

# AES Technical Committee on Spatial Audio



## Notes from the meeting of the TC at the 146th AES Convention, Dublin

**Date:** March 20, 2019, 9:00 am — 10:00 am

**Attendees:**

Allan Devantier  
Todd Welti  
Omid Khonsari  
Fellipe Baldruf  
Filipe Dias  
Junichi Yoshio  
Hedd Morfett-Jones  
Joe Fitzpatrick  
Charlie DeVane  
Steve Nimick  
Thomas Sporer  
Jonathan Wyner  
Tim Cato Netland  
Audun Solvang  
Sigurd Save  
Dylan Menzies  
Jacob Hollebon  
Pedro Acker Caetano  
Sergio Missoglie  
Enda Bates  
Marcin Gorzel  
Piotr Majdak

Toru Kamekawa  
Felix Andriessens  
Per Sjösten  
Nils Peters

Samsung USA  
Harman  
Harman  
Univ. of West London  
Univ. of West London  
Pioneer Cooperation  
Morf Audio Ltd  
Limerick IT  
Mathworks  
Apple  
Fraunhofer IDMT  
Berklee College of Music, IZotope  
NTNU  
SPOTICS AS  
SPOTICS AS  
Univ. of Southhampton  
Univ. of Southhampton  
Univ. of York  
Conservatorio di Como  
Trinity College Dublin  
Google  
Austrian Academy of Sciences,  
Acoustics Research Institute  
Tokyo Univ. of the Arts  
Ton und Meister  
Sound.se  
Qualcomm Technologies

**Chair:** Nils Peters

**Co-chairs:** Sascha Spors (excused)

**Activities at current AES event:**

- spatial music concert

- 3D Ambience recording/microphone techniques
- Workshop on orchestra 3D recording
- less paper contributions for spatial audio, possibly due to AES conference in York next week (see below)

### **Report from recent Spatial Audio events:**

2018 AES International Conference On Spatial Reproduction — Aesthetics And Science, Tokyo

2018 AES International Conference On Audio For Virtual & Augmented Reality, Redmond, US

2019 DAGA - <http://2019.daga-tagung.de/en/>

### **Upcoming Spatial Audio events:**

- Immersive and Interactive Audio, 2019 International AES Conference, York, UK
  - March 27-29, 2019
  - <http://www.aes.org/conferences/2019/immersive/>
  - submission deadline: 15th November 2018
- Headphone Technology, 2019 International AES Conference, San Francisco, CA, USA,
  - August 27-29, 2019
  - <http://www.aes.org/conferences/2019/headphones/>
  - submission deadline: February 11, 2019
- ICSA
  - Ilmenau, Sep. 2019, Germany
  - <https://vdt-icsa.de/>
- ICA
  - Aachen, Sep. 2019, Germany
  - session on Signal Processing on Spatial Audio
  - <http://www.ica2019.org/>
  - Satellite Workshop in Paris
    - EAA Spatial Audio Signal Processing Symposium
    - <https://sasp2019.ircam.fr/>
- next AES convention
  - NYC
  - more training workshops, focusing on techniques

### **Proposals for Workshops/Tutorials/Special Sessions**

ideas from last year:

- Workshop on Evaluation and Assessment of Spatial Audio without Reference (together with TC Perception?)
  - Attendees indicated that TC Perception will do this.
- Workshop on spatial microphones
  - Attendees suggested that Hyunkook Lee might be able to chair this.
- Personalized HRTFs estimation
  - Attendees noted that this would be well attended

- Must have both pro and con perspectives
- Patrick Flanagan (ThX), Karlheinz Brandenburg (FhG-IDMT), Yesenia Lacouture Parodi (Huawei) volunteered to work on this.
- Perceptual tuning of artificial reverbs
  - Karlheinz Brandenburg (FhG-IDMT) will investigate this topic. Wieslaw Woszczyk (McGill University) and Jonas Braasch (RPI) would also be able to help.
- Workshop on Evaluation and Assessment of Spatial Audio without Reference (together with TC Perception?)
  - Attendees indicated that TC Perception may have a workshop for NYC
  - people are strongly invited to contribute
  - idea is to have a paper session prior such workshop
- Spatial Audio for AR, 6DOF
- MPEG-I workshop
- MPEG-H tutorial
- Workshop on capturing room information and and apply them into virtual worlds
- TC members expressed need and interest in AR/VR conference outside of North America
  - proposals for AES conferences for 2020 are still possible
- better link between conventions and conferences
  - idea having a "best-of conf. session" at the next conventions

## **Other business**

### **Spatial Audio Glossary**

- still work in progress
- Members of the TC are invited to contribute
- please contact Sascha Spors

### **Awards (Reminder)**

- Please submit recommendations for AES awards and fellowships
- further information under [www.aes.org/awards](http://www.aes.org/awards)

### **Technical Council Forum (Reminder)**

For the TC, a discussion forum is provided on the website of the AES. You can reach the forum via “My Member Portal” when logged in on the AES website or by the direct link <https://secure.aes.org/forum/tc/sa/>.