



## forum acusticum 2023

10<sup>th</sup> Convention of the European Acoustics Association

Turin, Italy | 11th - 15th September 2023

#### Under the Patronage of













IABP International Association of Building Physics







In collaboration with





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#### Welcome to Forum Acusticum 2023

The Italian Acoustical Association is pleased to welcome you to Turin to attend Forum Acusticum 2023, the 10<sup>th</sup> Convention of the European Acoustics Association, from the 11<sup>th</sup> to the 15<sup>th</sup> of September 2023.

Forum Acusticum 2023 is being hosted at the Politecnico di Torino, in a renovated area of the campus with new and well-equipped rooms. The Congress is going to be a world leading event in the areas of acoustics and vibration and a great opportunity for participants to increase their knowledge, to share new techniques and competences, in the wide range of acoustics nowadays addressed in the community.

An extremely rich and attractive technical program has been organized, with 5 keynote lectures, 990 oral presentations, 60 poster presentations, several technical visits, addressing all the subjects of acoustics, from basic research to applied topics. A wide exhibition, with more than 35 companies in the field of acoustic materials and instruments, is on show in the congress venue.

In addition, concerts, touristic visits, a gala dinner and a jam session have been planned for participants and accompanying persons, to enjoy the Turin's culture and the beauties of the Piedmont region.

The EAA Summer School on the hot emerging topics of acoustics has been organized along 3 days before the conference, from the 8<sup>th</sup> to the 10<sup>th</sup> of September 2023, as an attracting opportunity for students and young researchers. Young acousticians will also benefit of Forum Laboris, which aims to connect them to potential job seekers, and of a social event organized by the Young Acoustician Network.

We hope you will enjoy Forum Acusticum and experience a full immersion in the latest trends in acoustics and vibration research!

Sincerely,

Arianna Astolfi Congress Chair Forum Acusticum 2023 Politecnico di Torino (Italy)



Francesco Asdrubali Congress Co-Chair Forum Acusticum 2023 Roma Tre University (Italy)

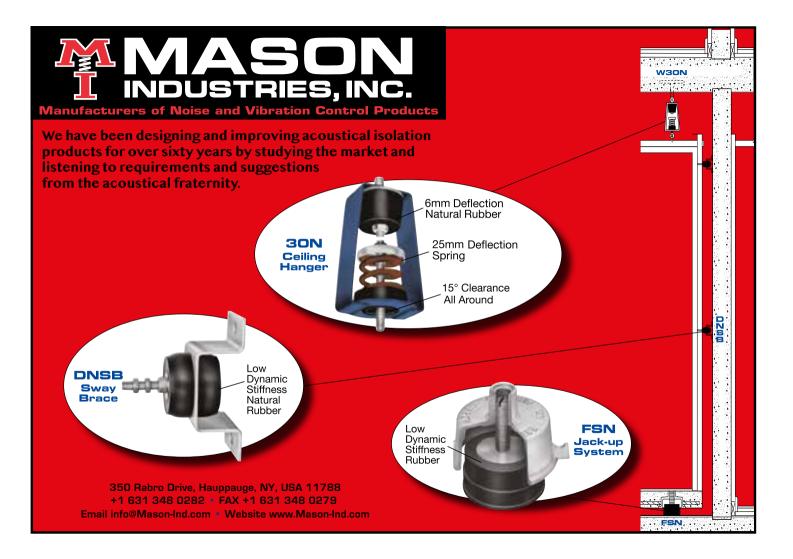




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## STRUCTURAL NOISE INSULATION

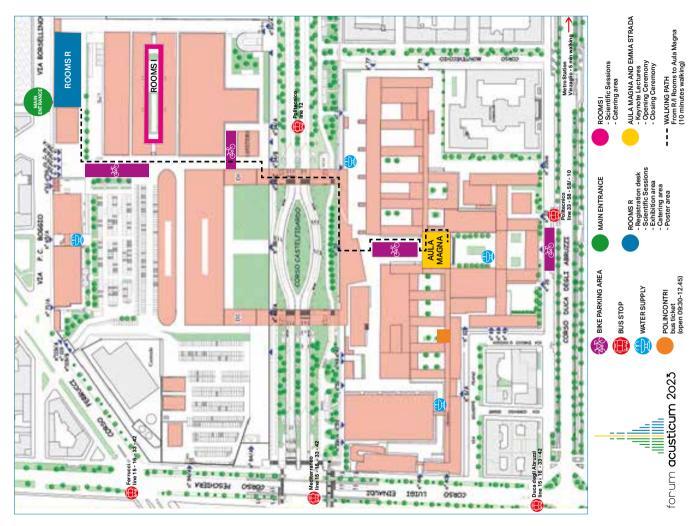


Aplicaciones Mecánicas del Caucho S.A.

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Akustik + sylomer?

