Toyoda, Masahiro; Takahashi, Daiji
- 14:00 Effects of the sound source direction on acoustical parameters in a church
Soeta, Yoshiharu; Ito, Ken; Shimokura, Ryota; Ohsawa, Tomohiro; Sato, Shin-ichi; Ando, Yoichi
- 14:20 Sound environmental design in nursery institutions focused on floor material
Noguchi, Saki; Konishi, Tadashi; Oikawa, Yasuhiro; Yamasaki, Yoshio
- 14:40 Acoustic characterization of sacred music rendered by a human whistle at the Divine Providence Church in Goa, India
Tavares, Menino Allan S. M. Peter; Rajagopalan, S.; Sharma, Satish Jagannath; Carvalho, António P

Monday 13.00-15.00 Room 106 Ultrasonics, quantum acoustics, and physical effects of sound 1

Chair: Nico Declercq Mihai Caleap

- 13:00 Modelling coherent elastic wave propagation through creep damaged material
Caleap, Mihai; Drinkwater, Bruce W.; Wilcox, Paul D.
- 13:20 Rough surface reconstruction using far-field acoustic measurements
Declercq, Nico F.; Lamkanfi, Ebrahim

- 13:40 Ultrasonication and kinetic studies in changes of ultrasonic velocities in the mixing of solvents
Nayakulu, S. V. Ranga; Reddy, D. Linga
- 14:00 Analysis of multilayered piezoelectric cylinders with noncircular cross-section
Puzyrev, Vladimir
- 14:20 Shock wave structure in gases using bimodal distribution function
Solovchuk, Maxim A.; Sheu, Tony W. H.
- 14:40 Welding characteristics and structures of same and different metal specimens using ultrasonic complex vibration welding equipment
Tsujino, Jiromaru; Sugimoto, Eiichi

Monday 13.00-15.00 Room 201 Psychological 1

Chair: Hugo Fastl Hiroaki Kato

- 13:00 Remote psychoacoustic experiments on audio-visual interactions
Fastl, Hugo; Fleischer, Tobias; Stelkens, Jörg
- 13:20 Colour-influences on loudness judgements
Menzel, Daniel; Haufe, Norman; Fastl, Hugo
- 13:40 Spatial acoustic cues for the auditory perception of speaker_facing direction
Kato, Hiroaki; Takemoto, Hironori; Nishimura, Ryouichi; Mokhtari, Parham
- 14:00 Global loudness of ramped and damped sounds
Meunier, Sabine; Susini, Patrick; Trapeau, Régis; Chatron, Jacques
- 14:20 Individual differences of sound localization ability on median plane
Funabashi, Takeo; Watanabe, Yuko; Shibata, Tatsuya; Hamada, Hareo

Monday 13.00-15.00 Room 202 Signal processing 1

Chair: Dinh-Quy Nguyen Chuansheng Xiao

- 13:00 An improved simplicity-based approach for heart sound analysis
Kim, Taehwan; Kim, Sahong; Wu, Hang; Bae, Keunsung
- 13:20 Hidden Markov Model with heart sound signals for identification of heart disease
Wu, Hang; Kim, Sahong; Bae, Keunsung
- 13:40 Stability analysis of broadband active noise equalization algorithm
Xiao, Chuansheng; An, Fengyan; Sun, Hongling; Xu, Jian; Li, Xiaodong
- 14:00 Robustness of array processing techniques in acoustic detection and localization
Nguyen, Dinh-Quy; Gan, Woon-Seng
- 14:20 Assessment of tissue attenuation from backscattered ultrasound
Litniewski, Jerzy; Klimonda, Ziemowit; Nowicki, Andrzej

Monday 13.00-15.00 Room 203 Non-medical Imaging and Ultrasonic Measurement Techniques 1

Chair: Kiran Shanker Yoshikazu Ohara

- 13:00 Fundamental study on nonlinear ultrasonic imaging method for closed cracks using subtraction of responses at different external loads
Ohara, Yoshikazu; Shintaku, Yohei; Hashimoto, Makoto; Horinouchi, Satoshi; Yamanaka, Kazushi
- 13:20 Acoustical investigations in some cubic crystals
Shanker, Kiran
- 13:40 Evaluation of contact stiffness between solid-solid interfaces using dual-frequency ultrasound
Guo, Xiasheng; Zhang, Dong; Gong, Xiufen
- 14:00 Inverse problem for structural noise and micro structural dimension scales forecasting in ultrasonic material analysis
Bettayeb, Fairouz

Monday 15.00 Distinguished Lectures

Room A: Chair Denis Burnham

Learning the sound system of Japanese: What does it tell us about language acquisition?
Reiko Mazuka

Room 103: Chair Robert Randell

Energy based contribution analysis
Steffen Marburg; Eric Lösche,

Monday 15.40-18.00 Room B Acquisition of Speech Perception Skills 2

Chair: Anne Cutler Denis Burnham

- 15:40 Transfer of talker-familiarity effects
Davis, Chris; Kim, Jeesun
- 16:00 Audio-visual speech integration in noise by first and second language listeners
Fitzpatrick, Michael; Kim, Jeesun
- 16:20 The development of auditory-visual speech perception across languages and ages
Erdener, Doğu; Sekiyama, Kaoru; Burnham, Denis
- 16:40 Modification of prosodic cues when an interlocutor cannot be seen: The effect of visual feedback on acoustic prosody production
Cvejic, Erin; Kim, Jeesun; Davis, Chris
- 17:00 The visual perception of lexical tone
Smith, Damien; Attina, Virginie; So, Connie; Burnham, Denis
- 17:20 Toward a hierarchical representation model of Lexical tones: Effects of acoustic, segmental and semantic characteristics on tone perception in Cantonese-speaking children
Tong, Xiuli

Monday 15.40-18.00 Room 101 Physiological acoustics 2

Chair: Koji Abe Stephane Durand

- 15:40 Behavior of precedence effect generated by two sound sources on the front and the mid-coronal plane
Abe, Koji; Kato, Sakie; Watanabe, Kanji; Takane, Shouichi; Sato, Sojun
- 16:00 Sub-cutaneous cochlear implant: analytical modelling of an acoustic receiver behind the skin
Durand, Stephane; Lavergne, Thomas; Veau, Nicolas; Bruneau, Miche
- 16:20 Acoustic sensitivity to micro-perturbations of KEMAR_pinna surface geometry
Mokhtari, Parham; Takemoto, Hironori; Nishimura, Ryouichi; Kato, Hiroaki
- 16:40 A simple pinna model for generating head-related transfer functions in the median plane
Takemoto, Hironori; Mokhtari, Parham; Kato, Hiroaki; Nishimura, Ryouichi; Iida, Kazuhiro
- 17:00 Simulation of increased masking in sensorineural hearing loss for a preliminary evaluation of speech processing schemes
Jangamashetti, Dakshayani S.; Cheeran, Alice N.; Kulkarni, Pandurangarao N.; Pandey, Prem C.

Monday 15.40-18.00 Room 102 Sonoprocessing 2

Chair: Sandra Kentish Enrique Riera

- 15:40 Effect of high power ultrasounds on mass-transfer zone in supercritical fluid extraction processes
Blasco, M.; García-Reverter, J.; Casas, E.; Riera, E.; Gallego-Juárez, J. A.
- 16:00 Enhancement of acoustic heating during nucleation of acoustic cavitation inside an ultrasonic reactor cavity
Hauptmann, M.; Brems, S.; Camerotto, E.; XiuMei, X.; Kim, T.-G.; Struyf, H.; Mertens, P.; Heyns, M.; De Gendt, S.; Glorieux, C.; Lauriks, Walter
- 16:20 Sonoprocessing of fluids for environmental and industrial applications
Gallego-Juárez, J. A.; Rodriguez, G.; Acosta, V.; Riera, E.
- 16:40 Investigation of Generated attosecond EM by Recoiling of ionized and bounded electrons in atom with fs laser
Zobdeh, P.; Rafiee-miyandashti, H.

- 17:00 Effect of ion density variation on THZ generation in laser-dense plasma interaction
Zobdeh, P.; Zareiee-sedehizadeh, H.
- 17:20 Localization and interaction of small phase inclusions in the sound field in the presence of phase transformations
Bulanov, Vladimir A.

Monday 15.40-18.00 Room 103 Theoretical and computational acoustics 1

Chair: Steffen Marburg Peter Jones

- 15:40 Numerical methods for simulating disc brake squeal noise
Oberst, S.; Lai, J. C. S.
- 16:00 Measurement and prediction of the acoustic performance of poroelastic foam filled mufflers for sleep apnoea devices
Jones, Peter; Kessissoglou, Nicole
- 16:20 A Multi-Level Fast Multipole Algorithm (MLFMM) for calculating the sound scattered from objects within fluids
Burgschweiger, Ralf; Schaefer, Ingo; Ochmann, Martin
- 16:40 Studies on substructure FMBEM and direct mixed-body FMBEM for acoustic performance prediction of reactive mufflers
Cui, Xiaobing; Ji, Zhenlin
- 17:00 The fast multipole BEM for low-frequency acoustic problems based on degenerate boundary formulation
Yasuda, Yosuke; Oshima, Takuya; Sakuma, Tetsuya; Gunawan, Arief; Masumoto, Takayuki
- 17:20 Numerical simulation of sound wave interaction with human hearing system with fast integral acousto-elastic equation solver
Bleszynski, Elizabeth; Bleszynski, Marek; Jaroszewicz, Thomas

Monday 15.40-18.00 Room 104 Environmental Noise 2

Chair: Najah Ishac Alex Marchuk

- 15:40 The Fortaleza noise mapping project – A tool for the strategies of knowledge and control of noise in the municipality and the new perception for the control of big music events
Aurélio Chaves Brito, F.; Bento Coelho, J. L.
- 16:00 Music and outdoors: Are they meant to work together?
Asselineau, Marc; Serra, Maud
- 16:20 Managing the cost of noise exposure in transport corridors
Marchuk, Alex; Henry, Frank
- 16:40 Improving environmental noise predictions
Ishac, Najah
- 17:00 Acoustical indicators and indexes for urban quality evaluation
Magrini, Anna; D'ambrosio, Francesca
- 17:20 Problems and solutions in urban noise management
Naik, Neelima S

Monday 15.40-18.00 Room 105 Architectural Acoustics 2

Chair: Martijn Vercammen Keiji Kawai

- 15:40 Reflection of sound by concave surfaces
Vercammen, Martijn
- 16:00 Acoustical effects of columns, beams and furniture on sound fields in small enclosures
Eda, Kazushi; Yasuda, Yosuke; Sakuma, Tetsuya
- 16:20 Effect of sound absorption on indoor sound environment of nursery school classrooms
Kawai, Keiji
- 16:40 Numerical investigation on the sound absorption coefficients of Malaysian wood
Mohammad, J. I.; Johari, N.; Fouladi, M. H
- 17:00 Study on an estimation method for parameters of a dry laminated panel
Nakanishi, Shinsuke
- 17:20 Simulation and validation of random incidence sound absorption coefficient measured in a reverberation room: Effect of sample size and angle of incidence
Shrivastava, Paresh; Jain, Sachin; Karanth, N. V.; Desa, Keith; Raju, S.

Monday 15.40-18.00 Room 106 Thermoacoustics 1

Chair: Shin-ichi Sakamoto Dai Shimizu

- 15:40 Effect of sub loop tube on energy conversion efficiency of loop-tube-type thermoacoustic system
Sakamoto, Shin-ichi; Tsukamoto, Daichi; Kitadani, Yuji; Ishino, Takahir; Yoshiaki, Watanabe
- 16:00 Basic study for practical use of thermoacoustic electric generation system
Kitadani, Yuji; Sakamoto, Shin-ichi; Sahashi, Kazuki; Watanabe, Yoshiaki
- 16:20 Critical temperature ratio needed for a spontaneous gas oscillation in a miniature thermoacoustic engine
Ueda, Yuki; Aoi, Yoshihumi
- 16:40 A basic study for silencer by using thermoacoustic phenomena - Experimental discussion for heat exchange and viscous dissipation
Tsukamoto, Daichi; Sakamoto, Shin-ichi; Kobayashi, Tetsuya; Watanabe, Yoshiaki
- 17:00 Marginal conditions of thermoacoustic Taconis oscillations revisited
Shimizu, Dai; Sugimoto, Nobumasa
- 17:20 Excess acoustical and optical properties of binary mixtures of poly ethylene glycol dimethyl ether 250 with 1- propanol and 1-butanol at varying temperatures
Gupta, Manisha; Singh, K. P.
- 17:40 Exergy analysis of thermoacoustic prime mover
Gholamrezaei, Mohammad; Ghorbanian, Kaveh

Monday 15.40-18.00 Room 201 Psychological 2

Chair: Florian Völk Françoise Dubois

- 15:40 Psychoacoustical experiments on loudness perception in wave field synthesis
Völk, Florian; Straubinger, Martin; Fastl, Hugo
- 16:00 Effects of the presence of cue tone in signal detection varies with relationships between cue tone and signal frequencies
Kidani, Shunuske; Miyauchi, Ryota; Unoki, Masashi
- 16:20 Simultaneity perception characteristics in contralateral ear considering attention
Yoshida, Junji; Hasegawa, Hiroshi
- 16:40 Detection of spectrally complex signals: Effect of difference in levels within components
Dubois, F.; Meunier, Sabine; Rabau, G.; Poisson, F.; Guyader, G.
- 17:00 Psychophysical tuning curves for very low centre frequencies
Jurado, Carlos A.; Moore, Brian C. J.; Pedersen, Christian S.

Monday 15.40-18.00 Room 202 Signal processing 2

Chair: John Buck Takuma Okamoto

- 15:40 SENZI, a 3D sound-space recording system using a spherical microphone array with 252-ch microphones
Sakamoto, Shuichi; Kodama, Jun_hi; Hongo, Satoshi; Okamoto, Takuma; Iwaya, Yukio; Suzuki, Yoiti
- 16:00 Performance analysis of dominant mode rejection beamforming
Wage, Kathleen E.; Buck, John R.
- 16:20 Design and calibration of a small aeroacoustic beamformer
Arcondoulis, Elias J. G.; Doolan, Con J.; Zander, Anthony C.; Brooks, Laura A.
- 16:40 Blind directivity estimation of a sound source in a room using a surrounding microphone array
Okamoto, Takuma; Iwaya, Yukio; Suzuki, Yoiti
- 17:00 Blind reverberation time estimation
Scharrer, Roman; Vorländer, Michael
- 17:20 Accurate position detection of sound source by LabView
Kim, Dong Hoon; Chung, Yun Mo

Monday 15.40-18.00 Room 203 Non-medical Imaging and Ultrasonic Measurement Techniques 2

Chair: Steve Spencer Perrine Sahuguet

- 15:40 Monitoring of flotation cell process state by acoustic emissions
Bruniges, Ryan; Catanzano, Alvaro; Roberts, Giffard; Sharp, Victor; Spencer, Steven
- 16:00 Speed measurement of moving object by using sensitivity compensated ultrasonic transmitting signal and pulse compression
Toh, Ryo; Chimura, Dai; Motooka, Seiichi

- 16:20 Quantitative numerical approach for ultrasound imaging with Time Domain Topological Energy
Sahuguet, P.; Gibiat, Vincent; Jacob, Xavier
- 16:40 Microstructure characterization and imaging of single phases in polycrystalline metals by atomic force acoustic microscopy
Hirse Korn, Sigrun; Rabe, Ute; Rabe, Jonas; Geng, Kai
- 17:00 Ultrasonic pulse waveform distortion in the peripheral area of piston source field
Perov, D. V.; Rinkevich, A. B.
- 17:20 An ultrasonic flowmeter based on beam pattern of a multi element transducer: theoretical approach
Rodrigo Costa, Félix

Monday 13.00-17.00 Poster Session 1 Bayside Terrace, Level 2

- Approach of instantaneous frequencies determination of speech signal by continuous wavelet transform: Application to formants calculation
Falek, Leila; Lamia, Fergani; Amar, Djeradi
- A study of vibrato features to control singing voices
Migita, Naoto; Morise, Masanori; Nishiura, Takanobu
- Proposal of a new vocoder for real-time synthesis of speech signal with high quality
Nakana, Kota; Morise, Masanori; Nishiura, Takanobu
- Effects of the emotional tone of voice on the acoustic characteristics of the Mandarin Chinese tones
Chang, Hui-Shan; Young, Shuenn-Tsong; Yuen, Kevin
- Noisy speech recognition using wavelet transform and weighting coefficients for a specific level
Midorikawa, Yoichi; Muraoka, Yuta; Akita, Masanori
- Acoustic features affecting speaker identification by imitated voice analysis
Tanaka, Mari; Yamamoto, Tatsuya; Morishima, Shigeo; Kawahara, Hideki
- A study of the influence of the reverberation time in speech synthesis
Matsubara, Takashi; Morise, Masanori; Nishiura, Takanobu
- Can visual information on lip gesture influence lexical processing in speech perception? A phonological priming study
Fort, Mathilde; Chipot, Justine; Kandel, Sonia; Savariaux, Christophe; Granjon, Lionel; Spinelli, Elsa
- Intelligibility of speech spoken in noise and reverberation
Hodoshima, Nao; Arai, Takayuki; Kurisu, Kiyohiro
- Polish sentence test for speech intelligibility measurement in children
Ozimek, Edward; Kutzner, Dariusz; Libiszewski, Paweł
- An evaluation of bone-conducted ultrasonic hearing-aid regarding transmission of Japanese prosodic phonemes
Kagomiya, Takayuki; Nakagawa, Seiji
- Acoustic studies of tremor in pathological voices
Castillo-Guerra, Eduardo; Farahani, Mohsen Amiri; Ferrer, Riesgo Carlos
- A unified approach of compensation and soft masking incorporating a statistical model into the Wiener filter
Kang, Byung-Ok; Jung, Ho-Young
- Deviations of vowel quality perception as a result of separated F3 manipulations
Smit, Thorsten; Tröckheim, Friedrich; Jakob, Andreas; Mores, Robert
- Numerical investigation of ultrasound wave propagation in cancellous bone with oblique trabecular orientation
Hosokawa, Atsushi
- The concurrent effects of low intensity pulsed ultrasound and heat on bone cell culture mineralization
Weidman, Judith; Tavakkoli, Jahan
- Ultrasonic sperm enrichment and In Vitro fertilization
Bavli, Danny
- Song consistency reflects age in banded wrens
de Kort, Selvino R.; Eldermire, Erin; Valderrama, Sandra; Botero, Carlos A.; Vehrenvcamp, Sandra L.
- Cepstrum method enables accurate assessment of thickness of cortical bone layers – Potential improvement for analysis of ultrasound backscatter from underlying trabecular matrix
Karjalainen, J. P.; Töyräs, J.; Jurvelin, J. S.

