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<td>Animal Bioacoustics: Fish and Marine Invertebrate Bioacoustics I. Crystal Ballroom (FE)</td>
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and Noise: Machine Learning for Acoustic Applications II. Shaughnessy (FE)

1:00 1pUWa Underwater Acoustics: Noise and the Environment. Salon C (VCC)

1:00 1pUWb Underwater Acoustics, Acoustical Oceanography, and Signal Processing in Acoustics: Variability in Shallow Water Propagation and Reverberation II. Oak Bay 1/2 (VCC)

MONDAY EVENING

7:00 1eID Interdisciplinary: Tutorial Lecture on An Introduction to Sound in the Sea. Salon A (VCC)

TUESDAY MORNING

8:00 2aAA Architectural Acoustics: Architectural Acoustics and Audio: Even Better Than the Real Thing. Theater (VCC)

9:00 2aAB Animal Bioacoustics: Topics in Animal Bioacoustics: Hearing. Shaughnessy (FE)

8:00 2aAO Acoustical Oceanography, Animal Bioacoustics, Underwater Acoustics, and Signal Processing in Acoustics: Machine Learning and Data Science Approaches in Ocean Acoustics I. Esquimalt (VCC)

8:00 2aBAAa Biomedical Acoustics, Structural Acoustics and Vibration, and Physical Acoustics: Wave Propagation in Complex Media: From Theory to Applications I. Colwood 1/2 (VCC)


9:00 2aMU Musical Acoustics and Signal Processing in Acoustics: Modeling Musical Instruments and Effects. Crystal Ballroom (FE)

8:00 2aNS Noise, Physical Acoustics, Structural Acoustics and Vibration, and Architectural Acoustics: Emerging Technologies for Noise Control. Salon C (VCC)

8:15 2aPA Physical Acoustics and Engineering Acoustics: Novel Approaches to Acoustic and Elastic Wave Experimentation: Concepts, Hardware, and Novel Processing Methods. Saanich 1/2 (VCC)


9:00 2aSA Structural Acoustics and Vibration and Physical Acoustics: Acoustic Metamaterials. Rattenbury A/B (FE)


8:45 2aUW Underwater Acoustics: Signals and Systems I. Oak Bay 1/2 (VCC)

TUESDAY AFTERNOON

1:00 2pAA Architectural Acoustics and ASA Committee on Standards: Auditorium Acoustics and Architectural Design: Challenges and Solutions II. Theater (VCC)

1:00 2pAB Animal Bioacoustics and Signal Processing in Acoustics: Anything You Can Do I Can Do Better: Bat Versus Dolphin Biosonar. Shaughnessy (FE)

1:00 2pAO Acoustical Oceanography, Animal Bioacoustics, Underwater Acoustics, and Signal Processing in Acoustics: Machine Learning and Data Science Approaches in Ocean Acoustics II. Esquimalt (VCC)

1:00 2pBAAa Biomedical Acoustics and Physical Acoustics: Shock Waves and Ultrasound for Calculus Fragmentation. Sidney (VCC)

1:00 2pBAb Biomedical Acoustics, Structural Acoustics and Vibration, and Physical Acoustics:Wave Propagation in Complex Media: From Theory to Applications II. Colwood 1/2 (VCC)

1:00 2pED Education in Acoustics: Measuring Educational Outcomes. Salon A (VCC)

1:00 2pID Interdisciplinary and Women in Acoustics: Panel Discussion: Mentoring Across Differences. Crystal Ballroom (FE)

1:00 2pNS Noise, Structural Acoustics and Vibration, and Architectural Acoustics: Noise and Vibration from Fitness Activities. Salon C (VCC)


1:00 2pPP Psychological and Physiological Acoustics and Speech Communication: Speech Perception in Children with Hearing Impairment. Salon B (VCC)
1:00 2pSA **Structural Acoustics and Vibration:** General Topics in Structural Acoustics and Vibration (Poster Session). Upper Pavilion (VCC)

2:00 2pSC **Speech Communication:** Speech Perception (Poster Session). Upper Pavilion (VCC)

1:00 2pUWa **Underwater Acoustics, Signal Processing in Acoustics, Structural Acoustics and Vibration, and Physical Acoustics:** Unmanned Vehicles and Acoustics. Saanich 1/2 (VCC)

1:30 2pUWb **Underwater Acoustics:** Signals and Systems II. Oak Bay 1/2 (VCC)

2:30 2pUWc **Underwater Acoustics:** Effects Due to Elasticity and Interfaces. Crystal Ballroom (FE)

**WEDNESDAY MORNING**

7:55 3aAA **Architectural Acoustics, Noise, ASA Committee on Standards, and Structural Acoustics and Vibration:** Advances in the Laboratory Testing of Materials. Theater (VCC)

