



AES Technical Committee on Loudspeakers and Headphones

Meeting Notes:

AES 140th Paris, 5/June/16 11:00 am Salon – Palais room 363

Chair: Steve Hutt

Attendees:

- Mark Dodd - GP Acoustics
- Jack Ocle-Brown - GP Acoustics
- Michael Hedges - Jaguar Land Rover
- Michael Turner - Neidec Servomotors, electroacoustic consultant.
- Martial Rousseau – Bowers & Wilkens
- Chris Struck - CJS Labs, standards Director Acoustical Society America
- Todd Welti - Harman
- Patrick Hagerty – Dynaudio, co-chair Conference on Headphones
- Hans Van Maanen, Temporal Coherence
- Marian Leibec, Klippel

Trends:

- Micro speakers
 - Applications for micro speakers continue to expand with high mechanical demands
 - rocking modes are an issue with single suspension transducers
 - Compression drivers with flat suspensions suffer rocking.
 - Klippel has been investigating & developing analysis & solutions
- Headphones
 - Trend in measurements and correlation to subjective preference:
 - - the market is 'getting more grown up'.
 - Some companies (perhaps not audio companies) may be unaware that there are performance targets.
 - Many do know, AKG, Etymotic, Beyer etc.
 - Some are looking at the target curve to develop company.
 - Some companies may be embracing the Harman target curves - maybe even faster than Harman brands.

- Apps for headphones are appearing:
 - From simple EQ apps to BiLi binaural HRTF management from Orange, BBC etc.

Workshop Concepts:

- Time domain measurement and analysis.
 - Hans van Maanen has volunteered to chair.
 - will organize for AES 142nd, Berlin
- Power Capacity
 - Power Capacity of Loudspeakers (drivers & systems) is a complex topic.
A first workshop might only explore questions.
 - How can the AES2-2012 loudspeaker driver test be better explained in the industry. i.e. why is this test not relevant to loudspeaker systems?
 - What kind of power capacity information is important to system designers and users.
 - Can programme material be organized into some kind of definitions?
 - Etc. etc.

Conferences:

- 2016 AES International Conference on Headphone Technology
 - Dates: August 24-26, 2016
 - update by chair: Patrick Hegarty
 - 40 submissions, chose 30 + 10 posters
 - 19 demos

Standards Liaison:

- EIA 60268-(5) update
 - The first IEC standard project IEC 60268-21 - Sound System Equipment - Loudspeakers - Acoustical (Output Based) Measurements is running and an international working group has been created. The aim is to revise the draft and to circulate it to IEC CO for CD circulation. Valuable feedback has been already provided and more is coming from the national committees.

The German national committee provides a proposal for a second related standard document IEC 60268-xxx - Sound System Equipment - Loudspeakers – electrical and mechanical Measurements.

A summary on both standards will be presented during the next AES convention in LA

New Topics:

- Chris Struck introduced the topic of “Measurement Uncertainty”
IEC boilerplate has a very general description about measurement uncertainty. Chris is working on expanding it. ISO 98 guide.

Next Meeting:

- AES 141st, Los Angeles 29Sept-2Oct/2016