Combined vibro-acoustography (VA) imaging and shearwave dispersion ultrasonic vibrometry (SDUV) for measuring prostate viscoelastic material properties – An in vitro feasibility study
Mitri, F. G.; Urban, M. W.; Fatemi, Mostafa; Greenleaf, James F.

Tuesday 08.20-11.00 Room 101 Signal processing 3

Chair: David Hutchins Gottfried Behler

- 08:20 Transfer path analysis of output noise using multi-dimensional spectral analysis method for vacuum cleaner
Jeong, Jae-Eun; Yang, In-Hyung; Park, Goon-Dong; Lee, You-Yub; Oh, Jae-Eung
- 08:40 Fault Diagnosis of Machinery based on Support Vector Data Description and D-S Evidence Theory
Chen, Bin; Ma, Longhua; Yan, Zhaoli
- 09:00 Optimum signals for acoustic security screening of cargo containers
Assous, Said; Hopper, Clare; Wilkinson, Paul B.; Gunn, David; Jackson, Peter; Hutchins, David; Davis, Lee; Diamond, Geoff; Zimmerman, Pete
- 09:20 Dynamics of acoustic parameters for compounds in polymerization
Rimlyand, V. I.; Starikova, V. N.; Kondratiev, A. I.
- 09:40 Automatic detection of road surface states from tire noise using neural network analysis
Kongrattanaprasert, Wuttiwat; Nomura, Hideyuki; Kamakura, Tomoo; Ueda, Koji
- 10:00 Reduction of computing time by genetic algorithm for the nondestructive technique to detect a crack in a large scale concrete structure
Fujiwara, Tatsuro; Fujioka, Toyota; Nagata, Yoshifumi; Abe, Masato
- 10:20 Loudness control of level in automotive infotainment systems
Behler, Gottfried; Guski, Martin
- 10:40 Parameters estimation of point moving source with time-frequency transformation
Tam, K.C.; Tang, S.K.

Tuesday 08.20-11.00 Room 102 Psychoacoustics from ecological viewpoints

Chair: Sonoko Kuwano Takeo Hashimoto

- 08:20 Examination of the deteriorating factors of sound quality of home electric appliances
Kuwano, Sonoko; Namba, Seiichiro; Kanmuri, Mika; Hirose, Tohru
- 08:40 Comparisons of auditory impressions and auditory imagery associated with onomatopoeic representation for environmental sounds
Takada, Masayuki; Fujisawa, Nozomu; Obata, Fumino; Iwamiya, Shin-ichiro
- 09:00 Desirable road traffic noise for human hearing
Hashimoto, Takeo; Ishiyama, Takeshi
- 09:20 Effects of transportation noise exposure time on the subjective response
Kim, Sun Woo; Park, Hyeon Ku; Lee, Tai Gang
- 09:40 Ecological loudness: Binaural loudness constancy
Florentine, Mary; Epstein, Michael
- 10:00 Perceptual space of multiple complex tones
Töpken, Stephan; Verhey, Jesko; Weber, Reinhard
- 10:20 Psychoacoustics for the creation of acoustically green city areas
Genuit, Klaus; Fiebig, André

Tuesday 08.20-11.00 Room 103 Bubbles on biomedical and industrial surfaces

Chair: Andrew Ooi Tom Matula

- 08:20 Mixing and pumping with oscillating bubbles
Khoo, B. C.; Betari, J.; Klaseboer, E.
- 08:40 The correlation between acoustic cavitation and sonoporation involved in ultrasound-mediated DNA transfection with Polyethylenimine (PEI) in vitro
Qiu, Yuanyuan; Luo, Yi; Zhang, Yanli; Cui, Weicheng; Zhang, Dong; Wu, Junru; Zhang, Junfeng; Tu, Juan
- 09:00 The effect of a nearby solid boundary on the dynamics of a small group of ultrasound driven microbubbles
Li, Michael; Ooi, Andrew; Dzaharudin, Fatimah; Manasseh, Richard

- 09:20 Bubble vessel interactions associated with pulsed ultrasound
Matula, Tom; Chen, Hong; Kreider, Wayne; Bailey, Michael; Brayman, Andy; Hwang, Joo Ha; Wang, Yak-Nam; Evan, Andrew
- 09:40 Developments in targeted ultrasound contrast agent dynamics
Allen, John S.
- 10:00 Measurement of a microcapsule vibration having a hard plastic shell in an acoustic standing wave
Koyama, Daisuke; Kotera, Hironori; Kitazawa, Natsuko; Yoshida, Kenji; Nakamura, Kentaro; Watanabe, Yoshiaki
- 10:20 Acoustically-driven microbubble pinch off
Zijlstra, A. G.; Rivas, D. Fernandez; Versluis, Michel; Mertens, P.; Gardeniers, H.; Prosperetti, A.; Lohse, D.
- 10:40 Influence of gas type on ultrasound cleaning efficiency
Brems, S.; Camerotto, E.; Hauptmann, M.; XiuMei, X.; Kim, T.-G.; Struyf, H.; Mertens, P.; Heyns, M.; De Gendt, S.

Tuesday 08.20-11.00 Room 104 Environmental Noise 3

Chair: Chris Field Wolfgang Probst

- 08:20 Compressor noise control for a large underground natural gas storage station in China
Yan, Xiang; Luo, Qiang
- 08:40 Ventilation system noise control
Gross, Neil; Lawrence, Ben
- 09:00 New techniques in noise prediction
Probst, Wolfgang
- 09:20 Satisfactory background noise levels in naturally ventilated buildings - Challenging acoustic criteria used in the past
Field, Chris
- 09:40 Construction noise management guideline for major transport infrastructure projects
Roberts, Cedric
- 10:00 Assessment of low frequency noise from transportation sources
Roberts, Cedric
- 10:20 Statistical patterns of the noise levels of a town
Moraes, Elcione; Simon, Francisco; Moscoso, Cristiany
- 10:40 Multisource industrial plant inverse noise modelling and assessment against ISO 8297
Castro-Cirac, Daniel; Reverter-García, Jorge; Kidner, Michael

Tuesday 08.20-11.00 Room 105 Lightweight Structures 1

Chair: John LoVerde Jean-Louis Guyader

- 08:20 The equivalent translational stiffness of steel studs
Davy, John L.; Guigou-Carter, Catherine; Villot, Michel
- 08:40 Empirical calculation of sound insulation in lightweight partition walls with separate steel studs
Ellefsen, Jarle; Olafsen, Sigmund
- 09:00 Evaluation of the sound insulation of roofing systems
Mahn, Jeffrey; Pearse, John
- 09:20 Improving transmission loss of light-weight panels by enhancement of skin tension through evacuation
Brosig, Deborah; Mellert, Volker
- 09:40 Prediction of sound transmission through a light double panel with sandwich skins, foam core and mechanical links.
Guyader, Jean-Louis; Cacciolati, Christian
- 10:00 Quantitative comparisons of resilient channel design and installation in single wood stud walls
LoVerde, John; Dong, Wayland
- 10:20 Sound and vibrations investigations in a multi-family wooden frame building
Bard, Delphine

Tuesday 08.20-11.00 Room 106 Animal bioacoustics

Chair: Joël Gilbert Thierry Aubin

- 08:20 Does the elephant trumpet like a trumpet?
Gilbert, Joël; Dalmont, Jean-Pierre; Potier, Romain
- 08:40 Territorial songs in birds: a multi-level coding process.
Aubin, Thierry; Briefer, Elodie; Rybak, Fanny
- 09:00 Feature extraction for fish species classification with the dolphin mimetic sonar
Matsuo, Ikuro; Ito, Masanori; Imaizumi, Tomohito; Akamatsu, Tomonari; Wang, Yong; Nishimori, Yasushi
- 09:20 Design considerations in an automatic classification system for bird vocalisations using the Two-dimensional Geometric Distance and cluster analysis
Jinnai, Michihiro; Boucher, Neil J.; Robertson, Jeremy; Kleindorfer, Sonia
- 09:40 Can passive acoustics identify the driving factors behind changes in marine mammal abundance and distribution?
Constantinou, N.; Klinck, H.; Rogers, T.; Laffan, S.; Mellinger, D. K.; Dziak, R. P.; Park, M.
- 10:00 Data mining frog choruses
Taylor, Andrew

Tuesday 08.20-11.00 Room 201 Speech perception 1

Chair: David Smith Akira Utsugi

- 08:20 Study of perceptual balance for designing comb filters for binaural dichotic presentation
Kulkarni, Pandurangarao N.; Pandey, Prem C.; Jangamashetti, Dakshayani S.
- 08:40 Time to judge sex of speaker: effect of glottal-pulse rate and vocal-tract length
Smith, David R. R.
- 09:00 The relation between speech intelligibility and audibility by voice emphasis in the subway
Ishigure, Taichi; Kanamori, Ysukazu
- 09:20 A robust method to detect dialectal differences in the perception of lexical pitch accent
Utsugi, Akira; Koizumi, Masatoshi; Mazuka, Reiko
- 09:40 A study on brain activities elicited by emotional voices with various F0 contours
Hamada, Yasuhiro; Kitamura, Tatsuya; Akagi, Masato
- 10:00 Processing of endpoint pitch in Mandarin tone perception: An eye movement study
Shen, Jing; Deutsch, Diana; Rayner, Keith
- 10:20 Tonotopic variation in the correlation between the shimmer of a natural vowel and that of the evoked response
Dajani, Hilmi R.; Giguère, Christian
- 10:40 Steady state vowel duration as an acoustic cue for Garhwali Hindi database
Upadhyay, R. K.; Riyal, Manoj

Tuesday 08.20-11.00 Room 202 Aircraft noise 1

Chair: Jeremy Astley Serge Lewy

- 08:20 Applying Computational Aero-Acoustics (CAA) to turbofan liner optimisation.
Astley, R. Jeremy; Sugimoto, R.; Achunche, I.; Deane, E.; Kewin, M.; Mustafi, P.
- 08:40 Semi-empirical prediction of tone noise due to counter-rotating open rotors
Lewy, Serge
- 09:00 Sound power radiation due to an isolated airfoil in a turbulent stream.
Blandeau, Vincent P.; Joseph, Phillip F.
- 09:20 Conversion relationship of aircraft noise indices between WECPNL and DENL
Kim, Taehyung; Kim, Kyutae; Kim, Jaehwan; Lee, Soogab
- 09:40 INM - getting it to work acoustically
Cooper, Steven
- 10:00 Military aircraft noise and the community
Cooper, Steven
- 10:20 Helicopter noise propagation characteristics in the refracting atmospheric conditions
Son, Eunkuk; Lee, Seungmin; Lee, Soogab

Tuesday 08.20-11.00 Room 203 Structural acoustics and vibration 2

Chair: Dave Davis Laurent Maxit

- 08:20 Noise reduction of an acoustical enclosure: Mechanisms and prediction accuracy
Lei, Ye; Pan, Jie; Sheng, Meiping
- 08:40 Investigation of the damping effect on the energy response of a structure-cavity system in the case of a heavy fluid
Maxit, Laurent; Totaro, Nicolas; Guyader, Jean-Louis
- 09:00 Vibroacoustic coupling of cylindrical structure with both excited end plates
Tsuchiya, Hirotarou; Kojima, Atsushi; Moriyama, Hiroyuki; Oshinoya, Yasuo; Kakimoto, Kunihiro
- 09:20 A review of prediction methods for ground-borne noise due to construction activities
Davis, D.
- 09:40 Passive control of structural intensity for reducing structure-borne sound on compound plate structure
Murakami, Yuta; Numata, Nozomu; Yamazaki, Toru
- 10:00 Low Frequency Sound Radiation from Aluminium Extrusion, Part I: Experimental Study
Shen, AnnemSui, FushengmYuan, Minmin
- 10:20 On some mathematical problems in modeling piezoelectric actuators
Wiciak, Margareta
- 10:40 Experimental investigation of particle clumping position on circular plates using acoustic streaming generated by ultrasonic vibrations
Mijarez-Castro, Rito; Hawkes, Jeremy J.; Jayassekera, Pramukh N.

Tuesday 11.00 Room A Plenary Chair: Philip Nelson

Interaction of sound and ultrasound with materials
Nico F. Declercq

Tuesday 13.00-14.00 Room A Architectural Acoustics 3

Chair: John Bradley Jin You

- 13:00 A new system of speech privacy criteria in terms of Speech Privacy Class (SPC) values
Bradley, John S.; Gover, Bradford N.
- 13:20 Reverberation time - The mother of all room acoustical parameters
Skålevik, Magne
- 13:40 Effects of sound strength and IACC on perception of listener envelopment in concert halls
Jeon, Jin Yong; You, Jin

Tuesday 13.00-14.00 Room 101 Signal processing 4

Chair: David A. Hague Hisashi Shiba

- 13:00 Designing a 3-D sonar system using a sparse array and CZT beamforming
Palmese, Maria; Trucco, Andrea
- 13:20 Multistatic time reversal
Shiba, Hisashi
- 13:40 A deterministic filterbank compressive sensing model for Bat biosonar
Hague, David A.; Buck, John R.; Bilik, Igal

Tuesday 13.00-14.00 Room 102 Psychoacoustics from ecological viewpoints 2

Chair: Sonoko Kuwano Takeo Hashimoto

- 13:00 An individual fitting algorithm for digital hearing aids by the modified critical bands and loudness scaling
Ih, Jeong-Guon; Park, Kyung-Hoon
- 13:20 ANN models for sound preference evaluations
Yu, Lei; Kang, Jian
- 13:40 The relationships between music, speech and other environmental sounds
Neuhoff, John G.

Tuesday 13.00-14.00 Room 103 Medical bubble acoustics 1

Chair: Vassilis Sboros Michiel Postema

- 13:00 Forming morphing microfoam
Kotopoulos, Spiros; Postema, Michiel
- 13:20 A review of single microbubble acoustics
Sboros, Vassilis
- 13:40 Ultrasound-activated microbubbles for tendon gene transfer: confocal microscopy real time intracellular investigations and in vivo efficiency
Delalande, Anthony; Bouakaz, Ayache; Midoux, Patrick; Postema, Michiel; Pichon, Chantal

Tuesday 13.00-14.00 Room 104 Thermoacoustics 2

Chair: Luc Mongeau Nobumasa Sugimoto

- 13:00 Time-resolved Particle Image Velocimetry (PIV) of the flow in an acoustic standing wave tube
Mongeau, Luc; Rafat, Yasser
- 13:20 Thermoacoustic wave propagation in a narrow channel subject to temperature gradient
Sugimoto, Nobumasa
- 13:40 Performance measurements of a traveling wave thermoacoustic refrigerator
Bassem, Mohamed Mehdi; Kawabe, Shunta; Ueda, Yuki; Akisawa, Atsushi

Tuesday 13.00-14.00 Room 105 Lightweight Structures 2

Chair: Jeffrey Mahn Grant Emms

- 13:00 Acoustic properties of hollow brick walls
Jacqus, Gary; Berger, Sylvain; Gibiat, Vincent; Jean, Philippe; Villot, Michel
- 13:20 A wave based model to describe the niche effect in sound transmission loss determination of single and double walls
Dijckmans, Arne; Vermeir, Gerrit
- 13:40 Modeling and experimental validation of locally resonant structures
Hall, Andrew J.; Calius, Emilio P.; Wester, Eric; Dodd, George; Halkyard, Roger

Tuesday 13.00-14.00 Room 201 Mack Breazeale Memorial Session

Chair: Nico Declercq Bogumil Linde

- 13:00 Theoretical and experimental investigation of the backward beam displacement
Herbison, Sarah W.; Declercq, Nico F.; Breazeale, Mack A.
- 13:20 Mack Breazeale's contribution to Spring Schools on acousto-optics and its applications (1980 – 2008)
Kwiek, Piotr; Linde, Bogumil B.J.; Sliwinski, Antoni
- 13:40 Studies on acoustical dissipation and related parameters in Vth group mononitrides
Singh, R. K.; Singh, R. P.

Tuesday 13.00-14.00 Room 202 Aircraft noise 2

Chair: Jeremy Astley Ichiro Yamada

- 13:00 A measurement method to discriminate aircraft fly-over noise
Genesca, M.; Romeu, J.; Pamies, T.
- 13:20 A paired comparison experiment to examine startle evoked by low level sonic booms and other transients.
Marshall, Andrew; Davies, Patricia
- 13:40 On the source modeling technique in Tam & Auriault's fine-scale turbulence jet noise theory
Li, X. D.; Yang, T. X.

Tuesday 13.00-14.00 Room 203 Theoretical and computational acoustics 2

Chair: Stuart Bolton Robert Anderssohn

- 13:00 Use of CFD to calculate the performance of microperforated materials
Kim, Nicholas; Bolton, J. Stuart
- 13:20 Numerical computations of a recorder fluid
Fuss, Stefanie; Marburg, Steffen
- 13:40 Efficient handling of parameter uncertainties in coupled fluid-structure finite element computations
Lippert, Stephan; von Estorff, Otto

Tuesday 14.00 Distinguished Lectures

Room A: Chair Norm Broner

Strength G, Reverberation Time RT, Listener Envelopment LEV, and Measurements Needed in Concert Halls

Leo L. Beranek,

Includes presentation of AAS Honorary Fellowship

Room 103: Chair Sandra Kentish

Sonochemistry - a proven tool for process intensification

Timothy J. Mason

Tuesday 14.40-16.20 Room A Architectural Acoustics 4

Chair: Michael Latimer Juergen Reinhold

- 14:40 Teatro di San Carlo, Naples, restoration and enlargement: Conservation of the excellent acoustics in the oldest active opera house in Europe
Reinhold, Juergen
- 15:00 Room acoustics in rehearsal rooms and public areas in the new Norwegian National Opera House
Limmesand, Per Kåre; Olafsen, Sigmund
- 15:20 Acoustics of the concert hall at the Sydney Opera House, Part two: The Acoustician's Perspective
Kirkegaard, Larry; Gulsrud, Tim; McCreery, Anthony
- 15:40 Acoustics of the concert hall at the Sydney Opera House, Part one: A Client's Perspective
Taylor, Lisa
- 16:00 Contoured foam absorbers
Pearse, John; Latimer, M. D.; Parkinson, J. P.