9:00 3aAB **Animal Bioacoustics, Acoustical Oceanography, and Signal Processing in Acoustics:** Passive Acoustic Density Estimation: Recent Advances and Outcomes for Terrestrial and Marine Species I. Shaughnessy (FE)

8:00 3aAO **Acoustical Oceanography, Underwater Acoustics, Animal Bioacoustics, and Signal Processing in Acoustics:** Arctic Acoustical Oceanography III. Esquimalt (VCC)

8:15 3aBAa **Biomedical Acoustics, Structural Acoustics and Vibration, and Physical Acoustics:** Wave Propagation in Complex Media: From Theory to Applications III. Colwood 1/2 (VCC)

9:00 3aBAb **Biomedical Acoustics and Physical Acoustics:** Bubble Trouble in Therapeutic Ultrasound I. Sidney (VCC)

8:00 3aED **Education in Acoustics:** Hands-On Demonstrations. Oak Bay 1/2 (VCC)

9:45 3aMU **Musical Acoustics, Physical Acoustics, and Structural Acoustics and Vibration:** Percussion Instruments. Crystal Ballroom (FE)

8:00 3aNS **Noise, ASA Committee on Standards, and Signal Processing in Acoustics:** Technological Challenges in Noise Monitoring. Salon C (VCC)

8:30 3aPA **Physical Acoustics, Structural Acoustics and Vibration, and Signal Processing in Acoustics:** Willis Coupling in Acoustic Metamaterials. Rattenbury A/B (FE)

8:00 3aPP **Psychological and Physiological Acoustics:** Acoustics Bricolage (Poster Session). Upper Pavilion (VCC)

8:00 3aSC **Speech Communication, Musical Acoustics, and Psychological and Physiological Acoustics:** The Sound of Emotion. Salon A (VCC)

8:30 3aUWa **Underwater Acoustics, Acoustical Oceanography, Animal Bioacoustics, and Physical Acoustics:** Biological Effects on Seabed Geoacoustic Properties. Salon B (VCC)

9:00 3aUWb **Underwater Acoustics:** Topics and Modelling in Underwater Acoustics. Saanich 1/2 (VCC)

**WEDNESDAY AFTERNOON**

1:00 3pAA **Architectural Acoustics:** Absorption, Diffusion, and Insulation. Theater (VCC)

1:00 3pAB **Animal Bioacoustics, Acoustical Oceanography, and Signal Processing in Acoustics:** Passive Acoustic Density Estimation: Recent Advances and Outcomes for Terrestrial and Marine Species II. Shaughnessy (FE)

1:00 3pBAb **Biomedical Acoustics, Structural Acoustics and Vibration, and Physical Acoustics:** Wave Propagation in Complex Media: From Theory to Applications IV. Colwood 1/2 (VCC)

1:00 3pEA **Engineering Acoustics and Noise:** Acoustic Particle Velocity Sensors, Algorithms, and Applications in Air. Esquimalt (VCC)

1:00 3pEDa **Education in Acoustics:** Undergraduate Research Exposition (Poster Session). Prefunction 1B

2:30 3pEDb **Education in Acoustics:** General Topics In Acoustics Education. Colwood 1/2 (VCC)

1:00 3pID **Interdisciplinary:** Hot Topics in Acoustics. Crystal Ballroom (FE)

1:00 3pNS **Noise:** Wind Turbine Noise. Salon C (VCC)

1:00 3pPP **Psychological and Physiological Acoustics:** Pitch and Sound Localization. Salon B (VCC)

1:00 3pSA **Structural Acoustics and Vibration, Noise, and Signal Processing in Acoustics:** History of Computational Methods in
Structural Acoustics and Vibration. Saanich 1/2 (VCC)

1:00 3pSC Speech Communication: Second Language Speakers and Listeners (Poster Session). Upper Pavilion (VCC)

1:00 3SPa Signal Processing in Acoustics: General Topics in Signal Processing I (Poster Session). Upper Pavilion (VCC)

1:00 3SPb Signal Processing in Acoustics: Geometric Signal Processing in Acoustics. Rattenbury A/B (FE)

WEDNESDAY EVENING

6:00 3eED Education in Acoustics and Women in Acoustics: Listen Up and Get Involved. Oak Bay 1/2 (VCC)

THURSDAY MORNING

7:45 4aAA Architectural Acoustics, Engineering Acoustics, Signal Processing in Acoustics, and Noise: Microphone Array Applications in Room Acoustics. Theater (VCC)

8:00 4aAB Animal Bioacoustics: Soundscapes, Noise, and Methods in Animal Bioacoustics. Shaughnessy (FE)

9:15 4aBA Biomedical Acoustics: Biomedical Acoustics I. Sidney (VCC)

