

DAY ONE					WEDNESDAY OCT 11, 2017 - MORNING				
					Registration Open at 8:00, Conference Centre Foyer				
8:50–9:00					WELCOME				
9:00–10:00					Plenary: Elliott BERGER (Royal City Ballroom B) <i>Bang! Damage from impulse noise and the effectiveness of hearing protection</i>				
10:00–10:20					COFFEE BREAK (Hallway)				
		OCCUPATIONAL NOISE AND STANDARDS I		ENVIRONMENTAL NOISE ASSESSMENT		ARCHITECTURAL ACOUSTICS MODELLING		ARCHITECTURAL ACOUSTICS APPLICATIONS I	
		Chair: Hugues Nélisse ROOM: Gryphon		Chair: Scott Penton ROOM: Flanders		Chair: Steve Meszaros ROOM: McCrae		Chair: Darron Chin-Quee ROOM: Royal City Ballroom A	
10:20–10:40		Investigation of Ground Crew Noise Exposure for the Royal Canadian Air Force CH-149 Cormorant Helicopter (Price, Ghinet, Chen, Grewal)		Sound Power Levels and Directivity Patterns of Refrigerated Transport Trailers (Roy, VanDelden)		Room Acoustics Model Calibration: A Case Study with Measurements (Bessey, Gully, Harper)		Practical Considerations of Ontario's Taron Builder Bulletin 19: Acoustical Reviews for New Condominium Buildings (Walters, Chin-Quee)	
10:40–11:00		Occupational Health Considerations for Teachers in Music Classrooms (Seebach, Chin-Quee)		Noise Characterization and Reduction Techniques of Multiple Axial Fans Unit (Arafa, Mohany)		A Novel Approach to Counting Waves in a Room (O'Keefe)		Case Studies: Effect of Fasteners Bridging Resilient Channels on AIIC Performance in Wood-Framed Condominiums (Lalonde)	
11:00–11:20		Localization of Reverse Alarms with Personal Safety Equipment (Vaillancourt, Giguère, Laroche, Nélisse)		Outdoor Concert Noise: The Kitchener ON Experience (Arnold, Chin-Quee, Penton)		Beam-Tracing Prediction of Room-to-Room Sound Transmission and the Accuracy of Diffuse-Field Theory (Mahmud, Hasan, Hodgson)		The Condominium Process and Noise (Clunis)	
11:20–11:40		Hearing Protector Fit-testing: Spectrum Uncertainty Budgets (Voix)		A Barrier for Community Power Generation Close to Homes (VanDelden)		Using Generative Design Principles to Optimize the Acoustic Quality of a Meeting Room (Peters, Lamb)		Acoustic Challenges for the Pacific Autism Family Centre (Scherebnyj)	
11:40–12:00		Insertion Loss of Hearing Protection Devices for Military Impulse Noise (Nakashima, Sarray, Fink)		Siting and Planning for the Ground Run-up Enclosure (GRE) at Billy Bishop Airport (Sylvestre-Williams)		The Application of NURBS to Acoustical Science (O'Keefe)		Beaver Barracks Acoustical Engineering Case Study (Clunis)	
12:00–12:20		Sound Attenuation of Acoustic Shields (Behar, Luo, Mosher, Abdoli-Eramaki)				Broadband Acoustic Energy Confinement in 3D Printed Hierarchical Sonic Crystals (Shakouri, Fan)		Destructive Interferences Created Using Additive Manufacturing (Berardi)	
12:20–1:20					LUNCH (Royal City Ballroom B)				