Tuesday 14.40-16.20 Room 101 Signal processing 5

Chair: Shefeng Yan Ben Kidd

- 14:40 A new FFT method for analysing signals containing frequency modulated tones
Kidd, Ben
- 15:00 Theory of sound manipulation: relation of transfer function characteristic and its performance
Song, Min-Ho; Chang, Ji-Ho; Park, Jin-Young; Kim, Yang-Hann
- 15:20 A conceptual explicit expression of the separation matrix in independent component analysis
Yanagida, Masuzo; Hojo, Shintaro
- 15:40 Design of time-domain modal beamformer for broadband spherical microphone arrays
Yan, Shefeng; Hou, Chaohuan
- 16:00 Multiple description coding for MP3 coded sound signal
Wey, Ho-seok; Ito, Akinori; Okamoto, Takuma; Suzuki, Yoiti

Tuesday 14.40-16.20 Room 102 Psychological 3

Chair: Florian Völk Jörg M. Buchholz

- 14:40 Advantages of binaural room synthesis for research and fitting of hearing aids, cochlear implants, electro-acoustical stimulation, and combined systems
Völk, Florian; Fastl, Hugo
- 15:00 Estimating individual listeners' auditory-filter bandwidth in simultaneous and non-simultaneous masking
Buchholz, Jörg M.; Dau, T.; Caminade, Sabine; Strelcyk, Olaf
- 15:20 Influence of the ventriloquism effect on minimum audible angles assessed with wave field synthesis and intensity panning
Völk, Florian; Schmidhuber, Maximilian; Fastl, Hugo
- 15:40 What cochlear implants can tell us about pitch perception in normal hearing
Swanson, Brett A.; McDermott, Hugh J.

Tuesday 14.40-16.20 Room 103 Sonochemistry and Sonoluminescence 1

Chair: Muthupandian Ashokkumar Peter Birkin

- 14:40 Observations of bubble clusters within different cavitation environments – electrochemistry, acoustics and imaging studies
Birkin, Peter R.; Leighton, Timothy G.; Offin, Douglas G.; Vian, Christopher J. B.
- 15:00 Multi-bubble sonoluminescence resolved in space, time, and color
Thiemann, Andrea; Nowak, Till; Mettin, Robert
- 15:20 Degradation of water pollutants using ultrasound
Paniwnyk, L.; Larpparasudthi, On Annong; Mason, Timothy J.
- 15:40 Sonochemistry with bubbles stabilized in micromachined pits
Rivas, D. Fernandez; Zijlstra, A. G.; Lohse, D.; Prosperetti, A.; Gardeniers, H.
- 16:00 Objective parameters for the characterization of cavitation effects
Jüschke, Matthias; Kochm, Christian

Tuesday 14.40-16.20 Room 105 Lightweight Structures 3

Chair: Jeffrey Mahn Grant Emms

- 14:40 Measurements on timber-framed floors with a granular material in the floor topping
Emms, Grant
- 15:00 Study of elastic modulus for viscoelastic absorption materials
Bai, Guofeng; Zhou, Chengguang; Liu, Bilong; Liu, Ke
- 15:20 The growth of vibro-acoustical properties of volume based timber buildings during the construction phase
Öqvist, Rikard; Ljunggren, Fredrik; Ågren, Anders
- 15:40 The effect of aerated concrete containing glass foam aggregate on the heavy-weight impact sound isolation
Jeong, Jeong-Ho; Yon, Chang-Yeon; Kim, Myung-Jun
- 16:00 Uncertainties in standard measurement and evaluation procedure applied in light weight structures
Hagberg, Klas; Thorsson, Pontus

Tuesday 14.40-16.20 Room 202 Vehicle noise and vibration 1

Chair: Derek Thompson Marco Decker

- 14:40 Trail bike exhaust noise: Are road-legal trail bikes louder than competition bikes?
Thompson, Derek
- 15:00 Development of experimental procedure for detecting and evaluating squeak and rattle noise emission from the instrument panel in a vehicle
Shin, Su-Hyun; Kim, Duck-Whan; Cheong, Cheolung
- 15:20 Vibro-acoustic analysis of a vehicle integrated with design of experiments methodology using three performance criteria
Yuksel, Erdem; Basdogan, Ipek

- 15:40 Optimization of Diesel engine noise
Decker, Marco; Schmiechen, Philipp; Röpke, Karsten; Gühmann, Clemens
- 16:00 The passive acoustic effect of automotive catalytic converters
Rämmal, Hans; Lavrentjev, Jüri

Tuesday 14.40-16.20 Room 203 Theoretical and computational acoustics 3

Chair: Sebastian Oberst Robert Anderssohn

- 14:40 The ultra-weak variational formulation for the 3D elastic wave problems
Luostari, Teemu; Huttunen, Tomi; Monk, Peter
- 15:00 Uncertainty modelling in detecting friction-induced pad-mode instabilities in disc brake squeal
Oberst, S.; Lai, J. C. S.
- 15:20 Meaning Of admittance boundary condition explained on an analytical example Of structure fluid coupling
Anderssohn, Robert; Marburg, Steffen; Hardtke, Hans-Juergen
- 15:40 The effect of coupling on the modal behavior of the coupled system of a cavity and a flexible panel
Guoyong, Jin; Yuehua, Chen
- 16:00 A review on prediction models for the acoustic performance of pipe lagging
Kanapathipillai, S.; Lacin, M. J.

Tuesday 08.20-12.30 Poster Session 2 Bayside Terrace, Level 2

- The acoustical design of mobile phones
Onishi, Yasuharu; Kuroda, Jun; Murara, Yukio; Komoda, Motoyoshi; Tsunoda, Kazuyuki; Yokoyama, Yukio; Oikawa, Yasuhiro; Yamasaki, Yoshio
- Short-interval period distributions for structural health monitoring
Gotoh, S.; Matsumoto, M.; Hiratam Y.
- Preliminary acoustic tests on resilient materials: comparison between common layers and nano-structured layers
Bettarello, Federica; Caniato, Marco; Kaspar, Jan; Di Monte, R.; Sbaizero, Orfeo
- On decreasing the calculation time in multi-dimensional acoustic numerical simulation by multi-GPU parallel computing
Kawada, Naoki; Okubo, Kan; Tagawa, Norio; Tsuchiya, Takao
- Noise suppression method for a high-realistic reproduction system with active noise control
Triki, Takayuki; Morise, Masanori; Nishiura, Takanobu
- A study of a comfortable sound design for higher-frequency noise based on auditory masking
Tsujikawa, Misaki; Morise, Masanori; Nishiura, Takanobu
- Highly uncomfortable Mosquito Signal based on subjective evaluation
Ishimaru, Fumihiro; Morise, Masanori; Nishiura, Takanobu
- In situ measurements of reflection index and sound insulation index of noise barriers
Tronchin, Lamberto; Venturi, Andrea; Tarabusi, Valerio; Farina, Angelo; Varani, Christian
- Thickness noise analysis of an uneven helicopter rotor configuration
Li, Donghong; Kang, Entao; Luo, Lunkai; Yang, Yichun
- Economics on wind farm noise mitigation by power limitation
Cotana, Franco; Rossi, Federico; Filipponi, Mirko
- Hearing status among aircraft maintenance personnel in a Swedish commercial airline company
Lindgren, Torsten
- Transmission loss calculations for dissipative mufflers with temperature gradients
Denia, Francisco D.; Antebas, Antoine; Martínez-Casas, José; Fuenmayor, F. Javier
- Performance improvement in automatic evaluation system of English pronunciation by using various normalization methods
Kusumi, Masaru; Kato, Masaharu; Kosaka, Tetsuo; Matsunaga, Itaru
- Speech recognition in noise by using word graph combinations
Kuramata, Shunsuke; Kato, Masaharu; Kosaka, Tetsuo
- Speech enhancement based on estimating expected values of speech cepstra
Zheng, Chengshi; Zhou, Yi; Hu, Xiaohu; Tian, Jing; Li, Xiaodong

- Fast subword-based approach for open vocabulary spoken term detection
Lee, Shi-wook; Nambu, Yoshiki; Kojima, Hiroaki; Tanaka, Kazuyo; Itoh, Yoshiaki
- Performance estimation of speech recognition based on acoustic parameters under reverberation environments with CENSREC-4
Fukumori, Takahiro; Morise, Masanori; Nishiura, Takanobu
- The Lombard speech recognition based on the voice conversion towards neutral speech
Uemura, Yuji; Morise, Masanori; Nishiura, Takanobu
- The acoustic sound field dictation with Hidden Markov Model based on an onomatopoeia
Hayashida, Kohei; Ogawa, Junpei; Mizoguchi, Yu; Morise, Masanori; Nishiura, Takanobu; Yamashita, Yoichi
- Unification of speech and audio coding technology for mobile devices
Lee, Taejin; Kang, Kyeongok; Kim, Whan-Woo
- Long-term modelling of parameters trajectories of the harmonic plus noise model for speech signals
Ben Ali, Faten; Girin, Laurent; Larbi, Sonia Djaziri
- XML based notation for rule-based text-to-speech systems
Sehhati, Shahla
- Rapid Acoustic Model Adaptation Using Inverse MLLR-based Feature Generation
Ito, Arata; Hara, Sunao; Kitaoka, Norihide; Takeda, Kazuya
- Mandarin tones recognition by segments of fundamental frequency contours
Ho, Cheng-Yu; Chang, Hui-Shan; Young, Shuenn-Tsong
- Evaluation and optimization of F0-adaptive spectral envelope estimation based on spectral smoothing with peak emphasis
Akagiri, Hayato; Morise, Masatoshi; Nisimura, Ryuichi; Irino, Toshio; Kawahara, Hideki

Tuesday 13.00-17.00 Poster Session 3 Bayside Terrace, Level 2

- Study on wooden micro-perforated panel and its application
Sheng, Shengwo; Mo, Fangshuo
- A proposal for a tool for automatic correction of geometrical errors in acoustical simulation
Montell, R.; Segura, J.; Giménez, A.; Barba, A.; Lacatis, R.; Planells, A.
- Comparison between measured and simulated binaural impulse responses in different rooms
Segura, J.; Cerdá, S.; Giménez, A.; Montell, R.; Barba, A.; Vera, L.; Fernandez, M.; Romero, J.; Lacatis, R.; Cibrián, R. M.; Miralles, J. L.; Navasquillo, J.
- Quantitative evaluation of three-dimensional shape of auditorium using elliptical Fourier descriptors
Hoshi, Kazuma; Hanyu, Toshiki
- Taiwan green building material labelling system and its sound insulating assessment
Chiang, Che-Ming; Hsieh, Ting-Ting; Chen, Jui-Ling; Lai, Rong-Ping; Lai, Kwang-Pang
- Restoration of the Bell Pavilion for King Song-Dok Bell considering its acoustic characteristics
Haan, Chan-Hoon
- A study of sound absorption characteristics on air layer with irregular shape
Liu, Kai-hua; Lai, Rong-Ping; Chou, Chuan-wen
- Impact of acoustic performance on sustainability and quality of an energy efficient building
Cotana, Franco; Goretti, Michele
- Improvement of the floor impact noise of the concrete slab using latex modified mortar
Haan, Chan-Hoon; Lee, Won-Hak; Park, Chan-Jae
- Floor impact noise characteristics of impact ball depending on the drop heights in the both wooden and concrete structures
Lee, Won-Hak; Haan, Chan-Hoon
- Influence of different materials in the acoustic performance of ventilated sill used in natural climatization construction
Oiticica, Maria Lúcia G.da R.; Bertoli, Stelamaris Rolla
- On the measurement and evaluation of bass enhanced in-ear phones
Wersényi, György
- Analysis of MRI driving sound in case of gradient magnet field controlled by the original sequence
Muto, Kenji; Yagi, Kazuo; Hata, Jun_hi; Chen, Guoyue; Takano, Kunihiro
- Comparative study of times of flight, speed of sound and elastic constants in nanostructured materials by pulse acoustic microscopy and laser ultrasonic techniques
Prokhorov, Viacheslav

Non contact acoustic imaging method in the extremely shallow underground using optimum frequency range method by SLDV

Sugimoto, Tsuneyoshi; Abe, Touma

Study on the health index value using the waveform of the Korotkoff sounds

Sugimoto, Tsuneyoshi; Katayama, Fumiyo

Possibility for sub-ppm hydrogen detection with the ball SAW sensor

Nagai, Hiroki; Kawai, Shohei; Ito, Osamu; Oizumi, Toru; Tsuji, Toshihiro; Takeda, Nobuo; Yamanaka, Kazushi

Measurement of sound intensity of MRI driving sound in near field of MRI equipment

Shimono, Yasuhiro; Chikai, Masataka; Muto, Kenji; Yagi, Kazuo

Fast near-field HRTF measurements using reciprocal method

Matsunaga, Noriyuki; Hirahara, Tatsuya

Characteristics of Absorbing Material in Obliquely Incident Waves

Yamana, Kazuki; Shibayama, Hideo

Effect of frequency compound technique on coded excitation and synthetic aperture focusing ultrasound imaging

Hiyoshi, Masato; Yanagida, Hirotaka; Guo, Shuqiang; Fan, Honghui; Tamura, Yasutaka; Saitoh, Tadashi; Ikegami, Masanaga; Takahashi, Tatsuhisa

Ultrasonic open channel drainage flow measurement using correlation technique

Nishimura, Ichiro; Yamada, Akira

Measurement of reverberation time: a comparative study of impulsive sound sources

Teixeira, Thaise Moser; Lisot, Aline; Soares, Paulo Fernando; Tamanini, Carlos A. M.

Diagnostics of elastic properties of polymerizing polyacrylamide

Korobov, A. I.; Filippova, O. E.; Kokshaisky, A. I.

Wednesday 08.20-11.00 Room A Road transportation noise 1

Chair: Peter Karantonis Daniel Naish

08:20 A study on the sound power level of Queensland road vehicles
Naish, Daniel

08:40 A geometric method to determine feasible noise barrier locations
Naish, Daniel

09:00 Limit of predicted road noise emissions due to traffic constraints - Part 2
Hall, Benjamin

09:20 An environmental noise mapping study for heterogeneous traffic conditions
Ramasamy, Kalaiselvi; Alur, Ramachandraiah

09:40 Further comparison of traffic noise predictions using the CadnaA and SoundPLAN noise prediction models
Karantonis, Peter; Gowen, Tracy; Simon, Mathew

10:00 Relationships between noise indices, road traffic noise and criteria in NSW
Parnell, Jeffrey; Wassermann, John; Samuels, Stephen

10:20 Directivity of the CoRTN road traffic noise model
Moore, Simon; Stead, Matthew; Cooper, Jonathan

10:40 Deployment of the binary traffic in the city of Maringa, PR, Brazil: acoustic adequacy of the surroundings of educational institution
Lisot, Aline; Bertoli, Stelamaris Rolla; Soares, Paulo Fernando

Wednesday 08.20-11.00 Room 101 Signal processing 6

Chair: Akio Ando Yusuke Hioka

08:20 Multizone soundfield reproduction using multiple loudspeaker arrays
Wu, Yan Jennifer; Abhayapala, Thushara D.

08:40 Conversion of reproduced sound field based on the coincidence of sound pressure and direction of particle velocity
Ando, Akio

09:00 Emergency evacuation guiding system using changeable sound directivity
Jung, Han Vit

- 09:20 Analysis of acoustic imaging using wide-spread infrasonic sensor network array
Quan, Guo; Yichun, Yang; Bo, Yang; Xinyuan, Wei
- 09:40 Generation of a private listening zone; acoustic parasol
Lee, Jung-Min; Lee, Tae-Woong; Park, Jin-Young; Kim, Yang-Hann
- 10:00 Evaluating estimation of direct-to-reverberation energy ratio using D/R spatial correlation matrix model
Hioka, Yusuke; Niwa, Kenta; Sakauchi, Sumitaka; Furuya, Ken_hi; Haneda, Yoichi
- 10:20 Adaptive noise cancellation for acquisition of reference signal of active noise control
Lee, Jong-Won

Wednesday 08.20-11.00 Room 102 Psychological 4

Chair: David Schönstein Mohan Rao

- 08:20 HRTF selection for binaural synthesis from a database using morphological parameters
Schönstein, David; Katz, Brian F. G.
- 08:40 The ability to transiently store acoustic details is associated with speech recognition against informational masking in reverberant environments
Li, Huahui; Huang, Ying; Zhang, Liang; Teng, Xiangbin; Wu, Xihong; Li, Liang
- 09:00 Influence of band-limited flattening of HRTFs on sound localization performance
Watanabe, Kanji; Kodama, Ryosuke; Sato, Sojun; Takane, Shouichi
- 09:20 Cognition improvement of warning system by complex stimuli in vehicle interior
Yamaguchi, Masao; Kobayashi, Shinya; Toi, Takeshi
- 09:40 Observations on auditory learning in amplitude- and frequency-modulation rate discrimination
Hoffmann, Pablo F.
- 10:00 Equal reverberance matching of running musical stimuli having various reverberation times and SPLs
Lee, Doheon; Cabrera, Densil; Martens, William L.
- 10:20 Characterization of sound quality of impulsive sounds using a loudness based metric
Willemsen, Andrew; Rao, Mohan D.

Wednesday 08.40-11.00 Room 103 Medical bubble acoustics 2

Chair: Vassilis Sboros Michiel Postema

- 08:40 Single microbubble acoustics in small tubes
Butler, Mairead; Dermizakis, Aris; Thomas, David; Looney, Pdraig; Pye, Stephen; Sboros, Vassilis
- 09:00 Wideband nonlinear imaging of ultrasound contrast agent with a CMUT Probe
Novell, Anthony; Bouakaz, Ayache
- 09:20 Evaluation of the effects of secondary radiation force on aggregation of ultrasound contrast agents
Zhang, Yanli; Zhang, Dong; Huang, Bei; Gong, Xiufen
- 09:40 A simultaneous observation system for microbubble vibration in an acoustic field by using a high-speed camera and an LDV
Kotera, Hironori; Kitazawa, Natsuko; Yoshida, Kenji; Koyama, Daisuke; Nakamura, Kentaro; Watanabe, Yoshiaki
- 10:00 Ultra high-speed fluorescence imaging of ultrasound contrast agents for imaging and therapy
Gelderblom, Erik; Kooiman, Klazina; Böhmer, Marcel; de Jong, Nico; Lohse, Detlef; Versluis, Michel
- 10:20 Ultrasound contrast agents: from imaging to therapy
Bouakaz, Ayache; Novell, Anthony; Escoffre, J. M.; Piron, J.; Aired, L.; Doinikov, A.

Wednesday 08.20-11.00 Room 104 Occupational noise 1

Chair: Georg Brockt Franco Gugliermetti

- 08:20 Noise at Work regulations 2005 and the Royal Academy of Music noise project.
Zepidou, G.; Dance, Stephen
- 08:40 The European Regulation 2003/10/EC and the impact of its application to the military noise exposure
Buck, Karl; Hamery, Pascal; Zimpfer, Véronique
- 09:00 Noise and hearing loss in the metal manufacturing industry in New Zealand
Welch, David; Grynevych, Alla; John, Gareth; Thorne, Peter

- 09:20 Noise in industrial workrooms
Piechowicz, Janusz
- 09:40 The assessment of auditory damage risk in particularly noisy environments
Gugliermetti, F.; Aureli, C.; Violante, A. C.
- 10:00 Control of noise exposure for employees in the music sector
Brockt, Georg
- 10:20 Noise levels in UAE dental clinics and its effect on dental professionals and patients
Elmehdi, Hussein M
- 10:40 The effect of wearing earplugs on the level and spectrum of performed music
Kozlowski, Emil; Zera, Jan; Mlynski, Rafal

Wednesday 09.00-11.00 Room 105 Lightweight Structures 4

Chair: John Davy Linda Parati

- 09:00 Vibro-Acoustic Characterisation of Thermoplastic Fibre Reinforced Composites
Klaerner, Matthias; Marburg, Steffen; Kroll, Lothar
- 09:20 Effect of resilient channel and floating floor on floor impact sound insulation of wood-frame construction
Hiramitsu, Atsuo; Hirota, Tomohito; Tanaka, Manabu; Sato, Hiroshi
- 09:40 Airborne sound transmission in lightweight wall design structures for residential and commercial buildings
Singh, M.; Singh, D. P.; Sharma, Omkar
- 10:00 Wooden roof: evaluation of acoustic performances performed in laboratory, on an external test-cell, and on real buildings
Parati, L.; Carrettini, A.; Scrosati, C.; Scamoni, F.

