



SMPTE 2017 Symposium

Monday, 23 October

Artificial Intelligence and Machine Learning in Digital Media Creation: The Promise, The Reality, and The (Scary?) Future

8:00 AM — 9:00 AM

Monday Morning Coffee — Ray Dolby Ballroom Terrace

9:00 AM — 9:15 AM

Opening Welcome — Salon 1

Speakers: Matthew Goldman, Michelle Munson, Yvonne Thomas, Richard Welsh

9:15 AM — 9:45 AM

Understanding AI, Analytics, and Machine Learning

Speaker: Richard Welsh

9:45 AM — 10:30 AM

Keynote Address

Speaker: Jeff Kember

10:30 AM — 10:55 AM

How Digital Transformation is Changing Media & Entertainment with Machine Learning

Speaker: Jay Yogeshwar

10:55 AM — 11:25 AM

Monday Morning Coffee Break — Ray Dolby Ballroom Terrace

11:25 AM — 11:50 AM

Predicting the Future with Media Analytics Services

Speaker: Yvonne Thomas

11:50 AM — 12:15 PM

Machine Translation of Timed Text: My Machine Can Read Faster Than Me

Speakers: Chris Reynolds, Greg Taieb

12:15 PM — 2:00 PM

HPA's Women in Post and SMPTE present Women in Technology Luncheon — *(Ticket Required)* Vantage Room

12:30 PM — 2:00 PM

Networking Lunch — Salon 1

2:00 PM — 2:30 PM

Machine Learning Foundations (Theory and Practice)

Speaker: Michelle Munson

2:30 PM — 3:00 PM

Using Machine Learning to Predict Optimal Sources for Content in a Heterogenous Network

Speaker: Michelle Munson

3:00 PM — 3:30 PM

Monday Afternoon Coffee Break — Ray Dolby Ballroom Terrace

3:30 PM — 4:15 PM

Microsoft's New Video Analytics Platform — A Scalable Turnkey Cloud Service for Understanding What's

Speaker: Martin Wahl

4:15 PM — 5:00 PM

Content Intelligence in AWS

Speaker: Konstantin Wilms

5:00 PM — 5:30 PM

The Power of AI — How AI Can Change our Business?

5:30 PM — 5:40 PM

Thank You and Adjourn

6:30 PM — 8:00 PM

SMPTE-HPA Student Film Festival — Chinese 6 (TCL)
(Ticket Required)





2017 ANNUAL TECHNICAL CONFERENCE & EXHIBITION

HOLLYWOOD, CA.

23-26 October 2017



Tuesday, 24 October

7:30 — 8:45 AM

Morning Coffee

Room: Dolby Terrace

8:45 — 9:00 AM

Opening and Welcome

Room: Salon 1 and 2

9:00 — 10:00 AM

Opening Keynote

Room: Salon 1 and 2

10:00 — 10:30 AM

Morning Coffee Break

Room: Dolby Terrace

10:30 AM — 12:00 PM

Advances in Display Technologies

Room: Salon 1

Chair: Peter H. Putman (ROAM Consulting LLC, USA)

Next-generation television (UHD+) will significantly improve our viewing experience, but creates new technical challenges (what a surprise!). How do you calibrate next-generation LCD and OLED displays to accurately display UHD content mastered with high dynamic range and wide color gamuts? How do you connect those ever-faster, high-bandwidth signals into the displays to begin with? And how do you provide live UHD broadcasts from a platform 200 miles high that's traveling 17,500 miles an hour? This year's Advances in Display Technology session will answer all of these questions. Don't miss it!