# Politecnico di Torino





Svantek Sp. z o.o. - Strzygłowska 81 - 04-872 Warsaw - Poland www.svantek.com



LOBBY OF ROOMS R	ROOM 5I	ROOM 9I	ROOM 2I	ROOM 111
	<b>09:00-13:00</b> EAA BOARD AND EXECUTIVE COUNCIL MEETING			
<b>15:00-18:00</b> Registration	<b>14:00-18:00</b> EAA GENERAL ASSEMBLY	<b>14:00-18:00</b> ODEON Course	<b>14:00-18:00</b> ICA BOARD MEETING	<b>14:00-17:00</b> EAA FORUM LABORIS
	19:00-	23:00 Welcome Cocktail at Valentii	no Castle	



LOBBY OF ROOMS R	ROOM RI	ROOM R2	ROOM R3
<b>08:00-10:00</b> Registration and Coffee Time			
	12:40-13:00 Musical Transfer to	Rooms R and I	
	<b>13:00-14:00</b> Lunc	h	
	<b>14:00-16:00</b> A03-11 Measurement of sound insulation in buildings	(new indicators, sensors design, sensor networks, data processing)	<b>14:00-16:00</b> A12-14 Accuracy in room acoustic modelling
	<b>16:00-16:40</b> Coffee E	Break	
	insulation in buildings 17:40-18:40 A03-06 Measurement uncertainty	(new indicators, sensors design, sensor networks, data processing) 17:00-18:40	16:40-17:00 A12-14 Accuracy in room acoustic modelling 17:00-18:40 A12-08 Real world implementation of innovative acoustic surfaces
	08:00-10:00	08:00-10:00           Registration and Coffee Time           12:40-13:00 Musical Transfer to           13:00-14:00 Luno           14:00-16:00           A03-11 Measurement of sound insulation in buildings           16:00-16:40 Coffee E           16:40-17:40           A03-11 Measurement of sound insulation in buildings           17:40-18:40	08:00-10:00 Registration and Coffee Time       Image: Comparison of the second se



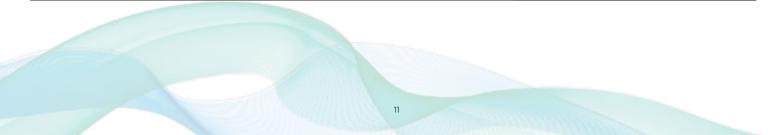
ROOM R4	ROOM RIB	ROOM R2B	ROOM R3B	ROOM R4B
	12:40	- <b>13:00</b> Musical Transfer to Rooms F	R and I	1
		<b>13:00-14:00</b> Lunch		
14:00-16:00 A03-01 General building acoustics and sound insulation	<b>14:00-16:00</b> A14-03 Soundscape and restoration, quiet areas		14:00-15:00A23-02 Multidomain comfort for human centric building energy efficiency and wellbeing - IEQ analysis and global comfort solutions15:00-16:00Al3-02 Audio signal processing for Virtual and Augmented Reality	<b>14:00-16:00</b> A11-01 Spatial Hearing: Modeling and Applications
		<b>16:00-16:40</b> Coffee Break		^
<b>16:40-18:40</b> A04-04 Urban air mobility noise (drones UAM)	<b>16:40-18:20</b> A14-05 Soundscape assessment and mapping (indicators, descriptors and metrics)	<b>16:40-18:20</b> A17-01 Automotive noise and vibration, including electric vehicles	<b>16:40-18:20</b> A13-02 Audio signal processing for Virtual and Augmented Reality	<b>16:40-18:40</b> A11-01 Spatial Hearing: Modeling and Applications

#### MONDAY SEPTEMBER

ROOM 1I	ROOM 3I	ROOM 5I	ROOM 7I					
	12:40-13:00 Musical Transfer to Rooms R and I							
	13:00-14:	<b>:00</b> Lunch						
<b>13:20-14:00</b> ACTA ACUSTICA MEETING								
<b>14:00-16:00</b> A07-01 Brass instruments: tribute to Joël Gilbert	<b>14:00-16:00</b> A10-01 Increasing ecological validity in audiology	<b>14:00-16:00</b> A15-02 Occupational voice demands and their effect on well-being and health	<b>14:00-16:00</b> A22-01 Education in acoustics and role of social media in outreaching of acoustics topics					
	16:00-16:40	Coffee Break						
<b>16:40-18:40</b> A07-01 Brass instruments: tribute to Joël Gilbert	<b>16:40-17:00</b> A10-01 Increasing ecological validity in audiology <b>17:00-18:20</b> A10-03 Modelling of unaided and aided performance	<b>16:40-18:40</b> A15-02 Occupational voice demands and their effect on well-being and health	<b>16:40-18:40</b> A22-05 Activities in acoustics of European Research Centers and Companies during the 20 <sup>th</sup> century					



ROOM 9I	ROOM 2I	ROOM 111
12:40-13:00 Musical Transfer to Rooms R and I		
<b>13:00-14:00</b> Lunch		
<b>14:00-16:00</b> A20-02 Modelling and numerical methods in vibroacoustics		
<b>16:00-16:40</b> Coffee Break		16:00-18:00 METAVISION DN project
<b>16:40-18:40</b> A20-02 Modelling and numerical methods in vibroacoustics		
		<b>18:40-20:00</b> EAA YAN meeting