Wednesday 08.20-11.00 Room 106 Micro/Nanofluidics and Actuation 1

Chair: James Friend Miyuki Maezawa

- 08:20 Liquid mixing using streaming in frequency-modulated ultrasound beams radiated from SAW devices
Maezawa, Miyuki; Nomura, Hideyuki; Kamakura, Tomoo
- 08:40 Acoustically induced micro-scale capillary wave turbulence
Blamey, Jeremy; Friend, James; Yeo, Leslie
- 09:00 Acoustic streaming on "micro-laboratory" using sensor plate/matching layer/piezoelectric substrate
Kondoh, Jun; Nakayama, Yutaro
- 09:20 Applications of high-frequency ultrasonics in microfluidics and microactuation
Friend, James; Yeo, Leslie
- 09:40 Fast microfluidic actuation driven using surface acoustic waves
Yeo, Leslie; Friend, James
- 10:00 Characteristics of screw-shaped ultrasonic motor that incorporates three transducers
Suzuki, Atsuyuki; Izumi, Kentaro; Tsujino, Jiomaru
- 10:20 Acoustical research of nanoparticle colloid suspensions
Damdinov, Bair; Reinecker, Marius; Schranz, Wilfried

Wednesday 08.40-11.00 Room 201 Speech production

Chair: Xavier Pelorson Takayoshi Nakai

- 08:40 Development of speech synthesis simulation system and study of timing between articulation and vocal fold vibration for consonants /p/, /t/ and /k/
Ogata, Kohichi; Hokazono, Mamio
- 09:00 Visualisation of moderate Reynolds number flow through a tooth-shaped nozzle
Grandchamp, X.; Van Hirtum, A.; Nozaki, K.; Cisonni, J.; Pelorson, X.; Shimojo, S.
- 09:20 Observation of voiced consonants using MRI movie
Nakai, Takayoshi; Hirayama, Koutaro; Ishida, Keizo
- 09:40 Theoretical and experimental study of some aeroelastic phenomena during phonation
Pelorson, X.; Meijers, R.; Ruty, N.; Van Hirtum, A.

- 10:00 Optimizing laryngeal pathology detection by using combined cepstral features
Vieira, Raissa Tavares; Brunet, Nathalia Arthur; Costa, Silvana Luciene do Nascimento Cunha;
Nóbrega, Suzete Élide Correia; Neto, Benedito Guimarães Aguiar; Fechine, Joseana Macêdo
- 10:20 Contribution to the improvement of the quality of a synthesis speech
Falek, Leila; Djeradi, Amar

Wednesday 08.20-11.00 Room 202 Aeroacoustics and atmospheric sound 1

Chair: Con Doolan Mikael Karlsson

- 08:20 Statistical estimation of turbulent trailing edge noise
Doolan, Con J.; Gonzalez, C. Albarracin; Hansen, Colin H.
- 08:40 Acoustic analysis of flat plate trailing edge noise
Moreau, Danielle J.; Tetlow, Matthew R.; Brooks, Laura A.; Doolan, Con J.
- 09:00 Linear stability analysis applied to flow duct acoustics
Karlsson, Mikael
- 09:20 Development of low-noise centrifugal fans in a refrigerator
Heo, Seung; Cheong, Cheolung
- 09:40 On conditions of equivalence between Curle's and non-uniform Kirchhoff equations of
aeroacoustics
Zinoviev, Alex
- 10:00 Hybrid CFD/BEM approach to predicting flow induced noise
Croaker, Paul; Kinns, Roger; Kessissoglou, Nicole; Norrison, Daniel; Widjaja, Ronny; Marburg, Steffen
- 10:20 Comparative study on finite-difference and finite-volume implementations of the linearized Euler
model for outdoor sound propagation simulations
Oshima, Takuya
- 10:40 Reducing the acoustic signature of a UAV propeller operating at low Reynolds numbers
Leslie, Angus; Wong, K. C.; Auld, Doug

Wednesday 08.20-11.00 Room 203 Theoretical and computational acoustics 4

Chair: Allan D. Pierce Chris Tindle

- 08:20 Modeling the transmission loss of passthroughs in sound package using foam finite elements
Guettler, Marcus; Pereira, Israel; Merz, Sascha; Shorter, Phil
- 08:40 Critique of Biot-related theories of acoustic waves in porous media
Pierce, Allan D.; Carey, William M.
- 09:00 Computing diffraction integrals with the numerical method of steepest descent
Svensson, P.; Asheim, Andreas
- 09:20 Wavefront modelling and low frequency ray theory
Tindle, Chris
- 09:40 Blind source separation and localization in case of one reflection problem of one source signal
Miyakawa, Yusuke; Sasaki, Fumio; Iiyama, Kahori; Tanaka, Osamu; Yasuoka, Masahito
- 10:00 Three formulas of generalized gamma functions occurring in analytical acoustics
Jeon, Wonju
- 10:20 Ranking energy paths in a SEA model
Guasch, Oriol; Aragonès, Àngels

Wednesday 11.00 Room A Plenary Chair: Samir Gerges

Human auditory signal processing in complex acoustic environment

Torsten Dau

Includes presentation of the ICA Early Career Award

Wednesday 13.00-15.00 Room A Road transportation noise 2

Chair: Ulf Sandberg Stuart Bolton

- 13:00 How to measure the effectiveness of low-noise pavements in urban situations?
van Keulen, Wim
- 13:20 Are vehicles driven in electric mode so quiet that they need acoustic warning signals?
Sandberg, Ulf; Goubert, Luc; Mioduszewski, Piotr

- 13:40 Enhancements to noise barrier design standards for European highways
Parker, Giles
- 14:00 Road traffic noise pollution in Vietnam
Phan, Hai Yen Thi; Phan, Hai Anh Thi; Yano, Takashi; Lan, Nguyen Thu
- 14:20 Quantitative assessment of noise reduction following building treatment to dwellings affected by traffic noise
Chung, Michael
- 14:40 Tire surface vibration and sound radiation resulting from the tire cavity mode
Jessop, Andrew M.; Bolton, J. Stuart

Wednesday 13.00-15.00 Room 101 Noise and Sound

Chair: Steven Cooper S.K. Tang

- 13:00 Sound transmission loss of expansion chambers with upper and lower chambers staggered
Tang, S. K.; Leung, R. C. K.
- 13:20 Sound therapy restores hearing– Fact or fiction? A personal experience of an acoustician
Cooper, Steven
- 13:40 Vibroacoustic investigations on hand prostheses and sound design
Altinsoy, M. Ercan

Wednesday 13.00-15.00 Room 102 Psychological 5

Chair: William L. Martens Yukio Iwaya

- 13:00 Correlation between groovy singing and words in popular music
Sakabe, Yuma; Takase, Katsuya; Yamada, Masashi
- 13:20 Spatial separation and timbral difference affect identification of pitch modulation in one of two sources
Song, Hong Jun; Martens, William L.
- 13:40 Adaptive adjustment of the “sweet spot” for head rotation
Merchel, Sebastian; Groth, Stephan
- 14:00 Effects of pitch of sounds on vertical localization of the sounds with frequencies changing over three octaves
Miyasaka, Eiichi
- 14:20 Fluctuation strength on the mandolin tremolo with the 1st and 2nd fluctuations
Yasui, Nozomiko; Miura, Masanobu
- 14:40 Sound localization in median plane using an avatar robot “TeleHead” with synchronization of a listener’s horizontal head rotation
Iwaya, Yukio; Masuyama, Yusuki; Otani, Makoto; Suzuki, Yoiti

Wednesday 13.00-15.00 Room 103 Sonochemistry and Sonoluminescence 2

Chair: Gareth Price Kyuichi Yasui

- 13:00 Multibubble sonoluminescence pulse from Na atom in viscous liquid
Sawada, Yosuke; Takeuchi, Yuta; Choi, Pak Kon
- 13:20 Sonochemistry and sonoluminescence in aqueous systems
Price, Gareth J.
- 13:40 Degradation of perchloroethylene aqueous solutions by sonochemical, electrochemical and sonoelectrochemical methods
Sáez, V.; Esclapez, M. D.; Tudela, I.; Bonete, P.; Louisnard, O.; González-García, J.
- 14:00 Cavitation – a rapid and a novel way of generating the nanoemulsion encapsulated with active pharmaceutical ingredients
Manickam, Sivakumar; Wei, Tan Khang; Tang, Siah Ying
- 14:20 Origin of the broad-band noise in acoustic cavitation
Yasui, Kyuichi; Tuziuti, Toru; Kozuka, Teruyuki; Towata, Atsuya
- 14:40 Transient cavitation in high-quality factor resonators at high static pressures
Gaitan, D. Felipe; Matula, Thomas J.; Church, Charles C.; Gutierrez, Joel; Scott, Corey; Holt, R. Glynn; Crum, Lawrence A.

Wednesday 13.00-15.00 Room 104 High Intensity Focused Ultrasound

Chair: Junru Wu Oleg Sapozhnikov

- 13:00 Theoretical modeling of radiation force imparted on a kidney stone by a focused ultrasound beam
Sapozhnikov, Oleg A.; Bailey, Michael
- 13:20 Mechanical erosion of tissue using millisecond bursts of high amplitude shock waves
Khokhlova, V. A.; Canney, M. S.; Khokhlova, T. D.; Wang, Yak-Nam; Hwang, Joo Ha; Crum, Lawrence A.; Bailey, Michael
- 13:40 Controlled drug release from encapsulated nanometer liposomes using high intensity focused ultrasound
Wu, Junru; Chen, Di
- 14:00 A brief review of development of high intensity focused ultrasound (HIFU) in Chongqing Medical University of the past 21 years
Li, Faqi; Wang, Zhibiao; Chen, Wenzhi; Li, Chengzhi; Zhang, Lian; Wu, Feng; Wu, Junru
- 14:20 Manufacture of graded porosity foams: Simulation of local ultrasonic pressure and comparison with experimental results
Torres-Sanchez, Carmen; Corney, Jonathan

Wednesday 13.00-15.00 Room 105 Architectural Acoustics 6

Chair: Stephen Dance Henrik Moller

- 13:00 Improving the acoustic for classical musicians
Dance, Stephen
- 13:20 Designing small music practice rooms for sound quality
Osman, Riduan
- 13:40 Acoustic description of the Great Hall of the Moscow P.I.Tchaikovsky Conservatory
Moller, Henrik; Vehvilainen, Sara; Tishko, Dmitri; Wulfrank, Thomas; Rozanov, Sergey I.
- 14:00 Acoustical design of inner galleries in Heydar Aliyev Center
Su-Gul, Zuhre; Caliskan, Mehmet
- 14:20 Acoustic study of the Society of Jesus Church. Characterization by means of objective and subjective parameters
Abadía, Leandra; López, Manuel Recuero; Ottobre, Daniel
- 14:40 An acoustic investigation into small auditorium in Indonesia
Handjarinto, Siti; Legoh, Finarya; Makainas, Indrajaya

Wednesday 13.00-15.00 Room 106 Measurement, Generation and reproduction of sound 1

Chair: Jin-Young Park Shigeto Takeoka

- 13:00 A sound telescope: a control of zone of interest
Jo, Hyun; Park, Youngjin; Park, Youn-sik
- 13:20 Acoustic projector using directivity controllable parametric loudspeaker arrays
Takeoka, Shigeto; Yamasaki, Yoshio
- 13:40 The reproduction of the response of an aircraft panel to turbulent boundary layer excitations in laboratory conditions
Bravo, Teresa; Maury, Cedric
- 14:00 Measurement and generation of footsteps sound on Japanese traditional dance
Kawakami, Hiroshi; Mito, Yuki
- 14:20 Performance degradation due to transfer function errors in acoustic brightness/contrast control: sensitivity analysis
Park, Jin-Young; Song, Min-Ho; Chang, Ji-Ho; Kim, Yang-Hann

Wednesday 13.00-15.00 Room 201 Speech processing and communication systems 1

Chair: Guilin Ma Magnus Schaefer

- 13:00 Reverberation-based post-processing for improving speech intelligibility
Schäfer, Magnus; Jeub, Marco; Sauert, Bastian; Vary, Peter
- 13:20 Do we need dereverberation for hand-held telephony?
Jeub, Marco; Schäfer, Magnus; Krüger, Hauke; Nelke, Christoph; Beaugeant, Christophe; Vary, Peter
- 13:40 Evaluation of speech balloon captions for auditory information support on small meetings
Hisaki, Ippei; Nanjo, Hiroaki; Yoshimi, Takehiko

- 14:00 Low-complexity GSC-RLS beamformer with self-tuning algorithm
Lee, Seokjin; Lim, Jun-seok; Sung, Koeng-Mo
- 14:20 Noise injection for feedback cancellation with linear prediction
Ma, Guilin; Gran, Fredrik; Jacobsen, Finn; Agerkvist, Finn T.
- 14:40 Properties analysis for a Bucky Ball microphone array based on soundfield decomposition using spherical harmonic
Chen, Rilin; Luo, Lunkai; Teng, Pengxiao; Yang, Yichun; Tian, Jing

Wednesday 13.00-15.00 Room 202 Underwater sound 1

Chair: Eugeniusz Kozaczka Mandar Chitre

- 13:00 Nonlinear searching of the buried objects at the sea
Kozaczka, Eugeniusz; Grelowska, Grazyna
- 13:20 The examination of the structure of the upper layers of the seabed by the means of the parametric sonar
Grelowska, Grazyna; Kozaczka, Eugeniusz
- 13:40 Vertical array passive geo-acoustic inversion in range-dependent environments
DelBalzo, Donald R.; Leclere, James H.
- 14:00 Development of the ship-mounted underwater acoustic surveillance system
Kuramoto, Kazuoki; Kurashige, Yoshinori; Asada, Akira; Maeda, Fumitaka; Nanri, Mitsuhiko; Hantani, Kazuhiro
- 14:20 Acoustic sensing in snapping shrimp dominated environments
Chitre, Mandar
- 14:40 The survey result of ship wreckage off the coast of Oman
Hu, Changqing; Wan, Shimin

Wednesday 13.00-15.00 Room 203 Structural acoustics and vibration 3

Chair: Jun Kuroda Josh Tsai

- 13:00 Optimal design of piezoelectric panel speakers using the simulated annealing algorithm
Bai, Mingsian R.; Tsai, Yao Kun
- 13:20 The development of ultra thin piezoelectric speakers for mobile phones
Onishi, Yasuharu; Kuroda, Jun; Murara, Yukio; Komoda, Motoyoshi; Toki, Nozomi; Sasaki, Yasuhiro; Oikawa, Yasuhiro; Yamasaki, Yoshio
- 13:40 The acoustical design of slim size piezoelectric speakers for mobile phones
Kuroda, Jun; Onishi, Yasuharu; Murara, Yukio; Komoda, Motoyoshi; Tsunoda, Kazuyuki; Takahashi, Masatake; Oikawa, Yasuhiro; Yamasaki, Yoshio
- 14:00 Vibration modelling of composite laminates with delamination damage
Zhang, Z.; Shankar, K.; Tahtali, M.; Morozov, E.
- 14:20 A novel double-notch passive hydraulic engine mount design
Tikani, Reza; Ziaei-Rad, Saeed; Vahdati, Nader; Heidari, Somayeh; Esfahanian, Mohsen
- 14:40 Adaptive electromechanical tuned vibration absorbers and their application in semi-active fluid mounts
Vahdati, Nader; Heidari, Somayeh

Wednesday 15.00 Distinguished Lectures

Room A: Chair Chris Schulten

Noise and Health from different perspectives
Irene van Kamp,

Room 103: Chair Michiel Postema

Nonlinear behavior of ultrasound contrast agent: Microbubbles and why shell buckling matters
Michel Versluis

Wednesday 15.40-18.00 Room A Health effects of noise

Chair: Irene van Kamp Gaetano Licitra

- 15:40 Effects of noise on sleep in shift workers
Griefahn, Barbara; Marks, Anke
- 16:00 The contribution of leisure noise to overall noise exposure
Beach, Elizabeth; Williams, Warwick; Gilliver, Megan
- 16:20 Comparative analysis of methods to evaluate people exposure and annoyance
Licitra, Gaetano; Brambilla, Giovanni; Ascari, Elena
- 16:40 A night noise index on the basis of the integration of awakening potential
Matsui, Toshihito; Takashima, Tomoya; Tagusari, Junta; Hiramatsu, Koza
- 17:00 Work and non-work noise exposure
Williams, Warwick
- 17:20 Introducing aircraft noise characteristics into models that predict sleep structure
McGuire, Sarah; Davies, Patricia
- 17:40 Economic valuation of sleep disturbance due to traffic noise: A questionnaire study applying CVM
in Urayasu, Chiba, Japan
Miyakawa, Masamitsu; Matsui, Toshihito; Hiramatsu, Koza

Wednesday 15.40-18.00 Room 101 Non linear acoustics

Chair: Vladimir Preobrazhensky Jahan Tavakkoli

- 15:40 Classical and non-classical nonlinear acoustic effects discerned by airborne ultrasound
Solodov, Igor; Döring, Daniel; Busse, Gerd
- 16:00 3D numerical modeling of nonlinear continuous wave ultrasound beam propagation in
homogeneous dissipative media
Mashouf, Shahram; Tavakkoli, Jahan
- 16:20 Explosive instability of ultrasound in solids
Preobrazhensky, V.; Yevstafyev, O.; Pernod, P.; Berzhansky, V.
- 16:40 Nonlinear resonant ultrasound spectroscopy and acoustic slow dynamics for micro-damage
characterization, correlation to acoustic emission : new trends for heterogeneous materials Non
Destructive Testing (NDT) and Structural Health Monitoring (SHM)
El Guerjouma, Rachid; Bentahar, Mourad
- 17:00 The acoustic source strength of high-energy blast waves: combining measurements and a non-
linear model
van der Eerden, Frits; van den Berg, Frank
- 17:20 Mechanism and experimental demonstration of giant acoustic nonlinearity of weakly-
compressible material containing inclusions with threshold behavior
Zaitsev, V. Yu.; Dyskin, A.; Pasternak, E.; Matveev, L. A.
- 17:40 Acoustic energy loss in crack-containing solids revised: anomalously high strain-sensitivity of
dissipation at dry and saturated cracks
Zaitsev, V. Yu.; Matveev, L. A.

