



Student Council Suggested Talks for Students

189th Meeting of the Acoustical Society of America
Acoustical Society of Japan (Sixth Joint Meeting)
Hilton Hawaiian Village Waikiki Beach Resort, Honolulu, Hawaii

ARCHITECTURAL ACOUSTICS (AA)

1aAA2: *Acoustical characteristics of Korean traditional architecture for virtual heritage reconstruction: a case study of Magoksa temple.* Sungjoon Kim, Rai Sato, Kyung Taek Oh, Pooseung Koh, Sungyoung Kim, Mon, 10:45am - 11:00am, CORAL 2

1aAA5: *Acoustic Analysis of The Finlandia Hall (Chamber Music Hall) Focusing on Ceiling Acoustical Reflectors: Room Acoustics in Alvar Aalto's Design Works.* Chisato Hayashi, Takane Terashima, Mon, 11:30am - 11:45am, CORAL 2

2aAAa13: *Acoustic Diffusion Characteristics of Origami Structure with Planar Filling and Spiral Fold Lines.* Yukari Sakino, Akiko Sugahara, Yasuhiro Hiraguri, Tues, 11:45am - 12:00pm, SOUTH PACIFIC 2

ANIMAL BIOACOUSTICS (AB)

1pAB9: *Vocal learning and rhythm processing in harbor seals.* Andrea Ravignani, Mon, 4:00pm - 4:20pm, KAHILI SUITE

2aABa4: *Culture in whales: Transmission of a complex display.* Ellen Garland, Tues, 9:05am - 9:25am, CORAL 5

4aABb8: *Novel Auditory Evoked Potential Recordings in a Holocephalan Species, the Spotted Ratfish (*Hydrolagus colliei*).* Aoi Hunsaker, Andrew Brown, Joseph Sisneros, Thurs, 10:15am - 10:30am, KAHILI SUITE

ACOUSTICAL OCEANOGRAPHY (AO)

1pAO4: *Spatial distribution of fish in and around offshore energy areas in southern New England.* Greg Roitbourd, J Michael Jech, Chris Orphanides, M McManus, Andrew Lipsky, Mon, 1:55pm - 2:10pm, CORAL 4

2pAOa4: *Acoustic propagation as an indicator of mesoscale oceanographic features in the Beaufort Sea.* William Jenkins, Ying-Tsong Lin, Tues, 2:00pm - 2:15pm, CORAL 4

3aAO3: *The Acoustic Landscape during the New England Seamount Experiment observed by the Acoustic Telescope using Adaptive Beamforming.* Arthur Baggeroer, Wed, 8:55am - 9:15am, CORAL 4

BIOMEDICAL ACOUSTICS (BA)

1pBAa1: *Ultrasensitive Doppler Techniques for Brain and Breast Imaging.* Chris de Korte, Thijs Kouwenhoven, Rosalie Dekkers, Cynthia Vroling, Chuan Chen, Ruud van Kaam, Willem de Boode, Astrid Hoedemaekers, Mon, 1:00pm - 1:15pm, SOUTH PACIFIC 3

Biomedical Acoustics (BA) – continued

2pBAa2: *Patient-Specific Approach for Real-Time Aberration Correction in Therapeutic Ultrasound.* Vera Khokhlova, Gilles Thomas, Pavel Rosnitskiy, Fedor Nartov, Ekaterina Ponomarchuk, Oleg Sapozhnikov, Tatiana Khokhlova, Tues, 1:20pm - 1:40pm, SOUTH PACIFIC 4

3pBAa7: *Breaking the Skull Barrier: Parametric Array Enable Non-Invasive Monitoring of Transcranial Focused Ultrasound.* Pradosh Pritam Dash, Costas Arvanitis, Wed, 2:55pm - 3:10pm, SOUTH PACIFIC 4

COMPUTATIONAL ACOUSTICS (CA)