MAIN HALL (AULA MAGNA)	LOBBY OF ROOMS R	FOYER OF ROOMS R, FIRST FLOOR	ROOM R1	ROOM R2	ROOM R3
<b>08:30-09:30</b> Plenary Lecture 2 Bluyssen					
			09:30-09:40 Transfer to Rooms R	and I	
	09:40-10:20 Cof	fee Break		<b>09:40-10:00</b> Coffee Break	
			<b>10:00-10:20</b> INDUSTRIAL SESSION (4 companies 5 min)	10:00-10:20 INDUSTRIAL SESSION (4 companies 5 min)	<b>10:00-10:20</b> INDUSTRIAL SESSION (4 companies 5 min)
			10:20-11:20 A03-06 Measurement uncertainty and test codes in building acoustics 11:20-12:20 A03-02 Sound insulation in wooden construction	<b>10:20-12:20</b> A04-11 Artificial intelligence and environmental noise	<b>10:20-12:20</b> A12-05 Acoustical needs for comfortable and inclusive learning spaces
		<b>12:20-13:00</b> Poster Session 1			
	1	1	13:00-14:00 Lunch		
			<b>14:00-16:00</b> A03-02 Sound insulation in wooden construction	<b>14:00-14:20</b> A04-11 Artificial intelligence and environmental noise <b>14:20-16:00</b> A04-03 Action plans and noise management	<b>14:00-16:00</b> A12-05 Acoustical needs for comfortable and inclusive learning spaces
<b>16:00-16:40</b> Coffee Break					
			<b>16:40-18:20</b> A03-02 Sound insulation in wooden construction	<b>16:40-17:20</b> A04-03 Action plans and noise management <b>17:20-18:40</b> A04-02 Noise mapping and assessment management	16:40-17:20 A12-05 Acoustical needs for comfortable and inclusive learning spaces 17:20-18:40 A12-13 Acoustics of cultural heritage buildings and
			12		archaeoacoustics



ROOM R4	ROOM RIB	ROOM R2B	ROOM R3B	ROOM R4B
	0	9 <b>:30-09:40</b> Transfer to Rooms R an	d I	
		<b>09:40-10:20</b> Coffee Break		
<b>10:20-12:20</b> A04-04 Urban air mobility noise (drones UAM)	10:20-11:20 A14-05 Soundscape assessment and mapping (indicators, descriptors and metrics) 11:20-12:20 A14-02 Soundscapes of the 'new normal' (post-COVID)	<b>10:20-12:20</b> A17-01 Automotive noise and vibration, including electric vehicles	<b>10:20-12:20</b> A13-03 Source localization and identification	<b>10:20-11:40</b> A11-01 Spatial Hearing: Modeling and Applications <b>11:40-12:20</b> A11-02 Virtual Reality and Hearing Research
		<b>13:00-14:00</b> Lunch		
<b>14:00-16:00</b> A12-02 New trends in room acoustic measurements (including arrays and signal processing) [joint session with A13-04]	14:00-14:40 A14-02 Soundscapes of the 'new normal' (post-COVID) 14:40-16:00 A14-04 Soundscape design interventions	14:00-15:00 A17-01 Automotive noise and vibration, including electric vehicles 15:00-16:00 A17-03 Tyre/road noise	14:00-15:00 A13-03 Source localization and identification 15:00-16:00 A13-05 Machine learning for acoustic sensor array processing	<b>14:00-16:00</b> All-02 Virtual Reality and Hearing Research
		16:00-16:40 Coffee Break		
<b>16:40-18:40</b> A12-02 New trends in room acoustic measurements (including arrays and signal processing) [joint session with A13-04]	<b>16:40-17:00</b> A14-04 Soundscape design interventions <b>17:00-18:20</b> A14-06 Indoor soundscaping	<b>16:40-18:40</b> A17-03 Tyre/road noise	<b>16:40-18:40</b> A13-05 Machine learning for acoustic sensor array processing	<b>16:40-17:00</b> All-02 Virtual Reality and Hearing Research <b>17:00-18:40</b> All-04 Personalisation in Spatial Audio Technologies
		17		

#### TUESDAY SEPTEMBER 12<sup>th</sup>

ROOM 1I	ROOM 3I	ROOM 5I	ROOM 7I			
09:30-09:40 Transfer to Rooms R and I						
	09:40-10:20	Coffee Break				
<b>10:20-12:20</b> A07-06 From FEM- to machine learning- based analysis and modeling of musical instruments	<b>10:20-12:00</b> A10-03 Modelling of unaided and aided performance	<ul> <li>10:20-11:20</li> <li>A15-02 Occupational voice demands and their effect on well-being and health</li> <li>11:20-12:20</li> <li>A15-06 Application of Machine Learning and Automated Methods to Speech and Voice Research</li> </ul>	<b>10:20-12:20</b> A22-05 Activities in acoustics of European Research Centers and Companies during the 20 <sup>th</sup> century			
<b>12:20-13:00</b> MENTORING						
	13:00-14:	00 Lunch				
14:00-15:00 A07-06 From FEM- to machine learning- based analysis and modeling of musical instruments	<b>14:00-16:00</b> A10-04 Auditory and cognitive aspects in perception with hearing devices	14:00-15:40 A15-06 Application of Machine Learning and Automated Methods to Speech and Voice Research	<b>14:00-16:00</b> A22-05 Activities in acoustics of European Research Centers and Companies during the 20 <sup>th</sup> century			
<b>15:00-16:00</b> A07-03 Acoustical, perceptual and neural modelling of drums		<b>15:40-16:00</b> A15-03 Extended high frequency in speech				
	16:00-16:40	Coffee Break				
modelling of drums <b>17:40-18:40</b>	<b>16:40-17:20</b> Al0-04 Auditory and cognitive aspects in perception with hearing devices <b>17:20-18:40</b> Al0-02 Assessment of hearing devices in complex environments	16:40-18:00 A15-03 Extended high frequency in speech 18:00-18:40 A15-05 Cognitive aspects of speech production and perception	<b>16:40-18:40</b> A22-05 Activities in acoustics of European Research Centers and Companies during the 20 <sup>th</sup> century			



