

REPRODUCED SOUND 2022

Auralisation and Personalisation – Beyond Reality

The Bristol Hotel, Bristol, 15–17 November 2022

38th ANNUAL CONFERENCE AND EXHIBITION 2022

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

TUESDAY 15 NOVEMBER 2022

17:00 Registration opens

18:00 Evening Workshops

Luke Jerram

Luke Jerram's multidisciplinary arts practice involves the creation of sculptures, installations and live artworks. Living in the UK, but working internationally, Luke creates art projects which excite and inspire people around the world.



Aeolus-Acoustic Wind Pavilion



Photo credit: Chris Jack

Tamasine Leighton-Crawford

Tamasine is a cellist, composer and acoustician based in Bristol. She uses her knowledge of acoustics in her musical work and takes inspiration from the natural environment and different music traditions in her compositions.

20:00 Close

WEDNESDAY 16 NOVEMBER 2022

08:00 Registration and refreshments

09:00 Conference opening and welcome

09:30 Peter Barnett Memorial Award presentation and Lecture: Standing on the Shoulders of Giants

Glenn Leembruggen, Acoustic Directions, Australia

10:30 Refreshments

Session 1 - Room acoustics

11:00 Multi-domain analyses of active room correction systems

Prathmesh Thakkar, GP Acoustics (UK)

11:30 Acoustic characterization of an Edwardian bathhouse

Pedro Novo, Max Fordham

12:00 Acoustic design and performance of a non-environment control room for recording and teaching

Glenn Leembruggen, Camille Hanrahan-Tan, Osborn Fong, Acoustic Directions, Australia

12:30 Lunch

Session 2 - Signal processing, immersive audio and spatial sound

13:30 Loudspeaker Matrix Arrays: Challenging the way we create and control sound

Evert Start, HOLOPLOT, Germany

14:00 Listener preference of reverberation in the post-production of live amplified music recordings

Ken Liston, Nottingham Trent University

14:30 Virtual bass expansion for cross-talk cancellation systems

Ben Scott, Daniel Wallace, Marcos Simon, Roberto Grilli, Davi Carvalho, Filippo Fazi, University of Southampton

15:00 Analysis of complex-valued neural networks for audio source localisation

Vlad S. Paul and Philip A. Nelson, University of Southampton

15:30 Refreshments

WEDNESDAY 16 NOVEMBER 2022 continued

Session 3 – Psychoacoustics, subjective assessment and auralisation

16:00 The Arup Experience Lab

Calum Ferreira, Arup Acoustics

16:30 Hearing degradation – a personal account

Philip Newell, Consultant

17:00 Using cognitive psychology and neuroscience to better inform sound system design at large musical events

Jon Burton, University of Derby

17:30 Electroacoustics Group AGM

18:00 Close

19:00 Conference Reception and Dinner



MUD DOCK Café
Dine overlooking Bristol's harbourside

THURSDAY 17 NOVEMBER 2022

08:00 Registration and refreshments

Session 4 – Measurement and modelling

09:00 Loudspeaker simulation vs. measurement: Validating matrix array electro-acoustic models

Mert Aslantürk and Evert Start, HOLOPLOT, Germany

09:30 Novel level detection methods for digital audio

Jamie Angus-Whiteoak, Consultant

10:00 On design of acoustically comfortable spaces for teaching in schools

Elena Prokofieva, Edinburgh Napier University

10:30 Refreshments

Session 5 – Loudspeakers

11:00 Metric based development of acoustic lenses and waveguides

Lewis MacDonald, University of Salford

11:30 Proceedings of the extreme steering committee

David Gilfillan, Gilfillan Soundwork, Australia;
Ambrose Thompson, Martin Audio; Mark Thompson, Hanson Associates, Australia; Glenn Leembruggen, Acoustic Directions, Australia and University of Sydney

12:00 Diversity Presentation and Discussion – Mark Bailey

12:30 Lunch

Session 6 – Events, installations, live sound, venues

13:30 A critical analysis of sound level monitoring methods at live events

Adam Hill, University of Derby; Jos Mulder, Australian National University, Australia; Jon Burton, University of Derby; Marcel Kok, dBcontrol, The Netherlands; Michael Lawrence, Rational Acoustics, USA

14:00 ABBA Voyage: Object-based mixing meets acoustic enhancement

Frédéric Roskam, Julian Laval, Étienne Corteel, L-Acoustics; Scott Willsallen, Auditoria

14:30 Refreshments

Session 7 – System design

15:00 Improving the intelligibility of underground station PAVA systems using horizontal line array

Diego Cordes, Sustainable Acoustics

15:30 Comparison of SPLmax using AES75 and multitone distortion (MTD) methods

James Hipperson, Funktion One

16:00 Guitar manufacturing measurements, a practical live demo

Ludovico Ausiello, Portsmouth University

16:30 Close of Conference