**DAY
ONE**

WEDNESDAY OCT 11, 2017 - EARLY AFTERNOON

	OCCUPATIONAL NOISE AND STANDARDS II Chair: Tim Kelsall ROOM: Gryphon	SHOCK AND VIBRATION Chair: Al Lightstone ROOM: Flanders	EDUCATION IN ACOUSTICS I Chair: Ramani Ramakrishnan ROOM: McCrae
1:20–1:40	Going Global: Hearing Conservation Regulations and Trends (Wells)	Relationship Between Railway Ground-Borne Vibration Propagation and Track Elevation – A Field Study (Collins)	Teaching Acoustics to Psychology and Neuroscience Students (Russo)
1:40–2:00	The History of Real-ear Attenuation at Threshold Since 1957 with Emphasis on the Most Recent ANSI S12.6-2016 and CSA Z94.2-2014 Standards (Berger)	Subway Train-induced Noise and Vibration in Buildings: Predictions and Measurements (Toome, Love)	Enseignement de L'acoustique en Conception Intégrée (Migneron, Potvin, Demers, Gosselin)
2:00–2:20	The ISO Standard on Hearing Protectors (Behar)	Mitigation of Railway Induced Ground-borne Noise and Vibration (Alkhatib, Lightstone, Du)	Seeing Sound: A Tool for Teaching Music Perception Principles (Ng, Schutz)
	GREEN BUILDING ACOUSTICS Chair: Jessie Roy		
2:20–2:40	Sound Transmission Loss Evaluation of Rainscreen Wall Assemblies; Investigation of Test Specimen Installation and Comparative Evaluation of 54 Rainscreen Assemblies (Connelly)	Case Study: Comparing Measured and Finite Element Modelled Footfall Vibration Levels in a New Research Building (Coetzer, Graham, Meszaros)	Acoustics Specialization for Building Engineers (Lee, Zaheeruddin)
2:40–3:00	Living Wall Noise - Case Study (Moquin)	Protection of Critical Assets from Construction Vibration - Field Tests, Prediction, and Control (Walters, Pridham)	Aeroacoustics and Aircraft Noise (Rocha)
3:00–3:20	Comparison of the Acoustic Design Requirements of the LEED, WELL and Green Globes Building Rating Systems (Roy)	Effects of Cable Connections on Vibration Measurements (Lightstone, Du)	Teaching Acoustics In Architectural Programs In Canada (Berardi)
3:20–3:40	COFFEE BREAK (Hallway)		

**DAY
ONE**

WEDNESDAY OCT 11, 2017 - LATE AFTERNOON

	ARCHITECTURAL SOUND TRANSMISSION I Chair: Alex Lorimer ROOM: Gryphon	WIND TURBINES Chair: Andy Metelka ROOM: Flanders	EDUCATION IN ACOUSTICS II Chair: Ramani Ramakrishnan ROOM: McCrae	
3:40-4:00	Contribution of Internal Wall Assemblies to Wood-Frame Floor/Ceiling ASTC Performance (Edwards, Niinivaara, Lorimer)	Wind Turbine Aeroacoustic Noise Prediction Using Computational Models and Comparison to Experimental Measurements (Zilstra, Johnson)	Use of Acoustical Standards in the Audiology Classroom (Giguère)	
4:00-4:20	Effect of Insufficient Adhesive on ASTC Performance in Concrete Partitions with Laminated Drywall (Niinivaara, Lorimer, Edwards)	Insertion Loss and Wind Induced Noise Results for Secondary Wind Screens (Bonsma, Gara, McCabe)	Teaching Acoustics to Architects (Ramakrishnan)	
4:20-4:40	Blocking Mass for Architectural Vibration Attenuation – A Case Study (Swallow, Villeneuve)	Differences in Predicted Far-Field Sound from Wind Turbine Noise Sources having Comparable Overall A-Weighted Sound Power Levels Using ISO 9613-2 (Clark)	Discussion	
4:40-5:00	Investigation of Flanking Noise Transmission into a Reverberation Room (Sadek, Arafa, Mohany)	Comparison of International Environmental Noise Guidelines for Wind Farms (Du, Lightstone, Doran)		
5:00-5:20	(A)STC Testing with MLS: Old Dog. New Tricks. (Matheson)	Wind Turbine Infrasonic Penetration into Homes using Narrowband Measurement Techniques (Metelka)		
5:30-7:00	Tours			
7:00-8:30	WELCOME RECEPTION & EXHIBITOR SHOW OPENING (Royal City Ballroom A-B)			