Wednesday 15.40-18.00 Room 102 Virtual sound displays

Chair: Michael Vorländer William Martens

- 15:40 Performance of computer simulations for architectural acoustics
Vorländer, Michael
- 16:00 Spatial data structures for dynamic acoustic virtual reality
Schröder, Dirk; Ryba, Alexander; Vorländer, Michael
- 16:20 Frequency- and time-dependent geometry for real-time auralizations
Pelzer, Soenke
- 16:40 Virtusound – a system for room acoustics simulation and auralization in real time
Alarcão, D.; Santos, D.; Bento Coelho, J. L.
- 17:00 Effects of individualised headphone response equalization on front/back hemifield discrimination
for virtual sources displayed on the horizontal plane
Martens, William L.; Guru, Abhishek; Lee, Doheon

- 17:20 Fast head-related transfer function measurement in complex environments
Ye, Qinghua; Dong, Qiuji; Zhang, Yan; Li, Xiaodong
- 17:40 Effects of headphone calibration functions on subjective impressions of spatial sound
Nishimura, Ryouichi; Kato, Hiroaki; Mokhtari, Parham; Takemoto, Hironori

Wednesday 15.40-18.00 Room 103 Sonochemistry and Sonoluminescence 3

Chair: Kenji Okitsu Francesca Cavaliere

- 15:40 Sonochemical reduction method for controlled synthesis of metal nanoparticles in aqueous solutions
Okitsu, Kenji; Nishimura, Rokuro
- 16:00 Ultrasonic synthesis of air-filled microbubbles and PFC-filled microcapsules
Cavaliere, Francesca; Melino, Sonia; Zhou, Meifang; Fabber, Francesca; Tortora, Mariarosaria; Ashokkumar, Muthupandian
- 16:20 Nebulization of a formaldehyde (FA)-neutralizing agent by an ultrasonic device enhances condensation of vaporized FA
Irie, Yutaka; Tachibana, Katsuro; Feril, Loreto B. Jr; Harada, Yoshimi; Hirakawa, Kazunori
- 16:40 Frequency effects on sonoluminescence of alkali-metal atoms in sulfuric acid
Hatanaka, Shin-ichi; Hayashi, Shigeo; Choi, Pak Kon
- 17:00 Effects of rare-gases on MBSL spectrum of K atom emission
Hayashi, Yuichi; Choi, Pak Kon
- 17:20 Modelling of Na D line shape in sonoluminescence spectra based upon density dynamics
Kazachek, Mikhail; Gordeychuk, Tatyana
- 17:40 Correlation of vibrometry and cleaning effects in ultrasonic dental instruments
Tiong, T. Joyce; King, David C.; Lea, Simon C.; Walmsley, A. Damien; Price, Gareth J.

Wednesday 15.40-18.00 Room 104 Acoustic measurement 1

Chair: Svend Gade Margriet Lautenbach

- 15:40 Volume diffusers in the reverberation room
Lautenbach, Margriet; Vercammen, Martijn
- 16:00 Ultrasonic food quality analyzer based on cylindrical standing waves
Aba, Priev; Yecheckel, Barenholz; Armen, Sarvazyan
- 16:20 A novel approach for impulse response measurements in environments with time-varying noise
Telle, Aulis; Vary, Peter
- 16:40 Development of a head-movement-aware signal capture system for the prediction of acoustical spatial impression
Kim, Chungun; Mason, Russell; Brookes, Tim
- 17:00 An in-situ technique for extensive field measurements of absorption characteristics of materials by using ensemble averaging
bin Che Din, Nazli; Otsuru, Toru; Tomiku, Reiji; Okamoto, Noriko; Kusno, Asniawaty
- 17:20 Multi-field microphone – when the sound field is unknown
Gade, Svend; Bøgholm, Niels V.
- 17:40 Improvement of measurement precision in a water-filled impedance tube
Zhou, Chengguang; Bai, Guofeng; Liu, Bilong; Li, Xiaodong

Wednesday 15.40-18.00 Room 105 Architectural Acoustics 7

Chair: Kenneth Roy Magne Skålevik

- 15:40 Green rating systems and classroom acoustic design
Roy, Kenneth P.
- 16:00 A review of the current role of acoustics in sustainability: The contrast of different rating tools, codes and standards
Gonzalez, Alfredo
- 16:20 Acoustical measurements in occupied rooms in Paris
Figueiredo, Fabio; Polack, Jean-Dominique
- 16:40 Room acoustical parameter values at the listener's ears – can preferred concert hall acoustics be predicted and explained?
Skålevik, Magne

- 17:00 Architectural categories and acoustic characteristics of traditional Chinese theatres
He, Jie; Kang, Jian
- 17:20 Acoustical characteristics of newly developed perforated plates
Nakai, Takayoshi; Kawakami, Fukushi; Wada, Keiichiro; Sano, Takayuki

Wednesday 15.40-18.00 Room 106 Measurement, Generation and reproduction of sound 2

Chair: Ira Wygant Ji-Ho Chang

- 15:40 Design, fabrication, and design verification of 50-kHz CMUTs for high-intensity airborne ultrasound
Wygant, Ira O.; Kupnik, Mario; Khuri-Yakub, Butrus T.
- 16:00 Visualization of sound field and sound source vibration using laser measurement method
Oikawa, Yasuhiro; Hasegawa, Tomomi; Ouchi, Yasuhiro; Yamasaki, Yoshio; Ikeda, Yusuke
- 16:20 Electro-acoustic transducers with cellular polymer electrets
Yasuno, Yoshinobu; Kodama, Hidekazu; Date, Munehiro; Fukada, Eiichi
- 16:40 Three-party sound field sharing system based on the boundary surface control principle-
Subjective assessment of voice reproduction with speaker_facing angle-
Ikeda, Yusuke; Enomoto, Seigo; Ise, Shiro; Nakamura, Satoshi
- 17:00 Analysis of exponentially tapered piezoelectric bimorph actuator
Kim, Moojoon; Kim, Jungsoon; Ha, Kanglyeol
- 17:20 Sound field reproduction by using a scatterer
Chang, Ji-Ho; Song, Min-Ho; Park, Jin-Young; Lee, Tae-Woong; Kim, Yang-Hann
- 17:40 Composite square and monomial power sweeps for SNR customization in acoustic measurements
Husztly, Csaba; Sakamoto, Shinichi

Wednesday 15.40-18.00 Room 201 Speech processing and communication systems 2

Chair: Prem C. Pandey Marinus Boone

- 15:40 Enhancement of electrolaryngeal speech by spectral subtraction, spectral compensation, and introduction of jitter and shimmer
Pandey, Prem C.; Basha, S. Khadar
- 16:00 Spontaneous speech recognition taking account of characteristics of speaker-dependent occurrence of filled-pauses
Shima, Yumi; Koga, Mariko; Yamashita, Masaru; Yamauchi, Katsuya; Matsunaga, Shoichi
- 16:20 Downstream speech enhancement in a low directivity binaural hearing aid
Boone, M. M.; Opdam, R.; Schlesinger, A.
- 16:40 A data reduction method to estimate vowel distributions and its use in comparing two formant estimation methods
Sakata, Tadashi; Ueda, Yuichi; Watanabe, Akira
- 17:00 Overview and comparative results of speech-based excitation signals for virtual localization and real-life applications
Wersényi, György
- 17:20 Integrating plural results of Spoken Term Detection using plural language models for subword-based speech recognition
Itoh, Yoshiaki; Onodera, Yuji; Kojima, Kazunori; Ishigame, Masaaki; Tanaka, Kazuyo; Lee, Shi-wook
- 17:40 Improving the accuracy of estimation of place of articulation during stop closures of vowel-consonant-vowel utterances by detecting the closure release bursts
Pandey, Prem C.; Bhat, Rajath S.; Jayan, A. R.; Shah, Milind S.

Wednesday 15.40-18.00 Room 202 Underwater sound 2

Chair: Adrian Jones Stan Dosso

- 15:40 Rapid seafloor inversion in shallow oceans using broadband acoustic data
Jones, Adrian D.; Clarke, Paul A.
- 16:00 Bayesian matched-field geoacoustic inversion
Dosso, Stan E.
- 16:20 Model calculations of wave noise and their application to the open ocean
Deane, Grant

- 16:40 Sound pressure analysis and experiment of small ultrasonic lens
Endoh, Nobuyuki; Tsuchiya, Takenobu; Matsumoto, Sayuri
- 17:00 Bistatic scattering from an array of regularly spaced cylinders
Kim, Eunhye,; Na, Jungyul,; Choi, Jee woong,; Kang, Donhyug

Wednesday 15.40-18.00 Room 203 Theoretical and computational acoustics 5

Chair: Oleg A. Godin Stan Dosso

- 15:40 Love wave propagation in a near-surface depth-varying distribution of cracks
Caleap, Mihai; Drinkwater, Bruce W.; Wilcox, Paul D.; Aristégui, Christophe
- 16:00 Prediction of soil surface velocity from above-ground acoustic sources
Attenborough, Keith; Taherzadeh, Shahram
- 16:20 Theory and Phenomenology of the Acoustic Vector Field
Smith, Kevin B.
- 16:40 Bayesian ocean acoustic tracking and track prediction in an uncertain environment
Dosso, Stan E.
- 17:00 Acoustic-gravity waves in the air generated by an underwater source
Fuks, Iosif; Godin, Oleg A.
- 17:20 Long-range correlation of random acoustic fields and passive remote sensing of the environment
Godin, Oleg A.
- 17:40 The plane wave expansion technique to describe diffraction of sound
Declercq, Nico F.; Herbison, Sarah W.

Wednesday 08.20-12.30 Poster Session 4 Bayside Terrace, Level 2

- The use of ultrasound energy propagated in wood
Otsuka, Tetsuro; Suzuki, Kei; Kawakami, Yuji
- Delamination detection in wood – based composites, a methodological review
Bucur, Voichita
- Preliminary study to assess ultrasonic characteristics of Torta del Casar – type cheese
Jiménez, Antonio; Crespo, Abel; Piedehierro, Juan; Rufo, M. Montana; Guerrero, M. Patricia;
Paniagua, Jesus M.; Riballo, M. Jose; Antolín, Alicia
- Ultrasonic evaluation of dimensional and technological parameters of cement mortars
Jiménez, Antonio; Rufo, M. Montana; Paniagua, Jesus M.; Antolín, Alicia
- Airborne ultrasonic transducers for ultrasonic transmission tomography in gaseous media
Gudra, Tadeusz; Opielinski, Krzysztof J.
- Acoustics and dielectric properties of Borassus Flabellifer 'BF' with frequency and temperature
Phadke, Sushil; Shrivastava, B. D.; Mishra, Ashutosh
- Aperture synthesis on 2-D ultrasonic transducer arrays for projection imaging of biological media
Opielinski, Krzysztof J.; Gudra, Tadeusz
- Localization of multiple sound sources based on subtraction of accumulated inter-channel correlation
Cho, Kook; Nishiura, Takano; Yamashita, Yoichi
- Sound signals decomposition for perceptual audio coding
Novacek, J.; Kadlec, F.; Hang, H.-M.
- A design of acoustic security system in near field based on paired microphones and automatic video camera
Hayashida, Kohei; Morise, Masanori; Nishiura, Takano
- Visualization and dereverberation of head-related transfer function based on spatio-temporal frequency analysis
Morimoto, Yasuko; Nishino, Takano; Takeda, Kazuya
- Improved acoustic echo cancellation for low SNR based on blockwise combination of filters
Azpicueta-Ruiz, Luis A.; Zeller, Marcus; Figueiras-Vidal, Anibal; Arenas-García, Jerónimo; Kellermann, Walter
- Theoretical study of 3D radiated sound field reproduction system using directional loudspeakers and boundary surface control
Kimura, Toshiyuki; Maki, Katsuhiko; Katsumoto, Michiaki
- Design of wireless class-D stereo amplifier system using Bluetooth
Park, Joon-Hoon; Kim, Byeong-Ju

- A study of dynamic determination of filter length for multi-channel active noise control
Morise, Masanori; Iriki, Takayuki; Kuratani, Yasuhiro; Ishii, Hiroaki; Nishiura, Takanobu
- Interpolation method of head-related transfer functions in the z-plane domain using a common-pole and zero model
Iwaya, Yukio; Sato, Wataru; Okamoto, Takuma; Otani, Makoto; Suzuki, Yoiti
- A Study on the musical source separation method using NMF and musical cues
Lee, Seokjin; Park, Sang Ha; Sung, Koeng-Mo
- A head-related transfer function model for fast synthesizing multiple virtual sound images
Liang, Zhiqiang; Xie, Bosun
- A Sample-wise Acoustic Positioning Method Using Natural Gradient Adaptation
Horiuchi, Toshiharu; Kato, Tsuneo
- Noise robust semi-adaptive sound reproduction system based on semi-BSS
Tatekura, Yosuke; Yoshida, Norihiro
- A design of reflective audio spot with reflective objects
Morise, Masanori; Ikefuji, Daisuke; Tujii, Hideya; Hirokawa, Kotaro; Nishiura, Takanobu
- The steering for distance perception with reflective audio spot
Sugibayashi, Yutaro; Morise, Masanori; Nishiura, Takanobu
- Analysis of frontal localization in double layered loudspeaker array system
Chung, Hyunjoo; Chon, Sang Bae; Jae-hyoun Yoo; Sung, Koeng-Mo
- Methods to reduce errors of ultrasound time-pulse radars
Soldatov, Alexey I.; Sorokin, Pavel V.; Kozhemyak, Olesya A.
- The suppression for undesired reflection towards audio spot
Kurimoto, Sota; Morise, Masanori; Nishiura, Takanobu
- Passive ultrasonic pointing system based on three-dimensional position estimation
Takayama, Shinya; Horiuchi, Toshiharu; Kato, Tsuneo
- New Sequential Partial Update Normalized Least Mean M-estimate Algorithms for Stereophonic Acoustic Echo Cancellation
Zhou, Yi; Zheng, Chengshi; Li, Xiaodong

Wednesday 13.00-17.00 Poster Session 5 Bayside Terrace, Level 2

- Computation of drag and flow noise along wavy wall in turbulent flow
Zhang, Huaixin; Meng, Kunyu; Shi, Yonglin
- Effects of correlation property of spread-spectrum signal on BER of M-ary underwater acoustic communication system
Wang, Jun; Wang, Haibin; Wu, Lixin
- Relation between BMD, ultrasonic properties and piezoelectricity in bovine cortical bone
Toussaint, Pierre-Louis; Yamamoto, Kazufumi; Nakatsuji, Tomohiro; Kubo, Tomohiro; Matsukawa, Mami
- Influence of defective elements on acoustic fields and imaging for a linear array transducer
Choi, Kwang-Yoon; Ha, Kanglyeol; Kim, Moojoon; Kim, Jungsoon; Lee, Chae-Bong
- Interaction of ultrasonic wave with the laser radiation in optical fiber
Gudra, Tadeusz; Muc, Sylwia
- Characteristics of longitudinal and torsional vibration for hole machining by ultrasonic vibration
Asami, Takuya; Miura, Hikaru
- Method of Determining Effect of Heat on Mortar by Using Aerial Ultrasonic Waves with Finite Amplitude
Osumi, Ayumu; Sato, Yasufumi; Ito, Youichi
- Removal of liquid in a long pore opened at both ends using high-intensity aerial ultrasonic wave
Ito, Youichi; Takamura, Eri
- Measurement of liquid characteristics using ultrasound resonator
Blahova, Ilona Ali
- Characteristics of focused ultrasound by layer structured phononic crystal
Nishimiya, Kojiro; Mizutani, Koichi; Wakatsuki, Naoto; Yamamoto, Ken
- Effect of ultrasound on the physical and functional properties of reconstituted whey protein powders
Chandrapala, Jayani; Zisu, Bogdan; Lee, Judy; Bhaskaracharya, Raman; Palmer, Martin; Kentish, Sandra; Ashokkumar, Muthupandian

- Flow cytometry as a means of observing the effects of ultrasound on bacteria
Al-Hashimi, Amna; Joyce, Eadaoin M.; Mason, Timothy J.
- On the influence of liquid-surface vibration on sonochemiluminescence
Tuziuti, Toru; Yasui, Kyuichi; Kozuka, Teruyuki; Towata, Atsuya
- Stabilization of multi-needle-to-plate electrical discharges in a high-intensity sound field
Balek, Rudolf; Cervenka, Milan
- Transient light emission measurement of pulse burst sonochemical luminescence
Yanagida, Hirotaka; Guo, Shuqiang; Fan, Honghui; Saitoh, Tadashi; Masanaga, Ikegami; Takahashi, Tatsuhisa
- Comparative analysis of gene transfer efficiency to CHO cells by echo contrast agent BR14 under different ultrasound conditions
Tachibana, Katsuro; Feril, Loreto B. Jr; Harada, Yoshimi; Ogawa, Koichi; Irie, Yutaka
- Sonodynamic therapy with titanium dioxide in vitro and in vivo
Harada, Yoshimi; Ogawa, Koichi; Irie, Yutaka; Endo, Hitomi; Feril, Loreto B. Jr; Noosavi-Nejad, S. F.; Tachibana, Katsuro
- Modulational instability of microbubbles surface modes
Dos Santos, Serge; Sánchez-Morcillo, Victor; Abellard, André-Pierre; Bouakaz, Ayache
- Non – linear properties of mixed divalent crystals
Kumar, Virendra
- Measurement of the thermal and acoustic properties of the concrete alleviated with the cork
Kellati, N.; El Bouardi, A.; Ajzoul, T.; Garoum, M.; Tyouri, M.; Ezbakhe, H.

Thursday 08.20-11.00 Room A Underwater sound propagation 1

Chair: David Bartel Raymond Mabuza

- 08:20 Hydrophone self-localisation using travel times estimated from ocean noise cross-correlations
Brooks, Laura A.; Gerstoft, Peter
- 08:40 On the study of longitudinal wave traveling through an elastic plate immersed in water
Mabuza, B. R.; Netshidavhini, N.
- 09:00 Aspects of practical models of acoustic reflection loss at the ocean surface
Jones, Adrian D.; Duncan, Alec J.; Maggi, Amos; Clarke, Paul A.; Sendt, Janice
- 09:20 Frequency dependence of low frequency horizontal correlation in shallow water
Li, Fenghua; Zhang, Yanjun; Zhang, Renhe
- 09:40 Estimation of propagated pulse waveform in Lützow-Holm Bay of Antarctic Ocean calculated by parabolic equation method
Tsuchiya, Takenobu; Endoh, Nobuyuki
- 10:00 Development of a small and long-life ultrasonic biotelemetry system strong against sea ambient noise
Miyamoto, Yoshinori; Takao, Yoshimi; Sasakura, Toyoki
- 10:20 Acoustic propagation fluctuation caused by internal waves in the Yellow Sea
Hu, Tao; Ma, Li; Guo, Zhongyuan; Jia, Ning; Guo, Shengming
- 10:40 HANKEL: A tool for exploring the complex pressure field in range-independent underwater acoustic environments
Bartel, David W.

