



## X Congreso Iberoamericano de Acústica

XIV Congreso Argentino de Acústica XXVI Encontro da Sociedade Brasileira de Acústica



















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The purpose of the ICA is to promote international development and collaboration in all fields of acoustics including research, development, education, and standardisation. It fulfils this mission by maintaining contacts with national and regional acoustical societies and associations; convening the International Congresses on Acoustics; sponsoring special international meetings.

ICA2016 has been organized by the **Ibero american** Federation of Acoustics (FIA) and the Argentinian Acousticians Association (AdAA), under the endorsement of the International Commission for Acoustics (ICA).

The Congress is officially sponsored by the Acoustical Society of America (ASA), the International Union of Pure and Applied Physics (IUPAP), and the National Council of Acoustical Consultants (NCAC). It is also sponsored by several Universities and Professional Institutions of Latin America.









## **WELCOME/BIENVENIDA:**

Welcome Message from Marion Burgess President, International Commission of Acoustics, 2013-2016

It is with great pleasure that on behalf of the International Commission for Acoustics I welcome you to the ICA 2016 in Buenos Aires. The selection of the hosts for the congress of the ICA is undertaken 6 years before the actual event and since that time there have been three Presidents of the ICA. However the organising committee has worked throughout this time to bring to fruition this congress. That committee comprised the Ibero-american Federation of Acoustics (FIA) and the Argentinian Acousticians Association (AdAA), in cooperation with the Chilean Acoustics Society (SOCHA). We thank the efforts of the committee for working on this congress over so many years and in particular thank the Congress President, Jorge Patricio and the Congress Secretary General Nilda Vechiatti.

The International Congress on Acoustics provides the opportunity only once every three years for all those around the world who are working in all areas of acoustics to meet, discuss and exchange ideas. We hope that during the congress you will benefit from the opportunity for cross disciplinary discussion. The five plenary lectures provide insights into five very different areas of acoustics. This highlights the breadth of the coverage of the presentations at the congress. The main program involves the presentations in a range of special topic areas and structured sessions. The technical exhibition provides the opportunity to see the latest advances in instrumentation and products related to acoustics.

The ICA provides grants to support the participation of some Young Scientists at the congress. We are delighted that additional funding from the International Union for Pure and Applied Physics (IUPAP) has been used to extend the Young Scientists support scheme.

This is the first time that the ICA has been held in South America so it is a wonderful opportunity for those from other parts of the world to learn more about the work being undertaken in these countries. It also provides the opportunity to learn more about the cultural and social life of Argentina and, perhaps for some, the opportunity to also travel to the nearby countries.

Thank you to all those who have worked and continue to work on the arrangements for this congress and, equally importantly, thank you to those who are participating and presenting their work to colleagues.

## WELCOME/BIENVENIDA:

Welcome Message from Jorge Patricio President, Iberomaerican Federation of Acoustics. President, International Congress on Acoustics, ICA 2016.



It is with great pleasure that I welcome you all to the 22nd International Congress on Acoustics, ICA 2016, that is going to be held in Buenos Aires, Argentina, between 5th and 9th, September, 2016.

This Congress is one of the most important Forums for those around the world working in all areas of Acoustics. It makes an outstanding opportunity to meet, discuss, exchange ideas, and establish partnerships, thus promoting the research and development of this scientific branch of Knowledge, in order to duly serve the needs of the Human being.

Jointly, with the ICA2016, it will also be held the X Ibero-american Federation of Acoustics Congress (FIA 2016), incorporating the XIV Argentinean Congress of Acoustics and the XXVI Meeting of the Brazilian Acoustical Society.

The Congress ICA 2016 is organized by the Ibero-american Federation of Acoustics (FIA) and the Argentinian Acousticians Association (AdAA), in cooperation with the Chilean Acoustics Society (SOCHA), under the endorsement of the International Commission for Acoustics (ICA). It is officially sponsored by the Acoustical Society of America (ASA), the International Union of Pure and Applied Physics (IUPAP), and the National Council of Acoustical Consultants (NCAC), Institutions to whom I express my deepest gratitude.

Despite we are actually suffering strange and unexpected turbulences worldwide, Acoustics still remains as an area of scientific and technical knowledge with strong dynamism. That is evident in the almost 600 papers to be presented in the frame of the Congress, among which 5 plenary lectures deserve the utmost attention for they deal with the latest developments in emergent scientific fields. A technical exhibition of materials, products, equipment and services of innovative character, presented by several companies to whom I thank for their participation and interest, will also be a key mark of the Congress.

Within the ICA umbrella, two short courses are planned to occur. Also, as satellite event, a Symposium on Room and Musical Acoustics will be held immediately after ICA 2016, in the Argentinian city of La Plata.

The accompanying persons programme, scheduled for these days, and the various social activities, turns this attendance into an excellent and unique opportunity to enjoy the Congress, and a chance to visit the magnificent and astonishing city of Buenos Aires, the Paris of South America with its culture and history, being proud to host their visitors with hospitality and a smile of hope in the future.

At last, and on behalf of all organizing team of ICA 2016, I want to stress my deepest thanks for your participation, as well as for the involvement of all supporting institutions and persons with a special mention to Prof. Nilda Vechiatti (Secretary General of ICA 2016) for her dedication, commitment and work.

So, on behalf of ICA 2016 organization and on Ibero-american Federation of Acoustics, I wish you all an excellent stay in Buenos Aires, in Argentina and in South America.



## WELCOME/BIENVENIDA:

Welcome Message from Nilda Vechiatti President, Argentinian Acousticians Association Secretary General, International Congress on Acoustics ICA 2016 President, Ibero-American Congress on Acoustics FIA 2016

As the host of this 22nd International Congress on Acoustics ICA 2016, we are delighted to welcome everyone here on behalf of the acousticians of Latin America and, in particular, of Argentina. I would like to thank Jorge Patricio because without his leadership and experience it would not have been possible to organize the ICA 2016 Congress. I would also like to thank Marion Burgess, Mike Stinson and Michael Vorländer, the Executive Board of ICA, for their support and assistance with the organization (with special emphasis on Marion's contribution). Thanks to the people of MCI as well, for their professional experience at the service of the organization of our event.

We can bet that the realization of this Congress in Latin America will trigger further development of Acoustics and its applications in the region, and enhance our links to the acoustical community around the world.

It is also a great honor for us to incorporate the X Congress of the FIA, the XXVI Meeting of the Brazilian Acoustical Society and the XIV Argentinean Congress of Acoustics under the umbrella of an ICA Congress, especially in this year when AdAA celebrates its firsts 40 years. We are persuaded that these events will be a bridge to reduce the distance between the acousticians of these countries.

We heartily wish you a very pleasant and unforgettable stay in Buenos Airs and Argentina.



## **COMMITTEES/ AUTHORITIES**

## INTERNATIONAL ORGANISING COMMITTEE

Congress President	Jorge Patricio (Portugal)
Secretary General	Nilda Vechiatti (Argentina)
Technical Chairs	Samir Gerges (Brasil) Pablo Girón (Argentina)
Technical Program	Purificación Merodo (Argentina) Jaime Delannoy (Chile)
Treasurer	Daniel Muzzio (Argentina)

## LOCAL ORGANISING COMMITTEE

General Chair	Nilda Vechiatti
Technical Chair	Pablo Girón
Technical Program	Purificación Merodo Adrián Azurro
Proceedings	Federico Miyara Ernesto Accolti
Social Program	Vivian Pasch
Exposition	Daniel Muzzio Alejandro Giani
Sponsorship	Walter Montano Pablo Ciccarella

International and National Technical Advisory Committee assisted with the development of the program and included:

## ICA ADVISORY COMMITTEE

President	Marion Burgess
Vice-President	Jeong-Guon Ih
Secretary General	Michael Stinson
Treasurer	Antonio Pérez-López
Past-President	Michael Vorländer

## **COMMITTEES/AUTHORITIES**

## INTERNATIONAL ADVISORY COMMITTEE

Alice Elizabeth González	Uruguay
Alberto Behar	Canada
Bertrand Dubus	France
Bogumil Linde	Poland
Carlos Jimenez Dianderas	Peru
Cesar Diaz	Spain
Colin Hansen	Australia
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Grazyna Grelowska	Poland
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Júlio A. Cordioli	Brazil
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Manuel Barreto	Venezuela
Marion Burgess	Australia
Masayuki Morimoto	Japan
Michael Taroudakis	Greece
Michael Vorländer	Germany
Mike Stinson	Canada
Monika Rychtarikova	Slovakia
Ning Xiang	USA
Roberto Pompoli	Italy
Sonoko Kuwano	Japan
Tapio Lokki	Finland
Yiu Lam	UK

## **GENERAL INFORMATION**

#### **ACCESS VENUE:**

Alicia Moreau de Justo 1680, Puerto Madero

#### REGISTRATION OPENING HOURS

(Entrance - Main Floor)

Sunday, September 4 from 13.00 to 17.00 hs. Monday, September 5 from 09.00 to 17.00 hs. Tuesday, September 6 from 08.00 to 17.00 hs. Wednesday, September 7 from 08.00 to 17.00 hs. Thursday, September 8 from 08.30 to 17.00 hs. Friday, September 9 from 08.30 to 17.00 hs.

#### **OPENING COREMONY**

(Juan Pablo II Room, 2nd Floor) Monday, September 5, at 11:00 hs.

#### WELCOME COCKTAIL

(Foyer 2nd Floor)
Monday, September 5, from 18:30 to 20.00 hs.

## **CLOSING CEREMONY**

(Juan Pablo II Room, 2nd Floor) Friday, September 9, at 17.30 hs.

## **FAREWELL COCKTAIL**

(Foyer 2nd Floor)

Friday, September 9, from 17:30 to 18.30 hs.

## **GENERAL ORGANIZING**



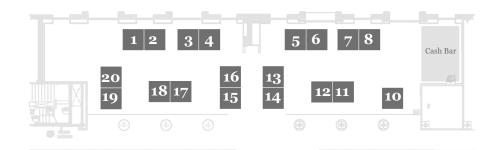
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## FLOOR PLAN FOYER JUAN PABLO II ROOM OF THE COMMERCIAL EXHIBITION - 2nd FLOOR

#### EXHIBITION OPENING HOURS (Foyer 2nd Floor)

Monday, September 5 from 09.00 to 20.00 hs. Tuesday, September 6 from 09.00 to 18.00 hs. Wednesday, September 7 from 09.00 to 18.00 hs. Thursday, September 8 from 09.00 to 18.00 hs. Friday, September 9 from 09.00 to 18.30 hs.



## JUAN PABLO II ROOM

- oi SoundPLAN International
- 02- PLITEQ INC.
- o3-WAGG BARRISOL
- **04** POLYTEC GmbH
- o5- MASON INDUSTRIES
- o6- SVANTEK Sp. Z.o.o
- o7- GFAITECH GmbH
- o8- BRÜEL & KJAER Sound and Vibration Measurement
- 10- ISOVER SAINT-GOBAIN
- 11- DATAKUSTIK GmbH
- 12- ACOEM

- 13- GETZNER WERKSTOFFE GmbH
- 14- KNAUF ARGENTINA
- 15- ARMSTRONG WORLD IND.
- 16- BSW Berleburger Schaumstoffwerk GmbH
- 17- ODEON A/S
- 18- AUBICON
- 19- OWA SONEX
- 20- Ministerio Ambiente y Espacio Público. Agencia de Protección Ambiental - DirecciónGeneral de Evaluación Técnica

## **CONGRESS DINNER TANGO SHOW**

Join other delegates and accompanying persons at the Congress Dinner Tango Show.









This musical genre recently declared human heritage is much more than the memory of its golden decades. Today, tango moves your nerve, impassions you, woes you, it is definitely alive and it is the real and vivid story of everyday life.

Tango show is the only place of its kind where the present and the past merge to create a bond between the audience and tango that is never forgotten.

This will be a great social opportunity to meet your peers, network and be entertained!

The Congress Party is not included in the registration fee. Reservations will be available at the Registration Secretariat desk.

Congress Dinner Tango Show Wednesday 7th, September 20.00 hs. Shuttle service from Hotel Madero at 19.30 hs.

Value per person On Site (until September 6th) USD 160

Get you ticket at the Registration Desk.

## SPEAKER SESSION/ KEYNOTES

Plenary Speakers



# MICHAEL VORLÄNDER From acoustic simulation to virtual auditory displays

Simulation and auralization techniques are used in engineering, architecture, sound design and in applications in hearing research. The components of this technique are acoustic simulations and signal processing tools and the data interfaces in between, for which well-established solutions exist. The main bottlenecks are lack of data of 3D characterization of sound sources and material parameters, and interfaces to spatial audio technology. These problems are subject to research. Whether the virtual environment is considered sufficiently accurate or not, depends on many perceptual factors, and on the pre-conditioning and the degree of immersion of the user in the virtual environment. In this presentation the processing steps for creation of Virtual Acoustic Environments are briefly presented, and the achievable degree of realism discussed in examples including room acoustics, archeological acoustics, transportation noise, and hearing research.



## **CHEN-FEN HUANG**

## On the perspective of underwater acoustic tomography for probing ocean currents in shallow-water environments

Oceanographic processes in coastal regions including wind driven flows, tidal currents, river outflows, internal waves, eddies, western boundary currents, etc. are highly variable in time and space. Conventional oceanographic measurements (e.g., acoustic Doppler current profiler) cannot provide a synoptic image of those dynamic processes, especially for short time and space scales. Ocean Acoustic Tomography (OAT) uses time-of-flight measurements from different angles across the water. OAT is an effective method for mapping the spatial distribution of current and temperature fields. This talk will focus on the OAT applications to probe the current field in shallow water environments and present recent experimental results. Included are 1) the application of the middle-range (~50 km) OAT technique to study the spatial and temporal variations of the sub-branch of the Kuroshio off the east coast of Taiwan, 2) exploiting the communication signals of distributed networked underwater sensors for ocean current mapping, and 3) integrating moving vehicles to enhance OAT results.

## SPEAKER SESSION/ KEYNOTES

Plenary Speakers



## ICA EARLY CAREER AWARD 2016 FRANK RUSSO

## Understanding music perception from the perspective of oscillation and resonance

Over the last decade my lab has investigated psychoacoustic properties of pitch, timbre, and rhythm as perceived by the ear (auditory) as well as the skin (vibrotactile). Mechanoreceptors in the skin are structurally similar to those in the ear and exhibit frequency tuning enabling coarse pitch perception. Although the skin is equipped with only a few broadly tuned frequency channels and without a "place code", this appears to be enough to enable discrimination between complex vibrotactile waveforms that have been matched for fundamental frequency and subjective magnitude (i.e., vibrotactile timbre perception). The skin is also quite capable of giving rise to the perception of rhythm, however this capacity proves challenging with complex rhythms. Neuro-electric measures allow us to examine resonance to different levels of oscillatory structure. Auditory neurons in the brainstem are capable of phase locking with tone frequencies in music. The fidelity of this type of neural resonance is better in individuals with music training and worse in individuals with hearing impairment. Neurons in auditory and motor cortices have been found to phase lock to the dominant beat frequency in music (i.e., the pulse). This form of neural resonance continues even after the music has stopped, and much like the brainstem response to tone frequencies, its fidelity tends to be better in individuals with music training. The picture that emerges from this body of work is that perception of music is underpinned by neural resonance to different levels of oscillatory structure present in auditory and vibrotactile waveforms. Long-term active engagement with music supports the fidelity of neural resonance.

## SPEAKER SESSION/ KEYNOTES

Plenary Speakers



## BARBARA SHINN-CUNNINGHAM How the brain makes sense of complex auditory scenes

Everyday listening involves a complex interplay between the ear, which transduces sound energy into neural responses, and the brain, which makes sense of these inputs. Historically, research on the ear tended to ignore the fact that what we can perceive in sound depends on what task the brain is engaged by, while research on cortical processing of sound ignored the complexity and sophistication of how the ear works. In this talk, I will explore how everyday perceptual abilities depend jointly on how the ear encodes information (and individual differences in the fidelity with which it does so) and how attention and other state dependent variables change the information we perceive.



## **SAMIR GERGES**

## Hearing Protectors: State of the Art and Emerging Technologies of Comfort and Uncertainty in Measurements

In many industrial and military situations it is not practical or economical to reduce ambient noise to levels that present neither a hazard to hearing nor annoyance. In these situations, personal hearing protection devices are capable of reducing the noise by up to around 35 dB. Although the use of a hearing protector is recommended as a temporary solution until action is taken to control the noise, in practice, it ends up as a permanent solution in most cases. Therefore, hearing protectors must be both efficient in terms of noise attenuation and comfortable to wear. Comfort in this case is related to the agreement of the user to wear the hearing protector consistently and correctly at all times. The purpose of this paper is to review the stat of art for the need to develop methods to quantify comfort and noise leakage, also to quantify the uncertainty in evaluating hearing protector noise attenuation.

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## TOPIC AND STRUCTURED SESSIONS

#### AA Architectural Acoustics – Room and Building Acoustics

**AA1** Acoustics in education

AA2 Acoustic of worship spaces

**AA3** Architectural acoustics for nonperformance spaces

**AA4** Calculation models for timber structures (silent timber build)

AA5 Challenges and solutions in acoustics measurements and design

AA6 Concert hall acoustics

AA7 Isotropy and diffuseness in room acoustics

AA8 Legislation and regulations in building acoustics

#### AB Animal Bioacoustics

ABI Animal Bioacoustics

#### AO Acoustical Oceanography

AOI Acoustical Oceanography

## BA

#### **Biomedical Acoustics**

BA1 Biomedical Acoustics

## CA

#### **Communication Acoustics**

CA1 The technology of binaural listening and understanding

CA2 Communication acoustics (others)

#### ED

#### **Education in Acoustics**

**EDI** Education in Acoustics

#### EL

#### **Electroacoustics and Audio Engineering**

ELI Electroacoustics and audio engineering

#### EN

## **Environmental Acoustics and Community Noise**

ENI Noise assessment and control

EN2 Noise mapping

EN3 Road traffic noise modeling and noise barrier

EN4 Smart city sound monitoring

EN5 Wind farm noise

#### MU

#### **Musical Acoustics**

MU1 Music perception

**MU2** String Instruments

MU3 Numerical Computation in Musical Acoustics

MU4 Wind instruments

MU<sub>5</sub> General Musical Acoustics

#### NS

#### Noise: Sources and Control

NSI Aircraft noise - Aeroacoustics

**NS2** Hearing protectors

NS3 Launch vehicle acoustics

NS4 Materials for noise control

NS5 Sustainable materials for sound absorption and insulation

NS6 Noise: Sources and Control (others)

#### NT

## Numerical Techniques

 $\ensuremath{\mathsf{NT}}\ensuremath{\mathsf{I}}$  Boundary element and meshless methods on acoustics and vibrations

NT2 Numerical Techniques (others)

## TOPIC AND STRUCTURED SESSIONS

## PA

#### **Physical Acoustics**

PA1 Phononic crystals and acoustic metamaterials

PA2 Sonochemistry and sonoprocessing

PA<sub>3</sub> Ultrasound

PA<sub>4</sub> Physical Acoustics (others)

#### PP

### Psychological and Physiological Acoustics

PP1 Free-field virtual psychoacoustics and hearing impairment

**PP2** Product sound quality and multimodal interaction

PP3 Psychological and Physiological Acoustics (others)

### SP

#### Signal Processing in Acoustics

SPI Acoustics Array Sistems

SP2 Acoustics array sistem: Near-field acoustic holography and vibro-acoustic field reconstruction

SP3 Model-based optimization/estimation and analysis

SP4 Signal Processing in Acoustics

## SS

## Soundscape

SSI Hospital noise and soundscape

**SS**<sub>3</sub> Soundscape, Psychoacoustics and Urban Environment

SS4 Soundscape, quality of life and health

SS<sub>5</sub>Spatialsoundrecordingsinpreservedhabitats

SS6 Soundscape (others)

#### S

## Acoustical measurements and instrumentation

 ${\bf SIi} Sound intensity and inverse methods in Acoustics$ 

 ${\bf SI2}$  Acoustical measurements and instruments

### SC

#### **Speech Communication**

**SCI** Speech Communication

#### S

#### Structural Acoustics and Vibration

SVI Structural health monitoring and sensor networks

SV2 Structural acoustics and vibration (others)

#### UW

#### **Underwater Acoustics**

**UW**1 Underwater Acoustics

UW2 Underwater seismic imaging

UW3 Underwater Acoustics (others)

## VA

#### **Virtual Acoustics**

**VAI** Virtual auditory scenes

## FIA 2016 - TÓPICOS

#### FIA-AA

#### Acústica arquitectónica - Acústica de salas

FIA-EN Acústica ambiental y ruido comunitario

FIA-MU Acústica musical

**FIA-NS** Ruido: Fuentes y su control

FIA-PP Acústica Psicológica y Fisiológica

FIA-SP Procesamiento de señal en Acústica

FIA-SS Paisaje sonoro

## Technical Programme - Monday, September 5

## Monday, September 5

Hours	Juan Pablo II (A)	Dr. Valsecchi (A)	Cardenal Pironio (A)	Room 204	Micro cinema	Auditorium 2	Auditorium 3
09:00- 11:00	Registration ( Ground floor He	all)					
11:00- 11:40	Opening Ceremony						
12:00- 12:40	Plenary Lecture: Michael Vorländer "From acoustic simulation to virtual auditory displays"						
13:00-14:30	BREAK						
14:30- 16:10	EN2 - Noise mapping	BA1 - Biomedical Acoustics	AA5 - Challenges and solutions in acoustics measurements and design	SC1 - Speech Communication	AB1 - Animal Bioacoustics	NT1 - Boundary element and meshless methods on acoustics and vibrations	PA1 - Phononic crystals and acoustic metamaterials
16:10- 16:30	BREAK						1
16:30-18:30	EN1 - Noise assessment and control.	BA1 - Biomedical Acoustics	AA5 - Challenges and solutions in acoustics measurements and design	SC1 - Speech Communication	PP2 - Product Sound Quality and Multimodal Interaction	NT2 - Numerical Techniques (others)	PAI - Phononic crystals and acoustic metamaterials

<sup>-</sup> Welcome Cocktail: 18.30 - 19.30 hs (Foyer 2nd Floor).

