AES Audio Engineering Society - Pacific Northwest Section

Around the Puget Sound, Seattle, Washington, U.S.A.

**NOTE: anyone can attend this meeting regardless of their status as an AES member.
AES MEMBERSHIP IS NOT REQUIRED.**

April Meeting Notice

Hearing 099

Presented by
JJ Johnston - Immersion Networks
and
The AES Pacific Northwest Section

Plato Auditorium
Digipen Institute of Technology
Wednesday, April 24th, 2019, 7:30PM
directions

Everything in audio is intended for human hearing, therefore it's helpful to understand just how hearing works. This talk discusses the very basics of the phenomena of human hearing, and points out some of the mechanics that makes this work. Along the way, the meaning of "loudness" as opposed to "power" or "SPL", etc, becomes clear, and the need for very different time/frequency resolution at different frequencies stands out.

A companion talk, on the spatial aspects of hearing may be available at a later date. (hint: if you want this, you need to tell someone!)

JJ Johnston

JJ received the BSEE and MSEE degrees from Carnegie-Mellon University, Pittsburgh, PA in 1975 and 1976 respectively.

JJ temporarily retired in 2002 but worked 26 years for AT&T Bell Labs and its successor AT&T Labs Research. He was one of the first investigators in the field of perceptual audio coding, one of the inventors and standardizers of MPEG 1/2 audio Layer 3 and MPEG-2 AAC, as well as the AT&T Bell Labs or AT&T Labs-Research PXFM (perceptual transform coding) and PAC (perceptual audio coding) and the ASPEC algorithm that provided the best audio quality in the MPEG-1 audio tests.

Most recently he has been working in the area of auditory perception of soundfields, electronic soundfield correction, ways to capture soundfield cues and represent them, and ways to expand the limited sense of realism available in standard audio playback for both captured and synthetic performances. He was previously employed by Microsoft and then by Neural Audio and its successors. His current status is Chief Scientist of Immersion Networks.

Mr. Johnston is an IEEE Fellow, an AES Fellow, a NJ Inventor of the Year, an AT&T Technical Medalist and Standards Awardee, and a co-recipient of the IEEE Donald Fink Paper Award. Mr. Johnston has presented many times for the PNW Section, most recently on the issues surrounding "Dynamic Range." In 2006, he received the James L. Flanagan Signal Processing Award from the IEEE Signal Processing Society, and presented the 2012 Heyser Lecture at the AES 133rd Convention: *Audio, Radio, Acoustics and Signal Processing: the Way Forward*.

Bob Moses

AES PNW 2018-2019 Section Chair

Our meetings are open to anyone interested in Audio. AES membership is NOT required for you to attend our meetings.
Last modified 04/12/2019 0:53:18.