ROOM 9I	ROOM 2I	ROOM 111
09:30-09:40 Transfer to Rooms R and I		
<b>09:40-10:20</b> Coffee Break		
<b>10:20-11:20</b> A20-02 Modelling and numerical methods in vibroacoustics		
<b>11:20-12:20</b> A20-01 Materials and systems for noise and vibration control		
		13:00-14:00 Acoustic Education: Interactive Session
13:00-14:00 Lunch		<b>13:00-14:00</b> Acoustic Education: Interactive Session
A20-01 Materials and systems for noise and vibration control		
<b>16:00-16:40</b> Coffee Break		
<b>16:40-18:40</b> A20-03 Acoustics of porous and structured materials		

## wednesday 13<sup>th</sup>

MAIN HALL (AULA MAGNA)	LOBBY OF ROOMS R	FOYER OF ROOMS R, FIRST FLOOR	ROOM R1	ROOM R2	ROOM R3
<b>08:30-09:30</b> Plenary Lecture 3 Fernandez Grande					
			09:30-09:40 Transfer to Rooms R	and I	
	09:40-10:20 Cof	fee Break		<b>09:40-10:00</b> Coffee Break	
			<b>10:00-10:20</b> INDUSTRIAL SESSION (4 companies 5 min)	<b>10:00-10:20</b> INDUSTRIAL SESSION (4 companies 5 min)	<b>10:00-10:20</b> INDUSTRIAL SESSION (3 companies 5 min)
			<b>10:20-12:20</b> A03-03 Impact noise	<b>10:20-12:20</b> A04-02 Noise mapping and assessment	<b>10:20-12:00</b> A12-13 Acoustics of cultural heritage buildings and archaeoacoustics
		<b>12:20-13:00</b> Poster Session 2			12:20-13:20 ROOM & BUILDING AC. TC
	1		13:00-14:00 Lunch		
			14:00-15:00 A03-03 Impact noise 15:00-16:00 A03-08 Acoustic regulations, classification schemes and standards in building acoustics	<b>14:00-16:00</b> A04-06 Outdoor machinery, including wind turbines and low frequency sources	14:00-16:00 A12-10 Artificial intelligence, machine learning and other computational methods in room acoustics
			<b>16:00-16:40</b> Coffee Break		
			<b>16:40-18:40</b> A03-08 Acoustic regulations, classification schemes and standards in building acoustics	<b>16:40-18:40</b> A04-06 Outdoor machinery, including wind turbines and low frequency sources	<b>16:40-17:20</b> A12-10 Artificial intelligence, machine learning and other computational methods in room acoustics
					<b>17:20-18:40</b> A12-04 Stage acoustics and rehearsal spaces



ROOM R4	ROOM RIB	ROOM R2B	ROOM R3B	ROOM R4B		
09:30-09:40 Transfer to Rooms R and I						
<b>09:40-10:00</b> Coffee Break		09:40-10:20	Coffee Break			
<b>10:00-10:20</b> INDUSTRIAL SESSION (2 companies 10 min)						
<b>10:20-12:00</b> A12-11 New trends in auditorium design	A14-06 Indoor soundscaping	<b>10:20-12:20</b> A17-02 Road traffic noise monitoring and abatement	<b>10:20-11:40</b> A13-06 Sound field control and loudspeaker array processing	<b>10:20-12:00</b> A11-04 Personalisation in Spatial Audio Technologies		
	<b>12:00-12:20</b> A16-04 Numerical flow acoustics/ Computational aeroacoustics		11:40-12:20 A08-03 Noise in restaurants and canteens			
	<b>12:20-13:20</b> NOISE TC			<b>12:20-13:20</b> PSYCOLOGICAL AND PHYSIOLOGICAL AC. TC		
		13:00-14:00 Lunch				
<b>14:00-14:40</b> A12-11 New trends in auditorium design <b>14:40-16:00</b> A12-06 Open plan offices	<b>14:00-16:00</b> A16-04 Numerical flow acoustics/ Computational aeroacoustics	<b>14:00-16:00</b> A17-05 Railway noise detection, monitoring and abatement	14:00-15:20 A08-03 Noise in restaurants and canteens 15:20-16:00 A08-01 Noise and Sustainable Development	<b>14:00-16:00</b> All-03 Perception and Behaviour in Complex Acoustic Scenes		
		<b>16:00-16:40</b> Coffee Break				
<b>16:40-18:40</b> A12-06 Open plan offices	<b>16:40-18:40</b> A16-01 Numerical and computational acoustics	<b>16:40-18:40</b> A17-05 Railway noise detection, monitoring and abatement	<b>16:40-17:40</b> A08-01 Noise and Sustainable Development <b>17:40-18:40</b> A08-02 Subjective evaluation of environmental noise included audio-visual interactions	<b>16:40-18:40</b> All-03 Perception and Behaviour in Complex Acoustic Scenes		