## Technical Programme - Tuesday, September 6

## Tuesday, September 6

Hours	Juan Pablo II (A)	Dr. Valsecchi (A)	Cardenal Pironio (A)	Room 204	Micro cinema	Auditorium 2	Auditorium 3
09:00-10:40	EN1 - Noise assessment and control.	BAI - Biomedical Acoustics	AA4 - Calculation models for timber structures (Silent Timber Build)	AA8 - Legislation and Regulations in Building Acoustics	FIA-NS - Noise: Sources and Control (NS - Ruido: Fuentes y su Control)	NT2 - Numerical Techniques (others)	PA2 - Sonochemistry and Sonoprocessing
					FIA- PP - Psychological and Physiological Acoustics (PP - Acústica Psicológica y Fisiológica)		
10:40-11:00	BREAK	1					
11:00- 12:00	EN1 - Noise assessment and control.	AA5 - Challenges and solutions in acoustics measurements and design	AA4 - Calculation models for timber structures (Silent Timber Build)	AA8 - Legislation and Regulations in Building Acoustics	FIA-EN - Environmental Acoustics & Community Noise (EN - Acústica Ambiental y Ruido Comunitario)	NT2 - Numerical Techniques (others)	PA2 - Sonochemistry and Sonoprocessing
12:00- 13:00	Plenary Lecture - Chen-Fen Huang 'On the perspective of underwater acoustic tomography for probing ocean currents in shallow- water environments'						
13:00- 14:30	BREAK						
14:30- 16:10	EN1 - Noise assessment and control.	AA5 - Challenges and solutions in acoustics measurements and design	SV1 - Structural Health Monitoring and Sensor Networks	SP2 - Acoustics Array System: Near-field acoustic holography and vibro-acoustic field reconstruction  FIA-EN - Environmental Acoustics & Community Noise (EN - Acústica Ambiental y Ruido	Acoustics & Community   Noise (EN - Acústica   Ambiental y Ruido	CA2 - Communication Acoustics	PA3 - Ultrasound
			SV2 - Structural Acoustics and Vibration (others)		Comunitario)		
16:10- 16:30		ity of Buenos Aires" - (with Cofl mbiente y Espacio PúblicoAgen de Evaluación Técnicav					
16:30- 18:30	EN1 - Noise assessment and control.	AA5 - Challenges and solutions in acoustics measurements and design	SV2 - Structural Acoustics and Vibration (others)	SP3 - Model-Based Optimization/Estimation and Analysis	EN - Environmental Acoustics & Community Noise (EN - Acústica Ambiental y Ruido	CA2 - Communication Acoustics	PA3 - Ultrasound
				SP3 - Model-Based Optimization/Estimation and Analysis	Comunitario)		
				<b>SP4</b> - Signal Processing in Acoustics (others)			

## Technical Programme - Wednesday, September 7

## Wednesday, September 7

Hours	Juan Pablo II (A)	Dr. Valsecchi (A)	Cardenal Pironio (A)	Room 204	Micro cinema	Auditorium 2	Auditorium 3
09:00-10:40	EN5 - Wind farm noise	SP1 - Acoustics Array Systems	AA1 - Acoustics in education	SV2 - Structural Acoustics and Vibration (others)	FIA-AA - Architectural Acoustics - Room and Building Acoustics (AA - Acústica Arquitectónica - Acústica de Salas)	AA2 - Acoustic of worship spaces	UW1 - Underwater Acoustics
10:40-11:00	BREAK						
11:00- 12:00	EN5 - Wind farm noise	SP1 - Acoustics Array Systems	ED1 - Education in Acoustics	SV1 - Structural Health Monitoring and Sensor Networks	FIA-AA - Architectural Acoustics - Room and Building Acoustics (AA - Acústica Arquitectónica - Acústica de Salas)	AA2 - Acoustic of worship spaces	UW1 - Underwater Acoustics
					FIA-SS - Soundscape (SS - Paisaje sonoro)		
12:00- 13:00	Plenary Lecture - Frank Russo "Understanding music perception from the perspective of oscillation and resonance"						
13:00- 14:30			SIMPOSIO GINER-CDM "Insulation and acoustic conditioning project of all the technical rooms of the new Disney Latin America headquarters in Argentina." (Limited capacity)				
14:30- 16:10	EN5 - Wind farm noise	SPI - Acoustics Array Systems	AA1 - Acoustics in education	VA PA3: Ultrasound	FIA-SP- Signal processing in Acoustics (SP- Procesamiento de señal en Acústica)		UW1 - Underwater Acoustics
					FIA-MU - Musical Acoustics (MU - Acústica Musical)		
		<u>'</u>	<u>'</u>				1
16:10- 16:30	BREAK						

## Technical Programme - Thursday, September 8

## Thursday, September 8

Hours	Juan Pablo II (A)	Dr. Valsecchi (A)	Cardenal Pironio (A)	Room 204	Micro cinema	Auditorium 2	Auditorium 3
09:00-10:40	EN4 - Smart City Sound Monitoring	SS4 - Soundscape, Quality of Life , and Health	AA6 - Concert Hall Acoustics	<b>CA1</b> - The Technology of Binaural Listening & Understanding	SHORT CURSE 1 ACOUSTIC DESIGN OF MUFFLERS Prof. Tamer Elnady		SHORT CURSE 2 ULTRASOUND, CAVITATION SONOCHEMISTRY. FUNDAMENTALS AND APPLICATIONS" Prof. Sivakumar Manickam
10:40-11:00	BREAK						
11:00- 12:00	EN3 - Road traffic noise modeling and noise barrier	SII - Sound intensity and Inverse methods in acoustics	AA6 - Concert Hall Acoustics	<b>CA1</b> - The Technology of Binaural Listening & Understanding	SHORT CURSE 1 ACOUSTIC DESIGN OF MUFFLERS Prof. Tamer Elnady	PP3 - Psychological and Physiological Acoustics (others)	SHORT CURSE 2 ULTRASOUND, CAVITATION SONOCHEMISTRY. FUNDAMENTALS AND APPLICATIONS" Prof. Sivakumar Manickam
12:00- 13:00	Plenary Lecture Barbara Shinn- Cunningham "How the brain makes sense of complex auditory scenes"						
13:00- 14:30	BREAK						
14:30- 16:10	NS2 - Hearing Protectors	SI2 - Acoustical	Acoustics	<b>CA1</b> - The Technology of Binaural Listening & Understanding	MU1 - Music Perception	PP3 - Psychological and Physiological Acoustics (others)	VA 1- Virtual Acoustics
	NS3 - Launch Vehicle Acoustics  measurements and instrumentation (others)						
16:10- 16:30	BREAK						
16:30- 18:30	NS1 - Aircraft Noise - Aeroacoustics	SI2 - Acoustical measurements and instrumentation (others)	SS5 - Spatial sound recordings in preserved habitats  SS2 - Soundscape and holistic analysis	<b>AO1</b> - Acoustical Oceanography	<b>MU5</b> - Gernal Music Acoustic	PP3 - Psychological and Physiological Acoustics (others)	VA 1- Virtual Auditory Scenes

<sup>-16:30:</sup> Tecnical Visit to Disney Latin America facilities, for previously registered participants – Limited capacity (event not organized by the ICA organizers) Sponsored by Giner

## Technical Programme - Friday, September 9

## Friday, September 9

Hours	Juan Pablo II (A)	Dr. Valsecchi (A)	Cardenal Pironio (A)	Room 204	Micro cinema	Auditorium 2	Auditorium 3
09:00-10:40	AA7 - Isotropy and diffuseness in room acoustics	SS3 - Soundscape, Psychoacoustics and Urban Environment	NS1 - Aircraft Noise - Aeroacoustics	EL1 - Electroacoustics and Audio Engineering	MU3 - Numerical Computation in Musical Acoustics	NS5 - Sustainable materials for sound absorption and insulation	AA3 - Architectural Acoustics - Room and Building Acoustics (others)
	acoustics	Environment	NS6 - Noise: Sources and Control (others)		ricoustics		
10:40- 11:00	BREAK						
11:00- 13:00	AA7 - Isotropy and diffuseness in room acoustics	SS3 - Soundscape, Psychoacoustics and Urban Environment	NS4 - Materials for Noise Control	EL1 - Electroacoustics and Audio Engineering	MU4- Wind instruments	PP1 - Free-Field Virtual Psychoacoustics and Hearing Impairment	AA3 - Architectural Acoustics - Room and Building Acoustics (others)
13:00- 14:30	BREAK		-				
14:30- 15:50	AA7 - Isotropy and diffuseness in room acoustics	SS3 - Soundscape, Psychoacoustics and Urban Environment	NS4 - Materials for Noise Control	EL1 - Electroacoustics and Audio Engineering	MU2 - Musical Acoustics (others)	PP1 - Free-Field Virtual Psychoacoustics and Hearing Impairment	aJA Group Meeting
15:50- 16:50	Plenary Lecture - Samir Gerges "Hearing Protectors: State of the Art and Emerging Technologies of Comfort and Uncertainty in Measurements"						
16:50- 17:30	Closing Ceremony (Juan Pablo II room)						

17:30- 18:30 - Farewel Cocktail: (Foyer 2nd Floor).

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PROGRAMME - Monday, September 5





12:00 - 12:40 - Juan Pablo II

Plenary Lecture

ICA2016-481. From Acoustic simulation to virtual auditory displays.

Michael Vorlaender





#### EN2- Noise Maping

ICA2016-628 REDUCE GEOMETRY OR DETAILING IT? COMPARISON BETWEEN MEASURED AND MODELED MICROSCALE URBAN SPACES. Rafaella Estevao da Rocha ICA2016-401 NOISE PROPAGATION SOFTWARE COMPARISON: A CASE OF STUDY BETWEEN SOUNDPLAN AND CODE\_TYMPAN. Esteban, Zanardi

ICA2016-517 TIME AND COST SAVING SOFTWARE TECHNIQUES AND THEIR APPLICATION IN LARGE-SCALE NOISE MAPPING PROJECTS. Antonio, Notario ICA2016-458 ISO 1996 MEASUREMENT PROCEDURE AND THE UNCERTAINTY ASSOCIATED IN STRATEGIC NOISE MAPS. Juan Miguel, Barrigón Morillas ICA2016-739 ACOUSTIC BARRIER FOR OUTDOOR MUSIC EVENT: A "RODA DE

SAMBA" IN RIO DE JANEIRO. Maria Lygia, Niemeyer

## Dr. Valsecchi

#### BA1- Biomecidal Aoustic

ICA2016-1135 BIOMEDICAL ACOUSTIC IMAGING SENSORS FOR U-HEALTH CARE APPLICATIONS. Vr., Singh

ICA2016-148 A STUDY ON THE FEASIBILITY OF MEMS PIEZOELECTRIC ACCELEROMETER COUPLED TO THE MIDDLE EAR AS SENSOR FOR TOTALLY IMPLANTABLE HEARING DEVICES. André, Loch Gesing

ICA2016-563 PHOTOACOUSTIC IMAGING OF VASCULATURE WITH PARABOLIC ARRAY TRANSDUCER. Yoshifumi, Saijo

ICA2016-284 THE VARIABLE COCHLEAR HYDRO-MECHANICAL INERTANCE. Lucas Valentino, Fantini

ICA2016-405 ON THE RELATION BETWEEN PRESSURE APPLIED TO THE CHEST PIECE OF A STETHOSCOPE AND PARAMETERS OF THE TRANSMITTED BIOACOUSTIC SIGNALS. Karolina, Nowak

## **Cardenal Pironio**

#### AA5 - Challenges and solutions in acoustics measurements and design

ICA2016-621 MODELING AND MEASUREMENTS OF AIRCRAFT NOISE FOR SINGLE FAMILY HOUSES TO MEET LOCAL ORDINANCE. Christopher, Barnobi

ICA2016-658 CASE STUDIES OF CONCAVE ROOMS FOR SPEECH AND MUSIC: MEASUREMENT AND DESIGN. David, Woolworth

ICA2016-50 THE SIMPLIFIED METHOD VERSUS THE DETAILED METHOD OF

PROGRAMME - Monday, September 5

CALCULATING FLANKING SOUND TRANSMISSION THROUGH WALLS WITH LININGS. Jeffrey, Mahn

ICA2016-121 STRAVINSKY HALL OF THE MOSCOW MUSICAL THEATRE "HELIKON -OPERA": ACOUSTIC CHALLENGES AND ACHIEVED RESULTS. Anatoly Livshits

ICA2016-483 AN INTRINSICALLY SOURCE INDEPENDENT METHOD TO ESTIMATE INTELLIGIBILITY. Roger Schwenke



#### SCI - Speech Communication

ICA2016-420 HOW LONG IS A VOCAL TRACT? COMPARISON OF ACOUSTIC IMPEDANCE SPECTROMETRY WITH MAGNETIC RESONANCE IMAGING. Noel Hanna

ICA2016-586 INFLUENCE OF CHANGES OF THE GLOTTAL WAVEFORM ON VOWEL PRODUCTION. Lukas Schickhofer

ICA2016-699 COPY SYNTHESIS OF RUNNING SPEECH BASED ON VOCAL TRACT IMAGING AND AUDIO RECORDING. Benjamin Elie

ICA2016-714 EMOTION RECOGNITION FROM SPEECH USING PHYSICAL MODEL. Norihide Kitaoka

ICA2016-662 STIMULI USED IN MELODIC INTONATION THERAPY WITH RELATION TO AUTOCORRELATION FUNCTION PARAMETERS. Andrés Sabater

#### Micro Cinema

#### ABI - Animal Bioacoustics

ICA2016-96 SONG AND GENETIC DIVERGENCES BETWEEN MIGRATORY AND SEDENTARY POPULATIONS OF A SONGBIRD, THE BLACKCAP SYLVIA ATRICAPILLA. Thierry Aubin

ICA2016-908 PHONOTACTIC RESPONSE DEPENDS ON TRACKBALL SURFACE TEXTURE IN GRYLLUS BIMACULATUS (GRYLLIDAE, ORTHOPTERA) Edith Julieta Sarmiento-Ponce

ICA2016-772 PASSIVE ACOUSTIC MONITORING AS A TOOL FOR MONITOR THE PRESENCE OF CETACEANS DURING SEISMIC SURVEYS. Andreadalben Andreadalben

ICA2016-866 DEVELOPMENT OF A COMPUTATIONAL TOOL TO ANALYZE SOUNDS: A BIOLOGICAL STUDY WITH ANURAN TADPOLES. Carolina Salgado Costa

ICA2016-820 HOW ECHOLOCATING BATS LISTEN TO THEIR ECHOES. Hiroshi Riquimaroux

#### Auditorium II

#### NTI-Boundaryelementandmeshlessmethodsonacousticsandvibrations

ICA2016-864 RBF-BASED SHAPES OPTIMIZED WITH GENETIC ALGORITHMS FOR SOUND DIFFUSION. Ricardo Patraquim

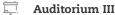
ICA2016-19 THE MFS AS A TOOL FOR THE NUMERICAL ANALYSIS OF VIBRATION PROTECTION DEVICES, Luis Godinho

ICA2016-181 BOUNDARY ELEMENT METHOD FOR ACOUSTIC RADIATION FORCE AND TORQUE ACTING ON NON-SPHERICAL PARTICLES. Kian-Meng Lim

PROGRAMME - Monday, September 5

ICA2016-309 EFFICIENT CALCULATION FOR EVALUATING VAST AMOUNTS OF QUADRUPOLE SOURCES IN BEM USING FAST MULTIPOLE METHOD. Takayuki Masumoto

ICA2016-418 EFFICIENT BOUNDARY ELEMENT ANALYSIS OF PERIODIC SOUND SCATTERERS. Mahmoud Karimi



#### PA1 - Phononic crystals and acoustic metamaterials

ICA2016-74 DUAL-BAND NEGATIVE INDEX ULTRASONIC METAFLUIDS. Thomas Brunet

ICA2016-579MULTIPLESCATTERINGENABLESNEGATIVEINDEXINSINGLENEGATIVE METAMATERIALS: PROOF WITH AN ACOUSTIC SUPERLENS. Fabrice Lemoult

ICA2016-104 EXTREMELY SLOW EDGE WAVES IN MECHANICAL GRAPHENE WITH ROTATING GRAINS. Vitalyi Gusev

ICA2016-368 SYMMETRY BREAKING AND TOPOLOGY OF ACOUSTIC WAVES IN PHONONIC STRUCTURES. Pierre Deymier

ICA2016-61 NONLINEAR WAVE PHENOMENA IN PIEZOELECTRIC PHONONIC CRYSTALS WITH TIME-DEPENDENT ELECTRIC BOUNDARY CONDITIONS. Bertrand Dubus



#### 16:30-18:30



## Juan Pablo II EN1 - Noise assessment and control

ICA2016-723 ASSESSMENT METHODS FOR LOW FREQUENCY NOISE: A BRIEF LITERATURE OVERVIEW. Marco Caniato

ICA2016-410 ANALYSIS OF ENVIRONMENTAL NORMATIVE ASSESSMENTS OF NOISE IMMISSION: GLOBAL VALUES VS SPECTRALLY DETAILED VALUES. Jorge Carrasco

ICA2016-378 EFFECTS OF NOCTURNAL AIR AND RAIL TRAFFIC NOISE ON SLEEP. Uwe Mueller

ICA2016-218 TESTS OF INFLUENCE OF HIGH FREQUENCY NOISE ON HUMAN PSYCHO- PHYSICAL EFFICIENCY. Bozena Smagowska

ICA2016-216 USING A SMARTPHONE APPLICATION TO PERFORM A FAST QUALITATIVE NOISE EXPOSURE EVALUATION IN A MINE SITE. Luis Corral

ICA2016-157 NORAH (NOISE RELATED ANNOYANCE, COGNITION, AND HEALTH): RESEARCH QUESTIONS, DESIGNS, AND MAIN RESULTS. Rainer Guski



#### Dr. Valsecchi

#### **BA1- Biomecidal Aoustic**

ICA2016-630 ADVANCE IN CORTICAL BONE ASSESSMENT USING ULTRASONIC RESONANCES AND GUIDED WAVES. Jean-Gabriel Minonzio

ICA2016-642 OBSERVING CYTOSKELETAL CHANGES IN CANCER CELLS USING HIGH-FREQUENCY (10-100 MHZ) ULTRASONIC SPECTROSCOPY. Caitlin Carter

PROGRAMME - Monday, September 5

ICA2016-643 SENSITIVITY OF HIGH-FREQUENCY ULTRASOUND TO BREAST CANCER LOBULAR CARCINOMAS: RESULTS FROM PHANTOM AND SURGICAL SPECIMEN STUDIES. Nicole Cowan

ICA2016-646 HISTOLOGY MIMICKING PHANTOMS FOR THE HIGH-FREQUENCY ULTRASOUND OF BREAST CANCER SURGICAL MARGINS: COMPARISON BETWEEN GELATIN AND AGAROSE MEDIA. Zachary Coffman

