

# BNAM 2024, May 22-24, Hanasaari, Espoo

Wednesday 22.5.2024

	Celsius		Kullager	
8:50	<b>OPENING</b>			
9:10	<b>Steindór Gudmundsson</b>	<b>Acoustic regulations and quality classes -- Experience from over 35 years of collaboration in the nordic countries</b>		
	<b>Room Acoustics, Chair: Henrik Möller, Bård Støfringsdal, Tapio Lokki</b>		<b>Environmental noise measurements and simulations + industrial noise, Chairs: Laimonas Ratkevičius, Deniss Mironovs</b>	
9:50	Marko Horvat and Kristian Jambrošić	Acoustic intervention in the French pavilion of the Student Centre in Zagreb as a protected cultural heritage building	Jarkko Keinänen, Olli Malmi, Kari Saine, Claus Paro and Aki Kinnunen	Dynamic properties of wire rope and rubber isolators at high frequency range in engine isolation
10:10	Yann Jurkiewicz, Vincent Berrier and Eckhard Kahle	Turku Fuuga – Acoustic Design of an Intimate and Immersive Concert Hall	Daudel Tchataat Ngaha and Kjell Eivind Frøysa	Effects of non-uniform flow on a sound field generated by a finite-size uniform piston
10:30	coffee	Tetra	coffee	Tetra
10:50	coffee	Tetra	coffee	Tetra
11:10	Octávio Inácio, Filipe Martins and Daniel José	Finite-difference time domain calculations of acoustic phenomena applied to concert hall design	Kari Saine, Antti Leskinen, Tero Korhonen, Roy Hjort and Zengxin Gao	Advanced method for workplace noise analysis
11:30	Ólafur Pjetursson, Finnur Pind and Cheol-Ho Jeong	New Opportunities in Room Acoustics Simulations Using Wave Based Technology	Christian Bergfjord Mørck, Helene Gabriella Axelsson, Nicolas Sogge and Ingunn Milford	Comparison of results from road noise measurements and road noise calculation methods
11:50	Henrik Möller, Jukka Pätynen and Sami Reina	Renovating the Encore hall using electro-acoustic enhancement systems	Johan Hallimäe	A city designed using sound - A tool to make spatial decisions
12:10	Lukasz Blasinski and Jedrzej Kocinski	The perception of reverberation length in concert halls with an Reverberation Enhancement System (RES)	Laimonas Ratkevičius and Steve Mitchell	Aircraft noise modelling with AEDT

<b>12:30</b>	Matias Remes and Perttu Korhonen	Renovation of Finnish Modern Theatres – Acousticians’ Experiences from the Past 10 Years	Unto K. Laine	Magneto-acoustic triangulation method for electric discharge localization in the atmosphere
<b>12:50</b>	John O’Keefe	Applications of a Zone to Zone Reflector Optimisation Routine	Mikko Kylliäinen	Finnish acoustician Paavo Ami (1905–1969)
<b>13:10</b>	<b>lunch</b>	<b>Restaurant (2nd floor)</b>	<b>lunch</b>	<b>Restaurant (2nd floor)</b>
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<b>14:10</b>	<b>Jens Holger Rindel (Keynote)</b>	<b>Room acoustic measurement methods in the past, present and future, including the importance of the ISO 3382 series</b>		
<b>14:50</b>	Henrik Möller and Łukasz Błasiński	Room acoustic measurements in halls with electro-acoustic enhancement systems	Jukka Pätynen, Python Workshop	
<b>15:10</b>	Petri Lehto, Henrik Möller and Jukka Pätynen	Fine tuning of the Sibelius hall stage acoustics		
<b>15:30</b>	Jorge Torres and Mattias Hill	Temperature effects on ice rink sports halls		
<b>15:50</b>	<b>coffee</b>	<b>Tetra</b>	<b>coffee</b>	<b>Tetra</b>
<b>16:10</b>	<b>coffee</b>	<b>Tetra</b>	<b>coffee</b>	<b>Tetra</b>
<b>16:30</b>	Anatoly Livshits, Aleksander Fadeef and Natalia Shirgina	Assessment of the influence of the method of fastening decorative and finishing panels on the fund of low-frequency sound absorption in a concert hall	Jukka Pätynen, Python Workshop continues	
<b>16:50</b>	Simen Helbæk Kjølberg	Sound Levels at a Clarinetist’s Ears During Solitary Practice		
<b>17:10</b>	Andrzej Klosak	Polish National Television production studios: acoustic design and performance		