Thursday 08.20-11.00 Room 101 Measurement, Generation and reproduction of sound 3

Chair: George Raicevich Terence Betlehem

- 08:20 Wide band pneumatic sound system for MEG
Raicevich, George; Burwood, Eric; Dillon, Harvey; Johnson, Blake; Crain, Stephen
- 08:40 A directional loudspeaker array for surround sound in reverberant rooms
Betlehem, Terence; Anderson, Craig; Poletti, Mark A.
- 09:00 Objective evaluation of a three-dimensional sound field reproduction system
Epain, Nicolas; Guillon, Pierre; Kan, Alan; Kosobrodov, Roman; Jin, Craig; van Schaik, Andre
- 09:20 Sound field reproduction using directional loudspeakers and the equivalent acoustic scattering problem
Fazi, Filippo M.; Nelson, Philip A.

- 09:40 Optimization of loudspeaker and microphone configurations for sound reproduction system based on boundary surface control principle– An optimizing approach using Gram-Schmidt orthogonalization and its evaluation –
Enomoto, Seigo; Ikeda, Yusuke; Ise, Shiro; Nakamura, Satoshi
- 10:00 New construction of loudspeaker for low frequency range by rotational type ultrasonic motor
Suzuki, Ryosuke; Takeda, Gen; Negishi, Hiro; Ohuga, Juro; Ohira, Ikuo; Maeda, Kazuaki; Kubota, Hajime
- 10:20 A new loudspeaker for low frequency radiation by linear motion type ultrasonic motor
Egawa, Tatsuya; Saito, Hiroki; Negishi, Hiro; Ohga, Juro; Oohira, Ikuo; Kubota, Hajime; Maeda, Kazuaki
- 10:40 Parametric simulation study of miniature loudspeaker for performance evaluation and improvement
Pawar, S. J.; Her, H. C.; Huang, Jin H.

Thursday 08.40-11.00 Room 102 Music and Musical Acoustics and ISMA 1

Chair: Antoine Chaigne Ewa Skrodzka

- 08:40 Feature extraction of bass guitar using principal component analysis
Abe, Yuzo; Murakami, Yuki; Miura, Masanobu
- 09:00 Effect of bracing pattern of guitar's front plate on modal behaviour
Skrodzka, Ewa; Linde, Bogumil B.J.; Rosenfeld, Eike; Krupa, Antoni
- 09:20 Making violins with Tasmanian tonewood: expect the unexpected
Pérez-Pulido, Maria; Bucur, Voichita; Morrow, Andrew; Ngo, Dung
- 09:40 Acoustic and mechanical modified wood characterization for woodwind use
Talgorn, B.; Gibiat, Vincent; Dubrisay, D.; Selmer, J.; Halary, J. L.
- 10:00 Linear string-soundboard coupling in pianos
Chaigne, Antoine
- 10:20 Vibrational and acoustical characteristics of the piano soundboard
Ege, Kerem; Boutillon, Xavier
- 10:40 Synthetic description of the piano soundboard mechanical mobility
Ege, Kerem; Boutillon, Xavier *ISMA paper*

Thursday 08.40-11.00 Room 103 Wind farm noise

Chair: Valeri Lenchine Stephen Chiles

- 08:40 Wind induced aerodynamic noise on microphones from atmospheric measurements
Cooper, Jonathan; Leclercq, Damien; Stead, Matthew
- 09:00 Statistical and curve fitting post-process of wind farm noise monitoring data
Lenchine, Valeri V.
- 09:20 A new wind farm noise standard for New Zealand, NZS 6808:2010
Chiles, Stephen
- 09:40 Assessment of the methods addressing atmospheric stability effects in the latest SA EPA Wind farms environmental noise guidelines, New Zealand NZS 6808 and Australian AS 4959
Kochanowski, Radek
- 10:00 Noise generated by wind farms: ISPRA experience of measurements
Curcuruto, S.; Atzori, D.; Betti, R.; Marsico, G.; Sacchetti, F.; Silvaggio, R.

Thursday 08.20-11.00 Room 104 Micro/Nanofluidics and Actuation 2

Chair: Adrian Neild Teruyuki Kozuka

- 08:20 Finite element analysis of acoustic streaming through the driving force in an ultrasonic air pump
Wada, Yuji; Koyama, Daisuke; Nakamura, Kentaro
- 08:40 Synthesis of multilayer polymeric nanoparticles using surface acoustic wave atomization
Qi, Aisha; Chan, Peggy; Yeo, Leslie; Friend, James
- 09:00 Acoustic sizing of air bubbles inside a MEMS piezo inkjet printhead
van der Bos, Arjan; Segers, Tim; Jeurissen, Roger; van den Berg, Marc; Wijshoff, Herman; Reinten, Hans; Versluis, Michel; Lohse, Detlef
- 09:20 Droplet motion and deformation induced by acoustic streaming and radiation pressure
Brunet, Philippe; Baudoin, Michael; Bou-Matar, Olivier; Zoueshtiagh, Farzam

- 09:40 Acoustic manipulation in a microchannel
Kozuka, Teruyuki; Yasui, Kyuichi; Hatanaka, Shin-ichi; Tuziuti, Toru; Towata, Atsuya
- 10:00 Unconstrained droplet behaviour under high intensity acoustic vibration
Whitehill, James; Martyn, Steve; Neild, Adrian; Ng, Tuck Wah
- 10:20 A high power piezoelectric ultrasonic linear micromotor using slotted stator
Yun, Cheol-Ho

Thursday 08.40-11.00 Room 105 Architectural Acoustics 8

Chair: John Bassett Hequn Min

- 08:40 Investigating room acoustics using higher order ambisonics and perceptual evaluation of ambisonic auralization techniques
Clapp, Sam; Guthrie, Anne; Braasch, Jonas; Xiang, Ning
- 09:00 A coherent image source method for flat waveguides with locally reacting boundaries
Min, Hequn; Qiu, Xiaojun; Li, Ningrong
- 09:20 Using an ambisonic microphone for measurement of the diffuse state in a reverberant room
Bassett, John; Cabrera, Denis; Spargo, D.
- 09:40 Basic study on acoustic wave analysis by the multi-moment method using interpolation by a high-order polynomial
Tanigawa, Masaki
- 10:00 The new Brazilian Standard for performance in residential buildings
Bertoli, Stelamaris Rolla; Neto, Maria de Fatima Ferreira
- 10:20 Simulation of the aperture diffraction in coupled rooms by acoustical radiosity
Jiang, Guorong; Zhou, Jie

Thursday 08.20-11.00 Room 106 Aeroacoustics and atmospheric sound 2

Chair: Philippe Blanc-Benon Axel Kierkegaard

- 08:20 Aeolian tones generated by a square cylinder with a splitter plate
Ali, Mohamed Sukri Mat; Doolan, Con J.; Wheatley, Vincent
- 08:40 Uncertainty assessment for outdoor sound propagation
Leroy, Olivia; Gauvreau, Benoit; Junker, Fabrice; de Rocquigny, Etienne; Bérengier, Michel
- 09:00 Time-domain simulations for outdoor sound propagation : surface waves and ground effects
Blanc-Benon, Philippe; Dragna, Didier; Poisson, F.
- 09:20 Flow-induced pulsations in pipe systems with closed side branches: study of the effectiveness of detuning as remedial measure
Tonon, D.; Willems, J. F. H.; Hirschberg, A.
- 09:40 Localization of stationary sound sources in flows by using a time-reversal method
Padois, Thomas; Graveline, Valentin; Prax, Christian; Valeau, Vincent
- 10:00 Simulations of acoustic scattering in duct systems with flow
Kierkegaard, A.; Boij, S.; Efrimsson, G.
- 10:20 The effect of grazing-bias flow on the self sustained oscillations in a side branch
Holmberg, Andreas; Karlsson, Mikael
- 10:40 Stochastic computational methods for broadband fan noise
Dieste, M.; Gabard, G.

Thursday 08.20-11.00 Room 201 Soundscapes 1

Chair: Brigitte Schulte-Fortkamp Klaus Genuit

- 08:20 Reflections on recent methodological developments in soundscape research
Lam, Kin-che
- 08:40 Effects of cultural factors on the evaluation of acoustic quality in residential areas
Yu, Chia-Jen; Kang, Jian
- 09:00 Education in soundscape - A seminar with young scientists in short term scientific mission
"Soundscape - Measurement, Analysis, Evaluation"
Fiebig, André; Genuit, Klaus; Schulte-Fortkamp, Brigitte
- 09:20 Evaluation of urban soundscape using soundwalking
Hong, Joo Young; Lee, Pyoung Jik; Jeon, Jin Yong
- 09:40 Urban design with Soundscaping: Experiences of a Korean - German team
Schulte-Fortkamp, Brigitte; Jeon, Jin Yong; Genuit, Klaus

- 10:00 Analysis of sound environment in coastwise area of Haihe river and preliminary study on its soundscape design and soundscape expression method
Ma, Hui; Zhang, Sen
- 10:20 Comparison between multiple linear regressions and artificial neural networks to predict urban sound quality
Brocolini, Laurent; Waks, Lory; Lavandier, Catherine; Marquis-Favre, Catherine; Quoy, Mathias; Lavandier, Mathieu

Thursday 08.20-11.00 Room 202 Vehicle noise and vibration 2

Chair: Rajendra Singh Sebastian Oberst

- 08:20 Brake vibration and noise - A review and discussion
Guan, Dihua
- 08:40 Numerical study of friction-induced pad-mode instability in disc brake squeal
Oberst, S.; Lai, J. C. S.
- 09:00 Acoustic radiation of friction-induced pad-mode instability in disc brake squeal
Oberst, S.; Lai, J. C. S.
- 09:20 Estimation of the dynamic force transmitted by a nonlinear hydraulic engine mount
Singh, Rajendra; Yoon, Jong-Yun
- 09:40 Quality evaluation of engine start and idle sounds
Altinsoy, M. Ercan
- 10:00 Characteristics of flow-induced noise generated by air flow passing through perforated plates and impinging on a flat plate
Koyama, Kazuya; Uchikawa, Akikazu; Kojima, Naoya; Mikami, Masato; Esaki, Takashi
- 10:20 Improving the acoustic evaluation of motor cars
Brizon, Carla Julio da Silveira; Medeiros, Eduardo Bauzer

Thursday 08.20-11.00 Room 203 Structural acoustics and vibration 5

Chair: Cedric Maury Mauro Caresta

- 08:20 Active suppression of acoustic radiation from a submarine hull using inertial actuators
Caresta, Mauro; Kessissoglou, Nicole
- 08:40 Underwater sound radiation by a layered infinite elastic plate with discontinuity
Zhang, Yanni; Pan, Jie; McMahon, Darryl
- 09:00 Measurement of sound-radiation from a torpedo-shaped structure subjected to an axial excitation
Liu, Wei; Pan, Jie; Matthews, David
- 09:20 Sonic crystal noise barriers made of resonant elements
Krynkin, Anton; Umnova, Olga; Chong, Alvin Yung Boon; Taherzadeh, Shahram; Attenborough, Keith
- 09:40 Infrasound and ground vibration transmitted from highway bridges using moving trucks
Hama, Hirokazu; Usui, Kimihisa; Fukada, Saiji; Kajikawa, Yasuo; Matsuda, Tetsuo
- 10:00 The radiation modes problem: Exact solutions for the active control of sound power and the reconstruction of acoustic sources
Maury, Cedric
- 10:20 Research on reduction of structure-borne sound using perforated plate
Tsugihashi, Kazuki; Tanaka, Toshimitsu
- 10:40 Effects of baffles on the sound power radiated by box-shaped structures
Amichi, Kamel; Sgard, Franck; Nélisse, Hugues; Atalla, Nouredine; Laville, Frédéric

Thursday 11.00 Room A Plenary Chair: Douglas Cato

Ocean Acoustic Waveguide Remote Sensing (OAWRS) of Marine Ecosystems
Nicholas Makris

Thursday 13.00-15.00 Room A Underwater sound 3

Chair: Manell Zakharia Victor Akulichev

- 13:00 Influence of mesoscale eddies and frontal zones on sound propagation at the Northwest Pacific Ocean
Akulichev, V. A.; Bugaeva, L. K.; Morgunov, Yu. N.; Solovjev, A. A.
- 13:20 Multistatic detection and tracking using maximal length sequences
Jobst, W.; Smith, D.; Whited, L.
- 13:40 Time frequency analysis of acoustics of breaking waves of plunging type
Rajasekaran, C.; Sannasiraj, S. A.; Sundar, V.
- 14:00 Security considerations of underwater acoustic network
Dong, Yangze; Liu, Pingxiang
- 14:20 A comparison of two secure routing protocols in underwater acoustic network
Dong, Yangze; Liu, Pingxiang
- 14:40 Assessment of the sea surface roughness effects on shallow water inversion of sea bottom properties
Bouchage, Géraldine; Zakharia, Manell E.

Thursday 13.00-15.00 Room 101 Geophysical and engineering bubble acoustics

Chair: Peter J Lesniewski Richard Manasseh

- 13:00 Ultrasonic streaming in incompressible fluids - modelling and measurements
Lesniewski, Peter J.; Stepin, Benjamin; Thomas, John C.
- 13:20 Multibubble cavitation inception: Effects of bubble-bubble interaction under negative pressure
Ida, Masato
- 13:40 Interfacial dynamics and frequencies of passive bubble-acoustic emissions
Manasseh, Richard; Bui, Anh; Liovic, Petar; Ooi, Andrew; Riboux, Guillaume; Risso, Frédéric
- 14:00 Bubbles in the ocean and their significance in ocean acoustics
Cato, Douglas H.
- 14:20 The role of surface tension in exciting breathing mode oscillations of newly-formed bubbles
Deane, Grant; Czerski, Helen

Thursday 13.00-15.00 Room 102 Music and Musical Acoustics and ISMA 2

Chair: Enrico Ravina Juliette Chabassier

- 13:00 Quantitative estimation for the effects of tempo, sound level and articulation on the perceptual tension of music
Tomoya, Kagami; Shoji, Kenta; Yoneda, Ryo; Yamada, Masashi
- 13:20 Parametrical 3D structural co-modelling of stringed instruments
Ravina, Enrico
- 13:40 Modeling and numerical simulation of a nonlinear system of piano strings coupled to a soundboard.
Chabassier, Juliette; Chaigne, Antoine
- 14:00 Numerical analysis on 2D and 3D edge tones in terms of aerodynamic sound theory
Takahashi, Kin; Miyamoto, Masataka; Ito, Yashunori; Takami, Toshiya; Kobayashi, Taizo; Nishida, Akira; Aoyagi, Mutsumi
- 14:20 Applicability of compressible LES to reproduction of sound vibration of an air-reed instrument
Miyamoto, Masataka; Ito, Yashunori; Takahashi, Kin'ya; Takami, Toshiya; Kobayashi, Taizo; Nishida, Akira; Aoyagi, Mutsumi *ISMA paper*

Thursday 13.00-15.00 Room 103 Environmental Noise 4

Chair: Vincent Chavand Tong Yean Ghing

- 13:00 Consideration of new environmental noise evaluation index
Yoshida, Junji
- 13:20 Acoustical insertion loss of plenum window at different sound incidence angles
Tong, Y. G.; Tang, S. K.

- 13:40 Development of noise control measures on construction site
Im, Jung-Bin; Chung, Jin-Yun; Lee, Sung-Chan
- 14:00 Noise assessment of a desalination plant
Evenden, Craig; Chavand, Vincent
- 14:20 Airport noise environmental impact assessment including affected communities perception: description of social survey on neighborhoods of Santos Dumont Airport - Rio de Janeiro, Brazil.
Nogueira, Rita de Cássia Cordeiro; Mansur, Webe João
- 14:40 Alternative aircraft metrics – Useful or like moving the deck chairs on the Titanic?
Cooper, Steven

Thursday 13.00-15.00 Room 104 Micro/Nanofluidics and Actuation 3

Chair: Daisuke Koyama Priscilla Rogers

- 13:00 Ultrasonic cleaning of the root canal
Verhaagen, Bram; Lea, Simon; Jiang, Lei-Meng; van der Sluis, Luc; Versluis, Michel
- 13:20 Noncontact ultrasonic particle manipulation in a circular trajectory using a vibrating disc
Koyama, Daisuke; Ito, Yu; Nakamura, Kentaro
- 13:40 Trapping of particles on ultrasonic radiation surface
Hu, Junhui; Liu, Yanyan; Zhao, Chunsheng
- 14:00 The use of acoustic actuation methods to drive particle concentration and separation within a droplet
Rogers, Priscilla; Yeo, Leslie; Friend, James

Thursday 13.00-15.00 Room 105 Architectural Acoustics 9

Chair: Richard Latimer Ken Stewart

- 13:00 Evaluation of a hard-walled rectangular room model with planar absorption cavities
Stewart, Ken; Cabrera, Densil
- 13:20 Sound propagation in performance halls with balconies
Cheung, L. Y.; Tang, S. K.
- 13:40 A numerical investigation of the sound intensity field in rooms by using diffusion theory and particle tracing
Visentin, Chiara; Valeau, Vincent; Prodi, Nicola; Picaut, Judicael
- 14:00 Reverberation times prediction on classroom using neural network model
bin Yahya, Musli Nizam; Otsuru, Toru; Tomiku, Reiji; Okuzuno, Takeshi; Nagasawa, Toshiki
- 14:20 A new type of porous absorber
Latimer, R. A.