10:30 AM — Engineering a Live UHD Program from the ISS

Rodney P. Grubbs (NASA Marshall Space Flight Center, USA); Sandy George (SAIC, USA)

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11:00 AM — Proposed Measured Display Characterization File for HDR Consumer Displays

Tyler Pruitt (SpectraCal, Inc, USA)

11:30 AM — Display Interfacing 2017: Getting Around the UHD Speed Bump

Peter H. Putman (ROAM Consulting LLC, USA)

Content Security: Maintaining Positive Control of Media

Room: Salon 2

Chair: Marc Zorn (GSC, USA)

10:30 AM — Blockchain & the Hollywood Supply Chain

Steve Wong (Hewlett Packard Enterprise, USA); Björn Obermeier (HP Enterprise Services, Germany); Eric Diehl (Sony Pictures Entertainment, USA); Stephanie Wu (Disney ABC Television Group, USA); Eileen Quenin (Disney, USA); Adam Rotaru (HBO, Hungary)

11:00 AM — Shoring up your DAM in the Cloud

Callum Hughes and Aaron Lovell (Amazon Studios, USA); David Ginsberg (Integrated Media Technologies & Elegant Workflow Consulting, USA)

11:30 AM — Stream Privacy

Prabhu Navali and Raj Nair (Ericsson, USA)

**12:00 — 1:30 PM
Fellows Luncheon**

**1:30 — 1:45 PM
Travel Time**

1:45 — 3:15 PM

Advances in Immersive Storytelling — VR/AR/MR and 360° Video — Part 1: “Understanding Immersive Storytelling”

Room: Salon 1

Chair: William Redmann (Technicolor, USA)

Many variations of interface-mediated experience are offered by VR and its extended kin, presenting different challenges and opportunities, both obvious and subtle, to the storyteller. New principles are being discovered and new tools are being developed, each teasing a content creator to explore its implications and make something breathtaking. This track is divided into two parts: Part 1 explores such principles and presents examples of wrangling with them. Part 2 presents leading-edge technologies and tools ready to be applied.

1:45 PM — The Immersive Experience Classification System: A New, Strategic Decision-Making Tool for Content Creators

Pierre Hugues Routhier (Creat3 inc., Canada)

2:15 PM — Story Presence & Perspective: A User Study of Story Presence in an Immersive Narrative Experience tested with Variant Levels of Immersion

Anna Dining (Rochester Institute of Technology, USA)

2:45 PM — ARnold: A Mixed Reality Short film using Microsoft HoloLens

Chinmay Chinara, Aakash Shanbhag, Greg Feingold and Kacey Weiniger (University of Southern California, USA)

Media Infrastructure (SDI, IP) — Part 1

Room: Salon 2

Chair: John E. Ferder (CBS, USA)

1:45 PM — NABA Media over IP Report

Thomas Bause Mason (Open Media Consulting, USA)

2:15 PM — Is SMPTE ST 2110 the New Standards Superpower?

Leigh Whitcomb (Imagine Communications, Canada)

2:45 PM — Synchronization and Timing in ST 2110

Paul E. Briscoe (Consultant, Evertz Microsystems, Canada)

3:15 — 3:45 PM

Afternoon Coffee Break

3:45 — 5:15 PM

Advances in Immersive Storytelling — VR/AR/MR and 360° Video — Part 2: “Technologies for Immersive Experience Production & Distribution”

Room: Salon 1

Chair: William Redmann (Technicolor, USA)

Many variations of interface-mediated experience are offered by VR and its extended kin, presenting different challenges and opportunities, both obvious and subtle, to the storyteller. New principles are being discovered and new tools are being developed, each teasing a content creator to explore its implications and make something breathtaking. This track is divided into two parts: Part 1 explores such principles and presents examples of wrangling with them. Part 2 presents leading-edge technologies and tools ready to be applied.

3:45 PM — 360 Degree Video Streaming and its Subjective Quality

Igor Curcio (Nokia, Finland); Henri Toukoma (Nokia Technologies, Finland); Deepa Naik (Tampere University of Technology, Finland)

4:15 PM — Case study: Bridging Gaming and Broadcast Technology for High Productivity Production

Tom Bradbury (Groupe Media TFO, Canada); Éric Minoli (Groupe Média TFO, Canada); Kuban Altan (Zero Density, Canada)



4:45 PM — State of the Art Virtual Reality Streaming: Solutions for Reducing Bandwidth and Improving Video Quality