ICA2016-647 EVALUATING MARGIN STATUS WITH HIGH-FREQUENCY (20-80 MHZ) ANALYTICAL ULTRASOUND DURING BREAST CONSERVATION SURGERY. Robyn Omer

ICA2016-651 DETECTING BREAST CANCER WITH HIGH-FREQUENCY (20-80 MHZ) ULTRASOUND: A HISTOLOGICAL PERSPECTIVE. Timothy Doyle



#### Cardenal Pironio

#### AA5- Challenges and solutions in acoustics measurements and design

ICA2016-89 ANALYSING, QUANTIFYING AND IMPROVING THE SOUND TRANSMISSION BETWEEN TWO PERFORMANCE HALLS IN A COMMON BUILDING. Eddy Gerretsen

ICA2016-337 MODIFIED WAVE EQUATION FOR MODELLING DIFFUSE SOUND FIELD. Hugo Dujourdy

ICA2016-379 WHAT IS "PROXIMITY", HOW DO EARLY REFLECTIONS AND REVERBERATION AFFECT IT, AND CAN IT BE STUDIED WITH LOC AND EXISTING BINAURAL DATA?. David Griesinger

ICA2016-381 PLAYBACK OF NON-INDIVIDUAL BINAURAL RECORDINGS WITHOUT HEAD TRACKING, AND ITS POTENTIAL FOR ARCHIVING AND ANALYZING CONCERT HALL ACOUSTICS. David Griesinger

ICA2016-843 ROOM ACOUSTIC EXPERIMENTS INSIDE THE UNIVERSIDADE FEDERAL DE SANTA MARIA INDUSTRIAL COLLEGE AUDITORIUM: A CASE STUDY WITH LOW COST INSTRUMENTATION. Jean Carlo Bernardi

ICA2016-463 ANALYSIS OF ACOUSTIC DEVICES USED IN HOMESTUDIO Eduardo Henrique Silva



#### Room 204

#### SCI - Speech Communication

ICA2016-333 ON THE USE OF THE ITALIAN MATRIXED WORD TESTS IN ROOM ACOUSTICS FOR EVALUATING SPEECH RECEPTION. Nicola Prodi

ICA2016-357 EFFECT OF BANDWIDTH ON THE INTELLIGIBILITY OF SPANISH WORDS FILTERED THROUGH A SERIES OF PASS-BAND FILTERS. Emilio Luquet

ICA2016-721 LARGE-SCALE ANALYSIS OF SPANISH /S/-LENITION USING AUDIOBOOKS. Neville Ryant

ICA2016-847 SPEECH RECOGNITION THROUGH THE ANALYSIS OF SPOKEN SYLLABLES USING AUTOCORRELATION FUNCTION PARAMETERS. Alan Rubellin

ICA2016-722 ROBUST TONAL AND NOISE SEPARATION IN PRESENCE OF COLORED NOISE, AND APPLICATION TO VOICED FRICATIVES. Benjamin Elie

PROGRAMME - Monday, September 5



#### Micro Cinema

#### PP2- Product sounds quality and multimodal interaction

ICA2016-672 STRUCTURAL ANALYSIS OF THE VALUE EVALUATION OF VEHICLE DOOR-CLOSING SOUNDS . Masayuki Takada

ICA2016-557 A SOUND QUALITY MODEL FOR WASHING MACHINE SOUNDS BASED ON ARTIFICIAL NEURAL NETWORK. M. Ercan Altinsoy

ICA2016-113 MODELLING THE SENSATION OF FLUCTUATION STRENGTH. Alejandro Osses

ICA2016-558 THE QUALITY OF POTATO CHIP SOUNDS AND CRISPNESS IMPRESSION. M. Ercan Altinsoy

ICA2016-907 RESEARCH ON NONLINEAR EVALUATION MODEL OF COOLING FAN SOUND QUALITY. Rui Zhu



#### Auditorium II

#### NT2 - Numerical Techniques (others)

ICA2016-802 ASSESSMENT OF THE FAR-FIELD SOUND RADIATION OF DUCTS USING THE LATTICE BOLTZMANN METHOD AND A TWO-DIMENSIONAL FFOWCS WILLIAMS AND HAWKINGS FORMULATION. Danilo Braga

ICA2016-101 AURALIZATION OF ROAD TRAFFIC/CONSTRUCTION NOISE BY USING NUMERICAL ANALYSIS. Masaki Tanigawa

ICA2016-561 OPTIMISED 25-POINT FINITE DIFFERENCE SCHEMES FOR THE THREE-DIMENSIONAL WAVE EQUATION. Brian Hamilton

ICA2016-736 PASSIVE TIME-DOMAIN NUMERICAL DESIGNS FOR ROOM ACOUSTICS SIMULATION. Stefan Bilbao

ICA2016-210 A BOUNDARY INTEGRAL OPERATOR METHOD FOR MODELLING UNCERTAINTIES IN VIBRO-ACOUSTICS. Janis Bajars

ICA2016-426 ADVANCES IN THE HOLISTIC NUMERICAL SIMULATION WORKFLOW TO ANALYZE THE SOUND OF COMBUSTION ENGINES BASED ON HUMAN AUDITORY PERCEPTION. Fabian Duvigneau



#### **Auditorium III**

#### PAI- Phononic cristalls and acoustic metamaterials

ICA2016-620 GEOMETRIC FRUSTRATION AND BAND GAPS IN ACOUSTIC NETWORKS. Vincent Tournat

ICA2016-345 FREQUENCY-DEPENDENT DISSIPATION IN DISPERSIVE WOOL FELT. Dmitri Kartofelev

ICA2016-402 SOUND PROPAGATION IN PERMEABLE MATERIALS WITH LOCALLY RESONANT ELASTIC FRAME. Rodolfo Venegas

ICA2016-896LABORATORY AND FULL-SCALE EXPERIMENTAL EVALUATION OF THE ACOUSTIC BEHAVIOR OF SONIC CRYSTAL NOISE BARRIERS. Paulo Amado-Mendes

PROGRAMME - Tuesday, September 6



## Tuesday,6



#### 09:00-10:40



#### Juan Pablo II

#### EN1 - Noise assessment and control

ICA2016-92 ASSESSMENT OF ANNOYANCE, NOISINESS AND LOUDNESS CAUSED BY ENVIRONMENTAL NOISE SOURCES. Nicolás Urquiza

ICA2016-67 REDUCTION OF NOISE ANNOYANCE THROUGH PUBLIC PARTICIPATION. Annett Zeisler

ICA2016-666 SOUND EXPOSURE MEASUREMENTS USING HEARING-AID TECHNOLOGY. Rodrigo Ordoñez

ICA2016-56 AIRCRAFT NOISE PROTECTION STRATEGY IN GERMANY. Maria Lúcia Oiticica

ICA2016-81 A FIVE YEAR FOLLOW-UP: NOISE EXPOSURE AND HEARING LOSS IN CLASSICAL ORCHESTRA MUSICIANS. Alberto Behar



#### Dr. Valsecchi

#### **BA1** - Biomedical Acoustics

ICA2016-649 HOLOGRAPHIC TISSUE ENGINEERING USING ULTRASONIC INTERFERENCE PATTERNS. Dolly Sanjinez

ICA2016-789 ACOUSTIC CHARACTERIZATION OF ENRICHED AND MONODISPERSE ULTRASOUND CONTRAST AGENTS. Michel Versluis

ICA2016-804 LASER-DRIVEN RESONANCE OF LIGHT-ABSORBING ULTRASOUND CONTRAST MICROBUBBLES. Guillaume Lajoinie

ICA2016-725 CONTRALATERAL SUPPRESSION OF TRANSIENT EVOKED OTOACOUSTIC EMISSIONS IN ADOLESCENTS WITH AND WITHOUT TINNITUS. María Hinalaf

ICA2016-364 DISCOVERING NEW FACTS AND REVEALING EXISTING MYTHS ABOUT THE ACOUSTIC STETHOSCOPE 200 YEARS AFTER ITS INVENTION. Lukasz Nowak



#### Cardenal Pironio

#### AA4 - Calculation models for timber structures (Silent Timber Build)

ICA2016-132 MODELLING OF THE TAPPING MACHINE FOR FINITE ELEMENT PREDICTION TOOLS - PRELIMINARY PARAMETRIC STUDIES. Juan Negreira Montero

ICA2016-372 REVERSE SEA TO PREDICT FLANKING TRANSMISSION IN TIMBER FRAMED CONSTRUCTIONS. Jean-Luc Kouyoumji

ICA2016-271 MODELLING VARIOUS FLOOR AND WALL ASSEMBLIES AND COMPARISONS TO MEASURED VALUES. Delphine Bard

ICA2016-255 ANALYSIS OF ACOUSTICAL BEHAVIOR OF BARE CROSS LAMINATED TIMBER FLOORS FOR THE EVALUATION OF THE IMPROVEMENT OF IMPACT SOUND INSULATION. Antonino Di Bella

ICA2016-159 HYBRID CROSS LAMINATED TIMBER FLOORS. COMPARISON OF MEASUREMENTS AND CALCULATIONS. Anders Homb



#### Room 204

#### AA8 - Legislation and Regulations in Building Acoustics

ICA2016-180 ESTABLISHMENT OF INDOOR NOISE REGULATION BETWEEN ADJACENCY HOUSEHOLDS IN APARTMENT BUILDING. Kyoungwoo Kim

ICA2016-301 SUGGEST TOILET NOISE STANDARD FOR MULTI-DWELLING RESIDENTIAL BUILDING. Hyekyung Shin

ICA2016-487 COMPARISON OF ACOUSTIC REGULATIONS FOR HOUSING AND SCHOOLS IN SELECTED COUNTRIES IN EUROPE AND SOUTH AMERICA – A PILOT STUDY. Maria Machimbarrena

ICA2016-76 ESTABLISH OF THE ACOUSTICAL STANDARD OF THE KOREAN CLASSROOMS USING SPEECH INTELLIGIBILITY TEST. Chan Hoon Haan

ICA2016-716 NEW GERMAN DIN 18041 ACOUSTIC QUALITY IN ROOMS. Christian Nocke



#### Micro Cinema

#### FIA- NS - Noise: Sources and Control (NS - Ruido: Fuentes y su Control)

FIA2016-6 ANALYTICAL AND NUMERICAL ESTIMATION OF ACOUSTIC TRANSFER FUNCTION IN DUCTS CONSIDERING GENERAL BOUNDARY CONDITIONS. Maria Alzira Nunes

FIA2016-100 EXPERIMENTAL STUDY OF THE RELATIONSHIP BETWEEN RADIATED SOUND AND MACHINING CONDITIONS OF A WOOD SHAPER MACHINE BASED ON ACOUSTIC CAMERA MEASUREMENTS. José Luis Barros

FIA2016-116 ACOUSTIC PROPERTIES OF RECYCLED TEXTILE MATERIALS. Juan Manuel Loria

FIA2016-102 SOUND ABSORPTION COEFFICIENT MEASUREMENT BASED ON THE TRANSFER FUNCTION METHOD SPECIFIED BY THE STANDARD ISO 10534-2 USING LOW-COST ALTERNATIVES. Thaynan Oliveira

FIA2016-37 NOISE ON AN AIRCRAFT CABIN: EFFECT OF POWER DENSITY SPECTRUM ON THE NOISINESS. Hugo Scagnetti



#### **Auditorium II**

#### NT2 - Numerical Techniques (others)

ICA2016-336 ON ACOUSTICS OF DIESEL PARTICULATE FILTERS. Sinem Ozturk

ICA2016-362 PREDICTIONS OF THE FAR-FIELD NOISE DUE TO VORTEX-SHEDDING USING A LATTICE BOLTZMANN SCHEME AND AN ACOUSTIC ANALOGY. Andrey Ricardo Da Silva

ICA2016-371 ABSORPTION COEFFICIENTS DETERMINATION BY COMBINING ACOUSTIC SIMULATION AND SWARM OPTIMIZATION METHODS- Julio Cesar Boscher Torres



#### **Auditorium III**

#### PA2 - Sonochemistry and Sonoprocessing

ICA2016-20 THE USE OF ULTRASOUND TO ENHANCE CRYSTALLIZATION OF MINERALS FROM CONCENTRATED SALINE EFFLUENT. Sandra Kentish

PROGRAMME - Tuesday, September 6

ICA2016-202 UNDERSTANDING AND OPTIMISING SONICATION CONDITIONS FOR CRYSTALLISATION PROCESSES. Judy Lee

ICA2016-59 STUDY ABOUT THE APPLICATION OF ACOUSTIC AGGLOMERATION OF AEROSOLS FOR SOURCE TERM MITIGATION IN NUCLEAR ACCIDENTS. Enrique Riera

ICA2016-107 ACOUSTIC DESIGN ASPECTS OF MEGASONIC REACTORS FOR OILS AND FAT SEPARATION Pablo Juliano



#### 11:00-12:00

#### Juan Pablo II

#### EN1 - Noise assessment and control

ICA2016-829 NOISE GENERATED FROM LARGE CONSTRUCTION SITES: MEASUREMENTS AND POSSIBLE MITIGATIONS. Patrizio Fausti

ICA2016-254 10 LESSONS LEARNED AS AN ENTRY-LEVEL TRANSPORTATION NOISE CONTROL ENGINEER. Priscilla Brownlow

ICA2016-450 NOISE SIMULATION OF A RAILWAY SECTION TO BE IMPLANTED IN A DENSELY URBANIZED NEIGHBORHOOD OF SÃO PAULO, BRAZIL. Maria Luiza Rocha Belderrain



#### Dr. Valsecchi

#### AA5 - Challenges and solutions in acoustics measurements and design

ICA2016-55 MEASUREMENTS FOR SIMULATION OF SPEECH INTELLIGIBILITY IN SPACES WITH CONFLICTING REQUIREMENTS.Rafael Trevisan

ICA2016-765 OPTIMIZING FLOOR-CEILING ASSEMBLIES IN WOOD-FRAMED MULTIFAMILY BUILDINGS USING A TWO-RATING METHOD OF EVALUATING IMPACT ISOLATION. John Loverde

ICA2016-325 AN DISCUSSION ON THE UNCERTAINTY OF ABSORPTION CHARACTERISTICS MEASURED BY ENSEMBLE AVERAGING TECHNIQUE FOR ROOM ACOUSTICS SIMULATIONS. Toru Otsuru



#### Cardenal Pironio

#### AA4 - Calculation models for timber structures (Silent Timber Build)

ICA2016-163 SEAP - ACOUSTIC DESIGN TOOL FOR STORA ENSO BUILDING SOLUTIONS. Klas Hagberg

ICA2016-165 MEASUREMENT SERIES TO VERIFY THE ACCURACY OF STORA ENSO ACOUSTIC PREDICTION TOOL - SEAP. Klas Hagberg

ICA2016-683 EFFECT OF DIFFERENCE IN SPECIFICATION ON SOUND INSULATION IN CROSS LAMINATED TIMBER SEPARATION WALL. Atsuo Hiramitsu



#### Room 204

#### AA8 - Legislation and Regulations in Building Acoustics

ICA2016-811 ACOUSTIC EVOLUTION OF OFFICIAL CONSTRUCTIVE SOLUTIONS FOR IMPACT NOISE IN THE PERIOD 2005-2014 IN CHILE. Jaime Delannoy

ICA2016-160 TRANSLATION OF EXISTING IMPACT SOUND INSULATION DESCRIPTORS INTO NEW PROPOSED ONES, BASED ON A LARGE SET OF IN SITU MEASUREMENTS. Maria Machimbarrena

ICA2016-861 REQUIREMENTS AND BUILDING GUIDELINES FOR THE RETROFITTING OF TRADITIONAL TIMBER FLOORS. Bart Ingelaere

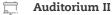


## FIA-EN - Environmental Acoustics & Community Noise (EN - Acústica Ambiental y Ruido Comunitario)

FIA2016-86 MEASUREMENTS, MODELING AND ANALYSIS OF INDUSTRIAL NOISE IN THE CITY OF CORONEL (CHILE) - ADVANTAGES OF USING ACOUSTIC CAMERA FOR SOURCE LOCATION. José Luis Barros

FIA2016-26 ANNOYANCE OF INDUSTRIAL NOISE WITH TONAL COMPONENT AT DIFFERENT FREQUENCIES. Matías Pace

FIA2016-28 CONCENTRATION MAPPING OF NOISE POLLUTION COMPLAINTS IN NATAL/RN (BRAZIL) BETWEEN 2012 AND 2015. Luciana Alves



#### NT2 - Numerical Techniques (others)

ICA2016-523 MULTIPLE-SCATTERING THEORY FOR TWO-DIMENSIONAL ARBITRARILY-SHAPED ACOUSTIC COMPOSITES. Alejo Alberti

ICA2016-118 USE OF BOUNDARY CONDITIONS OF IMPEDANCE, CONTINUITY, SOMMERFELD, FOR EVALUATE SOUND ATENUATION OF MIXED PASSIVE SILENCERS WITH FEM-2D. Alexander Garcia Luque

ICA2016-133 MUFFLER SHAPE OPTIMIZATION ACCOUNTING FOR ACOUSTIC-STRUCTURE INTERACTION. Luis Corral

#### Auditorium III

#### PA2 - Sonochemistry and Sonoprocessing

ICA2016-374 HIGH FREQUENCY SONOLUMINESCENCE IN SULPHURIC ACID AND PHOSPHORIC ACID Adriano Troia

ICA2016-90 NEW ULTRASONIC TECHNOLOGIES FOR FOOD DRYING PROCESS INTENSIFICATION. Enrique Riera

ICA2016-580 MAGNIFICATION OF ATOMIC LINES RESOLUTION AND OPTICS OF BUBBLES ORIGINATED BY LASER BREAKDOWN OF SALT WATER IN ULTRASOUND FIELD. Alexey Bulanov



## Juan Pablo II

#### **Plenary Lecture**

ICA2016-485 On the perspective of underwater acoustic tomography for probing ocean currents in shallow-water environments

Chen-Fen Huana

PROGRAMME - Tuesday, September 6

## 30-16:10

#### Juan Pablo II

#### EN1 - Noise assessment and control

ICA2016-105 ALTERNATIVE APPROACH FOR VALUING ROAD TRAFFIC NOISE: CASE STUDY OF QUITO, ECUADOR. Luis Bravo-Moncayo

ICA2016-247 INFLUENCE OF THE TEMPORAL AND SPECTRAL STRUCTURE OF THE ROAD TRAFFIC NOISE ON ANNOYANCE. Luis Bravo-Moncayo

ICA2016-390 OBSERVATORY NOISE METROPOLISES IN FRANCE. 20 YEARS OF PRACTICE. OBJECTIVES, ISSUES AND METHODS. Bruno Vincent

ICA2016-429 APPLYING LOW NOISE ROAD SURFACING TO REDUCE ROAD TRAFFIC NOISE IN HONG KONG. Edwin Chui

ICA2016-901 SPECIAL ACOUSTIC AREA: THE CENTER OF THE CITY OF MALAGA (SPAIN). Ricardo Hernandez Molina

#### Dr. Valsecchi

#### AA5 - Challenges and solutions in acoustics measurements and design

ICA2016-169 EFFECT OF SAMPLE AREA IN REVERBERANT CHAMBER MEASUREMENTS OF SOUND ABSORPTION COEFFICIENTS. Antonio Carvalho

ICA2016-238 CHARACTERIZATION OF SHEEP WOOL PANELS FOR ROOM ACOUSTIC APPLICATIONS. Umberto Berardi

ICA2016-205 MEASUREMENT AND NEW MODEL OF RESONANCES OF HELMHOLTZ RESONATOR AND TUBES. Takayoshi Nakai

ICA2016-809 FAÇADE INSULATION AT LOW FREQUENCIES - INFLUENCE OF WINDOW DESIGN. Krister Larsson

ICA2016-822 FAÇADE INSULATION AT LOW FREQUENCIES – INFLUENCE OF ROOM ACOUSTIC PROPERTIES. Dag Glebe

## 🗔 Cardenal Pironio

#### SVI - Structural Health Monitoring and Sensor Networks

ICA2016-654 APPLICATION OF ACOUSTIC EMISSION MONITORING TO THE ASSESSMENT OF STRUCTURAL INTEGRITY OF ROCKS. Patricia Rodríguez ICA2016-857 IDENTIFICATION OF DYNAMIC RESPONSE PARAMETERS OF A

ICA2016-857 IDENTIFICATION OF DYNAMIC RESPONSE PARAMETERS OF A CONCRETE BUILDING DURING RECENT EARTHQUAKES BY USING STRUCTURAL VIBRATION MONITORING. Pablo Alcaíno

### 🗖 Room 204

#### SP2 - Acoustic Array System: Near-field acoustic holography and vibroacoustic field reconstruction

ICA2016-489 UTILIZATION OF WALL REFLECTION DATA IN THE ACOUSTIC PYROMETRY FOR ESTIMATING THE GAS TEMPERATURE IN A DUCT SECTION. Jeong-Guon Ih

ICA2016-501 WIDE BAND HOLOGRAPHY. Svend Gade

ICA2016-567 NEAR-FIELD ACOUSTIC IMAGING BASED ON LAPLACIAN SPARSITY.