Thursday 13.00-15.00 Room 106 Speech processing and communication systems 3

Chair: Motoyuki Suzuki Michael Fisher

- 13:00 Four-tone modeling for natural singing synthesis in Chinese and comparing synthesized singings with speaking voices
Ota, Kenko; Ehara, Terumasa
- 13:20 Fast calculation of translation model score for simultaneous automatic speech recognition of multilingual audio contents
Ohmura, Eri; Nanjo, Hiroaki
- 13:40 An HMM-based segment quantizer and its application to low bit rate speech coding
Suzuki, Motoyuki; Adachi, Masashi; Kohata, Minoru; Ito, Akinori; Makino, Shozo; Ren, Fuji
- 14:00 Speech referenced limiting of noise
Fisher, Michael; Chong-White, Nicky; Dillon, Harvey
- 14:20 Tolerance and sensitivity of various parameters in the prediction of temporally localized distortions in degraded speech.
Lu, Wenliang; Sen, Deep
- 14:40 Forensic speaker identification: an experience in Indonesians court
Sarwono, J.; Suprijanto; Mandasari, Mi

Thursday 13.00-15.00 Room 201 Soundscapes 2

Chair: Catherine Semidor Klaus Genuit

- 13:00 Implications of Thao tribe culture and soundscape
Tsai, Kang-Ting; Tung, Chien-Hung; Tseng, Shuo-Wen; Liou, Yaw-Hwa
- 13:20 Assessment of railway soundscape in rural areas
Yoo, Hyo Joo; Lee, Pyoung Jik; Jeon, Jin Yong
- 13:40 Influence of the semantic content of urban sounds in the identity of outer spaces
Maristany, Arturo; López, Manuel Recuero
- 14:00 Objective parameters for acoustic comfort in enclosed spaces
Dokmeci, Papatya Nur; Kang, Jian
- 14:20 ASTUCE Research Project: one way to evaluate urban soundscapes
Semidor, Catherine; Torgue, Henry; Beaumont, Jacques; Barlet, Aline; Delas, Julien; Regnault, Cécile; Gbedji, Flora
- 14:40 A model of saliency-based auditory attention to environmental sound
De Coensel, Bert; Botteldooren, Dick

Thursday 13.00-15.00 Room 202 Rail Transport Noise and Vibration 1

Chair: David Anderson Conrad Weber

- 13:00 Probabilistic prediction of wheel squeal under field humidity variation
Bellette, P.; Meehan, P. A.; Jones, C.; Anderson, D.
- 13:20 The force transmissibility of a floating slab track
Duschlbauer, Dominik
- 13:40 Train induced vibration isolation of the skyvue, Sydney Australia
Boxoen, Thomas; Risbey, David; Weber, Conrad M.
- 14:00 Source noise control to mitigate airborne noise at high rise developments - Epping to Chatswood Rail Link
Weber, Conrad M.; Sburlati, D.

Thursday 13.00-15.00 Room 203 Theoretical and computational acoustics 6

Chair: Jerry Ginsberg Yiu Wai Lam

- 13:00 A fully consistent constrained generalized coordinate formulation of the interaction of an acoustic cavity and surrounding structures
Ginsberg, Jerry H.
- 13:20 High-order doubly asymptotic absorbing boundaries for the acoustic wave equation
Birk, Carolin; Prempramote, Suriyon; Song, Chongmin
- 13:40 FDTD modelling of frequency dependent boundary conditions for room acoustics
Lam, Yiu Wai; Jeong, Hyok
- 14:00 Investigation on the cause of instability in time domain acoustic BEM by using the wave vector concept
Jang, Hae-Won; Ih, Jeong-Guon
- 14:20 The prediction of synthesised wavefields within realistic room acoustics scenarios
Drumm, Ian; Oldfield, Robert
- 14:40 On the selection and implementation of sources for finite-difference methods
Botts, Jonathan; Bockman, Alexander; Xiang, Ning

Thursday 15.00 Distinguished Lectures

Room A: Chair Alec Duncan

The effects of noise on marine animals in the context of their natural acoustic environment
Douglas H. Cato

Room 103: Chair Astley, R. Jeremy

Aircraft Noise: Research Challenges and European Approach
Dominique Collin

Thursday 15.40-18.00 Room A Underwater sound 4

Chair: Alec Duncan Marshall Hall

- 15:40 Measurement and modelling of underwater noise from pile driving
Duncan, Alec J.; McCauley, Robert D.; Parnum, Iain; Salgado-Kent, Chandra
- 16:00 Underwater signals from confined explosions in very shallow water
Hall, Marshall V.
- 16:20 Analysis of the radiation impedance with effect of reflected wave from sonar-dome in a cylindrical array
Kim, Jungsoon; Kim, Moojoon; Ha, Kanglyeol
- 16:40 On the influence of transducer heating in underwater ultrasonic thruster
Tan, Alfred C. H.; Hover, Franz S.
- 17:00 Potential impact of long-life environmental sonobuoys on littoral ASW
DelBalzo, Donald R.; Leclere, James H.
- 17:20 Underwater ultrasonic field characterisation using laser doppler vibrometry of transducer motion
Cooling, Martin; Humphrey, Victor; Theobald, Pete; Robinson, Stephen
- 17:40 A mesh-less self-adaptive boundary element quadrature scheme for underwater noise prediction
Wei, Yingsan; Wang, Yongsheng

Thursday 15.40-18.00 Room 101 Education 1

Chair: Keith Attenborough Matthew Stead

- 15:40 EAA Summer Schools
Maffei, L.; Vorländer, Michael; Svensson, P.; Jambrosic, K.
- 16:00 Support Mathematics Summer Schools for acoustics researcher training
Attenborough, Keith
- 16:20 Problem based learning in acoustics at Aalborg University
Hammershviert, Dorte; Ordoñez, Rodrigo; Christensen, Flemming; Nielsen, Sofus Birkedal
- 16:40 Distance learning program for professional career in acoustics
Stead, Matthew; Burgess, Marion
- 17:00 Integral curriculum on noise control in Spain: a cooperative task
Romeu, J.; Genesca, M.; Pamies, T.
- 17:20 The delivery of noise and vibration study material and real life practice
Groothoff, Beno
- 17:40 Acoustic education: Experiments for off-campus teaching and learning
Wild, Graham; Swan, Geoff

Thursday 15.40-18.00 Room 102 Music and Musical Acoustics ISMA 3

Chair: Pan Jie Akira Nishimura

- 15:40 Measurement of overtone frequencies of a toy piano and perception of its pitch
Nishimura, Akira
- 16:00 An experimental study of acoustical properties of tubular tower bells
Pan, Jie; Bergmann, Sören
- 16:20 Restoration of ancient pipes organs aided by experimental vibration and acoustic modal analyses
Ravina, Enrico; Silvestri, Paolo
- 16:40 Automatic music transcription using non-negative matrix factorization
Park, Sang Ha; Lee, Seokjin; Sung, Koeng-Mo
- 17:00 Acoustical characteristics of old bell chimes
Yoo, Junehee; Park, Jeongwoo; Kim, Hyungjun; Bae, Daesung; Rossing, Thomas
- 17:20 A real tide organ: A new concept for powering pipe organs coastal locations
de Carvalho, Paulo Vaz
- 17:40 Analysis and synthesis of singing with hoarse vocal expressions
Kawahara, Hideki; Itagaki, Hanae; Wada, Yoshika; Morise, Masanori; Nishimura, Ryuichi; Irino, Toshio

Thursday 15.40-18.00 Room 103 Aircraft noise 3

Chair: Ichiro Yamada Keith Adams

- 15:40 Policy and the evaluation of aircraft noise
Kroesen, Maarten; Molin, Eric; van Wee, Bert
- 16:00 Factors affecting the harmonious coexistence of the airport and local communities
Yoshioka, Hisashi; Goto, Kyoich; Morinaga, Makoto; Yamada, Ichiro; Kuwano, Sonoko; Namba, Seiichiro
- 16:20 Aircraft noise management in New Zealand
Dickinson, Philip J.; Brown, Michael J.
- 16:40 Airport noise model taking account of soundproofing embankment and aircraft ground operation
Yamada, Ichiro
- 17:00 Towards improving the characterisation of aircraft and background noise
Adams, Keith
- 17:20 Airfoil trailing edge noise reduction by the introduction of sawtooth and slitted trailing edge geometries
Gruber, Mathieu; Azarpeyvand, Mahdi; Joseph, Phillip
- 17:40 Low frequency liners for turbofan engines
Sugimoto, R.; Astley, R. Jeremy; Murray, Paul B.

Thursday 15.40-18.00 Room 105 Architectural Acoustics 10

Chair: Daniel Naish David Griesinger

- 15:40 Predictions of road traffic noise on residential balconies using a specular & diffusion model
Naish, Daniel; Tan, Andy C. C.; Demirbilek, Nur
- 16:00 Phase coherence as a measure of acoustic quality: Part 1, The neural mechanism
Griesinger, David
- 16:20 Phase coherence as a measure of acoustic quality: Part 2, Audience engagement
Griesinger, David
- 16:40 Phase coherence as a measure of acoustic quality: Part 3, Concert hall design
Griesinger, David
- 17:00 Integrated lighting luminaire-acoustics diffusor for classroom
Sarwono, J.; Soelami, F. X. N.; Arinanda, D.
- 17:20 Optimal design of slit resonators for acoustic normal mode control in rectangular rooms
Floody, Sergio; Venegas, Rodolfo; Leighton, Felipe

Thursday 15.40-18.00 Room 106 Acoustic measurement 2

Chair: Finn Jacobsen Jongkil Lee

- 15:40 The design of clock delay circuit for delay pulse and beamforming in ultrasonic phased array system
Wang, Hua; Liu, Mei
- 16:00 Signals for the approximate characterization of acoustic systems
Martin, James S.; Rogers, Peter H.; Gray, Michael D.
- 16:20 Sound detection characteristics under different positions of the fiber optic sensor arrays using Sagnac interferometer
Lee, Jongkil
- 16:40 Specification and calibration of acoustic short-term stimuli for objective audiometry
Fedtke, Thomas; Hensel, Johannes
- 17:00 Precision Time Synchronization Using IEEE 1588 for Distributed Acoustic Measurement
Ma, Longhua; Chen, Xiaoliang; Chen, Bin; Yan, Zhaoli
- 17:20 Localization algorithms for acoustic emission phenomena
Gaete-Garretón, L.; Vargas-Hernández, Y.; Selegim., P.; Gatica-Hernández, N.; Galleguillos-Silva, R.
- 17:40 Improving the resolution of beamforming measurements on wind turbines
Jacobsen, Finn; Xenaki, Angeliki

Thursday 15.40-18.00 Room 201 Soundscapes 3

Chair: Greg Watts Brigitte Schulte-Fortkamp

- 15:40 Tranquil spaces in a metropolitan area
Watts, G.; Pheasant, R.; Horoshenkov, K.
- 16:00 Factor analysis of the sense of presence in daily scenes
Iizuka, Masayuki; Ozawa, Kenji; Kinoshita, Yuichiro; Fukue, Kazutomo
- 16:20 Can the wave-vibration and touch sense system help blind people? - results of questionnaire
Wiciak, Jerzy
- 16:40 Assessment of audio sound quality based on psychoacoustics
Tsai, Yu Ting; Huang, Jin H.
- 17:00 On the study of noise annoyance modifiers for city dwellers
Li, H. N.; Chau, C. K.; Tang, S. K.

Thursday 15.40-18.00 Room 202 Rail Transport Noise and Vibration 2

Chair: David Anderson Robert Bullen

- 15:40 Modelling the real time performance of noise barriers for the night time operation of a rail-freight terminal
Parker, Giles
- 16:00 Algorithms for detection of rail wheel squeal
Bullen, R.; Jiang, J.
- 16:20 Noise of railway transport and its impact on the environment
Guzas, Danieliu; Pivrikis, Viktoras
- 16:40 Application of noise reduction equipment in the modernization of the EU railway development
Guzas, D.; Tricys, V.
- 17:00 Rail dampers - The first Australian field trial
Parker, Andrew; Weber, Conrad M.
- 17:20 Investigations on transportation induced ground vibrations
Garg, Naveen; Sharma, Omkar

Thursday 15.40-18.00 Room 203 Structural acoustics and vibration 6

Chair: Michal Kozupa Tomasz G. Zielinski

- 15:40 Active structural acoustic control of sound radiation from flat plates
Pan, Xia; Forrest, James A.
- 16:00 Elastomer layer impact on plate radiation and transmission loss
Kozupa, Michal
- 16:20 Multiphysics modelling and experimental verification of active and passive reduction of structural noise
Zielinski, Tomasz G.
- 16:40 Active vibration control of clamped beams using PPF controllers with piezoceramic actuators
Hong, Chinsuk; Shin, Changjoo; Jeong, Weui Bong
- 17:00 Vibration control of a building model with base isolation
Wu, Helen
- 17:20 Vibration and reliability of synthesis gas compressors (A case study in PKT-Kaltim Indonesia)
Miasa, I Made; Purwanto, Teguh P.; Lacony, Erliandy

Thursday 08.20-12.30 Poster Session 6 Bayside Terrace, Level 2

- Resonant amplification of evanescent acoustic waves by a slab of 2D magnetic acoustic metamaterials
Sukhorukova, O. S.; Tarasenko, S. V.; Lapyteva, T. V.; Shavrov, V. G.; Yurchenko, V. M.
- Beyond the geometrical focus in focused acoustic beams
Camarena, Francisco; Makov, Yuri N.; Sánchez-Morcillo, Victor; Adrián, Silvia; Jiménez, Noé; Redondo, Javier
- Nonlinear elastic properties of solids with defects
Korobov, A. I.; Rudenko, O. V.; Izosimova, M. Y.
- Evaluation of stress corrosion cracks in metals by linear and nonlinear ultrasound
Shintaku, Yohei; Ohara, Yoshikazu; Hashimoto, Makoto; Horinouchi, Satoshi; Yamanaka, Kazushi

- Acoustic versus ultrasonic breast imaging
Alizad, Azra; Whaley, Dana H.; Urban, Matthew W.; Kinnick, Randall R.; Greenleaf, James F.; Fatemi, Mostafa
- A new model for the shapes of rate-level functions of auditory-nerve fibers
Heil, Peter; Neubauer, Heinrich; Irvine, Dexter R. F.
- The modulation of tactile stimulation on Mandarin tone production in children with cochlear implant
Wang, Ningyuan; Huang, Juan
- Music perception and musical sound vocal production in cochlear implant children
Wang, Shuai; Huang, Juan
- Human auditory steady-state responses and cochlear pad regions_
Kluk, Karolina; Wilding, Tim; John, M. Sasha; Picton, Terence W.; Moore, Brian C. J.
- A study on physiopsychological evaluation of noise during mental memory tasks
Tamesue, Takahiro; Takahashi, Hiroki; Kamijo, Haruka; Itoh, Kazunori; Saeki, Tetsuro
- Effect of attention to preceding stimuli on the simultaneity perception between an auditory and visual stimulus
Hasegawa, Hiroshi; Yoshida, Junji; Kasuga, Masao
- Effect of change in sound pressure level on the equivalent perception between a visual stimulus and its associated sound
Yamamoto, Shun; Hasegawa, Hiroshi; Ishikawa, Tomoharu; Yuyama, Ichiro; Kasuga, Masao; Ayama, Miyoshi
- A study on the precedence effect in various background sound
Fujikawa, Takahiro; Aoki, Shigeaki
- Interdependence between temporal and ambient spatial variations of a successive sound sequence
Miyouchi, Ryota; Iwaya, Yukio; Suzuki, Yoiti
- Signal bandwidth necessary for horizontal sound localization
Morikawa, Daisuke; Hirahara, Tatsuya
- Simulation and verification of nonparametric psychoacoustical experiment methods
Chen, Guobing; Xie, Zhiwen
- A study on the characteristics of evacuation inducing sound and psychological assessment using the voice information
Baek, Geon Jong; Shin, Hoon; Song, Min Jeong; Baek, Eun Sun; Kook, Chan
- Impressions of sounds in rural nature area: Comparison between university students in urban area and in rural area
Matsumoto, Junko; Nosaka, Toshiya; Kitayama, Akio; Honda-Sumi, Eri
- F0-based segregation in a three-talker sequential listening task
Iyer, Nandini; Brungart, Douglas S.; Simpson, Brian
- Effects of frequency, loudness, and ringing cycle of warning sound on urgent impression
Akita, Takeshi; Matsuda, Naohiro; Koga, Takaaki
- The use of parametric arrays for transaural applications
Greff, Raphaël
- A viscoelastic figure model of tongue for understanding speech articulation
Hirayama, Makoto J.
- Tomographic reconstruction of the inclining vortex wind field from the acoustic travel time data between a pair of facing line array
Li, Haiyue; Yamada, Akira

Thursday 13.00-17.00 Poster Session 7 Bayside Terrace, Level 2

- A study on acoustic theoretical formula for compact acoustic reproduction systems
Nakamura, Masashi; Kajikawa, Yoshinobu; Nomura, Yasuo; Miyakura, Takashi
- Representations of HRTFs using MATLAB: 2D and 3D plots of accurate dummy-head measurements
Wersényi, György
- Stereo reproduction using parametric loudspeakers
Toba, Masayoshi; Aoki, Shigeaki
- Localization of acoustic signals used in sound emitters at pedestrian crosswalks
Niewiarowicz, Marek; Furmann, Anna

- High order Ambisonic decoding method for irregular loudspeaker arrays
Trevino, Jorge; Okamoto, Takuma; Iwaya, Yukio; Suzuki, Yoiti
- Sound source location for reproduction of speech signal at local spot based on its decomposition into random signals
Takane, Shouichi; Abe, Koji; Watanabe, Kanji; Sato, Sojun
- Estimating a musical note of solo performance on the electric bass guitar by using wavelet analysis
Miyake, Shunsuke; Miura, Masanobu
- Estimating musical score and proficiency at playing the drums
Konishi, Yuki; Miura, Masanobu
- Nonlinear assessment of Korean Temple Bell using recurrence quantification analysis
Lee, Kuekjae; Heo, Hoon; Lee, Mingu; Park, Sang Ha; Sung, Koeng-Mo
- Relation between motion and emotion for the snare drum performance.
Mito, Yuki
- Method for estimating proficiency in playing acoustic piano
Shimazu, Shohei; Miura, Masanobu
- Bamboos as the material for saxophone reed
Cheng, Ji-Yen
- Slideshow system that automatically switches photographs based on a musical acoustic signal
Shoji, Nao; Miura, Masanobu
- Hybrid coding/indexing strategy for informed source separation of linear instantaneous under-determined audio mixtures
Parvaix, Mathieu; Girin, Laurent; Daudet, Laurent; Pinel, Jonathan; Baras, Cléo
- A high-capacity watermarking technique for audio signals based on MDCT-domain quantization
Pinel, Jonathan; Baras, Cléo; Girin, Laurent; Parvaix, Mathieu
- Features for musical pitch estimation from simplified auditory model
Taweewat, Pat
- Novel impulse response measurement method for stringed instruments
Türckheim, Friedrich; Smit, Thorsten; Hahne, Carolin; Mores, Robert
- The semi-virtual violin – A perception tool
Türckheim, Friedrich; Smit, Thorsten; Mores, Robert
- Brain waves' measurements on the "aha experience" in the cognition of a melody
Nakashima, Hirotake; Higuchi, Takenobu; Fuchie, Kyoichiro; Nishimura, Ryoji; Ueno, Masatoshi
- Subjective mood induced by singing in karaoke
Matsumoto, Junko; Aoki Shiori *ISMA paper*
- Percussion Instruments with Plural Sounds using Orthogonal Modes
Nishimiya, Kojiro; Wakatsuki, Naoto; Mizutani, Koichi *ISMA paper*
- An Acoustical and Historical Study of the Taiwanese Horned Fiddle: Exaptation of Musical Instruments
Tsai, Chen-Gia; Bai, Mingsian R. *ISMA paper*
- The low down on the double bass: looking for the effects of torsional modes
Wollman, Indiana; Smith, John; Wolfe, Joe *ISMA paper*
- Experimental Approaches on Vibratory and Acoustic Characterization of Harp-Guitars
Ravina, Enrico *ISMA paper*
- Parallel Monitoring of Sound and Dynamic Forces in Bridge-Soundboard Contact of Violins
Ravina, Enrico *ISMA paper*

