

‘THE AUDIO EXPLOSION’

Institute of Acoustics: RS25 (Reproduced Sound 2009, Nov 18 -20,)

With a good turnout from six universities and many major acoustics consultancies and contractors, never mind audio designers and theoreticians, RS25 combined seminars and student content together with a broad sweep of acoustic and audio papers. I attended for HIFICRITIC, having noted the particular interest topics; assessing sound quality, the audibility of sound track compression, the question of ‘realism’ and preservation of ‘fast transients’, and how loudspeaker bass is properly defined and designed. There were several papers on the subject of reverberant modes in small (i.e. domestic and monitoring) rooms and also the studio mastering errors introduced by indiscriminate low frequency room/system equalisation. KEF brought their advanced concept loudspeaker, The Blade, for aural scrutiny by professionals, the first public demonstration, and backed this with two papers on theoretical aspects of its advanced technical design.

Research on mapping and measuring unwanted sound from loudspeaker cabinets was matched by the use of advanced synthesis to predict and improve the measured and sound quality behaviour of bass-midrange loudspeaker cones.

While not directly applicable to domestic audio there was a very clever directional speaker using end fire or shot-gun bass crossing over to a fascinating coaxial mid treble horn from Martin Audio.

On room acoustics, the now perfunctory and simplistic view of ray diagrams and ‘wait for the reverberation’ idea has been supplanted by advanced modelling and analysis which includes the variation in both frequency and time and also the kind of reflections from different surfaces. This material, while directed at small studios, may well impact on domestic listening too. I will add a more detailed write up on the more relevant presentations soon.

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See www.ioa.org.uk for more info and purchase of the conference papers on CD (Many thanks to the IOA for the invitation)