8:55 4aMU Musical Acoustics: General Topics in Musical Acoustics. Crystal Ballroom (FE)

8:00 4aNS Noise, Speech Communication, and Psychological and Physiological Acoustics: Effects of Noise on Human Performance I. Salon C (VCC)

8:30 4aPA Physical Acoustics and Biomedical Acoustics: Interactions of Sound Beams with Objects I. Colwood 1/2 (VCC)


9:00 4aSC Speech Communication: Speech Production (Poster Session). Upper Pavilion (VCC)

8:00 4aSP Signal Processing in Acoustics, Underwater Acoustics, Engineering Acoustics, and Physical Acoustics: Detection and Tracking of Mobile Targets I. Rattenbury A/B (FE)


9:00 4aUWb Underwater Acoustics, Signal Processing in Acoustics, and Structural Acoustics and Vibration: Acoustic Vector Field Studies I. Saanich 1/2 (VCC)

THURSDAY AFTERNOON


1:30 4pAB Animal Bioacoustics and Signal Processing in Acoustics: Combining Passive and Active Acoustics for Ecological Investigations. Shaughnessy (FE)

1:00 4pAO Acoustical Oceanography: Topics in Acoustic Oceanography. Esquimalt (VCC)

1:30 4pBA Biomedical Acoustics: Biomedical Acoustics II. Sidney (VCC)


1:00 4pNSa Noise, Speech Communication, and Psychological and Physiological Acoustics: Effects of Noise on Human Performance II. Salon C (VCC)

2:45 4pNSb Noise, and Psychological and Physiological Acoustics: Soundscapes. Salon C (VCC)

1:00 4pPA Physical Acoustics and Biomedical Acoustics: Interactions of Sound Beams with Objects II. Colwood 1/2 (VCC)

1:00 4pPP Psychological and Physiological Acoustics: Acoustics Outreach: Linking Physiology and Behavior for Future Collaborations II. Salon B (VCC)

1:15 4pSCa Speech Communication: Phonetics of Under-Documented Languages I. Salon A (VCC)

3:00 4pSCb Speech Communication: Phonetics of Under-Documented Languages II (Poster Session). Upper Pavilion (VCC)

1:00 4pSP Signal Processing in Acoustics, Underwater Acoustics, Engineering Acoustics, and Physical Acoustics: Detection and Tracking of Mobile Targets II. Rattenbury A/B (FE)

1:00 4pUWa Underwater Acoustics, Signal Processing in Acoustics, and Structural Acoustics and Vibration: Acoustic Vector Field Studies II. Saanich 1/2 (VCC)

8:00 5aUW Underwater Acoustics, Acoustical Oceanography, Signal Processing in Acoustics, and Physical Acoustics: Sediment Acoustics–Inferences from Forward Modeling, Direct, and Statistical Inversion Methods III. Oak Bay 1/2 (VCC)

FRIDAY MORNING

8:30 5aAA Architectural Acoustics and Noise: Session in Memory of Murray Hodgson I. Theater (VCC)

8:45 5aAB Animal Bioacoustics: Marine Mammal Bioacoustics I. Shaughnessy (FE)

7:45 5aAOa Acoustical Oceanography, Underwater Acoustics, and Animal Bioacoustics: Ocean Observatories: Laboratories for Acoustical Oceanography I. Saanich 1/2 (VCC)

8:00 5aAOb Acoustical Oceanography and Underwater Acoustics: Experimental Assessment of Theories of Sound Propagation in Sediments II. Esquimalt (VCC)

9:00 5aPA Physical Acoustics: General Topics in Physical Acoustics I. Colwood 1/2 (VCC)

8:30 5aSC Speech Communication: Development and Clinical Populations (Poster Session). Upper Pavilion (VCC)

9:00 5aSP Signal Processing in Acoustics: General Topics in Signal Processing II. Rattenbury A/B (FE)

FRIDAY AFTERNOON

1:15 5pAA Architectural Acoustics and Noise: Session in Memory of Murray Hodgson II. Theater (VCC)

1:00 5pAB Animal Bioacoustics: Marine Mammal Bioacoustics II. Shaughnessy (FE)

1:00 5pAOa Acoustical Oceanography and Underwater Acoustics: Experimental Assessment of Theories of Sound Propagation in Sediments II. Esquimalt (VCC)

1:00 5pAOb Acoustical Oceanography, Underwater Acoustics, and Animal Bioacoustics: Ocean Observatories: Laboratories for Acoustical Oceanography II. Saanich 1/2 (VCC)

1:00 5pPA Physical Acoustics: General Topics in Physical Acoustics II. Colwood 1/2 (VCC)

1:00 5pSP Signal Processing in Acoustics: General Topics in Signal Processing III. Rattenbury A/B (FE)