#### Efren Fernandez-Grande

ICA2016-603 MEASUREMENT OF A TARGET'S STRUCTURAL ADMITTANCE USING NEAR-FIELD ACOUSTICAL HOLOGRAPHY (NAH) AND THE PREDICTION OF ITS SCATTERED FIELD. Earl Williams

ICA2016-607 LOCALIZATION OF A DEFECT IN AN IMPACTED PLATE USING TIME-DOMAIN NEARFIELD ACOUSTICAL HOLOGRAPHY AND TIME EVOLUTION OF SPATIAL FEATURES. Jean-Michel Attendu

#### Micro Cinema

## FIA- EN - Environmental Acoustics & Community Noise (EN - Acústica Ambiental y Ruido Comunitario)

FIA2016-29 CONCENTRATION MAPPING OF NOISE POLLUTION COMPLAINTS IN JOÃO PESSOA-PB (BRAZIL) BETWEEN 2012 AND 2015. Luciana Alves

FIA2016-49 THE TRANSPORT STREAM INTERFERING IN NOISE POLLUTION IN COMMERCIAL AND RESIDENTIAL DISTRICTS IN THE CITY OF MACEIÓ-AL. Stella Rosane Silva Oliveira

FIA2016-12 ANALYSIS OF THE INFLUENCE OF PUBLIC TRANSPORT IN NOISE LEVELS IN THE CITY OF TALCA, CHILE. Guillermo Rey-Gozalo

FIA2016-88 CHARACTERIZATION OF NOISE POLLUTION IN DOWNTOWN OF CORDOBA CITY. Jorge Perez Villalobo

FIA2016-103 MONTE CARLO SIMULATIONS TO ESTIMATE THE IMPACT OF VEHICLE TRAFFIC NOISE DYNAMICS IN THE VICINITY OF A BUS STOP BASED ON REAL SOUND SIGNALS. Italo Guedes

#### Auditorium II

#### **CA2 - Communication Acoustics**

ICA2016-187 THE ADVENT OF COMMUNICATION ACOUSTICS IN RETROSPECT. Jens Blauert

ICA2016-790 HEARING RESEARCH RELEVANT TO COMMUNICATION ACOUSTICS. Barbara Shinn-Cunningham

ICA2016-109 EVOLUTION OF SOUND REPRODUCTION FROM MECHANICAL SOLUTIONS TO DIGITAL TECHNIQUES OPTIMIZED FOR HUMAN HEARING. Ville Pulkki

ICA2016-391 VIEWS ON SOUND QUALITY. Alexander Raake

ICA2016-496 ON THE CONTRIBUTION OF SPATIAL HEARING TO SPEECH INTELLIGIBILITY. Steven Van De Par

#### 🗂 Auditorium III

#### PA3 - Ultrasound

ICA2016-543 EFFECT OF CONVECTIVE DRYING ASSISTED BY ULTRASOUND ON AROMA LOSSES OF TAMARILLO (SOLANUM BETACEUM) AND MANGO (MANGIFERA INDICA L.) FRUITS. Kamila Méndez

ICA2016-48 CONVERTING SUNLIGHT INTO AUDIBLE SOUND: ON THE DESIGN AND PHYSICAL MODELLING OF THE HELIOPHONE. N.B. Roozen

PROGRAMME - Tuesday, September 6

ICA2016-595 PARTICLE-IMAGE-VELOCIMETRY INVESTIGATION OF FLOW MORPHOLOGY AT SUDDEN EXPANSION AND CONTRACTION IN OSCILLATING FLOWS. Abdelmaged Ibrahim Essawey

ICA2016-26 HIGH-RESOLUTION IMAGING IN CHALLENGING MEDIA: A MODEL-BASED APPROACH, Ludovic Moreau

ICA2016-29 LIGHT DIFFRACTION BY LARGE AMPLITUDE ULTRASONIC WAVES IN LIQUIDS. Laszlo Adler



#### 16:30-18:50



## Juan Pablo II

#### EN1 - Noise assessment and control

ICA2016-79 NOISE ACTION PLANNING IN GERMANY. Matthias Hintzsche

ICA2016-629 DATA ANALYSIS OF NOISE COMPLAINTS IN THE REGIÓN METROPOLITANA, CHILE. Patricio Priede

ICA2016-417 COMPARISON OF NOISE POLLUTION COMPLAINTS CONCENTRATION MAPPED IN THREE CAPITALS OF BRAZILIAN NORTHEAST. Luciana Alves

ICA2016-657NOISEPOLLUTIONINFORTALEZA, SYNONYMOUSWITHDISCOMFORT, SEX AND VIOLENCE IN URBAN AREAS. Francisco Aurélio Chaves Brito



#### Dr. Valsecchi

### AA5 - Challenges and solutions in acoustics measurements and design

ICA2016-552 NOISE MEASUREMENT AND MITIGATION FOR URBAN BUILDING FOUNDATION EXCAVATION. Jack B Evans

ICA2016-484 THE EFFECTS OF THE EXCITATION SOURCE DIRECTIVITY ON SOME ROOM ACOUSTIC DESCRIPTORS OBTAINED FROM IMPULSE RESPONSE MEASUREMENTS. Alexander Pasqual

ICA2016-21 MEASURING SOUND INSULATION FROM PARTITIONS THROUGH A DECONVOLUTION TECHNIQUE. Marcio Avelar

ICA2016-831 A STUDY ON ACOUSTIC IMPEDANCE IN-SITU MEASUREMENT TECHNIQUE USING CARDIOID MICROPHONES. Kazuma Hoshi

ICA2016-224 RESULTS OF MEASUREMENTS ROOM ACOUSTICS PROPERTIES OF OPEN PLAN OFFICES BASED ON PARAMETER A-WEIGHTED SOUND PRESSURE LEVEL OF SPEECH. Witold Mikulski

ICA2016-537 HOW TO REDUCE UNCERTAINTIES FOR BUILDING ACOUSTIC MEASUREMENTS IN TEST FACILITIES? Volker Wittstock

ICA2016-451 EXPERIMENTAL MEASUREMENTS OF FLANKING TRANSMISSION IN CLT STRUCTURES. Federica Morandi



#### Cardenal Pironio

#### SV2 - Structural Acoustics and Vibration (others)

ICA2016-44 DIFFERENT INPUT PARAMETERS IN MODELLING FOR PREDICTING IMPACT NOISE OF NON-HOMOGENOUS FLOORS. Maria Fernanda Nunes

ICA2016-78 VIBRATION ISOLATION AND SEISMIC RESTRAINT FOR MECHANICAL

#### EQUIPMENT IN CHILE. Nicolás Bastián

ICA2016-80 STUDY OF THE SOUND RADIATION OF A RECTANGULAR PLATE RESTING ON A WINKLER ELASTIC FOUNDATION. Nicolás Bastián

ICA2016-10 THE EFFECT OF THE CUSHION ON REDUCING UNDERWATER NOISE CAUSED BY OFFSHORE PILE DRIVING. Qingpeng Deng

ICA2016-41 CALCULATION OF SOUND RADIATION IN INFINITE DOMAIN USING A MESHLESS METHOD. Shaowei Wu

ICA2016-176 INSTABILITY PREDICTION OF A FULLY UPDATED BRAKE SYSTEM WITH UNCERTAINTY IN CONTACT CONDITIONS. Joseph Lai



#### Room 204

#### SP2 - Acoustic Array System: Near-field acoustic holography and vibroacoustic field reconstruction

ICA2016-813 SEPARATION OF TRACK CONTRIBUTION TO PASS-BY NOISE BY NEAR-FIELD ARRAY TECHNIQUES. Ines Lopez Arteaga

#### SP3 - Model-Based Optimization/Estimation and Analysis

ICA2016-272 NONLINEAR SIGNAL PROCESSING TECHNIQUES FOR ACTIVE SONAR LOCALIZATION IN THE SHALLOW OCEAN WITH SIGNIFICANT ENVIRONMENTAL UNCERTAINTY AND REVERBERATION. Brian Worthmann

ICA2016-141 METHODOLOGY FOR THE STUDY OF ARRAY PROCESSING EMPLOYED FOR THE

#### SP4 - Signal Processing in Acoustics (others)

ICA2016-111 ABOUT DOPPLER-FIZEAU EFFECT ON RADIATED NOISE FROM A ROTATING SOURCE IN CAVITATION TUNNEL. Romuald Boucheron

ICA2016-728 PERCEPTUAL AUDIO CODING SCHEMES BASED ON ADAPTIVE SIGNAL PROCESSING TOOLS. Fernando A. Marengo Rodriguez

ICA2016-608 EFFECTS OF ACOUSTIC DEGRADATION ON COVER SONG RECOGNITION. Julien Osmalskyj

ICA2016-581 ROBUST ACOUSTICS AND SPEECH PERCEPTION OF AERIAL ROBOT UNDER EGO NOISE FOR SCENE UNDERSTANDING. Hanseok Ko



#### Micro Cinema

## FIA - EN - Environmental Acoustics & Community Noise (EN - Acústica Ambiental y Ruido Comunitario)

FIA2016-43 ACOUSTIC MAPPING IN THE INSTITUTE OF BIOLOGICAL SCIENCE FROM UFMG -IDENTIFICATION OF THE NOISE FONTS AND SOUND PRESSURE LEVELS IN OUTDOOR AREAS. Fabyola Resende

FIA2016-73 TIME REPRESENTATIVE WINDOW FOR THE MEASUREMENT OF URBAN NOISE IN LA PLATA CITY. Ariel Gustavo Velis

FIA2016-84 ROAD TRAFFIC NOISE IMPACT ON FACADES OF BUILDINGS. Renata De Brito Rocha

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FIA2016-98 GUIDELINES FOR NOISE CLASSIFICATION METHODS OF RESIDENTIAL BUILDINGS, ACCORDING TO THE BRAZILIAN STANDARD ABNT NBR 15575-4. Iara Cunha

FIA2016-11 NOCTURNAL SOUNDSCAPE OF BRASILIA'S PILOT PLAN: CASE STUDY IN NORTH SUPERBLOCK 410 (SQN 410). Ludmila De Araujo Correia Ludmila

FIA2016-47 ACOUSTICAL TREATMENT SOLUTION FOR A LARGE WATER COOLING AND CHILLER SYSTEM AT THE ROOFTOP OF A COMMERCIAL BUILDING. Maria Belderrain

FIA2016-75 VARIATION OF SOUND LEVELS IN THE CENTRAL AREA OF THE CITY OF BUENOS AIRES AFTER THE IMPLEMENTATION OF PRIORITY PEDESTRIAN PLAN. Vicente Sosa



#### Auditorium II

#### CA2 - Communication Acoustics (others)

ICA2016-465 CONCERT HALLS - CONVEYORS OF MUSICAL EXPRESSIONS. Tapio Lokki ICA2016-318 MODERN ADVANCEMENTS IN AUDIOLOGY. Jason Galster

ICA2016-43 A BINAURAL MODEL TO SEGREGATE SOUND SOURCES IN THE PRESENCE OF EARLY REFLECTIONS USING A MULTI-SOURCE PRECEDENCE-EFFECT MODEL. Jonas Braasch

ICA2016-818 SOURCE-BLIND BINAURAL SOURCE SEGREGATION UTILIZING HEAD MOVEMENT. Jonas Braasch

ICA2016-317 EXPERIMENT ON LISTENING DIFFICULTY OF ANNOUNCEMENTS FROM MUNICIPAL PUBLIC ADDRESS SYSTEM BY APPLYING THE METHOD OF CONTINUOUS JUDGMENT BY CATEGORY. Junichi Mori



#### **Auditorium III**

#### PA3 - Ultrasound

ICA2016-94 EXPERIMENTAL AND NUMERICAL RESULTS ON THE EVALUATION OF THE ADHESION LEVEL IN A BONDED TRI-LAYER METAL/ADHESIVE/METAL, USING LAMB GUIDED WAVES. Camille Gauthier

ICA2016-103 EXTENSION OF THEORETICAL ACOUSTICS TO CURVILINEAR SPACETIME. Woon Siong Gan

ICA2016-174 EVOLUTION MODELING OF FAST AND SLOW MAGNETOACOUSTIC WAVES IN THERMALLY UNSTABLE PLASMA. Dmitriy Zavershinskiy

ICA2016-175 ACOUSTICALLY INDUCED TRANSITIONS OF CHFD DISCHARGE IN SWIRL FLOW. Igor Zavershinskii

ICA2016-251 OVERTURNING OF NONLINEAR ACOUSTIC WAVES IN MEDIA WITH POWER-LAW ATTENUATION. Mark Hamilton

ICA2016-264 TIME-RESOLVED IMAGING OF ELECTRICALLY EXCITED GHZ ACOUSTIC VIBRATIONS AT ARBITRARY FREQUENCIES. Osamu Matsuda

ICA2016-296 ULTRASONIC FATIGUE TEST AND COMSOL FINITE ELEMENT MODELLING. Juan Carricondo



## Wednesday, 7



09:00-10:40



Juan Pablo II

#### EN5 - Wind farm noise

ICA2016-245 ENVIRONMENTAL NOISE DUE TO LARGE WIND TURBINES: WHAT WE HAVE LEARNT. Alice Elizabeth González

ICA2016-70 DETERMINATION AND ASSESSMENT OF NOISE FROM WIND TURBINES IN GERMANY, Andrea Bauerdorff

ICA2016-223 RISK ASSESSMENT RELATED TO NOISE AND INFRASONIC NOISE IN A WIND FARM. Dariusz Pleban

ICA2016-86 A NOISE GENERATION AND PROPAGATION MODEL FOR LARGE WIND FARMS. Franck Bertagnolio

ICA2016-168 PREDICTION OF ENVIRONMENTAL SOUND PRESSURE LEVELS DUE TO LARGE WIND TURBINES. Matteo Deambrosi



#### Dr. Valsecchi

#### SPI - Acoustics Array Systems

ICA2016-731 SPHERICAL HARMONIC SMOOTHING TECHNIQUE FOR DOA ESTIMATION OF FULLY COHERENT SOURCES. Jung-Woo Choi

ICA2016-158 EXPERIMENTAL INVESTIGATION OF MULTIPLE-INPUT MULTIPLE-OUTPUT SYSTEMS FOR SOUND-FIELD ANALYSIS. Hai Morgenstern

ICA2016-204 FREQUENCY DEPENDENT COPRIME LINEAR MICROPHONE ARRAYS FOR DIRECTION OF ARRIVAL ESTIMATION USING MODEL-BASED BAYESIAN INFERENCE. Dane Bush

ICA2016-312 FLEXIBLE MICROPHONE ARRAY BASED ON MULTICHANNEL NONNEGATIVE MATRIX FACTORIZATION AND STATISTICAL SIGNAL ESTIMATION. Hiroshi Saruwatari

ICA2016-412 A PARAMETRIC SUPERDIRECTIVE BEAMFORMER WITH UNIFORM LINEAR MICROPHONE ARRAYS. Gongping Huang



#### **Cardenal Pironio**

#### AAI - Acoustics in education

ICA2016-178 A COMPREHENSIVE SURVEY ON THE CURRENT ACOUSTIC ENVIRONMENT IN CHILD DAY CARE CENTERS IN THE KUMAMOTO CITY REGION, SOUTHWEST JAPAN. Keiji Kawai

ICA2016-241 EFFECTS OF AIRCRAFT NOISE ON CHILDREN'S READING AND QUALITY OF INSTRUCTION IN GERMAN PRIMARY SCHOOLS: RESULTS FROM THE NORAH STUDY. Jan Spilski

ICA2016-524 TEACHING IN A CLASSROOM ENVIRONMENT: SPEECH ADJUSTMENT TO REAL AND SIMULATED CLASSROOM CONDITIONS. Eric Hunter ICA2016-278 VOICE AND CLASSROOM INTERACTIONS - STATE OF THE ART.

Monika Rychtarikova
ICA2016-828 THE IMPACT OF USING DIFFERENT TIME SAMPLING WINDOWS ON

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#### MEASURED NOISE METRICS IN K-12 CLASSROOMS. Laura Brill



#### Room 204

#### SV2 - Structural Acoustics and Vibration (others)

ICA2016-182 GENERATION OF VIRTUAL SLIDING RESISTANCE ON A GLASSY PANEL USING VIBRATION. Da-Young Kim

ICA2016-99 ESTIMATION OF THE VIBRATION RESPONSE OF A PLATE WITH UNKNOWN BOUNDARY CONDITIONS USING THE ITERATIVE VARIATION METHOD. Jung-Han Woo

ICA2016-387 STUDY OF THE MODAL PARAMETERS OF A WIND TURBINE RUNNER ABLE TO INFLUENCE ITS ACOUSTIC BEHAVIOUR. Nicolae Constantin

ICA2016-516 GUIDED CONVECTED ACOUSTIC WAVE COUPLED WITH A MEMBRANE WALL USED AS NOISE REDUCTION DEVICE. Virgile Meyer

ICA2016-570 MATERIAL PROPERTIES AND MICROSTRUCTURE CONTRIBUTIONS TO VIBRATIONAL DAMPING IN ARUNDO DONAX L – REED CANE FOR WOODWIND INSTRUMENTS. Connor Kemp



#### Micro Cinema

## FIA- AA - Architectural Acoustics - Room and Building Acoustics (AA - Acústica Arquitectónica - Acústica de Salas)

FIA2016-52 NOISE MAP AS SUPPORT INSTRUMENT TO ACHIEVE ACOUSTIC PERFORMANCE OF RESIDENCES ENVELOPMENT ACCORDING NBR 15575-2013. Fabiana Curado Coelho

FIA2016-72 ACOUSTIC QUALITY IN SHOPPING MALLS FOR ENVIRONMENTAL CERTIFICATION. CASE STUDIES: SHOPPING MALLS RIOMAR RECIFE (PE) AND FORTALEZA (CE). Felipe B. Paim

FIA2016-93 CASE STUDY OF ACOUSTIC PERFORMANCE OF CORRECTIONS IN JUNCTIONS OF INTERNAL WALL AND CURTAIN WALL FAÇADE. Luis Eduardo Correa Rodrigues

FIA2016-51 INTERVENIENTS IN FLOATING FLOORS EXECUTION PROCESS AND ITS REFLECTS ON ACOUSTICS PERFORMANCE. Fabiana Curado

FIA2016-67 INFLUENCE OF THE COMPRESSION CONDITIONS IN THE ACOUSTIC PERFORMANCE OF RESILIENTE LAYERS OF FLOORS. Maria Fernanda Nunes



#### Auditorium II

#### AA2 - Acoustic of worship spaces

ICA2016-124 THE EFFECT OF NOISE CRITERIA LEVELS ON SPEECH INTELLIGIBILITY IN VARIOUS TYPES OF MIHRAB DESIGN. Nazli Che Din

ICA2016-213 NUMERICAL AND EXPERIMENTAL ACOUSTICAL ANALYSIS OF A CONTEMPORARY MODERN CHURCH. Corrado Schenone



#### **Auditorium III**

#### **UW1 - Underwater Acoustics**

ICA2016-780 ARCTIC AMBIENT NOISE: SYNOPTIC MEASUREMENTS IN THE FRAM STRAIT MARGINAL ICE ZONE. Dag Tollefsen

ICA2016-917 ACOUSTIC NOISE PROPERTIES IN THE RAPIDLY CHANGING ARCTIC OCEAN, Andrew Poulsen

 ${\tt ICA2016-427\ ACOUSTICAL\ IMAGES\ OF\ THE\ GULF\ OF\ GDANSK.\ Grazyna\ Grelowska}$ 

ICA2016-438 SEISMIC OCEANOGRAPHY IN BRAZIL FROM LEGACY MCS DATA OF THE OIL AND GAS INDUSTRY. Marcus Vinícius Carpes Barão

