Sacramento Section Meeting Notice

Date: Wednesday, March 21, 2018
Time: 7:00 pm
Location: Telestream 848 Gold Flat Rd. Nevada City, CA 95959
Contact: Dom Jackson 530-263-0407

Speakers: Tim Carroll, Sr. Director Technology & Jeff Riedmiller, VP Technology-CTO office of Dolby Labs

Dolby AC-4 Next Generation Audio and ATSC 3.0

It's hard to believe that our existing digital TV standard is more than 20 years old. While serving us well, multimedia distribution has advanced significantly since ATSC 1.0 was published in 1995. Happily, at this year's CES show, the new ATSC 3.0 standard was officially released and it offers broadcasters a major leap forward in features and performance.

ATSC 3.0 is built on an IP backbone to support streaming services and offers much more robust modulation for reception while stationary or in high speed motion. Video is delivered via efficient HEVC and supports 4K UHD, High Dynamic Range (HDR), and a wider color gamut. The audio system chosen for use in North America, including Canada and Mexico, is Dolby AC-4 which offers immersive and personalized audio, dialog enhancement, intelligent loudness, and of course, more efficient compression.

Tim and Jeff will present an overview of ATSC 3.0, including details of some recent on-air events, and will discuss Dolby AC-4 and how it evolved from Dolby Digital (AC-3) and Dolby Digital Plus (E-AC-3) which are on air today. They will discuss how AC-4 is both compatible with existing operations and offers some built-in improvements that can help broadcasters from the start. They will offer advice on what the transition might look like as well as a glimpse at what will be required of distribution and interchange formats to support advanced immersive and personalized operations.

Jeffrey Riedmiller is VP of the Sound Group in the Office of the CTO at Dolby Laboratories where he leads a group of forward-thinking researchers & technology experts responsible for defining and driving the vision for Dolby's sound related technologies and ecosystems. Joining Dolby in 1998; he worked extensively on the design, development and launch of multichannel audio for over 60+ digital cable, terrestrial and satellite television services throughout North America. He is the creator of several technology and product innovations such as the Dolby LM100 Broadcast Loudness Meter with Dialogue Intelligence and the DP600 Program Optimizer which received multiple Emmy Awards. Riedmiller and his team have driven the evolution of the Dolby Digital Plus (E-AC-3) format to fully support immersive audio (Atmos) as well as Dolby's latest state-of-the-art audio codec and delivery system; Dolby AC-4. Riedmiller is an active member of the IEEE, ATSC, SCTE and its Standards Committees. He holds several patents and has authored and presented several technical papers for the AES, NAB, NCTA, and SMPTE.

Tim Carroll is Sr. Director Technology, Sound Group in the Office of the CTO at Dolby Laboratories. Before returning to Dolby, he was CTO of the Telos Alliance, comprising Telos, Omnia, 25-Seven Systems, Axia, Minnetonka Audio, and Linear Acoustic, a company he founded. Previously, Tim worked for Dolby Laboratories in New York mastering films and DVDs, moving to San Francisco to manage the development of professional broadcast products for Dolby Digital (AC-3), Dolby E, and metadata. He has been honored with several Prime Time, Technology and Engineering, and Sports Emmy Awards for his work with Dolby E, television Audio Processing, and the Beijing, Vancouver, and London Olympic games. He is a member of AES, ASA, IEEE, SBE, and SMPTE, and is an active participant in the work of the ATSC. He holds multiple patents in the field of television audio and data processing.

Pizza and beverages will be provided. Non-members and guests are always welcome to attend.