Thierry Fautier (Harmonic Inc., USA); Rob Koenen (Tiledmedia, unknown)

Media Infrastructure (SDI, IP) — Part 2

Room: Salon 2

Chair: John E. Ferder (CBS, USA)

3:45 PM — Control Throughput and Latency for Multicast-based IP Routing Systems

John Mailhot (Imagine Communications, USA)

4:15 PM — Programmable Data Plane for Professional Media Networking

Thomas Edwards (Fox Networks Engineering and Operations, USA); Nick Ciarleglio (Arista Networks, USA)

4:45 PM — Parameters Affecting the 12Ghz Performance of Digital Coax Patching Systems

Ari Baron, Bryan Carpenter and Dimitrios Antsos (Bittree, USA)

Wednesday, 25 October

7:30 — 8:30 AM

Morning Coffee

Room: Salon 1, 2 and TCL

8:30 — 10:00 AM

Workflow Systems Part 1 — Staying Grounded and Looking Ahead in Workflow Management

Room: Salon 1

Chair: Kylee Peña (Bling Digital & Blue Collar Post Collective, USA)

In the management of workflow, we're always thinking about two things: what's working today and what will still work tomorrow? As the potential future of these systems continues to become a challenging reality, teams must deal with today; investigating both sides of this prevents us from getting stuck in an expensive daydream or frustrating dead end. Separating the long-standing terrestrial side of workflow systems from its growing cloud component, this session will provide a real-world outlook on IMF, IOA, and how flexibility and agility will be key to staying grounded in the complex future of workflow systems.

8:30 AM — Applying an Agile Approach to Next-Generation Media Management

Christian Siegert and Ben Davenport (Arvato Systems, Germany)

9:00 AM — IMF End-to-End Workflows in Media Asset Management Systems

Julian Fernandez (Tedral, Spain)

9:30 AM — Leveraging IOA to Create Hybrid Workflows

Joan Wrabetz (Western Digital Corporation, USA)

UHD, Bigger, Better, Faster — About Acquisition and Processing — Part 1

Room: Salon 2

Chair: Hans Hoffmann (European Broadcasting Union, European Union)

This session highlights the most recent technical developments in acquisition, processing and presentation to make UHD TV a real immersive experience. Fundamentally, the session will dive into the full application of all parameters of the ITU-R BT.2020 standards with higher resolution, increased bit-depth and dynamic range, extended color space and high frame rates and will reveal the challenges in image capture and processing.

8:30 AM — Implementation of Closed Captioning System for Terrestrial UHD based on ATSC 3.0

YunHyung Kim (KBS (Korean Broadcasting System), Korea)

9:00 AM — Beyond 4K: Can We Actually Tell Stories in Motion Pictures and Television in 8K? A Cinematography Perspective

Pierre Hugues Routhier (Creat3 inc., Canada)

9:30 AM — Access Services for UHD TV: An Initial Investigation of W3C TTML2 Subtitles (Closed-Captions)

Simon Thompson and Peter Cherriman, (BBC, United Kingdom, Great Britain)

Cinema Processing and Projection Technology — The Future is Bright: Enjoy the Best Cinema You Have Ever Seen

Room: TCL

Chair: Siegfried Foessel (Fraunhofer IIS, Germany)

Cinema is the place for highest immersive audiovisual experience. To achieve this goal in the digital age many new technologies have been developed in the last 15 years. But the consumer industry is breathing down the neck. Good differentiations are necessary and this can be achieved only by implementing environmental conditions and using extra technologies not available in the living room. Today it is possible to simulate a new cinema in virtual reality before building it. Frame rates on the screen can be adapted to the content and the contrast can shoot you to a different world. If you want to see how this is possible you should join this session?