Thursday 23.5.2024

Celsius		Kullager		Blixtlås
<b>Building acoustic regulations and classification in the Nordic and Baltic countries, Chairs: Birgit Rasmussen, Tønnes A. Ognedal</b>		<b>Workshops</b>		<b>Workshops</b>
8:30		Claus Lynge Christensen: ODEON		Torbjörn Kloow, Kari Pesonen: Dosimeter Workshop
8:50	Birgit Rasmussen and Claus Møller Petersen	Compliance procedures for sound insulation between dwellings in new housing – Rules according to Danish regulations & Experiences from practice		
9:10	Manu Rönkkö and Liisa Kilpilehto	Outdoor event noise levels and limits		
9:30	Birgit Rasmussen, Liisa Sell and Lars Sommer Søndergaard	Field tests of low noise levels from MVHR ventilation systems – Overview obstacles and pilot test of test procedure improvement		
9:50	Hassan Al-Ramadani	Acoustics in green buildings		
10:10	Mikko Kylliäinen, Simo Laitakari, Timo Huhtala, Matias Remes, Pekka Taina, Johannes Usano, Ville Veijanen, Janne Hautsalo and Oskar Lindfors	Revised Finnish standard SFS 5907:2022 on acoustical design and quality classes of buildings		
10:30	coffee	Tetra	coffee	Tetra
10:50	coffee	Tetra	coffee	Tetra
11:10	coffee	Tetra	Birgit Rasmusen, Tønnes A. Ognedal: Building acoustic regulations and classification workshop	
<b>Field measurements of Room acoustic parameters – Control measurements, Chairs: Mads Bollberg, Magne Skålevik</b>				
11:30	Karin Norén-Cosgriff and Jörgen Johansson	NS8141 vibration from construction activities. News in the Standards and the research		

<b>11:50</b>	Deniss Mironovs and Oliveris Tarvids	Immersive sound system showroom acoustical design in existing industrial premises			
<b>12:10</b>	Maria Quinn and Anne Pollet	Acoustics in a modular operating theatre			
<b>12:30</b>	Mads Bolberg and Ingvar Jónsson	Case study: Effect of furniture in reverberation time measurements			
<b>12:50</b>	Mads Bolberg and Ingvar Jónsson	Repairs on rendered sound absorptive ceilings and the effect on their acoustic performance			
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<b>14:10</b>	<b>Tønnes A. Ognedal (Keynote)</b>	<b>Acoustic properties to be included with new development of housing sales reports?</b>			
	<b>Field measurements of Room acoustic parameters – Control measurements, Chairs: Mads Bollberg, Magne Skålevik</b>		<b>Workshops</b>		
<b>14:50</b>	Christina Kjær, Cheol-Ho Jeong and Christer Volk	Perceptual Evaluation of Room Acoustic Simulation and Measurements	Patrick Grahm: COMSOL workshop		<b>BUS TOUR, "CITY SOUNDSCAPE EXHIBITION"</b>
<b>15:10</b>	Łukasz Błasiński and Jędrzej Kociński	Subjective localisation of a sound source in immersive sound system and stereophonic loudspeakers system			
<b>15:30</b>	Henrik Möller and Jukka Pätynen	Spatial acoustic measurements in concert halls with a reduced virtual orchestra			
<b>15:50</b>	<b>coffee</b>	<b>Tetra</b>	<b>coffee</b>	<b>Tetra</b>	
<b>16:10</b>	<b>coffee</b>	<b>Tetra</b>	<b>coffee</b>	<b>Tetra</b>	
<b>16:30</b>	Thomas Rittenschober and Mikko Halonen	Robust 3D Localisation of Anomalies in the Reverberation Time Signal	Patrick Grahm: COMSOL workshop continues		
	<b>Vibration in infrastructure, Chair: Mats Heikkinen</b>				