2pCA8: *Ultrasonic Weld Inspection Using Low-Order Lamb Wave Models and Machine-Learning based Signal Enhancement and Inversion.* Joshua Tempelman, Eric Flynn, Adam Wachtor, Tues, 4:55pm - 5:10pm, KAHILI SUITE

3aCA9: *Altitude-induced changes in hearing aid output: A computational simulation study.* Donghyeon Yun, Wed, 10:40am - 10:55am, KAHILI SUITE

4aCA4: *Time-domain Computational Acoustics for Modeling Nonlinear Sound Fields with Shocks.* Vera Khokhlova, Anastasia Kvashennikova, Maria Sergeeva, William Willis, John Cormack, Mark Hamilton, Thurs, 9:05am - 9:25am, CORAL 4

ENGINEERING ACOUSTICS (EA)

3aEA8: *Performance Weighted Blended Binaural Reproduction for Headworn Microphone Arrays.* Manan Mittal, Thomas Deppisch, Zamir Ben-Hur, David Lou Alon, Daniel Wong, Wed, 10:40am - 11:00am, SOUTH PACIFIC 2

3pEA6: *Evaluation of the musical field visualization using XR technology by extracting visualized images.* Wataru Teraoka, Atsuto Inoue, Yasuhiro Oikawa, Takahiro Satou, Masahito Kobayashi, Wed, 2:15pm - 2:30pm, SOUTH PACIFIC 2

4pEA9: *Rocket Flame Trench Analysis with COMSOL Multi-physics Software.* Lydia Pelham, Thurs, 3:15pm - 3:30pm, NAUTILUS SUITE

MUSICAL ACOUSTICS (MU)

2pMU6: *A musician-centered approach to background noise goals for design of practice rooms.* Jennifer Levins, Andy Carballeira, Rose Mary Su, Deeptha Ganesh, Tues, 4:45pm - 5:00pm, CORAL 2

3pMU3: *Analysis of playing the paired cymbals using motion capture system.* Masanobu Miura, Hidehiko Kozai, Wed, 1:45pm - 2:05pm, SOUTH PACIFIC 1

Musical Acoustics (MU) – continued

4aMU4: *Controlling the convergence of vocal tract resonances to generate apparent multiphonic effects.* Brad Story, Thurs, 9:25am - 9:45am, HIBISCUS SUITE

NOISE (NS)

1pNSa3: *Soundscape affects perceived visual landscape quality.* ZuYuan Zhou, Puay Yok Tan, Siu-Kit Lau, Mon, 1:40pm - 1:55pm, NAUTILUS I

4aNSb3: *Optimization of broadband sound absorbers.* Zhe Zhang, Xue Han, Ying Hu, Bohua Huang, Lixi Huang, Thurs, 9:15am - 9:30am, CORAL 1

5aNS2: *How to become an expert in high-amplitude noise measurements.* Kent Gee, Fri, 9:25am - 9:45am, SOUTH PACIFIC 2

PHYSICAL ACOUSTICS (PA)

2aPAa1: *Resonant Ultrasound Spectroscopy of Complex Materials: Thirty Years of Exploration.* Veerle Keppens, Tues, 8:10am - 8:30am, SEA PEARL I/II

4aPA1: *Wildland Fire Acoustics: Measuring the Inherent Variability of a Complex System.* Kara Yedinak, Shane Lympny, Nathan Murray, Thurs, 8:35am - 8:55am, SOUTH PACIFIC 1

4aPA8: *Acoustic-Optical Investigation of Water Droplet Explosion in Hot Oil: Kitchen Fire Prevention.* John Allen, Thurs, 11:15am - 11:30am, SOUTH PACIFIC 1

PSYCHOLOGICAL AND PHYSIOLOGICAL ACOUSTICS (PP)

2aPP1: *Development of Binaural Hearing in Humans: Behavioral and Physiological Factors.* Ruth Litovsky, Aditi Gargeshwari, Karen Gordon, Nike Gnanateja, Tues, 9:05am - 9:25am, CORAL 1

2pPP6: *Association between neural processing and speech understanding in adverse acoustics in children.* Vijayalakshmi Easwar, Tues, 3:00pm - 3:20pm, CORAL 1