8:30 AM — VR Theater, a Virtual Reality based Multi-Screen Movie Theater Simulator for Verifying Multi-Screen Content and Environment

Kyunghan Lee, Gaetan Guerrero, Seunghoon Cha and Younghui Kim (KAI Inc., Korea); Cho Sung Min (Korean Film Council, Korea)

9:00 AM — Variable Frame Rate Display for Cinematic Presentations

Tim Ryan (Texas Instruments, USA)

9:30 AM — Projector Contrast Performance in a Cinema Environment

Martin Richards, Barret Lippey, Peter van Kessel and Dave Schnuelle (Dolby Laboratories, USA)

10:00 — 10:30 AM

Morning Coffee Break

Room: Dolby Terrace & Annex

10:30 — 12:00 PM

Workflow Systems Part 2 — Above the Clouds — Applications for Media

Room: Salon 1

Chair: Al Kovalick (Media Systems Consulting, USA)

Over the past several years the public cloud has gained respect for media applications. This session will consider topics including the current state of the art for cloud-based production pipelines, integrating virtual machines, containers and bare metal, and an Internet of Things approach for running media workflows. Speakers will share their real-world experiences and provide useful insights for cloud adoption.

10:30 AM — Media Cloud Migration Patterns: Connecting Services Between Bare Metal, Virtual Machines and Containers

Shailendra Mathur (Avid, Canada)

11:00 AM — Moving to the Cloud: Current Risks & Rewards - An Analysis of the Current State of the Art for Cloud-Based Production Pipelines

Julie McDonald (Nimble Collective, USA)

11:30 AM — An Internet of Things Architecture for Cloud-fit Professional Media Workflow

Richard Cartwright (Streampunk Media Ltd., United Kingdom (Great Britain))

UHD, Bigger, Better, Faster — About Acquisition and Processing — Part 2

Room: Salon 2

Chair: Hans Hoffmann (European Broadcasting Union, European Union)

This session highlights the most recent technical developments in acquisition, processing and presentation to make UHDTV a real immersive experience. Fundamentally, the session will dive into the full application of all parameters of the ITU-R BT2020 standards with higher resolution, increased bit-depth and dynamic range, extended colour space and high frame rates and will reveal the challenges in image capture and processing.

10:30 AM — Content Production Technology on Hybrid Log-Gamma

Yuji Nagata, Kenichiro Ichikawa and Takayuki Yamashita (Japan Broadcasting Corp. (NHK), Japan)

11:00 AM — Choosing Encoding Parameters for High-Dynamic Range Streaming

Sean McCarthy (Sean McCarthy Consulting, USA)

11:30 AM — An 8K Full-Resolution 60-Hz/120-Hz Multiformat Portable Camera System

Tomohiro Nakamura, Takahiro Yamasaki, Ryohei Funatsu and Hiroshi Shimamoto (Japan Broadcasting Corp. (NHK), Japan)

12:00 — 1:30 PM

Lunch on Your Own

Room: Salon 1 and 2



1:30 — 3:00 PM

Innovating People: Managing, Mentoring and Change

Room: Salon 1

Chairs: John McCoskey (Eagle Hill Consulting & SMPTE, USA), Yvonne Thomas (Arvato Systems, Germany)

People are the lifeblood of every media and technology organization, but we often overlook the importance of understanding, care, feeding, and growth of our most important resource. Not only is adapting our management to welcome new and different generations of entertainment engineers vital to the future of organizations like SMPTE, it's key to future innovations in motion picture and television engineering. It is clear that groups of people with varying backgrounds and perspectives are better for business and lead to more successful projects. It's also no secret that technology-oriented organizations and industries remain sparsely populated by women and people of color. We will explore paths to welcome all kinds of people into an inclusive and exciting engineering field through rethinking our management, re-calibrating programs meant to attract diverse people, formalizing change management, and reconsidering how mentorship is really a two-way-street across generations.

1:30 PM — A Formal Approach to Change Management for Dynamic Technology-driven Media Organizations

John McCoskey (Eagle Hill Consulting, USA)

2:00 PM — Why Diversity Programs Fail — and How to Fix Them

Kylee Peña (Bling Digital & Blue Collar Post Collective, USA); Katie Hinsin (Department of Post NZ, New Zealand); Meaghan Wilbur (IncitefulMedia, USA)

2:30 PM — Mentoring and Reverse-Mentoring: What Baby Boomer and Millennial Tech Professionals Can Teach Each Other

Loren Nielsen (Entertainment Technology Consultants, USA); Kari Grubin (Walt Disney Studios, USA); Patricia Keighley (IMAX, USA); Sara Kudrle (Imagine Communications, USA); Jennifer Zeidan (Industrial Light and Magic, USA)

Is Compression Development at the End? — Part 1 — How to Optimize the Video Quality while Compressing?

