AES TCAA Web meeting 4/16/20

AES Vienna, the 148th European Pro Audio Convention, May 25-28, 2020

Due to COVID19 the AES is working on making this a virtual convention. From AES website http://www.aes.org/events/148/:

"Details on the virtual Convention, which are being developed to include video presentations of Papers, Workshops, Tutorials, Tech Tours and other technical program content along with live- and forum-based dialog with presenters, will be shared as they become available. We appreciate your patience and understanding as the myriad of options and details are finalized."

"It's All About the Bass", Rafael Kassier's workshop is in the works of being virtualized. More information will be forthcoming.

"Automotive Microphones: Status, Requirements and Trends" has been listed in Program Highlights. This may be moved to another convention depending on outcome of details of the virtual convention.

Automotive Audio Conference for 2021

Planning has begun for the next automotive conference to be held in Detroit in 2021. Chair: Roger Shively; Vice Chair: Alan Norton

- Proposal has been sent to AES and reviewed. Feedback expected shortly.
- Timing has been proposed at end of June between the SAE NVH Conference to be held in Grand Rapids, MI and the Detroit Auto Show. Roger to organize a poll to see if this date works or if mid/late September is better.
- Proposed venue is Ford Motor Company Conference and Event Center
- Greg Sikora mentioned that there is a need for paper reviewers. If interested contact Greg through TC-AA http://www.aes.org/technical/aa/
- Dawn Geary from Harman has been added to the committee to help with communications.

In-Vehicle Acoustic Measurements Whitepaper Kickoff

Greg Sikora from Harman is heading the effort to develop a whitepaper for In-Vehicle acoustics measurements.

- Kick off meeting was held on 2/17/20 with a good representation of OEMs and Suppliers.
- Focus is to develop measurements for documentation of the sound field that can be used by all to help standardize practices.
- Currently seeking input on what attributes of the sound field are essential for characterization of sound quality.
- Subsequent meetings will then discuss how to prioritize those attributes and the measurements to capture

- o The team has identified the WHY? of the whitepaper
- Now working on the WHAT?, which will be the quantities to be measured
- A shortlist will be made next, and then will proceed to HOW?, which will define the system, equipment, excitation signals, etc.

Deadline for completion is 6 months before Automotive Conference in 2021.

AES New York, NY Convention, October 21-24, 2020.

As with all future conventions in the near future there is uncertainty on what this will entail. Keep visiting the website for latest information: http://www.aes.org/events/149/

- Call for Contributions is Open http://www.aes.org/events/149/authors/cfc/
 - Schedule
 - Proposal (Category 1 and 2) deadline: June 15, 2020
 - Acceptance (précis proposals, Category 2) emailed: July 15, 2020
 - Acceptance (full papers, Category 1) emailed: July 15, 2020
 - Final manuscript (Category 1 and 2) deadline: July 31, 2020
 - Engineering brief (Category 3) proposal deadline: August 1, 2020
 - Engineering brief (Category 3) 1–5 page PDF deadline: August 31, 2020
- Categories
 - Authors may submit proposals in three categories:
 - 1. Complete-manuscript peer-reviewed convention papers
 - 2. Abstract-precis-reviewed convention papers
 - 3. Abstract-reviewed engineering briefs (paper optional)

Looking to facilitate papers, workshops and/or tutorials for upcoming conventions for the following topics. Please consider contribution.

- 1. Immersive Audio
 - Immersive native Formats (Sony, Dolby, others???)
 - Upmix immersive formats (Harman, Fraunhofer, Auro, ?)
 - Discuss current state, future development and needs
 - Engage universities (call for contributions) to research objective methods to assess spatial perception / spatial quality of sound stage in car cabins (long term activity, we could run a specific track of papers within convention or conference). Currently there's very little to none research in this area.
- 2. Computational Platforms
 - Dedicated audio platforms have been provided in the past by ADI, NXP and other vendors. In addition ARMS is getting popular for audio processing as are the Snapdragon chips from Qualcomm.
 - Workshop could be a tutorial to get the series started. Dan Foley of Audio Precision said he could help with contacts for potential contributions.

• It would be good to have papers from semiconductor vendors and Tier 1 and 2 suppliers, so that we can have an informed discussion about the topic.

3. Active Noise Control & Automotive Audio

- With vehicles becoming quieter and powertrains changing noise control is becoming more and more prevalent. Looking for contributions to help promote activity in this important field.
- Challenges and how to meet them and overcome them
- State of the art, case histories

4. High Efficiency systems

- What is HiE for transducers and amplifiers
- What is the impact of HiE on an overall performance of EV range comparing to component weight optimization
- Conference or Convention?

5. Microphones in cars

- Very little discussions or papers on this topic within AES
- A follow up workshop from Vienna to discuss automotive mic specs and microphone architectures to cover automotive needs (cancellation technologies, compensation technologies, hands-free, beamforming, etc.) – so far there's no established standard how to deal with system complexity
- Initial workshops could be then transformed into working group to write a recommendation

If interested please contact Roger Shively through TC-AA http://www.aes.org/technical/aa/

TC-AA Next Meeting

The next meeting was to be held during the Vienna Conference. Details will be forthcoming.