3pPP2: *From the lab to the clinic: development, validation, and application of the Audible Contrast Threshold (ACT™) test.* Johannes Zaar, Wed, 1:25pm - 1:45pm, CORAL 1

STRUCTURAL ACOUSTICS AND VIBRATION (SA)

4aSA1: *Fluid-metamaterial interaction: coupling phononic materials with unsteady aerodynamic flows.* Vinod Ramakrishnan, Arturo Machado Burgos, Sangwon Park, Andres Goza, Kathryn Matlack, Thurs, 9:05am - 9:25am, SEA PEARL 1-4

2pSAb1: *An investigation of the evaluation of subjective responses to simultaneous vertical and horizontal vibrations in residential environments.* Yasunao Matsumoto, Takashi Morihara, Shigenori Yokoshima, Kentaro Hayashi, Tues, 2:50pm - 3:10pm, NAUTILUS I

Structural Acoustics and Vibration (SA) – continued

3pSA2: *Dynamic direction-dependent mode coupling in elastic metamaterial plates.* Michael Haberman, Wed, 1:25pm - 1:45pm, SEA PEARL 1-4

SPEECH COMMUNICATION (SC)

1aSC2: *The history of the speech spectrogram.* Richard Wright, Matthew Kelley, Benjamin Tucker, Mon, 10:55am - 11:10am, SOUTH PACIFIC 1

2aSCa8: *Can Artificial Intelligence Accurately Clone Dysphonic Voices? A perceptual and Intelligibility Assessment.* Pasquale Bottalico, Charles Nudelman, Keiko Ishikawa, Virginia Tardini, Daniel Fogert, Tues, 10:10am - 10:30am, CORAL 2

2aSCb3: *The relationship between articulation and perception in the acquisition of the Mandarin sibilant contrast.* Madeleine Oakley, Tues, 11:40am - 12:00pm, CORAL 2

SIGNAL PROCESSING IN ACOUSTICS (SP)

1pSP5: *SBSS: A Research Toolkit for Scalable Blind Source Separation.* Yoshiaki Bando, Yuto Nozaki, Shun Sakurai, Masaki Onishi, Mon, 2:05pm - 2:25pm, LEHUA SUITE

3pSP5: *Data-driven Mode Matching for Three-Dimensional Sound Field Reproduction with Limited Microphone Signals.* Keiko Kawase, Gen Sato, Izumi Tsunokuni, Yusuke Ikeda, Wed, 2:00pm - 2:15pm, LEHUA SUITE

5pSP6: *Spatial-U-Net: A Multi-Channel Speech Enhancement Framework for Low Signal-to-Noise Ratio Scenario.* Yifei Wei, Jihui (Aimee) Zhang, Benjamin Yen, Yusuke Hioka, Fri, 2:45pm – 3:05pm, KAHILI SUITE

UNDERWATER ACOUSTICS (UW)

2pUW1: *Construction of underwater navigation lighthouse infrastructure to enable simultaneous positioning of next-generation multiple AUVs.* Toyoki Sasakura, Tues, 1:00pm - 1:15pm, HIBISCUS SUITE

3pUW8: *Mapping shallow water acoustic measurements to deep-water equivalents via model-based calibration.* Ali Bassam, Jay Patel, Mae Seto, Wed, 3:00pm - 3:15pm, HIBISCUS SUITE

4aUW5: *Mapping sediment thickness and composition of continental shelves from Doppler shifted ship-propeller harmonics.* David Dall'Osto, Peter Dahl, Thurs, 10:05am - 10:25am, CORAL 5

PRESENTATIONS BY SURIEA INTERNS

4pSC21: *Neural responses to target words are modulated by semantic and acoustic similarity of temporally offset distractors.* Gidey Gezae, Sahil Luthra, Hee So Kim, Wusheng Liang, Abigail Noyce, Barbara Shinn-Cunningham, Thurs, 1:00pm - 5:00pm, CORAL 3