WEDNESDAY 18 NOVEMBER 2009

19.00   **Introductory Workshop**
All RS25 delegates, especially those new to RS, are invited to join an informal workshop tutorial in the Tennyson Room on the evening before the main sessions. It will include:

     *   A practical demonstration of some fundamental acoustic conditions
         Helen Goddard and *Paul Malpas*

     *   Maths Primer on Sound Field Reproduction
         Phil Nelson and *Keith Holland*

and a Q&A opportunity with a panel of experienced electroacousticians, including *Peter Mapp, John Taylor, Alistair Meechin and Dave Bruml*.

THURSDAY 19 NOVEMBER 2009

08.00   Registration
08.45   Welcome - Sam Wise, Chairman

     ASSESSING AUDIO QUALITY - Paul Malpas

09.00   Getting the measure of reproduced sound can we quantify sound quality?
Peter Mapp, Peter Mapp Associates

09.30   The theatre sound design archiving Project notes on binaural recording with dummy head and video camera background: What are we trying to do?
John Taylor, d&b audiotechnik

10.00   Objective quality measurement of audio using multiband dynamic range analysis
Steve Fenton, Bruno Fazenda & Jonathan Wakefield, University of Huddersfield

10.30   ***Coffee***

     ASSESSING AUDIO QUALITY - Helen Goddard

11.00   Reality or soft-focus? A discourse on transient performance, a very neglected area of audio understanding
Tony Andrews, Funktion One Research Limited

11.30   **Peter Barnett Memorial Award**
The loudspeaker parameters and their evolution
Neville Thiele, The University of Auckland, Australia

12.30   **Peter Barnett Student Award**
Acoustics in open plan classrooms – towards revised speech intelligibility criteria
Emma Greenland, WSP Acoustics, B M Shield, London South Bank University & Julia Dockrell, Institute of Education

13.00   ***Lunch***

     LOW FREQUENCY ROOM ACOUSTICS - Sam Wise

14.00   Studies in modal density – its effect at low frequencies
Matthew Wankling & Bruno Fazenda, University of Huddersfield

14.30   Prediction, optimization and reproduction of low frequencies in small rooms
Dirk Noy, Walters-Storyk Design Group, Switzerland

15.00   Seeing through the darkness: Visualizing low frequency behaviour in small rooms
Adam Hill, Malcolm Hawksford, University of Essex

15.30   Room to room compatibility of the low frequency content of mixes
Philip Newell, Consultant, Spain, Keith Holland, ISVR University of Southampton, Matthew Desborough, Dolby Laboratories, Bruno Faszenda, University of Huddersfield, Branko Neskov, Tobis Portugesa, Portugal, Sergio Castro, Reflexion Arts, Spain, Eliana Valdigem, Engineer, Portugal, Julius Newell, Proinstall, UK

16.00	*Tea*

INTELLIGIBILITY (1) Allen Mornington-West

17.30   Watt did they just announce? A novel solution for a quantum improvement in intelligibility on railway station platforms.
David Gilfillan, Gilfillan Soundwork Australia, Glenn Leembruggen, Acoustic Directions Australia

17.00   Proposed average male and female speech spectra using Harvard phonetically balanced sentences
Christopher Nicolaides, AMS Acoustics

17.30   Correct and fast impulse response calculation as a must for intelligibility prediction and auralisation
Wolfgang Ahnert, Stefan Feistel & A Miron, AFMG Technologies, Germany

19.00   Reception
19.30   Conference Dinner

21.00   **Demonstration of new loudspeaker technology**

KEF Blade Technology – KEF's research engineers will explain how the KEF Blade coincident source array provides apparent point source behaviour over the whole audio band without diaphragm breakup, followed by the first public demonstration of this loudspeaker system in the UK.

FRIDAY 20 NOVEMBER 2009

INTELLIGIBILITY (2) - Mark Bailey

09.00   Exploring ways to improve STI's recognition of the effects of poor spectral balance on subjective intelligibility
Glenn Leembruggen, Acoustic Directions Australia, Marco Hippler, University of Applied Sciences Cologne, Peter Mapp, Peter Mapp Associates

09.30   Observations on the suitability of using STIPA to determine the speech intelligibility of limited bandwidth PA systems
Simon Stephenson and Reuben Ditchburn, Bureau Veritas UK Ltd

10.00   AMS ANS: A modern solution to automated noise separation
Xavier Babington & Christopher Nicolaides, AMS Acoustics

10.30   *Coffee*

LOUDSPEAKER DESIGN - Bob Walker

11.00   An investigation into loudspeaker cabinet vibration using reciprocity
Hessam Alavi and Keith R Holland, ISVR, University of Southampton

11.30   A new methodology for the acoustic design of compression driver phase plugs with radial channels
Mark Dodd, G P Acoustics & Jack Oclee-Brown, KEF (UK)

12.00   Cone shaped optimization for an improved radiated sound field
Patrick Macey, PACSYS Limited & Kelvin Griffiths, Harman International

12.30   Hybrid line arrays – a viable alternative
Ambrose Thompson, Martin Audio UK, Glenn Leembruggen, Acoustic Directions, Australia, David Gilfillan, Gilfillan Soundwork, Australia

13.00   *Lunch*

ROOM ACOUSTICS - Nick Screen

14.00   Characterisation of small room acoustics for audio production
Julian Romero, Bruno Fazenda & H Atmoko, University of Huddersfield

14.30   Measuring the direction of early reflections
Trefor Roberts & Mark Avis, University of Salford

15.00   The measurement of time-frequency responses in small rooms
Robert Walker, Consultant

15.30   Reflection control: how much absorption at a given frequency?
Jamie Angus, University of Salford

16.00   ***Tea***

IMMERSIVE AUDIO - Keith Holland

16.30   Distance coding and performance of the Mark 5 and ST350 soundfield microphones and their suitability for ambisonic reproduction
Bruce Wiggins & Tom Spenceley, University of Derby

17.00   Noise narratives - sense and sensibility of soundscapes
Simon Kahn, RPS

17.30   A novel method for immersion and interactivity in audio-visual environments
Paul Gillieron, Simeon Delikaris-Manias, Paul Gillieron Acoustic Design

18.00   EAG AGM

19.00   Reception
19.30   Informal Dinner

21.00   **Martin Audio Presentation**

Our presentation will compare our conventional loudspeaker technology with that of a small line array. The theme will be how the increase in directivity control, afforded by a line array, can reap benefits in typical acoustic spaces. An explanation will be given of how the   line array can be intelligently numerically optimised to cover the room. We will also be   extending the theme of directivity control down to low frequencies by demonstrating an   omni directional subwoofer compared to a directional array. An explanation will be given of how the directional array parameters were derived. Finally a conventional loudspeaker plus omni directional sub will be compared to a small line array with a directional subwoofer.