AES Technical Committee on Spatial Audio

Notes from the meeting held in San Francisco at the 129th Convention Nov 4-7, 2010

Chairs: Ville Pulkki, JJ Johnston

Attendee Introductions and Interests – Attendees had an opportunity to introduce themselves and express their interest in the Spatial Audio TC, and identify what the main issues and immerging trends are in this area. There was representation from the academic institutions, audio coding industry, Film TV/Production, and from smaller-scale audio industry. There was 13 attendees, see attachment.

Past events
The TC has been active in organizing workshops and tutorials in AES128 and AES129.

Workshops on "Time-frequency processing of spatial audio"
The workshop has been repeated now three times, in AES128, AES40 and AES129. The grand view was to talk about relatively recent ideas to apply time-frequency processing in spatial audio. The presenters in AES129 were Ville Pulkki, Christof Faller, Aki Härmä and Jean-Marc Jot. The presenters were the same in AES128, except that Christian Uhle replaced Aki Härmä. In AES40 Faller and Härmä were not present, but Juha Vilkamo was involved.

Tutorials on "Spatial audio reproduction: From theory to production"
This tutorial was repeated in AES128 and AES129. Sascha Spors (Jens Ahrens in AES129) and Frank Melchior were the presenters. The tutorial focused on HOA and WFS, and also on authoring tools for spatial sound production.

Proposals for Upcoming Workshops/Tutorials
At the meeting there were some discussions for AES130 and AES131. The topics discussed were around practical tools to create spatial sound, such as amplitude panning, HRTFs and so on, and also on different methods to author spatial sound in reproduction-method-agnostic way. Frank Melchior, Christof Faller, Ville Pulkki and Filippo Fazi joined a subgroup to further discuss these ideas.

JJ Johnston brought up an idea of workshop of DSP tools for practitioner in spatial audio. JJ continues on this.

AES Conferences

Ville Pulkki briefly reported from very successful AES40th conference in Tokyo.

Discussion on the AES standard on capture/reproduction metadata

This idea was introduced in TC meeting in AES126. Ville Pulkki wrote a white paper in autumn 2009, which circulated in the TC. Later it was found that the AES X155 standard proposal considers similar issues, however, in this meeting Andrew Mason noted that X155 may not cover all needed attributes. Ville Pulkki contacts AES standardization committee, and discusses of further steps.

Participants

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