Room: Salon 2

Chair: Marc Zorn (CSC, USA)

Today's video compression algorithms are very efficient. However increasing resolution and restricted bandwidth results always in limited quality at the consumer side. In this session, several techniques will be presented to improve the quality, based on perceptual measurements, by adaptation of the compression to the content or by using machine learning technologies.

1:30 PM — VMAF Reproducibility: Validating a Perceptual Practical Quality Metric for 4K Video

Reza Rassool (RealNetworks, USA)

2:00 PM — QBR Metadata to Improve Streaming Efficiency and Quality

William Cooper and Sue Farrell (Informity, United Kingdom (Great Britain)); Kumar Subramanian (MediaMelon, Inc., USA)

2:30 PM — Non-iterative Content-adaptive Distributed Encoding Through ML Techniques

Sriram Sethuraman (Ittiam Systems Pvt. Ltd., India)

3:00 — 3:30 PM

Afternoon Coffee Break

Room: Dolby Terrace & Annex

3:30 — 5:00 PM

Quality and Monitoring of Images and Sound

Room: Salon 1

Chair: John Maizels (Entropy Enterprises, Australia)

3:30 PM — Zen and the Art of Media in Motion: The Many Aspects of Quality in the Media Supply Chain

Dominic Jackson (Telestream Inc., USA); James Welch (IneoQuest Technologies, USA)

4:00 PM — Begin with the End in Mind: Accurately Predicting Viewer Quality of Experience to Define How Well a Digital Video Distribution System Performs

Zhou Wang (University of Waterloo, Canada); Abdul Rehman (SSIMWave Inc., Canada)

4:30 PM — Towards Scalable Automated Analysis of Digital Video Assets for Content Quality Control Applications

Subhabrata Bhattacharya, Adithya Prakash and Rohit Puri (Netflix, USA)

Is Compression Development at the End? — Part 2 — New Compression Technologies and its Applications

Room: Salon 2

Chair: Siegfried Foessel (Fraunhofer IIS, Germany)

Although many video codecs already exist, there is still room for new technologies. Higher video resolution up to 8K during production require specialized systems, transmission of video data over IP in the studio environment is requesting lowest latency compression in an resource efficient way and 4K and 8K video transmission to the end user everywhere always calls for more efficient codecs. In this session, the newest technologies in the development and pre-production stage will be presented.

3:30 PM — 8K-TICO Codec for Miniaturized and Simplified UHDTV Production System

Masayuki Miyazaki, Takayuki Yamashita and Tsuyoshi Sakiyama (Japan Broadcasting Corp. (NHK), Japan); Michael Van Dorpe (VILLAGE Island Co., Ltd., Japan)

4:00 PM — JPEG-XS - A High Quality Mezzanine Image Codec for Video over IP

Siegfried Foessel (Fraunhofer IIS, Germany)

4:30 PM — New Compression Techniques for Next-Generation Video

Thierry Fautier (Harmonic Inc., USA)

Thursday, 26 October

7:30 — 8:30 AM

Morning Coffee

Room: Dolby Terrace



8:30 — 10:00 AM

New Technologies and Techniques Part 1 — IMF and What's Next

Room: Salon 1

Chair: William Redmann (Technicolor, USA)

For how content is thought about, managed, and created, in the cloud or otherwise, these are ideas, technologies, and tools that are about to change how your work gets done. From those just graduating their fledgling year to ones that might defy standardization. This track is in two parts: Part 1 reports from the field about IMF and new workflow building blocks, while Part 2 describes amazing new tools, including a creative's AI assistant.