**DAY
TWO**

THURSDAY OCT 12 2017 - MORNING

EXHIBITION: Royal City Ballroom A 10:00–4:00

8:35–8:40	OPENING REMARKS		
8:40–9:40	Plenary: John BRADLEY (Royal City Ballroom B) <i>A Rationale for a National Classroom Acoustics Standard</i>		
9:40–10:20	COFFEE BREAK (Royal City Ballroom A)		
	<i>NRC WORKSHOP</i> Chair: Christoph Hoeller, Jeffrey Mahn ROOM: Gryphon	<i>HEARING SCIENCES I</i> Chair: Frank Russo ROOM: Flanders	
10:20–10:40	Tools and Guidelines for the Calculation of ASTC (Hoeller, Mahn)	Surveying the Sounds Used in Auditory Perception Research: Journal of the Acoustical Society of America (Schutz, Gillard)	
10:40–11:00		Effects of Short-term Choir Participation on Auditory Perception in Older Adults. (Dubinsky, Nespoli, Russo)	
11:00–11:20		Upper Limits of Auditory Motion Perception with Percussion Sounds (Tarlao, Frissen, Louart, Guastavino)	
11:20–11:40		Brain Entrain: Acoustic Features of Music that Drive You to Synch (Nespoli, Gilmore, Russo)	
11:40–12:00		EARtrodes: Towards a Wireless In-ear Custom-fitted Brain Computer Interface (Valentin, Viallet, Voix)	
12:00–1:00	LUNCH (Royal City Ballroom B)		

**DAY
TWO**

THURSDAY OCT 12, 2017 - EARLY AFTERNOON

	<i>NRC WORKSHOP (CONTINUED)</i> Chair: Christoph Hoeller, Jeffrey Mahn ROOM: Gryphon	<i>HEARING SCIENCES II</i> Chair: Jérémie Voix ROOM: Flanders		
1:00–1:20	Tools and Guidelines for the Calculation of ASTC (Hoeller, Mahn)	Objective Assessment of Companding Architecture for Assistive Hearing Devices (Moshgelani, Parsa)		
1:20–1:40		Generating Inverse Filters for HpTF Equalization as Part of Headphone Playback of Binaural Audio (Bessey)		
1:40–2:00		Loudness in the Occluded Ear Canal: Are We Again Missing 6 dB? (Bonnet, Voix, Nélisse)		
		<i>BIOMEDICAL ACOUSTICS AND ULTRASOUNDS</i> Chair: Jahan Tavakkoli		
2:00–2:20		Frequency-Domain Synthetic Aperture Focusing Techniques for Imaging with Single-Element Focused Transducers (Shaswary, Tavakkoli, Kumaradas)		
2:20–2:40		An Image-guided Focused Ultrasound System for Generating Acoustic Shock Waves that Induce Traumatic Brain Injury in Wild-type Zebrafish (Ferrier, Kaur, Park, Liu, Baker, Tavakkoli)		
2:40–3:00		Evaluation of the Bias on X-ray Absorptiometry and Quantitative Ultrasound Measurements Due to Bone-Seeking Elements (Jang, Da Silva, Tavakkoli, Slatkowska, Cheung, Pejovic-Milic)		
3:00–3:40	COFFEE BREAK (Hallway)			

**DAY
TWO**

THURSDAY OCT 12, 2017 - LATE AFTERNOON

	ARCHITECTURAL SOUND TRANSMISSION II Chair: John Bradley ROOM: Gryphon	SPEECH SCIENCES Chair: Bryan Gick ROOM: Flanders	ENVIRONMENTAL NOISE MODELLING Chair: Corey Kinart ROOM: McCrae	
3:40-4:00	Improving ASTC Performance of As-built Wood-frame Double-shear Panel Wall Assemblies (Lorimer, Niinivaara, Edwards)	Methodological Trade-offs for Dual-purpose Phonetic Fieldwork (Percival, Bliss, Schellenberg)	Estimating Hourly Leq from 24 Hour Leq (Daly, Kelsall, Khelladi)	
4:00-4:20	Complying with High Sound Isolation Requirements in Acoustics Standards when a Suspended Ceiling Extends Continuously Over Partial-Height Demising Walls (Madaras, Heuer)	Cross-Linguistic Bracing: A Lingual Ultrasound Study of Six Languages (Lauretta, Schellenberg, Gick)	Evaluation on Overlapping Barriers Design using SoundPLAN (Sun, Lacrampe)	
4:20-4:40	Probabilistic Approach to Selecting a Reasonable Minimum Sample of Rooms for ASTM E-336 Testing (Bell, Haniff, Lewis, Reuten)	Toward a Method to Uncover L1 Japanese Sociophonetic Transfer to L2 English (Yamane, Carter)	Quantitative Differences in Highway Noise Levels due to Pavement Type: Impact on Modelling Future Noise Emissions (Busch)	
4:40-5:00	The Validation of a Sound Intensity Imaging System for Wall STC Calculation, With Leak Detection (Mackenzie)	Indie-Pop Voice: How a Pharyngeal/Retracted Articulatory Setting May Be Driving a New Singing Style (Jones, Schellenberg, Gick)	Quality Assured Software Implementation of ISO 9613 According to ISO/TR 71534-3 (Hartog van Banda)	
5:15-6:15	CAA ANNUAL GENERAL MEETING (Room: Gryphon)			
6:15-9:30	AWC 2017 BANQUET & AWARDS (University of Guelph) (Cash Bar open at 6:15, Banquet 19:00)			

