



AES Technical Committee on Loudspeakers and Headphones

Meeting Notes:

AES 141st Los Angeles, 30/Sep/16 11:00 am room 405

Chair: Steve Hutt

Vice-chair: Juha Backman

Attendees:

• 24 Outstanding participants, including a few new faces (thank you).

Trends:

- Micro speakers
 - proliferation continues
 - the trend towards wireless was raised with questions of bandwidth & whether USB C
 & lightning bolt will continue to be available. USB Type C standard was just released this week.
 - A question are connection quality issues mis-identified as speaker issues?
- Headphones
 - Continue to grow with numerous variants.
 - VR is expanding the potential headphone market.
- Hi Resolution Audio
 - The trend of Hi Res Audio has an interest and impact on loudspeakers and headphones.

Workshop Concepts:

- Time domain measurement and analysis.
 - Hans van Maanen & Mike Turner will organize for AES 142nd, Berlin
- Power Capacity
 - Power Capacity of Loudspeakers (drivers & systems) is a complex topic. The concept received a strong interest for the pro & pro-sumer segment
 - some work is required to formulate an abstract. comments are welcome.

- Hi Resolution Audio Loudspeakers & Headphones
 - Andy Lewis has volunteered to explore organizing a workshop on Hi Res Audio & its relevance to loudspeakers & headphones.
- A workshop concept was introduced by Chris Struck on the topic of DSP control of Loudspeaker quality (distortion etc.) that has been introduced by some chip makers, NXP, TI for example. And, Klippel has discussed the concept for many years.
- Comments are welcome that can help flush this topic as a potential workshop & discussion.

Conferences:

- 2016 AES International Conference on Headphone Technology
 - Patrick Hegarty provided an update on the successful conference:
 - Numerous papers, demos & posters were presented with ~160 attendees.
 - A next Headphone conference is being discussed to take place in 2018 or 2019.

Standards Liaison:

- EIA 60268-21 update by Wolfgang Klippel.
 - 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.

Part B will focus on traditional transducer measurements, rubb & buzz, distortion etc. & include distortion artifact 'between' harmonics.

- End-of-Line Transducer Standards
 - TC AA has introduced the topic of AES developing a standard or Information Document for loudspeaker end of line testing.
 - TC LH can lend support & guidance to define what is important and what is feasible. SC04-03 will take up the topic in their meeting.

New Topics:

• Chris Struck introduced the topic of "Measurement Uncertainty" Chris is working on a paper for a future convention.

Next Meeting:

• AES 142nd, Berlin, May, 2017