16:50	Minna Santaholma, Mats Heikkinen, Timo Peltonen, Jukka Pätynen and Lauri Vapalahti	Optimising Railway Track Vibration Isolation by Matching Ground-Borne Noise Level Data to Train Location in a Tunnel			Torbjörn Kloow, Kari Pesonen: Dosimeter Workshop
17:10	Pekka Taina, Vesa Vähäkuopus and Jarkko Punnonen	Pile supported slab mitigating vibration under and next to a railway line			
18:00	<b>Dinner, arriving from 18.00, start at 19.00</b>	<b>Vanha Ylioppilastalo, Helsinki</b>	<b>Dinner</b>	<b>Vanha Ylioppilastalo, Helsinki</b>	

Friday 24.5.2024

Celsius		Kullager	
<b>Health effects of noise, Chair: Valtteri Hongisto, Maria Quinn</b>		<b>Workshops</b>	
8:30	Magne Skålevik Sound levels in symphony orchestras	Finnur Pind: TREBLE, room acoustics modeling workshop	
8:50	Valtteri Hongisto, Jukka Keränen and Jenni Radun Active noise-cancelling headphones: influence on performance, stress, and experience in work context		
9:10	Antti Kuusinen and Valtteri Hongisto Best descriptors for predicting noise annoyance and spectrum-based penalty of steady-state wideband noise		
9:30	Lars Bramsløw An auditory loudness model with hearing loss		
9:50	Valtteri Hongisto, Henna Maula and Jenni Radun Stress effects of impulsive noise - a laboratory experiment		
10:10	Veronica Amodeo, Simone Secchi and Luca Marzi Acoustic comfort assessment in hospital wards: measuring procedures and parameters		
10:30	Valtteri Hongisto, Reijo Alakoivu, Antti Kuusinen and Jukka Keränen Psychoacoustic experiment in BNAM 2024 conference		
10:50	coffee Tetra	coffee Tetra	
11:10	coffee Tetra	coffee Tetra	
11:30	<b>Klas Hagberg (Keynote)</b> <b>Sustainable wooden buildings -- opportunities for good indoor acoustics</b>		
<b>Building acoustics and noise from service equipment in buildings: modelling, calculations and measurements, Chair: Johannes Usano</b>		<b>Workshops</b>	
12:10	Ville Kovalainen, Jesse Lietzén, Benjamin Oksanen and Giovanni Hawkins Structure-borne vibration generated by a pallet jack exiting a service elevator	TBA: SoundPLAN workshop	
12:30	Jukka Keränen, Valtteri Hongisto and Giovanni Hawkins Survey measurement of impact sound insulation of concrete walls		
12:50	Mikko Mantri Roininen, Oskar Lindfors and Mats Heikkinen Gymnasium activity noise in residential and educational buildings		

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<b>14:10</b>	Archil Cheghelidze, Nikoloz Tchegeidze and Henrik Möller	Acoustic design of Hotels - Comparison between different hotel brand acoustic requirements	Johan Hallimäe: Rhino/Grasshopper workshop	
<b>14:30</b>	Jose Cucharero, Kari Kammiovirta, Marko Makkonen, Tuomas Hänninen and Tapio Lokki	The end justifies the means – Sprayed sound-absorbing coating on non-acoustic materials.		
<b>14:50</b>	Johannes Usano and Joona Koskimäki	Structure borne noise emitted by building service equipment: laboratory measurements and modelling		
<b>Wooden buildings, Chair: Klas Hagberg, Alain Bradette</b>				
<b>15:10</b>	Paulo Pinto, Marina Rodrigues and Reinhilde Lanoye	Harmonizing sustainability & acoustics: challenges in mass timber construction		
<b>15:30</b>	Paola Brugnara, Alice Speranza, Luca Barbaresi, Chiara Trucchi and Vincenzo Pettoni Possenti	Improving sound transmission in timber buildings: the role of flexible interlayers		
<b>15:50</b>	Jesse Lietzén, Ville Kovalainen, Mikko Kylliäinen and Sami Pajunen	FEM-based simulation procedure to predict impact sound insulation of a timber floor		
<b>16:10</b>	<b>Closing</b>			