12:40 - 13:40 | Room 12 | Tuesday - Aug.27

INNOVATION AND DISRUPTIVE TECHNOLOGIES

TV 2.5: DTVPLAY, HDR AND IMMERSIVE AUDIO

Chair: Leonardo Chaves - Transmission Technology Manager at TV Globo

Keynote Speaker: José Marcelo Amaral – President of the Brazilian Digital TV System Forum / Director of Engineering and Operations - RecordTV

Speaker: Paulo Henrique Castro - Technology and R&D Director / TV Globo

• HDR: "FROM DREAM TO MAINSTREAM"

Speaker: Pat Griffis - President of SMPTE / Vice President Technology, Office of the CTO at Dolby Laboratories

In this presentation, Patrick Griffis, SMPTE, will review some of the theory and resulting practice leading to the successful mainstream deployment of HDR in the market today in television, mobile devices and even computers.

The presentation will include animations defining concepts such as "Perceptual Quantizer", "Color Volume" and "Content Mapping" which are key to understanding HDR.

• BROADCAST EXPERIENCE WITH MPEG-H AUDIO IMMERSIVE AND PERSONALIZED AUDIO

Speaker: Adrian Murtaza - Senior Manager, Technology and Standards - Fraunhofer IIS

Already adopted by ATSC 3.0 and DVB, MPEG-H Audio was most recently selected by the SBTVD Forum for delivery of Immersive and Personalized Sound over the existing ISDB-Tb platform. A number of successful trials conducted during major live events across the world, have showcased the importance of interactive features in broadcast and how easy can be enabled in live production, even for the most complex events.

• TV 2.5: THE NEW THING IN THE INTERNET OF THINGS?

Speaker Prof. Marcelo Moreno, DSc. - Department of Computer Science (DCC / ICE) Federal University of Juiz de Fora (UFJF)



Chair: Leonardo Chaves - Transmission Technology Manager at TV Globo Currently, I am the Transmission Technologies Manager at TV Globo and coordinator of Technical Module in Forum SBTVD. I had the BSc in Electronic and Computing Engineering at Federal University of Rio de Janeiro (UFRJ), and MSc. of Electrical Engineering at the same university. I've got the MBA Management in Catholic University in Rio de Janeiro (PUC-Rio).

	Keynote Speaker: José Marcelo Amaral - President of the Brazilian Digital TV System Forum / Director of Engineering and Operations - RecordTV With a degree in Mathematics from FAHUPE-RJ, a graduate degree in Information System from PUC-RJ and FGV-SP and an MBA in Information Technology from USP-SP, José Marcelo do Amaral has made an extensive contribution to the broadcasting sector. He joined Record TV in 1991 and is today the director for Engineering and Operations. At the television station he has developed systems for the radio and TV commercial operations area; implemented a system for producing news; managed the integrated management system (ERP) project and created a system for monitoring audiences from mobile devices, among other tasks. As technology director he has participated in initiatives for implementing non-linear editing, digital archiving and tapeless work flow systems. During this period, he has also become involved with issues referring to digital video and video transmission using internet protocols (IP). He was Director of the Free-To-Air TV Segment at SET (the Brazilian Society for Television Engineering), his principal challenge being to develop digital television technology for Brazil, and he is responsible for its implementation and expansion throughout the entire Record group. Amaral's role also involves the Brazilian Digital TV System Forum, where he currently holds the position of President of this institution founded in 2006. One of his most challenging projects was the launch of the R7 portal, which is now the second-largest internet portal in Brazil. During his career he has also had the opportunity to head up the technical and operational planning and coordination of major sporting events broadcast by Record TV, the Guadalajara Pan-American Games (2011) Toronto (2015), the London Olympics (2012), Sochi (2014) and Rio (2016).
E DIÇÂ	Paulo Henrique Castro - Technology and R&D Director / TV Globo Engineer by the Pontifical Catholic University of Rio de Janeiro in 1996 (PUC-Rio). Working with Globo since 1996, where started on an internship program. Responsible for the standardization of the Digitial TV in BrazilCoordinator of the Audio and Video Coding Working Group of the SBTVD ForumChairman of the ABNTCommitee for Digital TV (Associação Brasileira de Normas Técnicas, Brazilian ISO Branch)Contact point for Subgroup A – Specifications, on the Brazil-Japan Joint Work Group for Digital Television iniciative -Member of SET (Sociedade Brasileira de Engenharia de Televisão) since 1996. Also a member of many societies of IEEE(CommSoc, BTS, MTT, CE) and SMPTE
	Pat Griffis - President of SMPTE / Vice President Technology, Office of the CTO at Dolby Laboratories Pat Griffis is President of the Society of Motion Pictures and Television Engineers (SMPTE) as well as Vice President Technology at Dolby. He is also Board member on the Ultra HD Alliance and Vice President of the UHD Forum. He past President of the IEEE Consumer Electronics Society. He holds 10 patents
	Adrian Murtaza - Senior Manager, Technology and Standards - Fraunhofer IIS Adrian Murtaza serves as Fraunhofer's Standards Manager in a number of industry standards bodies, including DVB, ATSC, CTA HbbTV and SCTE, and is the co-author of multiple specifications in those groups. Adrian Murtaza joined MPEG in 2013 and since then contributed to development of various audio technical standards in MPEG-D and MPEG-H. More recently he focused on specification of Next Generation Audio delivery and transport in ATSC 3.0 systems and MPEG-2 Transport Stream based DVB systems, as well as on enabling of MPEG-H Audio services in different broadcast and streaming ecosystems. With a strong interest in VR/AR media solutions he is actively involved in MPEG-I efforts targeting future immersive applications.
	Prof. Marcelo Moreno, DSc Department of Computer Science (DCC / ICE) Federal University of Juiz de Fora (UFJF) Marcelo F. Moreno is an Associate Professor at Federal University of Juiz de Fora (UFJF), where he is a permanent member of the Computer Science Postgraduate Program. He holds Master and Doctorate degrees on Informatics from PUC-Rio. He holds leadership roles in the International Telecommunication Union (ITU), including the rapporteurship of ITU-T Question 13/16 (Multimedia application platforms and end systems for IPTV), the

vice-chai Recomm Working	nanship of IRG-IBB (Intersector Group on Integrated Broadcast-Broadband), the rmanship of ITU-T Study Group 16 (Multimedia) and the editorship of many ITU-T endations and technical papers. He is also a coordinator of the Middleware Group at the Brazilian Digital TV System Forum (SBTVD). He has a solid history ations and presentations in both Academia and Industry events.