

DAS Temamøde

Sound Quality in headsets (Lydkvalitet i headsets)



Date & time: Wednesday, 10th of April 2019 at 3.30 p.m. to 6.30 p.m.
Place: Sennheiser Communications, Industriparken 27, 2750 Ballerup
Free parking possible.
Price: Free for DAS-members – will be held in English.
Sign-up: No later than 5th of April 2019 via <https://doodle.com/poll/tnurb5psgm73tuqs>
Max 50 people can attend.
Organizer: "Dansk Akustisk Selskab", Teknisk Komité for Psykoakustik:
Kim Larsen (Sennheiser Communications) & Christer Volk (SenseLab, Force Technology)

Overall, this go-home meeting is about methods for evaluating sound and sound quality related to headsets. Geoff Martin from B&O will start out presenting an interesting topic about electro-acoustic measurement methods and the problem of their sometimes lack of relevance in relation to perceived sound quality (- when can THD be related to experienced sound quality, for example). From Sennheiser Communications, Kim Larsen will subsequently discuss both objective and subjective sound quality evaluation methods used within the development of a headset. The meeting concludes with the possibility of questions as well as a tour of the acoustic facilities at Sennheiser Communications.

Program

15:30 – 15:45	Coffee
15:45 – 15:50	Welcome
15:50 – 16:50	Topic 1: <i>"Perceptual irrelevance and interpretation of electroacoustic measurements"</i> (Geoff Martin, B&O)
16:50 – 17:10	Break incl. coffee
17:10 – 17:45	Topic 2: <i>"Sound quality in headsets & evaluation methods"</i> , Kim Larsen, Sennheiser Communications
17:45 – 17:55	Sum-up & questions
17:55 – 18:25	Acoustic facilities – tour
18:25 – 18:30	Meeting ends



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More details:

The perceptual irrelevance of electroacoustic measurements

- Geoff Martin, B&O



Abstract: Duke Ellington once correctly said, “If it sounds good, it IS good.” Amongst developers of audio equipment, this is often incorrectly extrapolated to the assumption that “If it measures good, it sounds good.” This presentation will illustrate some of the pitfalls associated with placing too much faith in the numbers, particularly in some standard, “basic” measurements such as frequency response and THD+N. Note, however, that the tangential belief that “there are things that can be heard but not measured” will not be supported, to the possible dismay of any audiophiles’ present. With luck, an interesting Socratic discussion will be provoked and doubt (or at least critical skepticism) will be instilled.

Biography: Originally from Newfoundland, Geoff Martin holds degrees in music performance, tonmeister studies, and acoustics simulation. He is a Senior Technology Specialist in Sound Design at Bang & Olufsen in Struer, where his principal job consists of assessing electroacoustic measurements with his eyes and ignoring them with his ears. His weekends are spent restoring fountain pens and pocket watches, walking the dog, and trying unsuccessfully to keep up in conversations about Roblox and Overwatch with his two sons.

Sound quality in headsets and evaluation methods

- Kim Larsen, Sennheiser Communications

Abstract: Geoff Martin comes around various objective verification methods and their subjective (ir)relevance. How and which objective methods are used in relation to headset validation and why will be covered in this talk. Subjective validation methods and objective models based on subjective experiments will also be covered. Both microphone and speaker sound quality will be covered and the process around these topics in a development project. There will be sound demos along with the presentation.

Biography: Kim Larsen is Danish of nature with origin from Falster. He holds a master within electrical engineering from the Technical University of Denmark specialized in acoustics. Studies were finalized in 2004 and since then he has worked 6½ for Oticon until 2011 where he shifted to a position within the field of acoustics and sound quality at Sennheiser Communication. Since 2015 he has also had competence and people management as part of the job. He has a wife and 2 children, plays in a band, plays a bit of badminton and likes fixing the cars when they strike so besides that there’s not much spare time left.