## wednesday 13<sup>th</sup>

ROOM 1I	ROOM 3I	ROOM 5I	ROOM 7I					
	09:30-09:40 Transfer to Rooms R and I							
	09:40-10:20	Coffee Break						
<b>10:20-12:20</b> A07-02 Experimental methods for music acoustics	10:20-11:20 A10-02 Assessment of hearing devices in complex environments	10:20-12:20 A15-05 Cognitive aspects of speech production and perception	<b>10:20-12:20</b> A22-05 Activities in acoustics of European Research Centers and Companies during the 20 <sup>th</sup> century					
	<b>11:20-12:20</b> A09-01 Non Destructive Testing and Evaluation							
12:20-13:20 MUSICAL ACOUSTICS TC	12:20-13:20 ACOUSTIC MATERIALS TC							
	13:00-14:	<b>00</b> Lunch						
<b>14:00-16:00</b> A07-02 Experimental methods for music acoustics	<b>14:00-16:00</b> A09-01 Non Destructive Testing and Evaluation	14:00-16:00 A15-05 Cognitive aspects of speech production and perception	<b>14:00-16:00</b> A22-05 Activities in acoustics of European Research Centers and Companies during the 20 <sup>th</sup> century					
	16:00-16:40	Coffee Break						
<b>16:40-17:20</b> A07-02 Experimental methods for music acoustics	<b>16:40-17:20</b> A09-01 Non Destructive Testing and Evaluation	<b>16:40-18:40</b> A06-01 Rotor noise	<b>16:40-18:40</b> A15-01 Speech intelligibility in children					
<b>17:20-18:40</b> A02-05 Terrestrial bio-acoustics	<b>17:20-18:00</b> A09-07 Acousto-Optics <b>18:00-18:40</b> A09-03 Advances in acoustic metamaterials							



ROOM 9I	ROOM 2I	ROOM 111
09:30-09:40 Transfer to Rooms R and I		09:30-11:00
09:40-10:20 Coffee Break		TREBLE - Discover Treble Acoustic Simulation Suite with Finnur Pind
<b>10:20-12:20</b> A20-04 Inverse methods in acoustics and vibration		with Plind Plind
13:00-14:00 Lunch		
14:00-14:20 A20-04 Inverse methods in acoustics and vibration		
<b>14:20-16:0</b> A01-01 Active sound control/profiling		
<b>16:00-16:40</b> Coffee Break		
<b>16:40-18:20</b> A01-01 Active sound control/profiling		



MAIN HALL (AULA MAGNA)	FOYER OF ROOMS R, FIRST FLOOR	ROOM R1	ROOM R2	ROOM R3	
		<b>08:20-09:20</b> A03-08 Acoustic regulations, classification schemes and standards in building acoustics		<b>08:20-10:20</b> A12-04 Stage acoustics and rehearsal spaces	
		<b>09:20-10:20</b> A03-04 Absorption materials and innovative measuring techniques	<b>09:20-10:20</b> A04-08 Environmental noise and health effects		
		<b>10:20-11:00</b> Cof	fee Break		
		<b>11:00-13:00</b> A03-04 Absorption materials and innovative measuring techniques	<b>11:00-13:00</b> A04-08 Environmental noise and health effects	<b>11:00-13:00</b> A12-04 Stage acoustics and rehearsal spaces	
		13:00-14:00	Lunch		
	<b>14:00-14:40</b> Poster Session 3			<b>13:40-14:40</b> YAN Open Board Meeting	
		<b>14:40-15:20</b> A03-04 Absorption materials and innovative measuring techniques	<b>14:40-15:00</b> A04-08 Environmental noise and health effects		
		<b>15:20-16:40</b> A03-07 Structure borne and service equipment noise in buildings	<b>15:00-16:40</b> A04-10 Outdoor noise propagation	<b>15:00-16:40</b> A12-03 Innovations in sound absorption measuring techniques, including reverberation room measurements	
	<b>16:40-17:20</b> Coffee Break				
	<b>17:20-17:30</b> Transfer to Main Hall (Aula Magna)				
<b>17:30-18:30</b> Plenary Lecture 4 Fitch					



