

143rd SMPTE

Technical Conference and Exhibition

Hilton New York, November 4-7, 2001

Pixels, Packets, Processing, and Infrastructure

The 143rd Technical Conference and Exhibition is scheduled to be held on November 4-7, 2001 at the Hilton New York in New York City.

This year's conference themed Pixels, Packets, Processing, and Infrastructure is being chaired by *Chuck Phelan*, National TeleConsultants, and *Philip Livingston*, Azcar, who are in the process of selecting papers for the event that's shaping up to be both enlightening and entertaining.

The following program includes papers that are being considered; it is tentative and subject to change.

All-Day Seminar

**SUNDAY,
NOVEMBER 4, 2001**

Packets and Streaming Media

Chair: *Chuck Dages*, Warner Bros., New Media

Co-Chair: *David Colter*, Warner Bros.

Papers to be Selected



Technical Program

**MONDAY,
NOVEMBER 5, 2001**

MORNING

Opening Session and Guest Speaker

Session: **Broadband, Internet, and New Distribution Methods**

Chair: *Pete Ludé*, iBlast Networks

Delivery of Broadcast Services over ADSL or VDSL Services, Constraints, and Issues, *Jean Chatel* and *David Mouen Makoua*, Thomson Broadcast & Network Solutions/Nextream, Sevigne Cedex, France

Satellite Broadband Internet for Production and Post-Production, *Martin J. Stein*, San Diego, CA

Encrypted Satellite Multicast: Quality, Security, and Reliability Considerations Attending the Distribution of Television as Addressable Data, *Dom Stasi*, TVN Entertainment

Alternate Content Delivery and Encoding, *Declan Caulfield*, Kamera, Stockholm, Sweden

Session: **Audio**

Chair: *Richard Hess*, National TeleConsultants, Inc.

Papers to be Selected

Industry Luncheon and Keynote Address

AFTERNOON

Session: Servers and Networking

Chair: *Al Kovalick*, Pinnacle Systems

Distributed Broadcast Architectures, *Al Kovalick*, Pinnacle Systems, Mountain View, CA

Streaming Doesn't Fly for Video—Download-and-Play is the Better Alternative, *Joe Bezdek*, DiviXNetworks, Inc., San Diego, CA

Characteristics of Unprotected and Protected Storage Area Networks (SANs) in Broadcast Environments, *C. Jason Mancebo*, Mountain View, CA

DOTS-A New Roadmap for High-Speed Archival Storage, *Alan Marchand* and *Art Cosgrove*, Eastman Kodak Co., Rochester, NY

Session: File Formats for Interchange

Chairs: *Brad Gilmer*, Gilmer & Associates, Inc., and *Hans Hoffmann*, EBU (European Broadcasting Union)

User Requirements for File Formats, Associated Metadata, and Transfer Options for Future IT-Based TV Production, *Hans Hoffmann*

Enabling Network Interoperability Between Video File Servers: The SMPTE 360M General Exchange Format (GXF), *Ray Baldock*, Grass Valley Group, Nevada City, NV

Stream and File Formats—Where Are We Now? *Bob Edge*, Grass Valley Group, Beaverton, OR

In Pursuit of the “Agile Codec”—Parallel Processing Enables Flexible, Low-Cost Digital Cinema Solutions, *B. Jason Crew*, Teranex, Inc., Orlando, FL

The MXF Wrapper and Its Applications, *James H. Wilkinson*, Sony, BPE, Basingstoke, Hants, UK; and *Bruce Devlin*, Snell & Wilcox, Petersfield, Hants, U.K.

Technical Aspects of the Advanced Authoring Format, *James Cain*, Quantel, U.K.



TUESDAY, NOVEMBER 6, 2001

MORNING

Session: Case Studies: New Digital Facilities

Chairs: *David Horowitz*, Horowitz Television Technology, and *Randall Hoffner*, ABC, Inc.