8:30 AM — Implementation: IMF in Practice

Chris Reynolds (Deluxe Entertainment Services Group, Canada); Eric King (Deluxe Entertainment Services Group, USA)

9:00 AM — Microservices: Building Blocks to New Workflows and Virtualization?

Darren Gallipeau (Imagine Communications, Canada); Sara Kudrle (Imagine Communications, USA)

9:30 AM — Automating Digital Asset Production with SCTE Messages

Jim Duval (Telestream, USA); Eric Openshaw (Pebble Broadcast Systems & Pebble Beach Systems, USA)

Audio and Metadata...Can They Get Along?

Room: Salon 2

Chair: Jim DeFilippis (TMS Consulting, USA)

In a world where viewers need to find, share and consume moving images and sound, producers and distributors need to provide audio metadata for the audience to enjoy the full benefit of advanced audio features (e.g. alternate language, descriptive video, home/away announcers, dialog enhancements, immersive sound). In this SMPTE session, we will address audio metadata challenges in production, distribution and consumption.”

8:30 AM — An Open, Standards-Based Framework for Audio Metadata Transport in Live Content Workflows

Kent Terry (Dolby Laboratories, USA)

9:00 AM — Lightweight Air-Ready Masters with AAC in MXF

Oliver Morgan (Metaglobe Corporation, USA); Todd Brunhoff (Harmonic Inc., USA); J. Patrick Waddell

(Consultant, USA); Christopher Homer (PBS, USA); Bruce Devlin (Mr. MXF Ltd., United Kingdom (Great Britain) & The Media Bay LLC, USA)

9:30 AM — Metadata-Based Audio Production for Next-Generation Audio Formats

Peter Poers (Junger Audio GmbH, Germany)

Color and Dynamic Range Management

Room: TCL

Chair: Jaclyn Pytlarz (Dolby Laboratories, USA)

With the ever expanding capabilities of cameras and displays, it becomes more involved to manage differences. In this session, we will cover various methods to manage color and dynamic range down-mapping of high-dynamic-range and wide-color-gamut imagery. We will also cover techniques to manage color and dynamic range for multi-camera production. Overall, each topic will explore color management as it relates to human perception, and will present possible solutions for our future.

8:30 AM — Core Color Rendering Algorithms for HDR Display

Gary Demos (Image Essence LLC, USA); Douglas Walker (Autodesk Media & Entertainment, Canada)

9:00 AM — Color-Matching Shots from Different Cameras Having Unknown Gamma or Logarithmic Encoding Curves

Raquel Gil Rodriguez, Javier Vazquez-Corral and Marcelo Bertalmío (Universitat Pompeu Fabra, Spain)

9:30 AM — Automatic, Fast and Perceptually Accurate Gamut-Mapping Based on Vision Science Models

Syed Waqas Zamir, Javier Vazquez-Corral and Marcelo Bertalmío (Universitat Pompeu Fabra, Spain)

10:00 — 10:30 AM

Morning Coffee Break

Room: Salon 1, 2 and TCL



10:30 AM — 12:00 PM

New Technologies and Techniques Part 2 — Exotic New Tools

Room: Salon 1

Chair: William Redmann (Technicolor, USA)

For how content is thought about, managed, and created, in the cloud or otherwise, these are ideas, technologies, and tools that are about to change how your work gets done. From those just graduating their fledgling year to ones that might defy standardization. This track is in two

parts: Part 1 reports from the field about IMF and new workflow building blocks, while Part 2 describes amazing new tools, including a creative's AI assistant.

10:30 AM — How Artificial Intelligence and Machine Learning Will Change Content Creation Methodologies

Tom Ohanian (TAO Associates, USA)

11:00 AM — Access to Virtualized FPGA Resource

Jean-Francois Nivart (Image Matters & Image Matters, Belgium)

11:30 AM — Realtime Measurement of Ultra-High Definition Camera Modulation Transfer Function

Kenichiro Masaoka, Kazuyuki Arai, Tomohiro Nakamura and Yoshiro Takiguchi (Japan Broadcasting Corp. (NHK), Japan)

Emerging Research in Visual Perception

Room: Salon 2

Chair: David Long (Rochester Institute of Technology, USA)

As emerging cinema equipment and computer-generated imagery tools strive to push the bounds of our vision, it is imperative that we continue to affirm practical perceptual limits. Higher and higher fidelity in color and tone reproduction, temporal refresh rates, and graphical photorealism are challenging conventional wisdom of how the human visual system responds. This session will explore new data from various characterizations of visual perception trends and will address potential impacts on image quality.