ROOM R4	ROOM RIB	ROOM R2B	ROOM R3B	ROOM R4B
<b>08:20-10:00</b> A12-12 Directivity of sound sources and receivers I (also Session A21-03)	<b>08:20-10:20</b> A16-01 Numerical and computational acoustics	<b>08:20-10:00</b> A17-07 Road and rail noise barriers and related devices	<b>08:20-10:20</b> A08-02 Subjective evaluation of environmental noise included audio-visual interactions	08:20-09:40 All-03 Perception and Behaviour in Complex Acoustic Scenes 09:40-10:20
<b>10:00-10:20</b> A21-03 Directivity of sound sources and receivers II (also Session A12-12)		<b>10:00-10:20</b> A19-01 Source localisation and geoacoustic inversion		All-05 Psychoacoustics in Communication
		<b>10:20-11:00</b> Coffee Break		
<b>11:00-12:40</b> A21-03 Directivity of sound sources and receivers II (also Session A12-12) <b>12:40-13:00</b> A21-01 Auditory Cognition in interactive Virtual Environments	<b>11:00-13:00</b> A16-01 Numerical and computational acoustics	<b>11:00-13:00</b> A19-01 Source localisation and geoacoustic inversion	<b>11:00-12:00</b> A08-02 Subjective evaluation of environmental noise included audio-visual interactions <b>12:00-13:00</b> A08-04 Noise in hospitals and healthcare facilities	<b>11:00-13:00</b> A11-05 Psychoacoustics in Communication
	1	<b>3:00-14:00</b> Lunch <b>13:00-14:00</b> Lunc	h	
	<b>13:40-14:40</b> COMPUTACIONAL TC	<b>13:40-14:40</b> AUDIO SIGNAL TC		
14:40-16:00 A21-01 Auditory Cognition in interactive Virtual Environments 16:00-16:40 A21-02 Environmental Noise Auralization	14:40-15:20 A16-01 Numerical and computational acoustics 15:20-16:40 A16-02 Boundary and finite element methods in acoustics	<b>14:40-16:40</b> A19-02 Underwater Acoustic communication and networking	14:40-16:00 A08-04 Noise in hospitals and healthcare facilities 16:00-16:40 A05-01 Loudspeakers and sound	<b>14:40-16:40</b> A18-04 Sound for care and emotions
	and vibration		field control	
<b>16:40-17:20</b> Coffee Break				
17:20-17:30 Transfer to Main Hall (Aula Magna)				

#### THURSDAY SEPTEMBER 14<sup>th</sup>

ROOM 1I	ROOM 3I	ROOM 5I	ROOM 7I	
08:20-09:20 A02-05 Terrestrial bio-acoustics 09:20-10:20 A02-02 Open-source software and cutting-edge applications in bio- acoustics	<i>08:20-10:20</i> A09-03 Advances in acoustic metamaterials	<b>08:20-09:00</b> A06-01 Rotor noise <b>09:00-10:20</b> A06-02 Wind Tunnel Testing in Aeroacoustics	<i>08:20-10:20</i> A07-04 Acoustics of organ pipes and the pipe organ	
	10:20-11:00	Coffee Break		
<b>11:00-11:40</b> A02-02 Open-source software and cutting-edge applications in bio- acoustics	<b>11:00-13:00</b> A09-03 Advances in acoustic metamaterials	<b>11:00-13:00</b> A06-02 Wind Tunnel Testing in Aeroacoustics	<b>11:00-12:00</b> A07-04 Acoustics of organ pipes and the pipe organ	
<b>11:40-13:00</b> A02-03 Eco-Acoustics and non-vocal bio-acoustics			<b>12:00-13:00</b> A22-02 Interactive media or demonstrations for lectures and laboratory	
	13:00-14:	<b>00</b> Lunch		
<b>13:40-14:40</b> ULTRASOUNDS TC			<b>13:40-14:40</b> EDUCATION TC	
14:40-15:40 A02-03 Eco-Acoustics and non-vocal bio-acoustics 15:40-16:40 A02-04 Underwater bio-acoustics	<b>14:40-16:40</b> A09-03 Advances in acoustic metamaterials	14:40-15:00 A06-02 Wind Tunnel Testing in Aeroacoustics 15:00-16:40 A06-04 Metamaterials for passive control in aeroacoustics	<b>14:40-16:20</b> A22-02 Interactive media or demonstrations for lectures and laboratory	
	16:40-17:20	Coffee Break		
	17:20-17:30 Transfer to Main Hall (Aula Magna)			



ROOM 9I	ROOM 2I	ROOM 111
<i>08:20-10:20</i> A01-01 Active sound control/profiling		
10:20-11:00 Coffee Break		
<b>17:00-13:00</b> A01-04 Smart structures and systems for vibration control		
13:00-14:00 Lunch		
<b>14:40-16:40</b> A01-04 Smart structures and systems for vibration control		
16:40-17:20 Coffee Break		
17:20-17:30 Transfer to Main Hall (Aula Magna)		

#### FRIDAY SEPTEMBER 15<sup>th</sup>

MAIN HALL (AULA MAGNA)	FOYER OF ROOMS R, FIRST FLOOR	ROOM RI	ROOM R2	ROOM R3
		08:40-09:40 A03-07 Structure borne and service equipment noise in buildings 09:40-10:20 A03-10 Prediction and numerical simulation in building acoustics	<b>08:20-10:20</b> A04-10 Outdoor noise propagation	<b>08:20-10:20</b> A12-03 Innovations in sound absorption measuring techniques, including reverberation room measurements
		<b>10:20-11:00</b> Cof	fee Break	
			<b>11:00-13:00</b> A04-10 Outdoor noise propagation	<b>11:00-13:00</b> A12-09 Sound propagation in rooms
		13:00-14:00	Lunch	
		<b>14:00-14:20</b> Transfer to Ma	in Hall (Aula Magna)	
14:20-15:20 Plenary Lecture 5 Burgess Taroudakis 15:20-16:20 CLOSING CEREMONY				



