# Student Council Suggested Talks for Students



186th Meeting of the Acoustical Society of America Ottawa, Ontario, Canada, 13–17 May 2024

# Architectural Acoustics (AA)

**2aAAa1:** Non-standardized room acoustic metrics, Michael Vorlaender, May 14, 7:55am -8:15am, Room 207

**3aAAa3:** *Revisiting the Seattle Opera House*, Jennifer Levins, May 15, 8:40am - 9:00am, Room 201

**5aAA1:** Reevaluating acoustic metamaterial: limitations and misconceptions, Chao Shen, May 17, 8:05am - 8:25am, Room 207

# Animal Bioacoustics (AB)

**2pAB8:** Moving Cargo, Keeping Whales: Investigating Solutions for Ocean Noise Pollution, Vanessa ZoBell, May 14, 4:45pm - 5:00pm, Room 203

**3aAB3:** Spatiotemporal Patterns of Fish Chorusing in California National Marine Sanctuaries, Ella Kim, May 15, 8:30am - 8:45 am, Room 204

**4aAB5:** Cetacean Presence and Ambient Sound Level Analysis in Bermuda: A Comparison to Historical Records, Dawn Parry, May 16, 9:30am -9:45am, Room 204

# Acoustical Oceanography (AO)

**2pAO1:** Solutions to muddy (geoacoustic inversion) problems, Julien Bonnel, May 14, 1:05 pm - 2:00 pm, ROOM 215

**2aAO5:** Acoustic propagation through a biological deep scattering layer at the New England shelf break, Natalie Kukshtel, May 14, 9:30 am - 9:45 am, Room 215

**3pAO:** Inference of geoacoustic model parameters from acoustic field data: Perspectives on Geoacoustic Inversion, Ross Chapman, May 15, 1:00 pm – 2:00pm, Room 215

# **Biomedical Acoustics (BA)**

**1pBAb3:** *Wearable ultrasound technology*, Sheng Xu, May 13, 1:40pm - 2:00pm, Room 212

**1pBAa9:** Focused shear wave beam propagation through a 3D printed human rib cage, Yu-Hsuan Cha, May 13, 3:15pm - 3:30pm, Room 210

**2aBAa1:** Some Thoughts on Ultrasound Futures, Kai Thomenius, May 14, 8:00am - 8:20am, Room 212

# Engineering Acoustics (EA)

**1pEA2:** Application of acoustic metamaterials to phase computing, Pierre Deymier, May 13, 1:25pm - 1:45pm, Room 204

**2aEA2:** Multidomain modeling of acoustical transducers and arrays using electrical network theory, David Brown, May 14, 10:40am - 10:55am, Room 211

**4pEA3:** Speakers - as a sensor for detecting acoustic loads with Artificial Intelligence (AI), Noori Kim, May 16, 1:30pm - 1:45pm, Room 204

# Musical Acoustics (MU)

**2pMUa10:** Sounding saxophones like flutes, Jonas Braasch, May 14, 3:50pm - 4:05pm, Room 209

**3aMU4:** *Physical Modeling and Time-Domain Simulation of a Piano*, Eiji Tominaga, Masanao Sato, May 15, 9:35am - 9:55am, Room 209

**4aMU1:** The Applications of Dynamic Time Warping in the Source Separation of Percussive Sounds, Christopher Grabow, Tyler Dare, May 16, 9:00am - 9:15am, Room 209

# Noise (NS)

**1pNSa7:** Using empirical data to validate the role of Computational Fluid Dynamics in various stages of aero-acoustic simulations, Sogand Okhovatian, May 13, 2:45 pm - 3:00 pm, Room 205

**1pNSa4:** Generating Corcos-coherent signal series using phase perturbation, S. Hales Swift, May 13, 1:45 pm - 2:00 pm, Room 205

**3pNS2:** A Review of the Modelling of Impulsive Noise, Donal Finnerty, May 15, 1:00 pm - 1:15 pm, Room 215

# Physical Acoustics (PA)

**1pPAb4:** *The Infrasonic Choir: Recording Songs to Inform Decisions*, Sarah McComas, May 13, 2:00pm - 2:20pm, Room 206

**1pPAa4:** SoK: Sensor Wars: Attaches and Defenses on Acoustic Sensors, Orlando Arias, May 13, 2:20pm - 2:35pm, Room 202

**2aPA7:** Dealing with wind noise on resource constrained acoustic sensors, W.C. Alberts, May 14, 10:20am - 10:35am, Room 202

# Psychological and Physiological Acoustics (PP)

**3pPP:** *The Sing-Song of Old Man Human Ear*, Christopher Shera, May 15, 1:00 pm – 2:00 pm, ROOM 207

**3aPP1:** Modeling the relationship between listener factors and signal modification: A pooled analysis spanning a decade, Varsha Rallapalli, May 15, 8:05 am – 8:20 am, ROOM 206/ ROOM 208

**4aPP4:** How does voice familiarity affect speech intelligibility?, Emma Holmes, May 16, 9:00 am – 9:20 am, ROOM 208

#### **Structural Acoustics and Vibration (SA)**

**1pSA1:** *The Collapse of the Tacoma Narrows Bridge--Why?,* William Unruh, May 13, 1:05-1:25pm, Room 203

**3aSA4:** Lord Rayleigh versus Chladni and KFC Sanders: Who is correct about tuning forks?, Daniel Russell, May 15, 11:00-11:15am, Room 212

**4aSA3:** Monitoring the build history of a wire-arc additively manufactured part using structural resonances, Karl Fisher, May 16, 9:45-10:05am, Room 201

### **Speech Communication (SC)**

**2aSC7:** What babies bring to our understanding of vowel perception, Linda Polka, May 14, 10:20 am-10:40 am, Room 203

**2aSC10:** Unexpected findings from L2 speech research can help us understand how humans process vowels, Ocke-Schwen Bohn, May 14, 11:20 am-11:40 am, Room 203

**3aSC4:** Perceptual consequences of reverberant environments on spatial unmasking, Gabriel Weeldreyer, May 15, 8:45 am-9:05 am, Room 203

## Signal Processing in Acoustics (SP)

**2aSP3:** Augmenting sparse arrays in ocean acoustics: a Gaussian Process approach, Zoi-Heleni Michalopoulou, May 14, 8:45 am-9:05 am, Room 213

**3aSP2:** Parallel tempering in trans-dimensional Bayesian inversion for seabed geoacoustic models with many parameters per layer, Stan Dosso, May 15, 8:25 am-8:45 am, Room 213

**3aSP4:** Uncertainty quantification for acoustical problems, Peter Gerstoft, May 15, 9:05 am-9:25 am, Room 213

#### Underwater Acoustics (UW)

**1pUW9:** Automatic detection and 2D localization using a network of unsynchronized passive acoustic sensors in a dispersive waveguide, Mark Goldwater, May 13, 3:30pm – 3:50pm, Room 215

**2pUW11:** Seabed Analysis on the New England Shelf Break Using Ambient Sound Data and Trans-Dimensional Geoacoustic Inversion, Martin Siderius, May 14, 5:00pm – 5:15pm, Room 215

**4aUW1:** On the feasibility of using short-range, high-frequency transmissions to characterize the vertical-spectra of small-scale internal waves and turbulence in a bottom boundary layer, John Colosi, May 16, 8:05am – 8:25am, Room 215