16h - 17h30 | Aug. 22, 2017– Tuesday | ROOM 11

TECHNOLOGY FOR TV AND RADIO

HDR MASTER CLASS – SMPTE

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

- **SMPTE: THE NEXT CENTURY**

Speaker: Joel E. Welch - Director of Education- SMPTE

This session will open with a very brief discussion about SMPTE and its plans for its next century from the perspective of the Society's three pillars, Standards, Membership, and Education.

- **HIGH DYNAMIC RANGE MASTER CLASS**

Speaker: Matthew Goldman - Senior Vice President Technology at Ericsson / Fellow & President of SMPTE / Senior Member at IEEE

The session continues with the highly popular “High Dynamic Range (HDR) Master Class”: The hottest new development in viewing experience, High Dynamic Range (HDR), became real this year by landing in consumers' homes. HDR adds a level of realism that is unlike any other new image enhancement. This master class explores, in depth, what HDR is and its impact on the immersive viewing experience. The HDR schemes, based on perceptual quantizer (PQ) and hybrid log gamma (HLG) transfer functions, and how they impact the broadcaster workflows will be explained. Other topics covered include dynamic versus static metadata, interoperability, backwards compatibility, as well as the state of HDR standardization will be discussed.

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 Digital TV in Brazil. -Coordinator of the Audio and Video Coding Working Group of the SBTVD Forum. -Chairman of the ABNTComitee 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 initiative -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

Joel E. Welch - Director of Education- SMPTE

Joel E. Welch is a senior Learning & Development (L&D) professional who has built a career helping people and organizations grow and advance. Joel has demonstrated the ability to develop effective strategies, building technical and leadership learning programs from the ground up while keeping an eye on initiatives of greatest strategic impact. His systemic organizational view and skill at lateral thinking help ensure the impact to the whole organization is considered and collaborative processes are utilized. Mr. Welch is currently Director of Education for SMPTE. Previously, he's held a number senior L&D leadership positions. Joel was Director, Certification and Program Development from 2002 to 2007 at SCTE. He was a key member of the core start-up team of 28 employees as National Leadership and Technical Training Manager at Optus Vision based in Chatswood, NSW, Australia, helping to grow the organization from 28 to 2,700 employees in 18 months. It is believed that during this period Optus Vision and its technical training programs enabled the company to become the first in the world to deliver television and telephone services over a single coaxial cable. Mr. Welch's

Matthew Goldman - Senior Vice President Technology at Ericsson / Fellow & President of SMPTE / Senior Member at IEEE

Matthew Goldman is Senior Vice President of Technology, TV & Media, at Ericsson, where he is focused on video processing and media delivery solutions. He has been actively involved in the development of digital television systems since 1992. He was a prominent participant in the Moving Picture Experts Group where he helped create the MPEG-2 Systems and DSM-CC standards, and he continues to be influential in other industry organizations including the Society of Motion Picture and Television Engineers (SMPTE), the Alliance of IP Media Solutions (AIMS), the Ultra HD Forum, the Digital Video Broadcasting project, the Advanced Television Systems Committee, and the Society of Cable Telecommunications Engineers. Four of his projects have been later recognized by Technology & Engineering Emmy® Awards. Mr. Goldman received bachelor (high honors) and master of sciences degrees in electrical engineering from Worcester Polytechnic Institute. He holds six patents related to digital video transport. A SMPTE Fellow, he is also a senior member of the IEEE and an inductee of the Academy of Digital Television Pioneers. Mr. Goldman is currently serving as the President of SMPTE.

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