ROOM R4	ROOM R1B	ROOM R2B	ROOM R3B	ROOM R4B
<b>08:20-10:20</b> A21-02 Environmental Noise Auralization	A16-02 Boundary and finite element methods in acoustics and vibration	<b>08:20-10:00</b> A19-02 Underwater Acoustic communication and networking <b>10:00-10:20</b> A19-05 Underwater Soundscapes, Acoustical imaging and Mapping	field control <b>.</b> 09:20-10:20	08:20-09:20 A18-04 Sound for care and emotions 09:20-10:20 A18-02 From brief to evaluation in the sound design process
		10:20-11:00 Coffee Break		
<b>11:00-13:00</b> A21-04 Virtual acoustics for indoor spaces	A16-03 Data-driven methods in acoustics and vibrations	<b>11:00-13:00</b> A19-05 Underwater Soundscapes, Acoustical imaging and Mapping	<b>11:00-11:20</b> A05-02 Microphones for audio or measurement applications <b>11:20-12:40</b> A05-04 Acoustic MEMS	<b>11:00-11:20</b> A18-02 From brief to evaluation in the sound design process <b>11:20-12:40</b> A18-03 Sound design/quality in industrial products
<b>13:00-14:00</b> Lunch				
14:00-14:20 Transfer to Main Hall (Aula Magna)				

#### FRIDAY SEPTEMBER 15<sup>th</sup>

ROOM 1I	ROOM 3I	ROOM 5I	ROOM 7I	
<b>09:00-10:20</b> A02-04 Underwater bio-acoustics	08:20-10:20 A09-02 Nonlinear Acoustics	<b>08:20-09:20</b> A06-04 Metamaterials for passive control in aeroacoustics <b>09:20-10:20</b> A06-05 Jet noise and CAA methods	<b>09:00-10:20</b> A22-06 Reflections on the International Year of Sound	
	10:20-11:00	Coffee Break		
<b>11:00-13:00</b> A02-07 Bird bio-acoustics	<b>11:00-11:20</b> A09-02 Nonlinear Acoustics <b>11:20-13:00</b> A09-07 Acousto-Optics	11:00-12:20 A06-05 Jet noise and CAA methods	<b>11:00-12:00</b> A22-06 Reflections on the International Year of Sound	
<b>13:00-14:00</b> EAA GENERAL TC+BOARD MEETING		<b>13:00-14:00</b> Lunch		
	14:00-14:20 Transfer to Main Hall (Aula Magna)			



ROOM 9I	ROOM 2I	ROOM 111
<b>09:40-10:20</b> A01-05 Active metamaterials		
10:20-11:00 Coffee Break		
17:00-12:40 A01-05 Active metamaterials		
13:00-14:00 Lunch		
14:00-14:20 Transfer to Main Hall (Aula Magna)		



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#### We look forward to seeing you at booth 14!



#### CONFERENCE INFORMATION

#### VENUE

Politecnico di Torino Via Paolo Borsellino, 53/N - 10138 Torino Website: https://www.fa2023.org/congress-venue/

The sessions will take place in Rooms R and I. Keynote lectures will take place in Aula Magna and Emma Strada Room.

REGISTRATION DESK Rooms R – Politecnico di Torino Via Paolo Borsellino, 53/N - 10138 Torino

Sunday, Sept. 10<sup>th</sup> from 03.00 PM to 06:00 PM Monday, Sept. 11<sup>th</sup> from 08:30 AM to 06:00 PM Tuesday, Sept. 12<sup>th</sup> from 08:30 AM to 06:00 PM Wednesday, Sept. 13<sup>th</sup> from 08:30 AM to 06:00 PM Thursday, Sept. 14<sup>th</sup> from 08:30 AM to 06:00 PM Friday, Sept. 15<sup>th</sup> from 08:30 AM to 06:00 PM

#### SCAN IT FOR THE CONGRESS APP





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#### **POSTER PRESENTATION**

#### Poster area: Foyer of Rooms R (first floor)

Please kindly note that there are three poster sessions as stated in the program. Each poster will be displayed during the whole conference from Monday September 11<sup>th</sup> until Friday September 15<sup>th</sup>.

Each poster board will have a poster identification number.

It is the Presenter's obligation to put up and also remove the poster from the panel. Posters left after the end of the congress will be destroyed. The Congress Secretariat bares no responsibility for posters left behind.

#### **CERTIFICATE OF ATTENDANCE**

Certificates will be available online after the completion of the Scientific Program. Participants can download the certificate of attendance after the login in the DOWNLOAD AREA: https://registration.ccicongress.com/cmsweb/Login.asp?IDcommessa=C001/23&Lang=EN

#### **CONFERENCE BADGE**

Please wear your personal badge at all times. Entrance to the Conference area will only be permitted to guests wearing their name badge.

#### OFFICIAL LANGUAGE

English will be the official language of the Conference and no simultaneous translation will be provided.

#### CURRENCY

Italy's monetary unit is the Euro. No other currency is accepted, and it is best to exchange dollars or other currency at a bank.

#### **INSURANCE**

We cannot accept responsibility for any personal loss, accidents, or damages to participants and/or accompanying persons. Participants are advised to obtain personal insurance to cover any eventuality that may occur during the Congress.

