

REPRODUCED SOUND 2019

CREATING ENGAGEMENT IN SOUND

19-21 November 2019 – The Bristol Hotel, Princes Street, Bristol



35th ANNUAL CONFERENCE AND EXHIBITION 2019

Organised by the Electroacoustics Group of the Institute of Acoustics in collaboration with ABTT, AES, APRS & ISCE

TUESDAY 19 NOVEMBER 2019

17:00 Registration

18:00 **Demonstration by Funktion One Research**

WEDNESDAY 20 NOVEMBER 2019

08 :00 Registration and refreshments

09 :00 Conference Welcome, Keith Holland, EAG Chairman

09 :15 **Peter Barnett Memorial Award**

Psychoacoustic quality evaluation in the context of interactive sound and virtual reality

Francis Rumsey, Logophon

10 :30 Refreshments

Session 1 – Room acoustics and measurement

11:00 An acoustic and audio survey of some English churches

Peter Mapp, Peter Mapp Associates

11:30 Acoustic design criteria for higher-education learning environments

Sebastian Duran, Ludovico Ausiello, Juan Battaner-Moro, Solent University

12:00 Condenser microphones and factors that affect their sound

Hans Riekehof-Böhmer, Schoeps, Germany

12:30 Lunch

13:45 Diversity, Mark Bailey

Session 2 – Signal processing and audio coding

14:00 Optimal source distribution for multiple listener virtual sound imaging

Philip A Nelson, T Takeuchi, P E Couturier, ISVR, University of Southampton

14:30 A comparison of the performance of HRTF models in inverse filter design for Crosstalk Cancellation

Jacob Hollebon, Eric Hamdan, Filippo Maria Fazi, ISVR, University of Southampton

15:00 An introduction to sparse, or compressive, sampling for audio and acoustics

Jamie Angus-Whiteoak, University of Salford

15:30 Extended-band audio coding exploiting spectral-domain sampling-rate conversion with embedded ultrasonic data

Malcolm O J Hawksford, University of Essex

16:00 Refreshments

Session 3 – Assisted listening

- 16:30 Are we making best use of assistive hearing systems in theatres?
Ian Rees, Adrian James Acoustics
- 17:00 Quality evaluation of microphones used for lecture capture in universities
Rodrigo Sanchez-Pizani, Stephen Dance, Luis Gomez-Agustina, Peter Mapp, London South Bank University
- 17:30 Accessible broadcast audio customization
Lauren Ward, University of Salford
- 18:00 Close
- 18:45 Conference Reception and Dinner on board **SS Great Britain**
- 20:45 40 years of sound management at concerts and festivals
Jim Griffiths, D Butterfield, Vangardia

THURSDAY 21 NOVEMBER 2019

- 08:00 Registration and refreshments

Session 4 – Events and installations

- 09:00 **Keynote paper** – The Royal Albert Hall, sound of the future
Stephen Stringer, Darren McGaghran, Sandy Brown Associates; Daryl Prasad, Buro Happold
- 10:00 Effects of low frequency sound on the human condition: the case of Turbine Hall installation by Tania Bruguera
Richard Grove, Sero Di-Rosario, Joe Mccall, BDP
- 10:30 A case study on sound level monitoring and management at large-scale music festivals
Adam Hill, University of Derby; Johannes Mulder, Murdoch University, Australia; Jon Burton, freelance engineer; Marcel Kok, dBcontrol, Netherlands; Alex Kociper, A Berrios, Gand Concert Sound, USA
- 11:00 Acoustic design for sport stadia and arenas
Oliver Creedy, Vangardia
- 11:30 Refreshments

Session 5 – STI and intelligibility

- 12:00 What we do if we didn't have STI ?
Peter Mapp, Peter Mapp Associates
- 12:30 Another look at the relationship between frequency response and the speech transmission index, with respect to word scores and road tunnels
Glenn Leembruggen, Acoustic Directions, Australia

13:00 Lunch

Session 6 – Modelling and auralisation

14:15 A simple model of horn coverage angle
Keith R. Holland, University of Southampton, Philip R Newell, Consultant, Spain

14:45 Modern auralization routines as design tools
Wolfgang Ahnert, ADA Acoustic Media Consultants, Germany

15:15 The transparency of binaural auralisation using very high order circular harmonics
Mark Dring, Bruce Wiggins, University of Derby

15:45 Refreshments

16:00 EAG AGM

Session 7 – Loudspeakers

16:15 Non-minimum-phase behaviour of loudspeakers at low frequencies
Keith R. Holland, University of Southampton; Philip R Newell, Consultant, Spain

16:45 Energy efficiency in sound reinforcement
James Hipperson, Funktion One Research

17:15 Close