ICA2016-834 IMPROVING COMPUTATION SPEED IN SHALLOW WATER REVERBERATION MODELING. Dajun Tang



#### 11:00-12:00



## Juan Pablo II

#### EN5 - Wind farm noise

ICA2016-239 WIND TURBINE NOISE AS EXPERIENCED BY IMPACTED RESIDENTS. Sveinulf Vagene

ICA2016-353 PROPAGATION PHENOMENA ASSOCIATED WITH NOISE DUE TO THE OPERATION OF LARGE-SIZED WIND TURBINES. Matias Hernandez

ICA2016-673 SOUND PROPAGATION FROM A WIND TURBINE IN A HILLY ENVIRONMENT. Timothy Van Renterghem



#### Dr. Valsecchi

#### SPI - Acoustics Array Systems

ICA2016-122 COMPOSITE AEROACOUSTIC BEAMFORMING OF AN AXIAL FAN. Con Doolan

ICA2016-139 ANALYSIS AND DESIGN OF TIME-DOMAIN FIRST-ORDER CIRCULAR DIFFERENTIAL MICROPHONE ARRAYS. Yaakov Buchris

ICA2016-593 TOWARDS AN ENACTIVE ROBOT AUDITION ARCHITECTURE. Valentin Lunati



#### **Cardenal Pironio**

#### **EDI** - Education in Acoustics

ICA2016-724 A QUASI-EXPERIMENTAL FIELD STUDY OF THE IMPACT OF CLASSROOM NOISE ON ADOLESCENTS' MATHEMATICAL PERFORMANCE. Daniel Connolly

ICA2016-83 ACTIVE LEARNING IN THE "ANALYSIS AND SYNTHESIS OF MUSICAL SIGNALS" COURSE. Bruno Masiero

ICA2016-763 CINTRA: FROM AN INTERDISCIPLINARY CENTRE ON ACOUSTICS TOWARDS AN INTRA-INTER SYNERGETIC NETWORK. Pablo Kogan

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#### Room 204

#### SV2 - Structural Acoustics and Vibration (others)

ICA2016-618 FUTURE TUNNEL RAILWAY UNDERNEATH A CITY TRAINBUILDINGS TRANSFER FUNCTION ESTIMATE AND AT HOME VIBRATION PREDICTION. Fernando Schiappa

ICA2016-798 ON THE USE OF SHUNTED PIEZO ACTUATORS FOR MITIGATION OF DISTRIBUTION ERRORS IN RESONATOR ARRAYS. Joseph Vignola

ICA2016-824 ON USING THE HILBERT TRANSFORM FOR BLIND IDENTIFICATION OF SYSTEMS WITH COMPLEX MODES. Jose Antunes



#### Micro Cinema

## FIA- AA - Architectural Acoustics - Room and Building Acoustics (AA - Acústica Arquitectónica - Acústica de Salas)

FIA2016-45 STUDY OF SOUND ABSORPTION OF WOOLS COMPOSED BY PET WASTE PRODUCTS. Josiane Reschke Pires

#### FIA- SS - Soundscape (SS - Paisaje sonoro)

FIA2016-122 LEARNING THE SOUNDSCAPE IN URBAN AND ARCHITECTURAL ITINERARY. BARCELONA LISTENING BLINDFOLDER. Francesc Daumal I Domènech

FIA2016-111 SOME CONSIDERATIONS ON THE DESIGN OF LISTENING-TESTS FOR SOUNDSCAPE ASSESSMENT. Germán PÉREZ



#### Auditorium II

#### AA2 - Acoustic of worship spaces

ICA2016-269 ACOUSTICS OF NOTRE-DAME CATHEDRAL DE PARIS. Barteld Postma

ICA2016-77 ACOUSTICAL REFORM OF CHURCH NUESTRA SEÑORA DE LA PAZ Fernando Del Solar Dorrego

ICA2016-591 REVIEW OF ASPECTS THAT SHAPE THE AURAL EXPERIENCE IN WORSHIP SPACES. Alaa Algargoosh



#### Auditorium III

#### UW1 - Underwater Acoustics

ICA2016-636 GUIDELINES FOR PREDICTION AND EVALUATION OF ACOUSTIC IMPACT ON UNDERWATER FAUNA. Max Glisser

ICA2016-138 COMPARISON OF TRACKING ALGORITHMS FOR DOLPHIN WHISTLE CONTOUR DETECTION. Pina Gruden

ICA2016-644 ACOUSTIC NOISE INTERFEROMETRY IN A NONSTATIONARY OCEAN. Oleg Godin



#### 12:00-13:00



#### Juan Pablo II

#### **Plenary Lecture**

ICA2016-522 Understanding music perception from the perspective of oscillation and resonance

Frank Russo

#### SIMPOSIO GINER

Insulation and acoustic conditioning project of all the technical rooms of the new Disney Latin America headquarters in Argentina.



#### 14:30-16:10



## Juan Pablo II

#### EN5 - Wind farm noise

ICA2016-316 WIND TURBINE NOISE AS EXPERIENCED BY IMPACTED RESIDENTS. Sveinulf Vagene

ICA2016-440 PHYSIOLOGICAL EFFECTS OF WIND TURBINE NOISE ON SLEEP. Michael Smith

ICA2016-444 CHARACTERIZATION OF THE SOUND SPECTRUM OF THE WIND REGARDING ENVIRONMENTAL STUDIES, FOCUSED IN WIND ENERGY DEVICES. Pablo Gianoli

ICA2016-565 WIND TURBINE NOISE SOURCE CHARACTERISTICS MEASURED WITH A LARGE MICROPHONE ARRAY. Stuart Bradley

ICA2016-503 UNDERWATER NOISE MITIGATION FROM PILE DRIVING USING A TUNABLE RESONATOR SYSTEM. Mark Wochner



#### Dr. Valsecchi

#### SPI - Acoustics Array Systems

ICA2016-598 SWEET-SPOT-INDEPENDENT BINAURAL REPRODUCTION WITH A LISTENER-ADAPTIVE LOUDSPEAKER ARRAY. Marcos Simon

ICA2016-686 ADVANCED DELAY-AND-SUM BEAMFORMER WITH DEEP NEURAL NETWORK. Mitsunori Mizumachi

ICA2016-415 SOUND SOURCE SEPARATION IN COMPLEX ENVIRONMENTS USING AN ARRAY-OF-ARRAYS MICROPHONE SYSTEM. Jorge Trevino

ICA2016-903 THE OPTIMIZATION DESIGN OF MICROPHONE ARRAY LAYOUT FOR WIDEBAND NOISE SOURCES. Pengxiao Teng

ICA2016-506 IMPEDANCE ESTIMATION OF A FINITE ABSORBER BASED ON SPHERICAL ARRAY MEASUREMENTS. Antoine Richard



#### Cardenal Pironio

#### AAI - Acoustics in education

ICA2016-830 GOOD PRACTICES IN MUSIC ROOM ACOUSTICS IN BRAZIL: A

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DISSEMINATION ACTION AND AN EVALUATION OF ITS IMPACT. Aloísio Schmid

ICA2016-585 ACOUSTIC EVALUATION OF THE DESIGN PROCESS AND CONSTRUCTION OF THE TELEVISION STUDIO OF THE CATHOLIC UNIVERSITY OF URUGUAY. Leonardo Fiorelli

ICA2016-817 SPEECH TRANSMISSION INDEX VARIATION DUE TO VENTILATION AND AIR-CONDITIONING SYSTEM IN UNIVERSITY CLASSROOMS. Sebastian Pablo Ferreyra

ICA2016-102 GLOBAL CASE STUDIES OF ACOUSTICS IN CLASSROOMS. Kenneth Roy ICA2016-268 INTELLIGIBILITY IN A CLASSROOM: COUPLING EFFECTS BETWEEN OUTDOOR NOISE AND ROOM ACOUSTIC RESPONSE. Florent Masson



#### Room 204

#### SVI - Structural Health Monitoring and Sensor Networks

ICA2016-305 MEASUREMENT OF DYNAMIC YOUNG'S MODULUS BY ULTRASONIC RESONANCE WITH CYLINDRICAL RODS AND FINITE ELEMENT MODELLING ANALYSIS. Martin Javier Iofrida

ICA2016-386 TYPE IV COMPOSITE PRESSURE VESSEL CHARACTERIZATION BY MEASUREMENT OF ACOUSTIC REVERBERATION. Hossep Achdjian

ICA2016-531 ANALYTICAL SOLUTION FOR MODAL ACOUSTIC PROPAGATION WITH LAMINAR MEAN FLOW IN 2D CARTESIAN GEOMETRY. Romuald Boucheron ICA2016-741 AN ULTRASONIC WAVEGUIDE SENSOR FOR MONITORING ALCOHOL CONCENTRATION IN WATER-ALCOHOL MIXTURES. Onursal Önen ICA2016-943 A THEORETICAL ANALYSIS OF ACOUSTIC JETS. Igor Minin



#### Micro Cinema

## FIA- SP - Signal Processing in Acoustics (SP - Procesamiento de Señal en Acústica)

FIA2016-35 SIMPLIFIED FILTER BANK TO EMULATE THE HEAD DIFFRACTION DEPENDING ON THE AZIMUTH ANGLE OF THE SOURCE. Georgina Lizaso

FIA2016-53 IMPROVING THE ESTIMATED ACOUSTIC ABSORPTION CURVES IN IMPEDANCE TUBES BY USING WAVELET-BASED DENOISING METHODS. Luana Lara

#### FIA-MU - Musical Acoustics (MU - Acústica Musical)

STIMULI OF LONG LATENCY AEPS. Juan Manuel Loria

FIA2016-22 ULTRASONIC COMPONENTS OF MUSICAL INSTRUMENTS. Jorge Petrosino
FIA2016-96 THE PERCUSSION AS ACOUSTIC ELEMENT IN ORCHESTRAS AND
MUSICAL GROUPS FROM THE TWENTIETH CENTURY. Maria Lúcia Grillo
FIA2016-115 MUSICAL IMAGERY: INFLUENCE OF MUSICAL TRAINING IN
AUDITORY SOUND RECOGNITION BY MELODIC AND RHYTHMIC MODIFIED



#### **Auditorium III**

#### UWI - Underwater Acoustics

ICA2016-262 APPLICATION OF WAVELET TRANSFORM FOR CLASSIFICATION OF UNDERWATER ACOUSTIC SIGNALS. Noha Korany

PROGRAMME - Wednesday - Thursday, September 7-8

ICA2016-398 USING BASE FUNCTION DECOMPOSITION IN ADAPTIVE FILTERING FOR SEISMIC PULSE RETRIEVING. Marina Bousfield

ICA2016-35 NUMERICAL AND EXPERIMENTAL PREDICTION METHODS OF CAVITATION NOISE RADIATED BY UNDERWATER PROPELLERS. Taehyung Kim

ICA2016-164 NUMERICAL STUDY OF UNSTEADY SUPERCAVITATION AND FLOW INDUCED NOISE PROPAGATION. Boo Cheong Khoo

ICA2016-446 EXPLOITATION OF FREQUENCY INFORMATION IN CONTINUOUS ACTIVE SONAR. Lisa Zurk



### Thursday, 8



09:00- 10:40



#### Juan Pablo II

#### **EN4 - Smart City Sound Monitoring**

ICA2016-97 ROBUST MICROPHONE ARRAY BEAMFORMING FOR LONG-TERM MONITORING OF INDUSTRIAL AREAS. Bert De Coensel

ICA2016-330 REMOVING LOCAL SOUND DISTURBANCES FROM INDUSTRIAL NOISE MONITORING AT LONG DISTANCE. Peter Wessels

ICA2016-545 A PROPOSAL FOR A MOBILE PHONE'S APPLICATION ALERTING AND WARNING ABOUT NOISE POLLUTION IN MEXICO CITY. Veronica Arroyo-Pedroza ICA2016-793 DATA MINING ON URBAN SOUND SENSOR NETWORKS. Dick Botteldooren



#### Dr. Valsecchi

#### SS4 - Soundscape, Quality of Life, and Health

ICA2016-226 APPLICATION OF THE SWEDISH SOUNDSCAPE-QUALITY PROTOCOL IN ONE EUROPEAN AND THREE LATIN-AMERICAN CITIES. Pablo Kogan

ICA2016-233 LOCI FOR SOUNDSCAPE PLANNING AND MANAGEMENT. Alan Lex Brown

ICA2016-265 SOUND PLEASANTNESS EVALUATION OF PEDESTRIAN WALKS IN URBAN SOUND ENVIRONMENTS. Pierre Aumond

ICA2016-340 ACOUSTIC INTERVENTION AT PRESCHOOLS HAD MARGINAL EFFECT ON NOISE-LEVELS BUT IMPACTED ON CHILDREN'S PERCEPTION AND RESPONSE TO SOUND QUALITIES. Kerstin Persson Waye

ICA2016-167 PERCEIVED SOUNDSCAPES, HUMAN RESTORATION AND RELATED HEALTH IN GREEN URBAN AREAS. Irene Van Kamp



#### Cardenal Pironio

#### AA6 - Concert Hall Acoustics

ICA2016-606 THE ACOUSTICS OF THE CONCERT HALL Auditorium JUAN VICTORIA FROM SAN JUAN, ARGENTINA. Ernesto Accolti

ICA2016-166 ACOUSTIC CHARACTERIZATION OF THE USINA DEL ARTE

PROGRAMME - Thursday, September 8

#### SYMPHONY HALL. Leandro Rodiño

ICA2016-729 SOUND ENERGY DISTRIBUTION IN ITALIAN HISTORICAL THEATRES. Massimo Garai

ICA2016-95 ACOUSTICS FOR AMPLIFIED MUSIC AND A NEW, VARIABLE ACOUSTICS TECHNOLOGY THAT INCLUDES LOW FREQUENCIES. Niels Adelman-Larsen

ICA2016-664 USING A SPHERICAL MICROPHONE ARRAY FOR STAGE ACOUSTICS: A PRELIMINARY CASE FOR A NEW SPATIAL PARAMETER. Lilyan Panton



#### CA1 - The Technology of Binaural Listening & Understanding

ICA2016-363 AUDITORY ILLUSION THROUGH HEADPHONES: HISTORY, CHALLENGES AND NEW SOLUTIONS. Karlheinz Brandenburg

ICA2016-715 MULTIMODAL FUSION AND INFERENCE USING BINAURAL AUDITION AND VISION. Benjamin Cohen-Lhyver

ICA2016-827 A PRECEDENCE EFFECT MODEL WITH TOP-DOWN PROCESSING STAGES BASED ON VISUAL CUES. Jonas Braasch

ICA2016-718 CONTRIBUTIONS OF BINAURAL PROCESSING TO SEGREGATING AND SELECTING SPEECH IN A COMPLEX SOUND MIXTURE. Barbara Shinn-Cunningham

ICA2016-633 BINAURAL TECHNOLOGY AND AUTOMATIC SPEECH RECOGNITION Richard Stern



#### "ACOUSTIC DESIGN OF MUFFLERS". Prof. Tamer Elnady

## Auditorium III

"ULTRASOUND, CAVITATION, SONOCHEMISTRY. FUNDAMENTALS AND APPLICATIONS". Prof. Sivakumar Manickam

## 11:00-12:00

#### 🗎 🛮 Juan Pablo II

#### EN3 - Road traffic noise modeling and noise barrier

ICA2016-850 A FIELD SURVEY ON SOUND POWER LEVEL OF JAPANESE ROAD VEHICLES. Shinichi Sakamoto

ICA2016-564 A STUDY OF THE ACOUSTICS OF THE URBAN SPACE IN MEXICO CITY THROUGH PHYSICAL SCALE MODELS: A FIRST APPROACH. Fausto E. Rodriguez-Manzo

ICA2016-904 SONIC CRYSTAL NOISE BARRIER USING LOCALLY RESONANT SCATTERERS. Nicole Kessissoglou

#### 🔲 Dr. Valsecchi

#### SII - Sound intensity and Inverse methods in acoustics

ICA2016-208 USING THE IRROTATIONAL PART OF STRUCTURAL INTENSITY TO

#### VISUALIZE VIBRATIONAL ENERGY SOURCES. N.B. Roozen

ICA2016-534 CHARACTERIZATION OF A POROUS PLATE SATURATED WITH WATER USING BAYESIAN INVERSION. Matti Niskanen

ICA2016-486 INVERSE METHODS OF DETERMINING THE ACOUSTICAL PARAMETERS OF POROUS SOUND ABSORBING METALLIC MATERIALS. Bo Zhang



#### AA6 - Concert Hall Acoustics

ICA2016-732 RECORDINGS OF ITALIAN OPERA ORCHESTRA AND SOLOISTS IN A SILENT ROOM. Dario D'orazio

ICA2016-32 THE SOUND IS A WAVE. A NEW CONCEPT OF HUYGENS ACOUSTIC DIFFUSER. Higini. Arau-Puchades

ICA2016-754 ANALYSIS OF LIGHT-WEIGHT ACOUSTIC REFLECTORS. Federico Miyara



#### CA1 - The Technology of Binaural Listening & Understanding

ICA2016-299 SPATIAL MODULATION: HEARING THE ENVIRONMENT. Pierre Divenyi

ICA2016-154 SIMULATING COGNITIVE FEEDBACK IN THE CONTEXT OF BINAURAL SCENE ANALYSIS. Jens Blauert

ICA2016-346 ASSESSMENT OF AUDIO QUALITY AND EXPERIENCE USING BINAURAL-HEARING MODELS. Alexander Raake

#### Micro Cinema

"ACOUSTIC DESIGN OF MUFFLERS". Prof. Tamer Elnady

## Auditorium II

#### PP3 - Psychological and Physiological Acoustics (others)

ICA2016-885 MORE ROBUST ESTIMATES FOR DPOAE LEVEL AT AUDIOMETRIC FREQUENCIES. Dorte Hammershøi

ICA2016-219 INVESTIGATION OF HEARING PERCEPTION AT ULTRASOUND FREQUENCIES BY FUNCTIONAL MAGNETIC RESONANCE IMAGING (FMRI) AND MAGNETOENCEPHALOGRAPHY (MEG). Christian Koch

ICA2016-832 HYBRID METHOD FOR OBTAINING INDIVIDUAL HEAD RELATED TRANSFER FUNCTIONS (HRTF): PINNA MOLDING AND HEAD-TORSO PHOTOGRAMMETRIC 3D RECONSTRUCTION. Sebastian Fingerhuth

#### **Auditorium III**

"ULTRASOUND, CAVITATION, SONOCHEMISTRY. FUNDAMENTALS AND APPLICATIONS". Prof. Sivakumar Manickam

PROGRAMME - Thursday, September 8



12:00-13:00



### Juan Pablo II

### **Plenary Lecture**

#### How the brain makes sense of complex auditory scenes

Barbara Shinn-Cunningham



14:30-16:10



### Juan Pablo II

#### NS2 - Hearing Protectors

ICA2016-98 USING FINITE-ELEMENT MODELING TO PREDICT THE EFFECT OF SOUND INCIDENCE ON THE NOISE REDUCTION BASED ATTENUATION OF EARMUFFS. Franck Sgard

ICA2016-808 MEASUREMENT OF INSERTION LOSS OF EAR-MUFF TYPE PROTECTORS USING THE IMPULSE RESPONSE TECHNIQUE. Lucas Guillermo Gilberto

ICA2016-354 UNCERTAINTY OF HEARING PROTECTOR NOISE ATTENUATION BASED ON REAT METHOD. Rafael Gerges

#### NS3 - Launch Vehicle Acoustics

ICA2016-495 REDUCING REAR AXLE GEAR WHINE NOISE INSIDE A CAR BY INFLUENCING THE STRUCTURE-BORNE SOUND TRANSFER PATH USING STRUCTURALLY INTEGRATED PIEZO-ACTUATORS. Jan Troge

ICA2016-684 PROJECTION ALGORITHMS FOR TARGET SPECTRUM MATRIX DEFINITION IN MIMO DIRECT FIELD ACOUSTIC CONTROL. Mariano Gaston Alvarez Blanco



#### Dr. Valsecchi

#### SII - Sound intensity and Inverse methods in acoustics

ICA2016-198 ON THE RELATIONSHIP BETWEEN SOUND INTENSITY AND WAVE IMPEDANCE. Domenico Stanzial

#### SI2 - Acoustical measurements and instrumentation (others)

ICA2016-859 BROADBAND AIR ULTRASOUND REFERENCE SOUND SOURCE. Angelo J Campanella

ICA2016-792 SAMSOFT: ACOUSTIC DEVICES AUTOMATIC MEASUREMENT SYSTEM SOFTWARE. Sebastian Pablo Ferreyra

