

Organised by the Electroacoustic Group

REPRODUCED SOUND 2022
Auralisation and
Personalisation-Beyond Reality

15-17 NOVEMBER 2022

BRISTOL

PROGRAMME

Tuesday 15 November 2022

17:00 Registration and refreshments

Evening Workshops - supported by UKAN+



18:00 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.

19:00 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.

20:00 Close

Wednesday 16 November 2022

08:00 Registration and refreshments

09:00 Conference opening and welcome **Chair: Bob Walker**

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 Chair : Bob Walker

11:00 Multi-domain analyses of acoustic 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 Chair : Mark Bailey

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

Session 3 – Psychoacoustics, subjective assessment and auralisation

Chair : Ludo Ausiello

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 Buffet Dinner
MUD DOCK Café

Thursday 17 November 2022

08:00 Registration and refreshments

Session 4 - Measurement and modelling Chair: Glenn Leembruggen

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 Chair : John Taylor

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 Chair : Paul Malpas

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 Chair: Adam Hill

15:00 Comparison of SPLmax using AES75 and multitone distortion (MTD) methods
James Hipperson, Funktion One

15:30 Guitar manufacturing measurements, a practical live demo
Ludovico Ausiello, Portsmouth University

16:00 Close of Conference

POSTER

The IVOS dome: a multisensory immersive facility featuring visual, olfactory and sound cues.

Chinmay Rajguru, Giada Brianza, University of Sussex

Matt Roberts, Chris Andrews, Portal Devices

Emanuela Maggioni, Marianna Obrist, OWidgets

Abdelhalim Azbaid El Quahabi, Gianluca Memolo, Metasonixx