#### **EXHIBITION AREA**

The FA2023 Exhibition Area will open on Monday, September 11<sup>th</sup>, and will be present throughout all Conference days. Exhibitors will have physical booths on the ground floor and first floor in Rooms R of Politecnico di Torino: Via Paolo Borsellino, 53/N - 10138 Torino.

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COMPANY	BOOTH n°
AMC MECANOCAUCHO	5
BOSCO ITALIA Spa	23
Dassault Systèmes	20
DIASEN	11b
EAA - European Acoustics Association	4
Flex Acoustics	21
Gerriets GmbH	10
HEAD acoustics	14
HOTTINGER BRÜEL & KJAER	25
MASON INDUSTRIES, INC.	6
MATELYS - Research Lab	19
Mc4Software Italia Srl	16
Metecno Sound	13

BOOTH n°
18
17
8
1
1b
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22
24
12
9



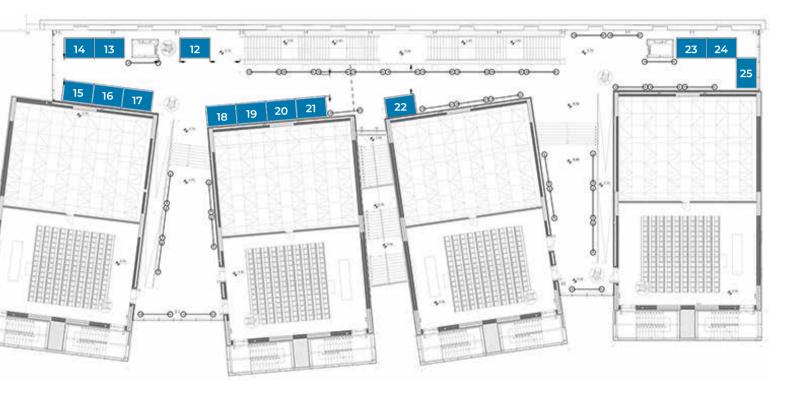
#### **EXHIBITORS MAP**

#### **ROOMS R - GROUND FLOOR**



# **EXHIBITORS MAP**

### **ROOMS R - FIRST FLOOR**



### INDUSTRIAL SESSIONS

### TUESDAY, SEPTEMBER 12th, 2023

### ROOM R1

 10:00 – 10:05
 AMC-Mecanocaucho

 10:05 – 10:10
 BOSCO ITALIA Spa

 10:10 – 10:15
 Dassault Systèmes

 10:15 – 10:20
 Diasen

### ROOM R2

10:00 - 10:05	Edilclima
10:05 – 10:10	Flex Acoustics
10:10 – 10:15	Gerriets GmbH
10:15 – 10:20	HEAD acoustics

### **ROOM R3**

 10:00 – 10:05
 Hottinger Brüel & Kjaer Italy

 10:05 – 10:10
 MATELYS - Research Lab

 10:10 – 10:15
 Mc4Software Italia Srl

 10:15 – 10:20
 Metecno Sound

### WEDNESDAY, SEPTEMBER 13th, 2023

### ROOM R1

10:00 – 10:05 NORSONIC – RION		
10:05 – 10:10	Odeon A/S	
10:10 – 10:15	ROCKWOOL – Rockfon	
10:15 – 10:20	Siemens	

### **ROOM R2**

10:00 – 10:05 Softnoise		
10:05 - 10:10	Spectra – Sinus	
10:10 – 10:15	SVANTEK	
10:15 – 10:20	Treble	

### ROOM R3

10:00 - 10:05	Wavebreaker AB
10:05 – 10:10	Toto Acustica by Web
10:10 – 10:15	WÖLFEL

### **ROOM R4**

10:00 – 10:10 Saint-Gobain Ecophon 10:10 – 10:20 MASON INDUSTRIES, INC.



# Rockfon

Ti aspettiamo allo stand n.8

Stone wool helps the city to sleep

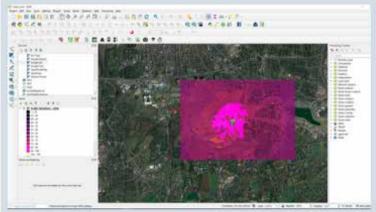




# New! iNoise V2024 with CNOSSOS add-on



# New! LimA V2024 with QGIS add-on



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## SPONSORS OF FORUM ACUSTICUM



## SOCIAL PROGRAM



for Theme organizers, Chairmen and EAA Board members as a priority

on 10<sup>th</sup> September 2023

19:00-23:00

at Valentino Castle Gardens



for the EAA Young Acousticians Network

on 11<sup>th</sup> September 2023

from 20:00

at Imbarchino



on 12<sup>th</sup> September 2023

19:00-23:00

at Conservatorio Giuseppe Verdi

### SOCIAL PROGRAM



on 13<sup>th</sup> September 2023

19:00-23:00

at OGR Torino



on 14<sup>th</sup> September 2023

19:30-23:00

at MAUTO (Museo dell'Automobile di Torino)

# NOTES

-		
-		


### **Congress Secretariat**



Centro Congressi Internazionale S.r.I. Via G. Guarini, 4 – 10123 Torino Tel. 011 2446911 info@ccicongress.com – www.ccicongress.com