ICA2016-388 IMPLEMENTATION AND ANALYSIS OF INTERNATIONAL STANDARDS FOR ELECTROACOUSTIC PERFORMANCE EVALUATION OF HEARING AIDS. Zargos Neves Masson

ICA2016-190 BI-LATERAL COMPARISON OF PISTONPHONE CALIBRATION BETWEEN INMETRO AND INTI. Jorge Martin Riganti



#### **Cardenal Pironio**

#### AA6 - Concert Hall Acoustics

ICA2016-1182 AN INVESTIGATION INTO THE HELMHOLTZ RESONATORS OF THE QUEEN ELIZABETH HALL, LONDON. Christina Higgins

ICA2016-743 ACOUSTICAL DESIGN OF AWAZA CONVENTION CENTER. Mehmet Caliskan

ICA2016-320 A COMPARISON OF CONCERT HALLS' ACOUSTICS BEFORE AND AFTER RENOVATION. Anton Peretokin

ICA2016-761 ACOUSTICAL RENOVATION AND IMPROVISATION OF KENNEDY AUDITORIUM, INDIA. Shah Faaiz Alam



#### Room 204

#### CA1 - The Technology of Binaural Listening & Understanding

ICA2016-445 EXPLOITING ENVELOPE FLUCTUATIONS TO ACHIEVE ROBUST EXTRACTION AND INTELLIGENT INTEGRATION OF BINAURAL CUES. G. Christopher Stecker

ICA2016-253 PERFORMANCE ANALYSIS OF A COMPACT SPHERICAL MICROPHONE ARRAY USED FOR A SOUND-SPACE SENSING SYSTEM FOR BINAURAL PRESENTATION. Shuichi Sakamoto

ICA2016-161 EXAMINING AUDITORY SELECTIVE ATTENTION IN REALISTIC, NATURAL ENVIRONMENTS WITH A NEWLY DESIGNED PARADIGM. Janina Fels

ICA2016-525 SACCADE-LIKE HEAD MOVEMENTS IN NON-HUMAN PRIMATES AND IMPLICATIONS OF THE BINAURAL "ACOUSTIC FLOW" ON SPATIAL. HEARING. YI Zhou



#### Micro Cinema

#### MU1 - Music Perception

ICA2016-243 SUBJECTIVE PREFERENCE OF ELECTRIC GUITAR SOUNDS IN RELATION TO PSYCHOACOUSTICAL AND AUTOCORRELATION FUNCTION PARAMETERS. Diego Leguizamón

ICA2016-227 SUBJETIVE PREFERENCE OF CLASSICAL GUITAR STROKES "APOYANDO" AND "TIRANDO" RELATED TO ITS HARMONIC COMPONENTS AND AUTOCORRELATION FUNCTION. Joaquin Garcia

ICA2016-152 EFFECTS OF THE MODE OF TEMPO CHANGE ON PERCEPTION OF TEMPO CHANGE. Masuzo Yanagida

ICA2016-727 EFFECTS OF LIGHTING ON IMPRESSION OF POPULAR MUSIC. Akira Nishimura

ICA2016-1179 THE MECHANICAL INVARIANCE FACTOR IN MUSICAL ACOUSTICS AND PERCEPTION. Akpan Essien



#### Auditorium II

#### PP3 - Psychological and Physiological Acoustics (others)

ICA2016-240 RESEARCH ON SOUND HYPERSENSITIVITY: PARAMETERS OF DISCOMFORT AND ATTRACTION. Helena Rodi Neumann

PROGRAMME - Thursday, September 8

ICA2016-432 EFFECTS OF BACKGROUND SPEECH ON READING PERFORMANCE IN ADULTS: RESULTS USING A NEW TEST PROCEDURE. Helga Sukowski

ICA2016-435 AUDITORY FMRI CORRELATES OF LOUDNESS PERCEPTION FOR MONAURAL AND DIOTIC STIMULATION. Stefan Uppenkamp

ICA2016-288 HARMONIC HYDROMECHANICAL MOVEMENT OF THE COCHLEAR FLUID IS NOT A WAVE NEITHER A VIBRATION. Valentino Lucas Fantini

ICA2016-9 PERCEPTUAL CONSEQUENCES OF AUDITORY TRAINING IN YOUNG BLIND PERSONS. Ewa Skrodzka



#### **Auditorium III**

#### VA 1- Virtual Acoustics

ICA2016-519 INDIVIDUAL HEAD-RELATED IMPULSE RESPONSE MEASUREMENT SYSTEM WITH 3D SCANNING OF PINNAE. Fabián C. Tommasini

ICA2016-768 ASSESSING THE CONTRIBUTION OF BINAURAL CUES FOR APPARENT SOURCE WIDTH PERCEPTION VIA A FUNCTIONAL MODEL. Johannes Käsbach

ICA2016-886 A DYNAMIC BINAURAL SYNTHESIS SYSTEM FOR INVESTIGATION INTO SITUATIONAL AWARENESS FOR TRUCK DRIVERS. Flemming Christensen

ICA2016-797 INTERACTIVE ACOUSTIC ENVIRONMENTS FOR AUDITORY REHABILITATION AND RESEARCH. Steve Ellison

ICA2016-801 INVESTIGATION INTO THE ROLE OF THE NON-NEGATIVITY CONSTRAINT IN SOUND FIELD REPRODUCTION PROBLEMS. Filippo Fazi



## 16:30-18:30 Juan Pablo II



## NS1 - Aircraft Noise - Aeroacoustics

ICA2016-535 100 YEARS OF PIEZOELECTRIC MATERIALS IN ACOUSTICS: FROM A SONAR TO ACTIVE METASURFACES. Pavel Mokry

ICA2016-597 ADAPTIVE ACOUSTIC METASURFACES FOR THE ACTIVE SOUND FIELD CONTROL. Pavel Mokry

ICA2016-491 REDESIGNING HELMHOLTZ RESONATORS TO ACHIEVE ATTENUATION AT MULTIPLE FREQUENCIES. Nicolas Etaix

ICA2016-490 COMPARISON OF DIFFERENT IMPEDANCE BASED METHODS FOR EVALUATING THE ACOUSTIC BEHAVIOUR OF POROUS MATERIALS IN COMPRESSED AND UNCOMPRESSED CONDITIONS. Umberto Berardi

ICA2016-589 EFFECT OF THE THREE-DIMENSIONAL MICROSTUCTURE ON THE SOUND ABSORPTION OF FOAMS: A PARAMETRIC STUDY. Camille Perrot

ICA2016-882 CHARACTERIZATION OF MUFFLERS. Tamer Elnady



#### Dr. Valsecchi

#### SI2 - Acoustical measurements and instrumentation (others)

ICA2016-87 BI-LATERAL COMPARISON OF LS1P MICROPHONE CALIBRATION BETWEEN INTI AND INMETRO. Federico Ariel Serrano

ICA2016-635 SOUND POWER LEVEL DETERMINATIONS AT LABORATORY AND FIELD ENVIRONMENTS: AN EXPERIMENTAL COMPARISON, Lucía Taibo

ICA2016-382 STATISTICAL STUDY OF THE SOUND COVERAGE IN FAÇADE SOUND INSULATION MEASUREMENT USING DIFFERENT TYPES OF LOUDSPEAKERS. César Díaz

ICA2016-619 A QUANTITATIVE COMPARISON OF DIRECTIONAL WAVE SEPARATION TECHNIQUES IN TUBULAR WAVEGUIDES – AN EXPERIMENTAL EVALUATION. Omar Abdullah S Aldughayem

ICA2016-548 SIMPLIFIED TWO-LOAD TRANSMISSION TUBE MEASUREMENTS USING AN ACTIVE ABSORBING TERMINATION F. Felipe Orduña-Bustamante

ICA2016-421 DEVELOPMENT OF A MEASUREMENT METHOD FOR OBLIQUE-INCIDENCE SOUND ABSORPTION COEFFICIENT USING A THIN CHAMBER. Naohisa Inoue



#### Cardenal Pironio

#### SS5 - Spatial sound recordings in preserved habitats

ICA2016-746 PRELIMINARY RESEARCH INTO THE ACOUSTIC SOUNDSCAPE OF SPITSBERGEN.Jerzy Wiciak

ICA2016-706 THE SOUNDS OF DEER MATING SEASON IN THE BIALOWIEZA NATIONAL PARK. Janusz Piechowicz

ICA2016-674 SOUNDSCAPE ANALYSIS BASED ON AMBISONIC RECORDINGS EXECUTED IN A PRIMEVAL FOREST. Pawel Malecki

#### SS2 - Soundscape and holistic analysis

ICA2016-678 A SUMMARY OF THE SPATIAL CONSTRUCTION OF SOUNDSCAPE IN CHINESE GARDENS. Hui Xie

ICA2016-656 A SOCIOLOGICAL ANALYSIS OF SOUNDWALK PARTICIPANT DEMOGRAPHICS AND FEEDBACK IN NEW ORLEANS, David Woolworth



#### Room 204

#### AO1 - Acoustical Oceanography

ICA2016-687 OCEAN ACOUSTIC TOMOGRAPHY USING A THREE-PHASED PROBABILISTIC MODEL-BASED INVERSION SCHEME. Michael Taroudakis

ICA2016-361 ACOUSTIC SCATTERING BY PARAMETERIZED CONCAVE SURFACES USING AN IMPLEMENTATION OF THE KIRCHHOFF INTEGRAL METHOD. Rui Marques Rojo

ICA2016-298 ACOUSTIC SCATTERING BY PROLATE AND OBLATE LIQUID SPHEROIDS. Silvia Blanc

ICA2016-360 A REVIEW OF THEORETICAL MODELS FOR ATTENUATION OF SOUND BY BUBBLE CLOUDS. Maria Paz Raveau

ICA2016-338 THE STUDY OF ACOUSTIC CLIMATE OF THE SOUTHERN BALTIC. Grazyna Grelowska

ICA2016-196 ADVANCES ON MODELLING, SIMULATION AND SIGNAL PROCESSING OF ULTRASONIC SCATTERING RESPONSES FROM PHYTHOPLANKTONIC CULTURES. Patricio Bos

PROGRAMME - Thursday, September 8



#### Micro Cinema

#### MU5 - General Musical Acoustics

ICA2016-858 HIDDEN INFLUENCE OF RESONATORS FOR NON-LINEAR OSCILLATORS. Peter Hoekje

ICA2016-750 ANTIALIASED SOFT CLIPPING USING A POLYNOMIAL APPROXIMATION OF THE INTEGRATED BANDLIMITED RAMP FUNCTION. Fabian Esqueda Flores

ICA2016-692 HIDDEN MELODY IN MUSIC PLAYING MOTION: MUSIC RECORDING USING OPTICAL MOTION TRACKING SYSTEM. Minho Song

ICA2016-601 COMMENTS ON TRAVELLING WAVE SOLUTIONS IN NONLINEAR ACOUSTIC TUBES: APPLICATION TO MUSICAL ACOUSTICS. Reginald Harrison ICA2016-207 SOPRANO SINGING, WITH AND WITHOUT RESONANCES. Noel Hanna

ICA2016-482 INTERVAL ACCURACY: A PRELIMINARY STUDY OF ISOLATED CHOIR VOICES SINGING MEDIEVAL LITURGICAL CHANT. Juana M. Gutierrez-Arriola



#### Auditorium II

#### PP3 - Psychological and Physiological Acoustics (others)

ICA2016-730 A RESEARCH ON UNDERSTANDING OF PIANO PLAYERS'
PERCEPTION OF SONIC ENVIRONMENT AND CONTROL OF PERFORMANCE
THROUGH BRAIN FUNCTION ANALYSIS AND INTERVIEW. Ayako Matsuo
ICA2016-612 A PHYSICALLY REALISABLE LUMPED PARAMETER MODEL OF

ICA2016-612 A PHYSICALLY REALISABLE LUMPED PARAMETER MODEL OF THE ORGAN OF CORTI. Marcos Simon

ICA2016-766 INFANT EXPLORATORY MOVEMENTS TO LOCALIZE A SOUND OBJECT IN PERI- AND EXTRAPERSONAL SPACE. Fabián C. Tommasini

ICA2016-150 DIMENSIONAL APPROACH OF MUSIC EMOTION RECOGNITION IN RELATION TO THE RUNNING AUTOCORRELATION PARAMETERS. Esteban Zanardi

ICA2016-665 LISTEN CAREFULLY: VOLUME ADJUSTMENT BEHAVIOUR FOR PORTABLE MUSIC PLAYER USAGE WITH HEADPHONES. Rodrigo Ordoñez

ICA2016-279 PITCH AND RHYTHMIC PATTERN DISCRIMINATION OF PERCUSSION INSTRUMENTS FOR COCHLEAR IMPLANT USERS. Federico Nahuel Cacavelos



#### Auditorium III

#### VA 2- Virtual Auditory Scenes

ICA2016-681 PERCEPTION OF THE REVERBERATION IN A REAL ROOM, DEPENDING ON POSITION AND DIRECTION. Annika Neidhardt

ICA2016-170 VALIDATING AURALIZATIONS BY USING ARTICULATION INDEXES. Roberto Tenenbaum

ICA2016-69 PARAMETRIC SPATIAL AUDIO RECORDING AND REPRODUCTION BASED ON PLAYBACK-SETUP-DEFINED BEAMFORMERS. Symeon Delikaris-Manias

ICA2016-826 AN IMMERSIVE TELECONFERENCING SYSTEM USING SPHERICAL MICROPHONES AND WAVE FIELD SYNTHESIS. Jonas Braasch

PROGRAMME - Friday, September 9







#### AA7 - Isotropy and diffuseness in room acoustics

ICA2016-863 EVALUATION OF ISOTROPY OF SOUND FIELD IN A ROOM BASED ON THE DECAY-CANCELED SOUND INTENSITY. Toshiki Hanyu

ICA2016-578 A WAVENUMBER APPROACH TO CHARACTERIZING THE DIFFUSE FIELD CONDITIONS IN REVERBERATION ROOMS. Mélanie Nolan

ICA2016-527 KURTOSIS AS A DIFFUSENESS MEASURE. Cheol Ho Jeong
ICA2016-624 INVESTIGATION ACROSS DIFFERENT CONDITIONS OF ROOM
DIFFUSIVITY MEASURED FROM A VARIABLE ACOUSTICS FACILITY. Jay Bliefnick
ICA2016-556 A RIGOROUS DEFINITION OF THE TERM "DIFFUSE SOUND FIELD" AND
A DISCUSSION OF DIFFERENT REVERBERATION FORMULAE. Uwe M. Stephenson

#### 🔲 Dr. Valsecchi

#### SS3 - Soundscape, Psychoacoustics and Urban Environment

ICA2016-550 SOUNDSCAPE STANDARD UNDER DEVELOPMENT. Brigitte Schulte Fortkamp

ICA2016-528DOWENEEDPSYCHOACOUSTICSWITHINSOUNDSCAPE?.KlausGenuit
ICA2016-856 SOUNDSCAPE AND ACTIVITY: A COMPARISON OF DATA
COLLECTION METHODS IN A PLEASANT URBAN PARK, Daniel Steele

ICA2016-532 IDENTIFICATION AND SEPARATION OF NOISES WITH SPECTROTEMPORAL PATTERNS. Roland Sottek

ICA2016-791 A NOVEL AUDITORY SALIENCY PREDICTION MODEL BASED ON SPECTROTEMPORAL MODULATIONS. Karlo Filipan

#### Cardenal Pironio

#### NS4 - Materials for Noise Control

ICA2016-911 EVALUATION OF THE ACOUSTIC PERFORMANCES OF METAL POWDER BASED MATERIALS. Federico Rossi

ICA2016-323 ACOUSTIC DESIGN OF THE AIR TRANSPARENT SOUNDPROOFING WALL. Seong-Hyun Lee

#### NSI - Aircraft Noise - Aeroacoustics

ICA2016-110 CIVIL AIRCRAFT NOISE REDUCTION: SUMMARY OF RECENT RESEARCH AND OVERVIEW OF FORTHCOMING EFFORTS TO PROMOTE NEW RESEARCH IN A EUROPEAN CONTEXT. Denis Gély

ICA2016-93 FLOW-INDUCED NOISE REGIMES OF A WALL-MOUNTED FINITE AIRFOIL. Danielle Moreau

ICA2016-214 LABORATORY STUDY ON JET INSTALLATION NOISE EFFECTS BY DESIGNING AND USING A 3D MICROPHONE ARRAY. Michael Bauerl

PROGRAMME - Friday, September 9

#### Room 204

#### EL1 - Electroacoustics and Audio Engineering

ICA2016-290 FREQUENCY DISTRIBUTION OF TEMPORAL SOUND PRESSURE CAPACITY REQUIREMENT IN TWO-WAY AND THREE-WAY ACTIVE MONITORS. Aki Makivirta

L ICA2016-436 OUDSPEAKER PROTECTION SYSTEM FOR MOBILE DEVICES. Gottfried Behler

ICA2016-655 MEASUREMENT OF THE CONTRIBUTION TO THE ACOUSTICAL IMPEDANCE OF A LOUDSPEAKER DUE THE INTERNAL CAVITIES IN MAGNETIC CIRCUIT USING AN IMPEDANCE TUBETUBE. Jorge Moreno

ICA2016-355 TWO MODIFIED IEC 60318-4 EAR SIMULATORS FOR EXTENDED DYNAMIC RANGE. Peter Wulf-Andersen



#### Micro Cinema

#### MU<sub>3</sub> - Numerical Computation in Musical Acoustics

ICA2016-54 CHAOTIC BEHAVIOR OF THE PICCOLO. Nicholas Giordano

ICA2016-399 CHARACTERISATION OF BRASS INSTRUMENTS WITH MUTES THROUGH EXPERIMENTAL MEANS AND FINITE-ELEMENT SIMULATIONS. Erika Martínez-Montejo

ICA2016-459 A NUMERICAL MODEL FOR AXIAL STRAIN VIBRATIONS OF BRASS WIND INSTRUMENT BELLS OFFERING SUPERIOR PERFORMANCE COMPARED TO FINITE ELEMENT METHODS. Saranya Balasubramanian

ICA2016-560 MODELLING COLLISIONS OF NONLINEAR STRINGS AGAINST RIGID BARRIERS: CONSERVATIVE FINITE DIFFERENCE SCHEMES WITH APPLICATION TO SOUND SYNTHESIS. Michele Ducceschi



#### Auditorium II

#### NS<sub>5</sub> - Sustainable materials for sound absorption and insulation

ICA2016-605 A MICRO-PERFORATED PANEL ABSORBER WITH PERIODIC SUB-CAVITIES AT DIFFERENT DEPTHS BY QUADRATIC RESIDUE SEQUENCES. Hequn Min

ICA2016-188 MICRO-PERFORATED MATERIALS FOR THE REDUCTION OF FLOW-INDUCED NOISE. Teresa Bravo

ICA2016-852 ACOUSTIC ABSORBERS BASED ON RECYCLED MATERIALS. Federico Miyara

ICA2016-201 SOUND INSULATION RESEARCH OF FRAMELESS THREE-LAYERS CONCRETE PARTITIONS. Anatoly Livshits



#### **Auditorium III**

#### AA3 - Architectural acoustics for non-performance spaces

ICA2016-713 TRANSPARENT MICRO-PERFORATED SOUND ABSORBERS REVISITED. Christian Nocke

ICA2016-383 EFFECTS OF ABSORPTION AND SCATTERING COEFFICIENT UNCERTAINTIES ON LEVELS AND REVERBERATION TIMES COMPUTED WITH SOUND PARTICLE SIMULATION: A CASE STUDY. Stefan Weigand

PROGRAMME - Friday, September 9

ICA2016-464 EFFICIENT PREDICTION OF LOW-FREQUENCY SOUND FIELDS IN RECTANGULAR ROOMSWITHLOCALIZED BOUNDARY ABSORPTION. Edwin Reynders



#### 11:00-13:00



#### Juan Pablo II

#### AA7 - Isotropy and diffuseness in room acoustics

ICA2016-703 RELATION BETWEEN ACOUSTIC MEASUREMENTS AND THE PERCEIVED DIFFUSENESS OF A SYNTHESISED SOUND FIELD. Michael Cousins

ICA2016-777 NON DIFFUSE SOUND FIELD IN THE REVERBERATION ROOM. Martijn Vercammen

ICA2016-717 DECAY CURVES IN COUPLED REVERBERANT SPACES. Jamilla Balint ICA2016-919 EFFECTIVENESS OF REVERBERATION ROOM DESIGN: ROOM SIZE AND SHAPE AND ITS EFFECT ON MEASUREMENT ACCURACY. Md Mehadi Hasan ICA2016-277 PROPOSAL OF THE ALGORITHM FOR ACCURATE SOUND SCATTERING COEFFICIENT MEASUREMENTS. Monika Rychtarikova