Friday 08.40-11.00 Room 101 Linear Acoustics

Chair: Mark Poletti Bertrand Dubus

- 08:40 Research on acoustic source positioning method for boiler tube leakage
Jiang, Genshan; Wang, Lin; Tian, Jing; Pan, Jie
- 09:00 Cylindrical harmonic expansion of the sound field due to a rotating line source
Poletti, Mark A.
- 09:20 The physics of wedge diffraction: high-frequency approximate solution in the vicinity of shadow boundary
Ueda, Mitsuhiro
- 09:40 Diffraction of bulk waves on phononic crystals
Herbison, Sarah W.; Declercq, Nico F.; Moiseyenko, Rayisa; Laude, Vincent

- 10:00 Left-handed elastic shear and longitudinal elastic waves in 2D phononic crystals made of a solid matrix
Croënne, Charles; Hladky-Hennion, Anne-Christine; Vasseur, Jérôme; Bavencoffe, Maxime; Tinel, Alain; Morvan, Bruno; Dubus, Bertrand
- 10:20 Wave propagation interaction in anisotropic piezoelectric porous layer loaded with fluid
Khurana, Poonam; Lauriks, Walter

Friday 08.40-11.00 Room 102 Music and Musical Acoustics and ISMA 4

Chair: Enrico Ravina Eva Cheng

- 08:40 Musical onset detection using MPEG-7 audio descriptors
Smith, Daniel; Cheng, Eva; Burnett, Ian
- 09:00 Enhancing headphone reproduction of an electronic piano: Control of dynamic interaural level differences coupled with a player's active head movement
Kim, Sungyoung; Ramesh, Anandhi; Ikeda, Masahiro; Martens, William L.
- 09:20 A dimensional study on the emotion of musical pieces composed for video games
Tsukamoto, Masanari; Yamada, Masashi; Yoneda, Ryo
- 09:40 Study on effect of room acoustics on timbral brightness of clarinet tones. Part II: an acoustic interpretation and synthesis of analytical results
Kato, Kosuke; Nagao, Tsubasa; Yamanaka, Toshio; Kawai, Keiji; Sakakibara, Ken-Ichi
- 10:00 Effect of music on the performance and impression of simple repetitive calculations
Yoneda, Ryo; Yamada, Masashi
- 10:20 A functional approach to amplified music
Mulder, Johannes

Friday 08.40-11.00 Room 103 Ultrasonics, quantum acoustics, and physical effects of sound 2

Chair: Takeshi Iino Konstantin Dyakonov

- 08:40 Ultrasonic attenuation in divalent FCC crystal CaO due to phonon-phonon interaction in temperature range 100-1500K
Kailash; Kumar, Jitendra
- 09:00 Temperature variation of anharmonic properties of tellurium oxide single crystal
Kailash; Shrivastava, S. K.
- 09:20 Density dependence of acoustic and acousto-optic characteristics of silica nanofoam
Iino, Takeshi; Nakamura, Kentaro
- 09:40 Acoustoelectric transport in magnetoresistive manganite films in high magnetic fields
Dyakonov, K.; Goltsev, A.; Popov, V.; Dyakonov, V. P.; Szymczak, H.
- 10:00 A comprehensive study of thermodynamical parameters and solvation number of some organic acid salts in non-aqueous medium
Ernest, Suhashini; Ebenezer, Jasmine Vasantha Rani
- 10:20 Temperature dependent anharmonic properties of MgO, MgS and MgSe
Raju, Krishna Murti

Friday 08.40-11.00 Room 104 Noise effects and control 1

Chair: Michael Fisher Toshimitsu Tanaka

- 08:40 Active noise control at a virtual acoustic energy density sensor in a three-dimensional sound field
Moreau, Danielle J.; Cazzolato, Ben S.; Zander, Anthony C.
- 09:00 The insertion loss of thick barriers with rectangular and circular vertical edges
Piippo, K; Tang, S. K.
- 09:20 An adaptive approach to enhance damping in a two dimensional feed forward active noise control system using velocity microphones
Kleinhenrich, Christian; Weigler, Tobias; Krahé, Detlef
- 09:40 Improvement of active noise control performance by changing reference signal
Yang, Inhyung; Jeong, Jae-Eun; Oh, Jae-Eung
- 10:00 Active noise reduction: performance of personal devices
Rudzyn, Ben(2); Fisher, Michael(2)
- 10:20 Vibro-acoustic behavior of micro-perforated plate to sound absorption performance
Tanaka, Toshimitsu; Kusakari, Tatsuhiro; Tsugihashi, Kazuki

Friday 08.20-11.00 Room 105 Architectural Acoustics 11

Chair: Knut Guettler Takayuki Hidaka

- 08:20 Study on effect of room acoustics on timbral brightness of clarinet tones. Part I: subjective evaluation through a listening experiment
Kato, Kosuke; Nagao, Tsubasa; Yamanaka, Toshio; Kawai, Keiji; Sakakibara, Ken-Ichi
- 08:40 The Lindeman Hall of Oslo — Evidence of low-frequency radiation from the stage floor
Guettler, Knut; Buen, Anders; Askenfelt, Anders
- 09:00 Effect of experimental design on the results of clarity-index just-noticeable-difference listening tests
Vigeant, Michelle C.; Celmer, Robert D.
- 09:20 Optimal architectural configurations and acoustic parameters for multiple sources.
Robinson, Philip; Xiang, Ning; Braasch, Jonas
- 09:40 Measurement and optimization of background noise and reverberation for a meeting room
Gramez, Abdelghani; Amara, Mohamed
- 10:00 A new miniature loudspeaker for room acoustical scale model experiment
Hidaka, Takayuki; Suzuki, Kazunori; Yamada, Yoshinari
- 10:20 Examining the relationships between monaural and binaural classroom acoustics parameters and student achievement
Ronsse, Lauren M.; Wang, Lily M.; Sim, Paul

Friday 08.20-11.00 Room 106 Medical bioacoustics

Chair: Graham Wild Miguel Bernal

- 08:20 Assessment of chest impedance in relation to phonocardiography
Zimmermann, Henrik; Moller, Henrik; Hammershøi, Dorte; Hansen, John
- 08:40 Quantifying viscoelasticity of urethane rubber materials using shearwave dispersion ultrasound vibrometry (SDUV)
Nenadic, Ivan; Urban, Matthew W.; Mitchell, Scott A.; Greenleaf, James F.
- 09:00 Molecular imaging for the detection of vulnerable atherosclerotic plaque
Anastasiadis, Pavlos; Allen, John S.
- 09:20 Classification between normal and abnormal respiratory sounds based on stochastic approach
Yamamoto, Hitoshi; Matsunaga, Shoichi; Yamashita, Masaru; Yamauchi, Katsuya; Miyahara, Sueharu
- 09:40 Numerical analysis of HRTF spectral characteristics based on sound pressures on a pinna surface
Otani, Makoto; Iwaya, Yukio; Suzuki, Yoiti; Itoh, Kazunori
- 10:00 Ultrasound tomography calibration using structured matrix completion
Karbasi, Amin; Oh, Sewoong; Parhizkar, Reza; Vetterli, Martin
- 10:20 Modal analysis on arteries and tubes using ultrasound vibrometry
Bernal, Miguel; Nenadic, Ivan; Urban, Matthew W.; Greenleaf, James F.
- 10:40 Acoustic transmissions for wireless communications and power supply in biomedical devices
Wild, Graham; Hinckley, Steven

Friday 08.20-11.00 Room 201 Occupational noise 2

Chair: Christian Giguère Franco Gugliermetti

- 08:20 Earmuffs comfort
Gerges, Samir N. Y.
- 08:40 Validation of a temporary threshold shift (TTS) detector for use with portable listening devices
Giguère, Christian; Laroche, Chantal; Végiard, Chrystal; Blomberg, Les
- 09:00 Results of simulation tests of a global index proposed for the acoustic assessment of machines
Pleban, Dariusz
- 09:20 Determination of earmuff transmittance with the use of MIRE technique and with artificial test fixtures
Zera, Jan; Mlynski, Rafal
- 09:40 Noise exposure of the ramp's operators in airport apron
Gugliermetti, F.; Bisegna, F.; Violante, A. C.; Aureli, C.
- 10:00 Noise as a cognitive impairment factor: a case study amongst teachers
Arezes, P. M.; Barbosa, M. S.; Miguel, A. S.
- 10:20 Military aircraft noise effects on crew's cognitive conditions
Méndez, Fredesvinda; Recuero, Manuel

- 10:40 Effect of hearing protection and hearing loss on warning sound design
Laroche, Chantal; Giguère, Christian

Friday 08.40-11.00 Room 202 Acoustic measurement 3

Chair: Toshihiro Tsuji Paul Dickens

- 08:40 Improved method of measuring reflection or impedance spectra using adapted signal spectra and resonance-free calibrations
Dickens, Paul; Smith, John; Wolfe, Joe
- 09:00 Ball SAW gas chromatograph for detection of mixed VOC and FC gases
Tsuji, Toshihiro; Kawai, Shohei; Nagai, Hiroki; Sakamoto, Toshihiro; Iwaya, Takamitsu; Akao, Shingo; Yanagisawa, Takayuki; Ohgi, Tsuneo; Nakaso, Noritaka; Yamanaka, Kazushi
- 09:20 Measurement of equivalent continuous A-weighted sound pressure level of driving sound of three tesla MRI equipment
Chikai, Masataka; Shimono, Yasuhiro; Muto, Kenji; Shibayama, Hideo; Yagi, Kazuo; Onodera, Toshiyuki
- 09:40 Sound strength calibration methods
Hak, C. C. J. M.; Wenmaekers, R. H. C.; Hak, J. P. M.; van Luxemburg, L. C. J.; Gade, A. C.
- 10:00 Sensitivity study of fiber optic ultrasonic probe based on the modulation in the refractive index of air
Bo, Shen; Wada, Yuji; Koyama, Daisuke; Nakamura, Kentaro

Friday 08.20-11.00 Room 203 Theoretical and computational acoustics 7

Chair: Andreas Richter Daehwan Kim

- 08:20 FDTD techniques applied to acoustic propagation in vegetable tissue
Jiménez, Noé; Picó, Rubén; Redondo, Javier; Camarena, Francisco; Roig, Bernardino
- 08:40 Time-domain computation of broadband noise due to interaction of a rectilinear cascade of flat plates with inflow turbulence
Kim, Daehwan; Cheong, Cheolung
- 09:00 Basic investigations on boundary shape modeling for sound field analysis of rooms using time domain finite element method
Okuzono, Takeshi; Otsuru, Toru; Tomiku, Reiji; Okamoto, Noriko; Naoya, Kitamura
- 09:20 A method to calculate the acoustic intensity near an open end of a flanged round pipe
Prisutova, Jevgenija; Horoshenkov, K.
- 09:40 Prediction by the finite-difference time-domain method for vibroacoustic problems
Toyoda, Masahiro; Takahashi, Daiji
- 10:00 Frequency-domain computation of inflow broadband noise due to interaction of a rectilinear cascade of flat plates with incident turbulence
Wei, Dingbing; Cheong, Cheolung
- 10:20 Sound production and radiation of resonator-controlled edge tones
Richter, Andreas; Fuss, Stefanie
- 10:40 Experimental and theoretical investigation into aerodynamic noise sources of large upwind horizontal-axis wind turbines
Lee, Gwangse; Shin, Su-Hyun; Cheong, Cheolung; Jung, Sung-Soo

Friday 11.00 Room A Plenary Chair: Tom Rossing

The acoustics of wind instruments – and of the musicians who play them.
Joe Wolfe

Friday 13.00-15.00 Room 101 Education 2

Chair: Renz van Luxemburg Ewa Skrodzka

- 13:00 Workshop on advanced room acoustic prediction modelling
Wenmaekers, R. H. C.; van Hout, N. H. A. M.; van Luxemburg, L. C. J.; Rindel, J. H.
- 13:20 Case study of curriculum development for technical listening training for employees of an acoustic related company
Kawahara, Kazuhiko; Ito, Toshihiro; Kobayashi, Tetsu; Iwamiya, Shin-ichiro; Takada, Masayuki

- 13:40 Identification, classification and acquisition of sounds for spatial orientation and mobility training of blind and visually impaired persons
Tomaszewski, Franciszek; Czechyra, Bartosz; Skrodzka, Ewa

Friday 13.00-15.00 Room 102 Music and Musical Acoustics ISMA 5

Chair: Neville Fletcher John Smith

- 13:00 Inverse problems in musical acoustics
Fletcher, Neville H.
- 13:20 Ability of cochlear implant users to segregate a melodic line
Marozeau, Jeremy; Innes-Brown, Hamish; Grayden, David B.; Burkitt, Anthony N.; Blamey, Peter
- 13:40 Attack transients in a loudspeaker / resonator coupled system
Almeida, Andre; Laruaz, Mathieu; Dalmont, Jean-Pierre
- 14:00 Pitch Bending on Early Brass Instruments
Norman, Lisa; Campbell, Murray; Chick, John; Logie Shona *ISMA paper*
- 14:20 Brassy sounds : from trombone to elephant
Gilbert, Joël; Dalmont, Jean-Pierre *ISMA paper*
- 14:40 Wagner's music is even better than it sounds: resonance tuning produced by matching vowels with pitch
Smith, John; Wolfe, Joe *ISMA paper*

Friday 13.00-15.00 Room 104 Noise effects and control 2

Chair: Sheikh Mahbub Alam Michael Barclay

- 13:00 Estimating the sound-absorption coefficients of oblique micro-perforated panels by using stepwise multiple linear regression analysis
Lai, Rong-Ping; Chiang, Chung-Chieh
- 13:20 An acoustic comfort model for dwellers in high-rise built environment in the tropics
Alam, Sheikh Mahbub; Eang, Lee Siew; Alan, Tan Hock Seng; Tiong, Tan Sze
- 13:40 Estimating urban natural ventilation potential by noise mapping and building energy simulation
Barclay, Michael; Sharples, Stephen; Kang, Jian; Wang, Bo; Du, Hu
- 14:00 Measurement methodology for the acoustic scattering of a single tree
Ding, L.; Van Renterghem, T.; Botteldooren, Dick
- 14:20 The practical applications of the perforated panel resonator with flexible tube bundles
Lu, Yadong; Tang, Huide; Wang, Qiang; Tian, Jing

Friday 13.00-15.00 Room 105 Architectural Acoustics 12

Chair: Sigmund Olafsen Ning Xiang

- 13:00 Control of sound insulation in glass facades at Oslo's Opera House
Olafsen, Sigmund; Limmesand, Per Kåre
- 13:20 Evaluation of stage support for musician_performance in a concert hall
Kim, Yong Hee; Jeon, Jin Yong; Cabrera, Densil
- 13:40 Effects of stage design elements on acoustics of concert halls
Jang, Hyung Suk; Kim, Yong Hee; Jeon, Jin Yong
- 14:00 Characterization of non-exponential sound energy decays in multiple coupled volumes
Xiang, Ning; Robinson, Philip; Jing, Yun
- 14:20 Proposal for a reference floor for hollow brick and concrete slabs based on Italian experiences
Schiavi, Alessandro; Di Bella, Antonino; Semprini, Giovanni; Astolfi, Arianna; Tarizzo, Paolo; Luison, Leonardo; Barbaresi, Luca; Pontarollo, Chiara Martina
- 14:40 Dynamic stiffness of resilient materials: Some consideration on the proposed revision of ISO 9052-1 standard
Schiavi, Alessandro; Belli, Andrea Pavoni; Russo, Francesco; Corallo, Mario

Friday 13.00-15.00 Room 106 Measurement, Generation and reproduction of sound 4

Chair: George Raicevich Ki-Won Kim

- 13:00 Bone conductors, signals and sores
Raicevich, George; Burwood, Eric; Dillon, Harvey
- 13:20 Sound source localization using scattered acoustic pressure on the surface of rigid sphere and its performance

- Kim, Ki-Won; Seo, Dae-Hoon; Chang, Ji-Ho; Kim, Yang-Hann
 13:40 Microdefects detection in metals using transverse ultrasonic waves
 Korkh, Yu. V.; Rinkevich, A. B.; Perov, D. V.

Friday 13.00-15.00 Room 202 Acoustic measurement 4

Chair: Graham Wild Subaru Kudo

- 13:00 Design of distributed monitoring system based on vibration and acoustic signals
 Yan, Zhaoli; Ma, Longhua; Cheng, Xiaobin
 13:20 Determination of the velocity of surface acoustic waves with excitation and detection by local
 electric field probes
 Habib, A.; Amjad, U.; Pluta, M.; Pietsch, U.; Grill, W.
 13:40 The study of sensitivity on piezoelectric vibratory tactile sensor using a longitudinal bar resonator
 Kudo, Subaru
 14:00 Development of a low cost system for pass-by noise beamforming measurements
 Fonseca, William D.; Gerges, Samir N. Y.
 14:20 Discrepancies between actual-ear and artificial-ear responses
 Hirahara, Tatsuya
 14:40 Optical fibre Bragg gratings for acoustic sensing
 Wild, Graham; Hinckley, Steven

Friday 13.00-15.00 Room 203 Structural acoustics and vibration 7

Chair: Nicole Kessissoglou Mauro Caresta

- 13:00 Power transmission analysis of coupled rectangular plates with elastically restrained coupling
 edge including in-plane vibration
 Yuehua, Chen; Guoyong, Jin; Jingtao, Du; Zhigang, Liu
 13:20 Monte Carlo model of the uncertainty of SEA loss factors
 Fernández, María José; Chimeno-Manguán, Marcos; López-Díez, Jesús; Simon, Francisco
 13:40 Effects of extensional wave propagating through shell structure on vibration energy flow
 Take, Hirofumi; Shigemura, Naoki; Nishijima, Motofumi; Kojima, Naoya; Mikami, Masato
 14:00 Simulation of the vibration generated by entry and exit to/from a spall in a rolling element
 bearing
 Sawalhi, Nader; Randall, Robert
 14:20 Vibrations of roll swage jointed plates
 Caresta, Mauro; Wassink, David
 14:40 Acoustic waves in quasi-periodic multi-layered media
 Ponge, Marie-Fraïse; Jacob, Xavier; Gibiat, Vincent

Friday 15.00 Room A Closing of Congress