

REPRODUCED SOUND 2020

TUESDAY 17 NOVEMBER 2020

11:55 Welcome: Chairman Keith Holland

Session 1 – Loudspeakers **Chair: Glenn Leembruggen**

- 12:00 Investigation into the effects of the geometry in cone driven midrange horns and phase plugs
Lewis MacDonald, Jonathan Hargreaves, University of Salford
- 12:30 Infinite waveguide termination by hybrid finite element / series solution
Patrick C Macey, PACSYS
- 13:00 Advances in acoustic instrument measurements and system design
Ludovico Ausiello, Solent University

13:30 Break

Session 2 – Measurement 1 **Chair: Paul Malpas**

- 14:00 Temporal structure of the spectral levels within pre-recorded speech, music and cinema material
Glenn Leembruggen, Acoustic Directions, Australia
- 14:30 On the viability of the Energy-Time Curve (ETC) in electro-acoustic measurement and analysis
James Love, David Gilfillan, Gilfillan Soundwork, Australia
- 15:00 Use of artificial intelligence in room acoustics prediction using a photograph
Dan Milne, Lee Davison, Ludovico Ausiello, Solent University

15:30 Break

Session 3 – System design and modelling **Chair: Keith Holland**

- 16:00 Meeting room ecosystem – How technology has enabled a faster, simplified networked system from microphone to loudspeaker with greater consistency
John Ellis, Andrew Francis, Shure UK
- 16:30 Hitting the “peak”: My quest for understanding modern amplification systems
Alberto Fueyo Gallego, AMS Acoustics
- 17:00 An archaeoacoustics investigation of the Beulieu Abbey
Sebastian Duran, Martyn Chambers, Ioannis Kanellopoulos, Chris Barlow, Solent University

17:30 Break

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WEDNESDAY 18 NOVEMBER 2020

Session 4 – Signal processing

Chair: Ludovico Ausiello

- 12:00 Analysis of neural network architectures for audio signal processing
Vlad S Paul and Philip A Nelson, ISVR, University of Southampton
- 12:30 An automated method for delay estimation and time alignment of sources in a reflective environment
Ambrose Thompson, Martin Audio, Alexander Holt, University of Surrey
- 13:00 Portable synthesizer on embedded system
João Davi de Campos, Federal University of Santa Maria, Brazil

13:30 Break

Session 5 – Measurement 2

Chair: Adam Hill

- 14:00 Development and use of a low-cost acoustic flow resistance meter
Camille Hanrahan-Tan and Glenn Leembruggen, Acoustic Directions, Australia
- 14:30 Suitability of hi-fi loudspeakers measuring reverberation time in domestic rooms
Chris Adair, Adair Acoustic Design, Luis Gomez-Agustina, London South Bank University
- 15:00 Audio signal statistics revisited: A homomorphic separation approach
Jamie A S Angus-Whiteoak, Consultant
- 15:30 Determining the source of coherence reduction using playback level of M-Noise.
Roger Schwenke, Merlijn Van Veen, Meyer Sound Laboratories, USA

16:00 Break

16:15 Electroacoustics Group Annual General Meeting

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THURSDAY 19 NOVEMBER 2020

Session 6 - Virtual audio

Chair: Jamie Angus

- 12:00 WHAM: Webcam head-tracked ambisonics
Mark Dring, Bruce Wiggins, University of Derby
- 12:30 Rendering binaural signals for moving sources
Lucas M. Gomes, William D'Andrea Fonseca, Davi Carvalho; Paulo H. Mareze
Federal University of Santa Maria, Brazil

13:00 Break

Session 7 – Case studies and regulation

Chair: Mark Bailey

- 14:00 The acoustic design of the Qingdao Oriental Movie Metropolis Grand Theatre
Shenzhi Su, CSP Acoustics; Yuewei Cui, Sunac, China
- 14:30 A case study on the impact live event sound level regulations have on sound
engineering practice
Adam Hill, Jon Burton, University of Derby.
- 15:00 An overview of UK and international guidance for the control of noise from outdoor
events and why events deviate from the guidance
Peter Wheeler, Open University
- 15:30 The Sound of SoFi – Amplifying the experience
Jim Burdette, JBL/Harman, Kevin Day, WJHW, Demetrius Palavos, Pro Media,
- 16:00 Break & Close