ICA2016-225 SPATIAL VARIATIONS OF THE MEAN FREE PATH IN LONG ROOMS: INTEGRATION WITHIN THE ROOM-ACOUSTIC DIFFUSION MODEL. Vincent Valeau



#### Dr. Valsecchi

#### SS3 - Soundscape, Psychoacoustics and Urban Environment

ICA2016-609 ACCURACY OF COMPUTER SIMULATION SOFTWARE USING HYBRID MODELS FOR MICROSCALE URBAN ENVIRONMENTS. Rafaella Rocha ICA2016-222ASSESSMENTOF COMBINED ENVIRONMENTAL SOUNDS. Sabrina Skoda ICA2016-720SOUNDS CAPE IDENTIFICATION IN TERMS OF URBAN MORPHOLOGY

ICA2016-263 NOISE IN A GERMAN OPERATION THEATRE: STRAIN FOR THE MEDICAL STAFF. Silvester Siegmann

ICA2016-119 A COMPARATIVE STUDY ON THE SOUNDSCAPE OF PUBLIC SPACES IN COASTAL AND INLAND CITIES IN NORTHERN CHINA. Lingtong Deng

ICA2016-75 FOUNTAINS AS SOUND ELEMENTS IN THE DESIGN OF URBAN PUBLIC WALKS SOUNDSCAPES. Fernando Javier Elizondo Garza



#### **Cardenal Pironio**

#### NS4 - Materials for Noise Control

ACCORDING TO SOUND RECORDINGS. Lei Yu

ICA2016-443 A SYSTEMATIC REVIEW OF SEMI-EMPIRICAL ACOUSTIC LINER MODELS UNDER GRAZING FLOW AND HIGH SPL. Andre Spillere

ICA2016-131 "INFLUENCE OF AN ADAPTIVE NACELLE INLET LIP ON FAN NOISE PROPAGATION". Gunilla Efraimsson

ICA2016-108 EXPERIMENTAL STUDY OF CASING TREATMENT IMPACT ON DUCTED COUNTER-ROTATING FAN NOISE. Iurii Khaletskii

ICA2016-430 AERO-ACOUSTIC FAN BROADBAND NOISE: A NEW PARAMETERIZATION PROPOSAL. Rafael Cuenca

ICA2016-191 PARCIMONIOUS APPROACHES FOR THE LABORATORY SYNTHESIS OF WALL-PRESSURE EXCITATIONS. Cedric Maury

PROGRAMME - Friday, September 9



#### Room 204

#### ELI - Electroacoustics and Audio Engineering

ICA2016-810 EFFECTIVE RADIATION AREA (SD) FOR AN AXISYMMETRIC PISTON RADIATING IN AN INFINITE BAFFLE. Luis Angelo Velarde Criado

ICA2016-215 IMPLEMENTATION OF A LOW COST REMOTE FAILURE
MONITORING SYSTEM FOR SPEAKER LINES IN A SHOPPING MALL, Luis Corral

ICA2016-155 DEVELOPMENT OF MULTICHANNEL SINGLE-UNIT MICROPHONE USING SHOTGUN MICROPHONE ARRAY. Yo Sasaki

ICA2016-193MODELINGOFTHEELECTROACOUSTICS COUPLINGOFELECTROSTATIC MICROPHONES INCLUDING THE PREAMPLIFIER CIRCUIT. Bernardo Murta

ICA2016-147 AN INVESTIGATION ABOUT DIFFUSE-FIELD CALIBRATION OF MEASUREMENT MICROPHONES BY THE RECIPROCITY TECHNIQUE. Ricardo E. Musafir

ICA2016-47 ANALYSIS ON THE INTERAURAL LEVEL DIFFERENCE IN NEAR-FIELD-COMPENSATED HIGHER ORDER AMBISONICS REPRODUCTION. Bosun Xie



#### Micro Cinema

#### MU4 - Wind Instruments

ICA2016-748 "1. REED CHAMBER RESONANCES AND ATTACK TRANSIENTS IN FREE REED INSTRUMENTS". James Cottingham

ICA2016-756 AEROACOUSTICS OF FREE REEDS. Maximilian Nussbaumer ICA2016-610 VALIDATION OF BRASS WIND INSTRUMENT RADIATION MODELS IN RELATION TO THEIR PHYSICAL ACCURACY USING AN OPTICAL SCHLIEREN IMAGING SETUP. Amaya López-Carromero

ICA2016-347 INFLUENCE OF STRAIN-GAUGE SENSORS ON THE VIBRATIONAL BEHAVIOUR OF SINGLE REEDS Vasileios Chatziioannou

ICA2016-870 EFFECT OF INPUT SIGNAL SHAPE ON THE NONLINEAR STEEPENING OF TRANSIENT ACOUSTIC WAVES IN A CYLINDRICAL TUBE. Pablo Luis Rendón



#### **Auditorium II**

#### PPI - Free-Field Virtual Psychoacoustics and Hearing Impairment

ICA2016-711 HEARING IMPAIRMENT, HEARING AIDS, AND CUES FOR SELF MOTION. W. OwenBrimijoin

ICA2016-653 FACTORS INFLUENCING THE ECOLOGICAL VALIDITY OF LABORATORY-BASED SPEECH TESTS. Joerg Buchholz

ICA2016-431 SPEECH PERCEPTION BY CHILDREN IN A REAL-TIME VIRTUAL ACOUSTIC ENVIRONMENT WITH SIMULATED HEARING AIDS AND ROOM ACOUSTICS. Janina Fels

ICA2016-776 AUDITORY LOCALIZATION OF REAL AND VIRTUAL SOUNDS BY HEARING IMPAIRED LISTENERS. Douglas Brungart

ICA2016-123 STUDY ON EVALUATION OF SPEECH INTELLIGIBILITY FOCUSING ON SPEECH PRIVACY. Hyojin Lee

PROGRAMME - Friday, September 9



#### **Auditorium III**

#### AA3 - Architectural acoustics for non-performance spaces

ICA2016-156 ROOM ACOUSTICAL OPTIMIZATION: AVERAGE VALUES OF ROOM ACOUSTICAL PARAMETERS AS A FUNCTION OF ROOM SHAPE, ABSORPTION AND SCATTERING Uwe M. Stephenson

ICA2016-127 EFFICIENCY FACTORS CHARACTERIZING SOUND REFLECTION PROPERTIES OF A ROOM CEILING. Nikolay Kanev

ICA2016-197 PHYSICALLY-BASED NUMERICAL SOUND PROPAGATION MODELING IN ROOMS WITH NON-FLAT WALLS. Kevin Rabisse

ICA2016-900 STUDY CASE OF A PUBLIC HOSPITAL. Marilita Giuliano

ICA2016-313 MULTIPLEX CINEMA HALLS: DESIGN AND CONSTRUCTION OF SIX HALLS IN THE CITY OF MAR DEL PLATA. Daniel Ottobre

ICA2016-572 ACOUSTICS OF THE BORDER CULTURAL CENTER IN THE NEIGHBORHOOD OF PALERMO, CITY OF BUENOS AIRES, ARGENTINA. Agustin Arias



#### 14:30-15:30



#### Juan Pablo II

#### AA7 - Isotropy and diffuseness in room acoustics

ICA2016-232 EVALUATION OF TEMPORAL DIFFUSION OF ROOM IMPULSE RESPONSES BY USING THE AUTOCORRELATION ANALYSIS. Shin-Ichi Sato

ICA2016-551 EXPERIMENTAL INVESTIGATION ON VARIED DEGREES OF SOUND FIELD DIFFUSENESS IN ENCLOSED SPACES. Alejandro Bidondo

ICA2016-574 GAUSSIAN WHITE NOISE IMPULSE RESPONSES AS ABSOLUTE DIFFUSION REFERENCE VALUES. Alejandro Bidondo

ICA2016-393 REPRODUCTION OF THE MODAL RESPONSE OF ENCLOSURES BY MEANS OF INTERACTIVE AURALIZATION. Diego Mauricio Murillo Gomez



#### Dr. Valsecchi

#### SS3 - Soundscape, Psychoacoustics and Urban Environment

ICA2016-267 INFLUENCE OF EXPERIMENTAL CONDITIONS ON SOUND PLEASANTNESS EVALUATIONS. Pierre Aumond

ICA2016-794 STUDYING THE URBAN ACOUSTIC EXPERIENCE OF ELDERLY DUTCH PEOPLE IN RELATION TO THEIR ACTIVITIES: RESULTS FROM A SOUNDWALK IN AMSTERDAM. Edda Bild



#### **Cardenal Pironio**

#### NS6 - Noise: Sources and Control (others)

ICA2016-116 A FIELD INVESTIGATION ON THE VIBROACOUSTIC IMPACT OF AN UNDERGROUND METRO LINE. Marco Carlo Masoero

ICA2016-276 SHIELDING THE SOURCE, Ricardo Ouintana

ICA2016-773 ACOUSTICS OF TEARING VELCRO. Anurag Agarwal

PROGRAMME - Friday, September 9



#### Room 204

#### EL1 - Electroacoustics and Audio Engineering

ICA2016-230 ESTIMATION OF DIRECTIONAL LOCALIZATION OF SOUND FROM REPRODUCED WAVE SURFACE. Akio Ando

ICA2016-422 PHOTOLIPTOPHONE: A VIRTUALLY UNKNOWN ANCESTOR OF OPTICAL AUDIO SYSTEMS TO REPRODUCE PRINTED SOUND ON PLAIN PAPER. Ianina Canalis

ICA2016-559 PLATE REVERBERATION: TOWARDS THE DEVELOPMENT OF A REAL-TIME PHYSICAL MODEL FOR THE WORKING MUSICIAN. Michele Ducceschi

ICA2016-613 EFFECTS OF OPERATION AT AND OFF-ELECTRICAL RESONANCE ON THE PERFORMANCE INDICES OF LINEAR ALTERNATORS UNDER THERMOACOUSTIC POWER-CONVERSION CONDITIONS. Abdelmaged Ibrahim Essawey



#### Micro Cinema

#### MU2 - Musical Acoustics (others)

ICA2016-8 ABOUT THE ACOUSTIC AND OTHER NON-DESTRUCTIVE METHODS FOR THE CHARACTERIZATION OF OLD HISTORICAL STRING MUSICAL INSTRUMENTS – AN OVERVIEW. Antoine Chaigne

ICA2016-25 COMPARISON BETWEEN THREE DIFFERENT VIENNESE PIANOS OF THE NINETEENTH CENTURY. Antoine Chaigne

ICA2016-171 CONTRIBUTION OF THE VIBRATION OF VARIOUS COMPONENTS OF PIANO IN THE RESULTING PIANO SOUND. Jin Jack Tan



#### Auditorium II

#### PPI - Free-Field Virtual Psychoacoustics and Hearing Impairment

ICA2016-493 AN INTRINSICALLY SOURCE INDEPENDENT METHOD TO ESTIMATE INTELLIGIBILITY. Roger Schwenke

ICA2016-775 DOES LEARNING A ROOM'S REFLECTIONS AID SPATIAL HEARING? Bernhard Seeber

ICA2016-373 PRIOR EXPOSURE TO ROOM ACOUSTICS AND ITS EFFECT ON LOCALIZATION. Samuel Clapp

ICA2016-400 ANALYSIS OF HUMAN RESPONSE TO COMBINED NOISE AND VIBRATIONS IN AIRPLANES. Roberto Jordan

#### **Auditorium III**

Young Argentinian Acoustics Meeting & Young Acousticians Network Meeting



#### 15:50-16:30



#### Juan Pablo II

ICA2016-895 Hearing Protectors: State of the Art and Emerging Technologies of Comfort and Uncertainty in Measurements"

Samir Gerges

## Tuesday,6

© 09:40-10:00

#### Lounge lateral room- LCD ONE

#### AA5 - Challenges and solutions in acoustics measurements and design

ICA2016-57 OBJECTIVE DETECTION METHOD OF SOUND COLORATION IN ELECTROACOUSTIC ENHANCEMENT SYSTEM. Takayuki Watanabe

#### 10:00-10:20

#### AA5 - Challenges and solutions in acoustics measurements and design

ICA2016-442 THE ACOUSTIC PERFORMANCE OF WALLS MADE WITH SUSTAINABLE AND INDUSTRIALIZED PANELS. Rodrigo Scoczynski Ribeiro

#### **10:20-10:40**

#### AA3 - Architectural acoustics for non-performance spaces

ICA2016-409 ULTRA LOW FREQUENCY FLOATING FLOORS CONTROLING RESONANCES. Alexandre Boratto

#### [3] 11:00-11:20

#### AA3 - Architectural acoustics for non-performance spaces

ICA2016-707 ACOUSTIC PROJECTS OF CONTEMPORARIES OPEN PLAN OFFICES IN BRAZIL. Vivian Ribeiro

#### 11:20-11:40

#### AA3 - Architectural acoustics for non-performance spaces

ICA2016-704 ACOUSTICINSULATION FACADE OF HISTORICAL BUILDING THAT WILL BETRANSFORMED IN THE FIRST BRAZILIAN 6 STARS HOTEL. Raquel Rossatto Rocha

### 11:40 - 12:00

#### AA3 - Architectural acoustics for non-performance spaces

ICA2016-162 ACOUSTICS AND ARCHITECTURE IN OFFICE BUILDINGS: HOW THE SITE PLAN AND THE SHAPE OF THE BUILDING AFFECT THE LEVELS OF INCIDENT NOISE IN FACADES. Andrea Destefani

#### 7 15:10 A 15:30

#### SS3 - Soundscape, Psychoacoustics and Urban Environment

ICA2016-815 THE MEXICO CITY CATHEDRAL: AN ARQUEOACOUSTICAL AND MUSICOLOGICAL ANALYSIS. Alejandro Ramos- Amézquita

#### **15:30-15:50**

#### SS3 - Soundscape, Psychoacoustics and Urban Environment

ICA2016-329 EXPANDING SONIC IMAGINATION IN DESIGN PRACTICES WITH ARCHITECTURAL SOUNDWALKS. Alessia Milo

POSTERS SESION

#### 15:50-16:10

#### SS3 - Soundscape, Psychoacoustics and Urban Environment

ICA2016-476 SOUNDSCAPES IN THREE AREAS OF THE TUCUMÁN PROVINCE, ARGENTINA. Natalia Cerasuolo

#### 16:30-16:50

#### EN1 - Noise assessment and control.

ICA2016-229 URBANA ACOUSTIC ASSESSMENT: URBAN NOISE CHARACTERIZATION OF MIGUEL ROSSAFA SQUARE IN UMUARAMA PARANÁ. Dayane Cristina Lima Estercio

#### 16:50-17:10

#### EN2 - Noise mapping

ICA2016-478 THE PLACE OF THE TRAM REGARDING TO THE 49/2002/EC DIRECTIVES NOISE MAP. Maria Bite

#### 17:10- 17:30

#### EN3 - Road traffic noise modeling and noise barrier

ICA2016-321 COMPARISON OF THE INSERTION LOSS OF NOISE BARRIER WITH DIFFERENT SHAPES OF UPPER STRUCTURE. Chan Hoon Haan

#### 09:40-10:00

#### Lounge lateral room - LCD TWO

#### NSI - Aircraft Noise - Aeroacoustics

ICA2016-615 VALIDATION OF COLD JET NOISE RIG AT LABORATORY OF ACOUSTIC & VIBRATION (LVA) OF FEDERAL UNIVERSITY OF SANTA CATARINA (UFSC). Julio A. Cordioli

#### 10:00-10:20

#### NSI - Aircraft Noise - Aeroacoustics

ICA2016-695 ACOUSTIC PROPERTIES OF GREEN WALLS: ABSORPTION AND INSULATION. Rodolfo Thomazelli

#### 10:20-10:40

#### NSI - Aircraft Noise - Aeroacoustics

ICA2016-865 BIOBASED POROUS ACOUSTICAL ABSORBER MADE FROM POLYURETHANE AND WASTE TIRES PARTICLES. Guillermo Soto

#### 11:00-11:20

#### NS4 - Materials for Noise Control

ICA2016-128 INVESTIGATION OF THE NOISE REDUCTION PROVIDED BY

#### VEGETATION BELT IN DIFFERENT DESIGN STYLES. Qinying Zhang

11:20-11:40

#### NS4 - Materials for Noise Control

ICA2016-326 EXPERIMENTAL STUDY ON SOUND PERFORMANCE OF MICROPERFORATED PANEL WITH MEMBRANE-TYPE ACOUSTIC METAMATERIALS COMPOSITE STRUCTURE. Tuo Xing

11:40-12:00

#### NS4 - Materials for Noise Control

ICA2016-475 EVALUATION AND COMPARISON OF ACOUSTIC INSULATION OF TRADITIONAL AND ALTERNATIVE MASONRY IN TUCUMAN, ARGENTINA. Leonardo Paterlini

75:10-15:30

#### BAI - Biomedical Acoustics

ICA2016-292 TYMPANIC MEMBRANE PHYSIOLOGY, María Tieso

15:30-15:50

#### BAI - Biomedical Acoustics

ICA2016-324 DETECTION OF ABNORMAL LUNG SOUNDS CONSIDERING SPECTRAL AND TEMPORAL FEATURES OF HEART SOUNDS. Shoichi Matsunaga

15:50-16:10

#### BAI - Biomedical Acoustics

ICA2016-499 CONTINUOUS WAVELET TRANSFORM FOR TISSUE PERIODICITY ESTIMATION: EFFECT OF NOISE AND SCATTERER POSITION VARIABILITY. Christiano Machado

16:30-16:50

#### NS4 - Materials for Noise Control

ICA2016-604 CALCULATION OF NOISE EMITTED BY TECHNOLOGY EQUIPMENT SOUNDPROOFING COMPARTMENT. Ilya Tsukernikov

16:50-17:10

#### NS4 - Materials for Noise Control

ICA2016-660 MEMBRANE ACOUSTIC METAMATERIAL WITH MULTIPLE MAGNETIC NEGATIVE STIFFNESS CELLS. tuo Xing

17:10- 17:30

#### NS4 - Materials for Noise Control

ICA2016-701 REVIEW OF THE ACOUSTIC PROPERTY OF THE OPEN GRADED FRICTION COURSE (OGFC). Eric Brandão

POSTERS SESION

09:40-10:00

#### Lounge lateral room - LDC THREE

#### **CA2 - Communication Acoustics**

ICA2016-833 EVALUATION OF THE FREQUENCY RESPONSE OF CONSUMER HEADPHONES AND ITS INFLUENCE TOWARDS A BINAURAL REPRODUCTION WITH HRTF INDIVIDUALIZATION. Jose J. Lopez

ا 10:00-10:20

#### SPI - Acoustics Array Systems

ICA2016-295 SOFTWARE DEVELOPMENT OF 3D IMPULSE RESPONSE: USES AND APPLICATIONS. Federico Nahuel Cacavelos

10:20-10:40

#### SPI - Acoustics Array Systems

ICA2016-352 A SOUND SOURCE LOCALIZATION ALGORITHM USING MICROPHONE ARRAY WITH RIGID BODY. Tianshu Qu

10:40-11:00

#### SP3 - Model-Based Optimization/Estimation and Analysis

ICA2016-367 AN ARTIFICIAL NEURAL NETWORK MODEL FOR PREDICTING SOUND DIRECTION IN DIFFERENT ACOUSTIC ENVIRONMENTS. Tao Song

**II:00-II:20** 

#### SP3 - Model-Based Optimization/Estimation and Analysis

ICA2016-530 A NEW TOOLBOX FOR THE IDENTIFICATION OF DIAGONAL VOLTERRA KERNELSALLOWINGTHEEMULATIONOFNONLINEARAUDIO DEVICES. Thomas Schmitz

15:30-15:50

#### SII - Sound intensity and Inverse methods in acoustics

ICA2016-533 INVERSE ACOUSTIC CHARACTERIZATION OF RIGID FRAME POROUS MATERIALS FROM IMPEDANCE TUBE MEASUREMENTS. Matti Niskanen

15:50-16:10

#### SI2 - Acoustical measurements and instrumentation (others)

ICA2016-784 CALIBRATION OF PIEZOELECTRIC ACCELEROMETERS AT INTI. Alexis Zapata

16:30-16:50

#### ELI - Electroacoustics and Audio Engineering

ICA2016-747 ESTIMATION OF THE THIELE-SMALL PARAMETERS IN MOVILE APPLICATION USING AS LINK PURE DATA PROGRAMMING AND MICROSOFT VISUAL STUDIO. Alexander Calva