DAY THREE					FRIDAY OCT 13 2017 - MORNING				
8:35–8:40					OPENING REMARKS				
8:40–9:40					Plenary: Samir ZIADA (Royal City Ballroom B) <i>Flow-excited Acoustic Resonances in Shallow Cavities</i>				
9:40–10:00					COFFEE BREAK (Hallway)				
SPEECH COMMUNICATION Chair: Christian Giguère ROOM: Gryphon		AEROACOUSTICS Chair: Joana Rocha ROOM: Flanders		ENVIRONMENTAL NOISE CRITERIA Chair: Jason Tsang ROOM: McCrae		ARCHITECTURAL ACOUSTICS APPLICATIONS II Chair: Mehrzad Salkordeh ROOM: Royal City Ballroom A			
10:00–10:20	Hearing and Memory Deficits in Older Adults using Telehealth (Willoughby, Zendel)	Effect of Vortex Formation Length on Flow-Excited Acoustic Resonance for a Single Spirally Finned Cylinder in Cross-Flow (Alziadeh, Mohany)	A Vital Role in Resolving Rail Related Noise and Vibration Complaints (Tsang)	Operational Transfer Path Analysis: Practical Considerations for Selecting Sensor Positions (Toome)					
10:20–10:40	The Role of Inhibition in Older and Younger Adults' Lexical Competition (Colby, Poulton, Clayards)	Aeroacoustic Noise from Building Façades – Observed Problems and Approaches to Mitigation (Pridham)	Brief History of Montreal Noise-by-laws and Their Enforcement (Dumoulin)	HVAC Displacement System Noise Control – A New Method to Quantify Noise Control Performance (O'Keefe)					
10:40–11:00	Sensory Integration from an Impossible Source: Perceiving Simulated Faces (Keough, Taylor, Derrick, Schellenberg, Gick)	Wind-Induced Noise of Architectural Perforated Plates (Vanoostveen, Ziada)	Discussion on Noise and its Impact on Birds (Babic)	Challenges in Intelligibility Analysis of Public Address and Emergency Notifications Systems (Latour)					
11:00–11:20	Acoustic Analysis of Emotional Speech Processed by Hearing Aids (Goy, Pichora-Fuller, Singh, Russo)	Acoustics of Aero-Acoustic Wind Tunnels – State of the Art (Ramakrishnan, Waudby-Smith)	An Analysis of Two Cities and a State where Construction Noise and Vibration are Uniquely Regulated (Busch)	Noise Isolation Class (NIC) Testing of Modular Office Partitions (Williamson)					
11:20–11:40	Voices in Noise or Noisy Voices: Effects on Task Performance and Appreciation (Bockstael, Vandevelde, Botteldooren, Verduyck)	Surface Dipole Strength Generated by Cylindrical Struts (Marriner)	Trading Decibels: Overview of a Cap and Trade Regulatory Framework for Noise Emissions (Lambert, Lacrampe)	Acoustic Performance of Study Rooms - A Case Study (Sagar, Ramakrishnan)					
11:40–12:00	The Impact of Dialect on the Ability to Understand Speech-in-Noise (Power, Zendel)	Effect of Duct Height on the Magnitude of Acoustic Resonance for Single Cylinder in Cross-flow (Afifi, Mohany)	Standard Methods and Criteria Considerations for Residential Noise Complaints (Meszaros, Toome)	Heritage Building Conversions and Acoustics (Clunis)					
12:00–12:20	An Acoustician's Journey into Hearing Aids (O'Keefe)	Development of Aircraft Cabin Sound Environment Reproduction Facility for Passenger Comfort Research (Yapa, Ghinet, Price, Grewal, Chen, Wickramasignhe)	Discussion						
12:20–1:40					LUNCH & STUDENT PRESENTATION AWARDS (Royal City Ballroom B)				