10:30 AM — Hitting the Mark — A New Color Difference Metric for HDR and WCG Imagery

Elizabeth Pieri and Jaclyn Pytlarz (Dolby Laboratories, USA)

11:00 AM — Assessing Psychophysics Functions for Framerate Perception

Elizabeth DeVale and David Long (Rochester Institute of Technology, USA)

11:30 AM — Is Seeing Still Believing: A Critical Review of the Factors that Allow Humans and Machines to Discriminate Between Real and Generated Images

Martyn Gates (Ravensbourne & Pure & Applied Image Recognition Limited, United Kingdom (Great Britain))

12:00 — 2:00 PM

Boxed Lunch

Room: Dolby Ballroom & Annex

2:00 — 3:00 PM

Digital Revolution in Data Management — Value Proposition in the Content Business — Part 1

Room: Salon 1

Chair: Yvonne Thomas (Arvato Systems, Germany)

The highest goods in the media business is our content and thus needs high protection and careful management. While standards from ISO, SMPTE and company support the exchange and archiving of content, the challenge of handling the mass of data and files remains with the media houses. Therefore they need to carefully look at workflows, metadata generation and what kind of software/hardware they use.

2:00 PM — Building a Content Data Management Strategy

Floyd Christofferson (StrongBoxData Solutions, USA)

2:30 PM — Exploring Image Corruption in the Workflow, and how to Stop this from Happening

Keith Hogan (Pixspan, Inc., USA)

Next-Generation TV Part 1 — Not Your Father's Television

Room: Salon 2

Chair: Bobby White (Sunset Bronson Studios, USA)

2:00 PM — The Broadcast Guide to Surviving the Repack, Channel Sharing and Upcoming Transition to ATSC 3:0

Ralph Bachofen (Triveni Digital Inc., USA)

2:30 PM — The Future of Technology in the Future of Broadcasting

John Footen (United States & Deloitte Consulting, LLP, USA)

3:30 — 4:00 PM

Afternoon Coffee Break

Room: Dolby Terrace

3:30 — 5:00 PM

Digital Revolution in Data Management — Value Proposition in the Content Business — Part 2

Room: Salon 1

Chair: Yvonne Thomas (Arvato Systems, Germany)

The highest goods in the media business is our content and thus needs high protection and careful management. While standards from ISO, SMPTE and company support the exchange and archiving of content, the challenge of



handling the mass of data and files remains with the media houses. Therefore they need to carefully look at workflows, metadata generation and what kind of software/hardware they use.

3:30 PM — Standards, Media Archiving & Designing a Long-term Data Set

James Snyder (Library of Congress, USA)

4:00 PM — NABA DPP: Specifications, Standards, and Content Delivery

Christopher J. Lennon (MediAnswers, USA); Clyde Smith (Fox Network & Engineering Operations, USA)

Next-Generation TV Part 2 — Tools of the Trade

Room: Salon 2

Chair: Bobby White (Sunset Bronson Studios, USA)

3:30 PM — Captioning and Subtitling for Social Media

Giovanni Galvez (Telestream, USA)

4:00 PM — Does Capping the Encode Bitrate Really Cap Streaming Quality?

Ali C. Begen (Ozyegin University & Networked Media, Turkey); Alex Giladi, Yasser Syed and Alex Balk (Comcast, USA)

4:30 PM — When Recommendations and the Real World Do Not Align

Roger Franklin (President and CEO at Crystal, USA); Alan Young (Chief Operating Officer at Crystal, USA)

(Program Subject to Change)

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