16:50-17:10

#### EL1 - Electroacoustics and Audio Engineering

ICA2016-425 MULTI-ZONE SOUND FIELD REPRODUCTION METHOD INCLUDING DISTANCE EFFECTS. Taku Shimizu

17:10- 17:30

#### EL1 - Electroacoustics and Audio Engineering

ICA2016-488 MULTIBAND DISTORTION PEDAL. Alejandro Serrano

## Wednesday,7

10:00-10:20

#### Lounge lateral room - LCD ONE

#### NS2 - Hearing Protectors

ICA2016-45 TRANSMISSION LOSS OPTIMIZATION USING GENETIC ALGORITHM IN HELMHOLTZ RESONATOR UNDER SPACE CONSTRAINTS. Sérgio Klippel Filho

??? I0:20-I0:40

#### NS2 - Hearing Protectors

ICA2016-668 TRANSIENT RESPONSE PREDICTION OF AN IMPULSIVELY EXCITED STRUCTURE USING A SCALING APPROACH. Xianhui Li

11:00-11:20

#### AA2 - Acoustic of worship spaces

ICA2016-331 ANALYSIS OF ACOUSTIC VARIATIONS DUE TO DIFFERENT USE CONFIGURATIONS IN THE "BASILICA DE SANTA MARIA DE ELCHE", VENUE OF THE "MISTERI". Alicia Gimenez

??? II:20-II:40

#### **EDI** - Education in Acoustics

ICA2016-366 PRACTICAL CLASS ON ROOM ACOUSTIC FOR SOUND AND RECORDING DEGREE PROGRAM IN SANTA FE, ARGENTINA. Paula Gareis

11:40-12:00

#### EDI - Education in Acoustics

ICA2016-477 THE SOUND IN THE HABIT: IT'S APPROACH IN THE ELECTIVE MATTER INTO THE ARCHITECTURE CAREER. Beatriz Garzón

14:50-15:10

#### AA6 - Concert Hall Acoustics

ICA2016-676 ANALYSIS OF REVERBERATION TIMES AND ENERGY DECAY

POSTERS SESION

CURVES OF 1/12 OCTAVE BANDS IN PERFORMANCE SPACES CONSIDERING MUSICAL SCALE. Akiho Matsuo

15:10-15:30

#### AA6 - Concert Hall Acoustics

ICA2016-511 ACOUSTICS OF NEW AND RENOVATED CHAMBER MUSIC HALLS IN RUSSIA. Nikolay Kanev

15:30-15:50

#### AA6 - Concert Hall Acoustics

ICA2016-502 RANK-ORDERING OPERA HOUSES ACCORDING TO THEIR SOUND QUALITY PARAMETERS USING THE PROMETHEE II METHOD. Calebe Giaculi Júnior

15:50-16:10

#### AA6 - Concert Hall Acoustics

ICA2016-694 INFLUENCE OF MUSIC-INDUCED FLOOR VIBRATION ON IMPRESSION OF MUSIC IN CONCERT HALLS. Takahisa Miyata

09:40 - 10:00

## Lounge lateral room - LCD TWO

#### PA2 - Sonochemistry and Sonoprocessing

ICA2016-922 AN ULTRASONIC APPROACH TO INVESTIGATE THE EFFECT OF AERATION ON RHEOLOGICAL PROPERTIES OF SOFT BIOLOGICAL MATERIALS WITH BUBBLES EMBEDDED. Hussein Elmehdi

10:00 - 10:20

#### PA3 - Ultrasound

ICA2016-406 EFFECT THE ULTRASOUND WAVE PROPAGATION REGIME IN THE HEAT SOURCE TERM OF PENNE'S BIO-HEAT TRANSFER EQUATION. Guillermo Cortela

10:20 - 10:40

#### PA2 - Ultrasound

ICA2016-221 HYBRID LEVITATION APPARATUS FOR LABORATORY X-RAY DIFFRACTION STUDY. Yong-Il Kim

11:00hs - 11:20

#### PA3 - Ultrasound

ICA2016-344 ACOUSTIC EMISSION SENSORS FOR GFRP WIND TURBINE BLADE. Ki-Bok Kim

11:20 - 11:40

#### PA3 - Ultrasound

ICA2016-348 A COMPLETE MEDICAL ULTRASOUND IMAGING SIMULATION BASED ON COMSOL®AND MATLAB®. Wagner Pereira

😗 11:40hs - 12:00

#### PA3 - Ultrasound

ICA2016-819 ON THE POSSIBILITY OF NON-INVASIVE TISSUE ASSESSMENT USING INDUCED CHANGES IN BACKSCATTERED ENERGY: A K-WAVE SIMULATION. César Teixeira

🥰 10:00-10:20

#### Lounge lateral room - LCD THREE

#### **SCI - Speech Communication**

ICA2016-786. DETAILING SPEECH PROCESSING IN INFANCY USING CORTICAL AUDITORY EVOKED POTENTIALS AND MULTIDIMENSIONAL SCALING. Paul Iverson

10:20-10:40

#### **SCI - Speech Communication**

ICA2016-185 EFFECT OF CONSONANT MANNER ON L2 SPEECH PERCEPTION IN REVERBERATION. Hinako Masuda

11:00-11:20

#### **SCI** - Speech Communication

ICA2016-738 A 3D COMPUTER GAME FOR TESTING PERCEPTION OF ACOUSTIC DETAIL IN SPEECH. Daniel Duran

**11:20-11:40** 

#### SCI - Speech Communication

ICA2016-300 VOICE CONVERSION OF EMOTIONAL SPEECH USING HIDDEN MARKOV MODEL-BASED SPEECH RECOGNITION AND SYNTHESIS. Tetsuo Kosaka

#### 11:40-12:00

#### SCI - Speech Communication

ICA2016-526 INVESTIGATION OF THE EFFECT OF ARTICULATORY-BASED SECOND LANGUAGE PRODUCTION LEARNING ON SPEECH PERCEPTION. Atsuo Suemitsu

14:50-15:10

#### SCI - Speech Communication

ICA2016-645 AN ACOUSTIC EXAMINATION OF LATERALS IN LOWER SORBIAN. Phil Howson

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15:10-15:30

#### SCI - Speech Communication

ICA2016-140 CONTEXT SPEECH RATE CAN AFFECT ARABIC GEMINATE PERCEPTION. Christopher Heffner

15:30-15:50

#### **SCI - Speech Communication**

ICA2016-544 THE ACOUSTICS OF WORD-FINAL FAKE GEMINATES IN EGYPTIAN ARABIC. Kyle Jones

15:50-16:10

#### SCI - Speech Communication

ICA2016-770 EFFECTS OF FIRST- AND SECOND-LANGUAGE ACCENTS ON VOWEI PERCEPTION MEASURED BY CORTICAL AUDITORY EVOKED POTENTIALS. Emma Brint

14:50-15:10

#### Lounge lateral room - LCD TWO

#### AO1 - Acoustical Oceanography

ICA2016-518 CONCURRENT ACOUSTICAL AND OPTICAL OBSERVATIONS IN ZOOPLANKTON STUDIES. Lukasz Hoppe

15:10-15:30

#### UW1 - Underwater Acoustics

ICA2016-151 A STUDY ON SPATIAL FADING IN A SHALLOW WATER ACOUSTIC CHANNEL. Gil Felix Greco

15:30-15:50

#### UWI - Underwater Acoustics

ICA2016-192 A NEW IMPROVEMENT OF RAKE ALGORITHM BASED ON PREDICTION OF MULTIPATH STRUCTURE OF UNDERWATER ACOUSTIC CHANNEL. Zhi Shaolong

15:50-14:10

#### UW1 - Underwater Acoustics

ICA2016-235 A SURVEY ON RECENT RESEARCHES OF MAC PROTOCOLS IN UASNS. Xiao  $\,$  Feng

14:50-15:10

#### PA3 - Ultrasound

ICA2016-221 HYBRID LEVITATION APPARATUS FOR LABORATORY X-RAY DIFFRACTION STUDY. Yong-Il Kim

[2] 11:00-11:20

#### PA3 - Ultrasound

ICA2016-344 ACOUSTIC EMISSION SENSORS FOR GFRP WIND TURBINE BLADE. Ki-Bok Kim

11:20-11:40

#### PA3 - Ultrasound

ICA2016-348 A COMPLETE MEDICAL ULTRASOUND IMAGING SIMULATION BASED ON COMSOL®AND MATLAB®. Wagner Pereira

11:40-12:00

#### PA3 - Ultrasound

ICA2016-819 ON THE POSSIBILITY OF NON-INVASIVE TISSUE ASSESSMENT USING INDUCED CHANGES IN BACKSCATTERED ENERGY: A K-WAVE SIMULATION. César Teixeira

## Thursday,8

10:00-10:20

#### Lounge lateral room - LCD ONE

#### MU2 - Musical Acoustics (others)

ICA2016-821 IMPROVED FREQUENCY-DEPENDENT DAMPING FOR TIME DOMAIN MODELLING OF LINEAR STRING VIBRATION. Charlotte Desvages

**3** 10:20-10:40

#### MU<sub>3</sub> - Numerical Computation in Musical Acoustics

ICA2016-576 TRANSMISSION-LINE MATRIX MODELING AND TRANSFORMED AREA FUNCTIONS OF FLARING MUSICAL HORNS. Felipe Orduña

**11:00-11:20** 

### PP1 - Free-Field Virtual Psychoacoustics and Hearing Impairment

ICA2016-53 MEASUREMENT OF PINNA FLARE ANGLE AND ITS EFFECT ON INDIVIDUALIZED HEAD-RELATED TRANSFER FUNCTIONS. Guangzheng Yu

11:20-11:40

## PPI - Free-Field Virtual Psychoacoustics and Hearing Impairment

ICA2016-816 ARE THE PRECEDENCE EFFECT AND SPATIAL IMPRESSION THE RESULT OF DIFFERENT AUDITORY PROCESSES?. Jonas Braasch

11:40- 12:00

#### PP2 - Product Sound Quality and Multimodal Interaction

ICA2016-851 SOUND QUALITY APPROACH FOR DETECTING ABNORMAL NOISE OF DEHUMIDIFIER. Sung-Hwan Shin

15:10-15:30

#### PP3 - Psychological and Physiological Acoustics (others)

ICA2016-114 EVALUATION OF APPLE IOS-BASED AUTOMATED AUDIOMETRY. Jing Chen

15:30-15:50

#### PP3 - Psychological and Physiological Acoustics (others)

ICA2016-252 INVESTIGATING THE COCHLEAR CONTRIBUTION TO AUDITORY PRE-MASKING. Yi-Wen Liu

15:50-16:10

#### PP3 - Psychological and Physiological Acoustics (others)

ICA2016-582 IMPAIRMENT OF HUMAN DNA AS A RESULT OF HIGHLY ENERGETIC IMPULSE NOISE: GENE EXPRESSION PROFILES AS PART OF BIOLOGICAL MONITORING Silvester Siegmann

16:30-16:50

#### PP3 - Psychological and Physiological Acoustics (others)

ICA2016-625 MODELLING OF THE AUDITORY RIBBON SYNAPSE. Pablo Esteban Etchemendy

16:40-17:10

#### PP3 - Psychological and Physiological Acoustics (others)

ICA2016-700 AUDITORY ENVIRONMENTAL CONTEXT AFFECTS VISUAL DISTANCE PERCEPTION. Ramiro Vergara

17:10-17:30

#### PP3 - Psychological and Physiological Acoustics (others)

ICA2016-735 FLEXIBLE SOLVER FOR 1-D COCHLEAR PARTITION SIMULATIONS Manuel C. Eguía

10:20-10:40

## 🗔 Lounge lateral room- LCD TWO

#### VA 1- Virtual Acoustics

ICA2016-342 AN ASYNCHRONOUS HRTF MEASUREMENT METHOD BASED ON PHASE ALIGNMENT. Tianshu Qu

11:00-11:20

#### SP4 - Signal Processing in Acoustics (others)

ICA2016-125 INTER-CHANNEL TRANSFER FUNCTION BASED PARAMETRIC STEREO CODING SYSTEM. Tianshu Qu

#### 11:20-11:40

#### SP4 - Signal Processing in Acoustics (others)

ICA2016-303 A CONTROL OF MAXIMUM DEMODULATION DISTANCE WITH GAS LAYER FOR PARAMETRIC LOUDSPEAKER. Kirara Ariyoshi

#### 11:40- 12:00

#### SP4 - Signal Processing in Acoustics (others)

ICA2016-304 DISTANT-TALKING SPEECH ACQUISITION USING OPTICAL MEASUREMENT SYSTEM BASED ON SPECKLE INTENSITY. Tomoyuki Mizuno

#### 14:50-15:10

#### SP4 - Signal Processing in Acoustics (others)

ICA2016-306 A STUDY ON NEAR-FIELD SOUND PROPAGATION BASED ON DELAY-FILTERING FOR CARRIER AND SIDEBAND WAVES USING CURVED-TYPE PARAMETRIC LOUDSPEAKER. Ryosuke Uemura

#### 15:10-15:30

#### SP4 - Signal Processing in Acoustics (others)

ICA2016-307 INVESTIGATION ON SUITABLE ACOUSTIC FEATURES IN DEEP NEURAL NETWORK FOR ENVIRONMENTAL SOUND DISCRIMINATION. Sakiko Mishima

#### 15:30-15:50

#### SP4 - Signal Processing in Acoustics (others)

ICA2016-308 AN EVALUATION OF DISCOMFORT REDUCTION BASED ON AUDITORY MASKING FOR RAILWAY BRAKE SOUNDS. Sayaka Okayasu

## 15:50-16:10

#### SP4 - Signal Processing in Acoustics (others)

ICA2016-310 REVERBERATION DESIGN BASED ON ACOUSTIC PARAMETERS FOR REFLECTIVE AUDIO-SPOT SYSTEM WITH PARAMETRIC AND DYNAMIC LOUDSPEAKERS. Ryosuke Uemura

## **30:10-16:30**

#### SP4 - Signal Processing in Acoustics (others)

ICA2016-314 CONTROL SIGNAL DESIGN FOR REDUCING DISCOMFORT OF INFANT CRY BASED ON MITIGATION OF TIME FLUCTUATION. Aomi Kobayashi

## 16:30-16:50

#### SP4 - Signal Processing in Acoustics (others)

ICA2016-614 CROSS-FREQUENCY COUPLING AND PHASE SYNCHRONIZATION IN NON-LINEAR ACOUSTICS. Juan Manuel Rosselló

#### 16:50-17:10

#### SP4 - Signal Processing in Acoustics (others)

ICA2016-881 THREE-DIMENSIONAL SPATIAL SOUND-IMAGE DESIGN BASED ON SEPARATING EMISSION WITH CURVED-TYPE PARAMETRIC LOUDSPEAKER Shinya Komori

#### 🔆 09:40-10:00

#### Lounge lateral room - LCD THREE

## FIA-PP - Psychological and Physiological Acoustics (PP - Acústica Psicológica y Fisiológica)

FIA2016-95. SOUND ANALYSIS OF TRAFFIC ROUTES IN COPACABANA, RIO DE JANEIRO. María Lygia Niemeyer

#### 10:00-10:20

## FIA-PP - Psychological and Physiological Acoustics (PP - Acústica Psicológica y Fisiológica)

FIA2016-78 STANDARDS, LABORATORY MEASUREMENT AND ANALYSIS OF ACOUSTIC PERFORMANCE TILES SANDWICH. Bruna Fuzzer

#### 10:20-10:40

#### FIA- SS - Soundscape (SS - Paisaje sonoro)

FIA2016-60 LISTENING TO FAITH: DESCRIPTION OF THE ALLOTMENT VILLAGE CAMPESTRE SOUNDSCAPE, IN MACEIÓ, BRAZIL. Maria Lúcia Oiticica

#### 11:00-11:20

#### FIA- NS - Noise: Sources and Control (NS - Ruido: Fuentes y su Control)

FIA2016-64 ACOUSTIC PERFORMANCE TO AIRBORN NOISE IN VERTICAL PARTITIONS ON CONSTRUCTION LIGHT STEEL FRAMING. CASE STUDY: RESIDENTIAL BUILDING, PERNAMBUCO- BRAZIL. Selma Bandeira Costa

#### 11:20-11:40

#### FIA- NS - Noise: Sources and Control (NS - Ruido: Fuentes y su Control)

FIA2016-17 SOUND POWER COMPARISON BETWEEN A NEW DEVICE AND A DAILY USE DEVICE UNDER THE STANDARD ISO 3741-1. Esteban Lombera

#### 11:40- 12:00

#### FIA- NS - Noise: Sources and Control (NS - Ruido: Fuentes y su Control)

FIA2016-27 NOISE IMPACT ASSESSMENT IN A BUS TERMINAL SURROUNDINGS CASE STUDY: TERMINAL OF CRUZ DAS ALMAS, MACEIO, AL. Maria Lúcia G. da R. Oiticica

14:50-15:10

FIA- EN - Environmental Acoustics & Community Noise (EN - Acústica Ambiental y Ruido Comunitario)

FIA2016-30 EVALUATION OF ACOUSTIC COMFORT IN LONG STAY INSTITUTIONS FOR ELDERLY IN MACEIO-AL. Lorena Firmino

15:10-15:30

FIA- EN - Environmental Acoustics & Community Noise (EN - Acústica Ambiental y Ruido Comunitario)

FIA2016-34 ANNOYANCE OF THE TRAFFIC NOISES IN THE CITY OF BUENOS AIRES. Vicente Sosa

**S** 15:30-15:50

FIA- EN - Environmental Acoustics & Community Noise (EN - Acústica Ambiental y Ruido Comunitario)

FIA2016-61 EVALUATION OF THE IMPACT OF TALL BUILDINGS CONSTRUCTION IN THE ACOUSTIC QUALITY OF INDOOR ENVIRONMENTS AND URBAN GRID OF THE NEIGHBORHOOD. Caroline lech Gomes De Barros

15:50-16:10

FIA- EN - Environmental Acoustics & Community Noise (EN - Acústica Ambiental y Ruido Comunitario)

FIA2016-62 NIGHT NOISE IMPACT CAUSED BY COMMERCIAL ESTABLISHMENTS: CASE STUDY AVENUE DR. ANTONIO GOMES DE BARROS, MACEIÓ-AL. Bianca Oliveira Pontes BIANCA

**16:30-16:50** 

FIA- AA - Architectural Acoustics - Room and Building Acoustics (AA - Acústica Arquitectónica - Acústica de Salas)

FIA2016-56 EVALUATION OF THE ACOUSTIC PERFORMANCE OF SYSTEMS OF WALLS AND FLOORS FOR VERIFYING COMPLIANCE WITH STANDARD 15.575. Thayse Nunes

16:50-17:10

FIA- AA - Architectural Acoustics - Room and Building Acoustics (AA - Acústica Arquitectónica - Acústica de Salas)

FIA2016-76 RESULTS COMPARISON OF ACOUSTIC PERFORMANCE OF A CHURCH WITH CONTEMPORARY ARCHITECTURE MEASURED WITH TWO TYPES OF IMPULSE SOURCE. Moisés Canabarro

77:10-17:30

FIA- AA - Architectural Acoustics - Room and Building Acoustics (AA - Acústica Arquitectónica - Acústica de Salas)

ICA2016-70 DETERMINATION AND ASSESSMENT OF NOISE FROM WIND TURBINES IN GERMANY. Andrea Bauerdorff

77:10hs - 17:30

FIA- AA - Architectural Acoustics - Room and Building Acoustics (AA - Acústica Arquitectónica - Acústica de Salas)

FIA2016-38 SOUND INSULATION FIELD MEASUREMENTS OF BRAZILIAN TRADITIONAL INTERNAL HORIZONTAL PARTITION SYSTEMS. Josiane Reschke Pires

7:10hs - 17:30

FIA- AA - Architectural Acoustics - Room and Building Acoustics (AA - Acústica Arquitectónica - Acústica de Salas)

FIA2016-46 CHARACTERIZATION OF RESILIENT MATERIAL USED IN FLOATING FLOOR SYSTEMS. Letícia Kauer Zuchetto

7:10hs - 17:30

FIA- AA - Architectural Acoustics - Room and Building Acoustics (AA - Acústica Arquitectónica - Acústica de Salas)

FIA2016-55 SOUND INSULATION COMPARATIVE STUDY ON CERAMIC MASONRY WITH MORTAR OR PLASTERBOARD COATING. Josiane Reschke Pires

NOTES/NOTAS	NOTES/NOTAS

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