Normalization Methods for Objective Video Quality Measurements, *David K. Fibush*, Tektronix, Beaverton, OR

Achievements by the Hi-Vision (HDTV) Virtual Studio System at the NHK News Center, *S. Mikami*, *K. Hasimoto*, and *K. Tomiyama*, NHK (Japan Broadcasting Corp.), Tokyo, Japan

Leading-Edge Technology, Multiple Vendors, and User Friendly Solutions: It Can Be Done, *Jim McGrath*, A.F. Associates, Inc., Northvale, NJ

Intelligent Infrastructure for New Digital Installations, *M. Snell*, *M. Holmes*, and *John Shike*, Snell & Wilcox, Santa Clara, CA

Design of a Local Centralized Multistream Playout Facility, *John Luff* and *Karl Paulsen*, Azcar USA Inc., Canonsburg, PA

Case Study: 16 Channel Central Casting Facility, *Keith DeBelius* and *Jay Fine*, National TeleConsultants, Inc., Glendale, CA

Session: Film Acquisition and Processing: Emulsions, Cameras, and Facilities

Chair: *Timothy Spitzer*, Tapehouse Editorial Co.

Color Space Conversion with 3-D-LUT for Laser Film Recorder, *Ado Ishii*, Imagica Corp., Tokyo, Japan

A Tour up the Gray-Scale Vector of the RGB Color Cube: How Computer Graphics Color Spaces Relate to Digital Video Color Difference Space, *Leonard J. Reder*, Arete Entertainment, Sherman Oaks, CA, and *Michael Farris*

Application of the Latest Technologies to a New Fujicolor Negative Film, *K. Kawai*, *K. Makino*, *H. Murakami*, and *S. Yamaryo*, Fuji Photo Film Co., Ltd., Ashigara Research Lab, Minami-Ashigara, Kan

Design Improvements for Motion Picture Film Projectors, *C. L. DuMont*, *A.F. Kurtz*, *B. D. Silverstein*, and *D. H. Kirkpatrick*, Eastman Kodak Co., Rochester, NY

The White Paper: Theory and Practice of White Points for Digital Cinema, *Matt Cowan*, Entertainment Technology Consultants, Los Angeles, CA

Using Digital Intermediate to Provide the 70mm Quality in Theaters—A Progress Report, *R. A. Morton, M. A. Maurer and C. L. DuMont*, Eastman Kodak Co., Rochester, NY

The Laser Cathode Ray Tube—A Paradigm Shift in Illumination, *Michael D. Tiberi*, and *Glenn H. Sherman*, Principia Light Works, Inc., Marina Del Rey, CA

AFTERNOON

Session: **New Standards for New Media: MPEG-4 and 7**

Chairs: *Rich Mizer*, Digital Ventures Diversified, Inc., and *Rob Keonen*, Intertrust Technologies, Corp.

MPEG-4 Studio Profile, Speaker TBD

MPEG-4 Video vs. H.264 Video, *Gary Sullivan*, Microsoft

Advanced Audio Coding Standard, *Schuyler Quakenbush*, AT&T

MPEG-4 System Specification, *Dave Singer*, Apple

Authoring for MPEG-4, Speaker TBD

Architectures for the MPEG-2 Transcoding from the Production Format into MPEG-4 Internet Video Format, *Rolf Hedtke* and *Matthias Schnoll*, University of Applied Sciences, Wiesbaden, Germany

The MPEG Legacy and its Future in the Convergence of the Broadcast and IT Industries: A Brief Look at the Past and a Peek at the Future, *Peter Schirling*, IBM Research, Yorktown Heights, NY

Session: **Archive and Asset Management**

Chair: *Janet Gardner*, Perspective Media Group

Video Content Management in Broadcast, *Derek Gascon*, Convera, Carlsbad, CA

Need for Integration of Physical and Virtual Media Asset Systems, *Hugh R. Heinsohn*, Burbank, CA

Media Asset Management: Making Sense Out of Digital Chaos, *Jennifer Neumann*, Canto Software AG, Berlin

Effective Use of Grouping Capabilities in Archive Management, *Steve Atkinson* and *Bernie Walsh*, Software Generation, Ltd., Southampton Hants, U.K.

Creating Access and Usability in a Digital Video Archive, *John Phillips*, Survivors of the Shoah Visual History Foundation, Los Angeles, CA

Practical Applications of Agent-Based Asset Management Technology to Digital Media Distribution Systems, *Steven C. Bilow*, Grass Valley Group, Beaverton, OR

WEDNESDAY, NOVEMBER 7, 2001

MORNING

Session: **24 P: An Update**

Chair: *Gavin Schutz*, Liberty Livewire Corp.

P24...The Next Generation, *Jim DeFilippis*, News Technology Group, Los Angeles, CA

Session: **Metadata: Case Studies, Expectations, Realities, Lessons Learned**

Chair: *Robert Slutske*, National TeleConsultants, Inc.

Digital Rights Management in a Multimedia Environment, *Marcus Peinado*, Microsoft Corp., Redmond, WA

Lunch

AFTERNOON

Session: **D-Cinema**

Chair: *William C. Miller*, ABC, Inc.

Papers to be selected.

Session: **Video and IP**

Chairs: *Darcy Antonellis*, Warner Bros., and *Gary Washauer*, Pinnacle Systems

Applying DRM Technologies to Video on the Net, *Eric Grab*, DivXNetworks, San Diego, CA

Satellite, Broadcast, and Broadband Networks Powered with Storage Area Networks (SAN), *Greg Reitman*, Logic Storage Systems, Inc., Los Angeles, CA

Realtime Video and Audio Content Delivery Over IP Packet Networks—True Circuit Implementations, *Carsten Baumann*, Leitch, Inc., Burbank, CA; and *Yendo Hu*, Path 1

Alternate Content Delivery and Encoding, *Declan Caulfield*, Kamera, Stockholm, Sweden

Satellite Broadband Internet for Production and Post-Production, *Martin J. Stein*, San Diego, CA

The Battle Over Wireless Open Streaming Standards, *Sorin V. Papuc*, Luxxon Corp., Mountain View, CA

The Welcome Reception

This event has always been successful, and expectations are no different for this year. The Welcome Reception is the perfect opportunity to get to know the colleagues you'll be sharing the next few days with, and to get re-acquainted with friends from previous SMPTE conferences. Join us for a relaxed evening of good company and hors d'oeuvres.

Industry Luncheon

Sit down to a banquet with your colleagues; share information, business cards, and a good meal. The event is capped by the conference's keynote address, as a mover and shaker in the motion imaging industry speaks to attendees. Previous luncheon speakers include: Jack Valenti, Motion Picture Association of America; Michael Sherlock, NBC; Saul Shapiro, ABC; Roger Mayer, Turner Entertainment, and a host of principal players in the field of motion imaging.

Honors and Awards Reception

Annually, SMPTE gives awards to those in the industry who have demonstrated great achievement and contribution to motion imaging. Awards include Honorary Membership, the Citation for Outstanding Service, the Eastman Kodak, John Grierson/Technicolor, Fuji, and SMPTE Journal awards, and the new Leitch award.

Registration and Further Conference Developments

If you are a SMPTE member, registering early saves you money. If you're not a member, becoming one more than pays for itself in early registration fees for the Technical Conference. Keep monitoring the *Journal* and SMPTE's Website (www.SMPTE.org) for the latest in new sessions, program developments, speakers, and more.

SMPTE EXHIBITION

It is not too late for companies wishing to participate in SMPTE's Exhibition. Contact Steve Antolick, Exhibit Coordinator, SMPTE, 2025 M St. NW, Ste. 800, Washington, DC 20036. Tel: 202-367-2311, fax: 202-429-5112, or e-mail: Steven_Antolick@dc.sba.com.

The following is a list of exhibitors as of July 11, 2001:

Acterna
ADC
AgileVision LLC
AJA Video
Astro Systems, Inc.
Audio Accessories, Inc.
Avica Technology Corp.
Axon Digital Design B.V.
BarcoNet
BBC Technology
Belden Electronics Division
Bittree, Inc.
Broadcast Store, Inc.
Chyron Corp.
Convera
DNF Controls
Dolby Laboratories, Inc.
DVS Digital Video, Inc.
Evertz Microsystems Ltd.
Force, Inc.
GEPCO
Grass Valley Group
Innovation TK Ltd.
Leader Instruments Corp.
Leitch, Inc.
LSI Logic Storage Systems, Inc.
Microwave Radio Communications
Miranda Technologies, Inc.
OmniBus Systems
Oxtel, Inc.
Panasonic Broadcast
ParkerVision, Inc.
PESA Switching Systems, Inc.
Quantel
Quartz Electronics Ltd.
Rohde & Schwarz, Inc.
Ross Video Ltd.
Snell & Wilcox
Sony Electronics Inc.
SyntheSys Research, Inc.
TANDBERG Television
Tektronix, Inc.
TeraNex
Trompeter Electronics
Video Products Group, Inc.
Videotek, Inc.
West Penn Wire/CDT
Wohler Technologies