

34th Advanced Motion Imaging Conference

The latest digital cinema technology, standards, systems, and hardware were presented at the 34th SMPTE Advanced Motion Imaging Conference, February 3-5, 2000 at the Fairmont Hotel in San Francisco, CA. The conference was co-chaired by Richard Mizer, Digital Ventures Diversified, and Charles Hintz, California State University—Hayward.

“Bandwidth, Bitrate, and Resolution” encouraged further progress and brought awareness to the nearly 500 attendees as SMPTE examined digital cinema projection, 24-frame progressive digital cameras, MPEG-2 compression, wavelets and MPEG-4, DVD, and the Internet. The program consisted of two tutorials on Audio and Video Compression, followed by sessions on Acquisition, Compression and Transmission, Switching and Storage, and Exhibition.

SMPTE Engineering Director for Film, Ioan Allen, presented a report on the creation and progress of the SMPTE D-Cinema Technology Committee. This group was recently established to develop systems and standards for the growing D-Cinema industry.

All-Day Seminar

The program commenced on Thursday morning, February 3, with the Audio tutorial co-chaired by Steve Vernon and Ioan Allen, Dolby Labs. Topics addressed in this session included Nyquist Criterion, Shannon Theory, Reed-Solomon Coding Techniques, Audio Coding and Bandwidth, AC-3, and Dolby-E.

The afternoon session, “Video, Video Compression, and MPEG,” was co-chaired by Wayne McLachlan, Grass Valley Group, and Mark Montello, Sony Electronics. Presentations in this session included *Analog Video for Digital Conversion*, Wayne McLachlan; *Kicking the MPEG Workhorse: The How, Why, and What of MPEG*, Charles Hintz and Wayne McLachlan; *Video Testing in a DTV World*, Dave Fibush, Tektronix; *High-Definition Cable and Return Loss*, Steve Lampen, Martin J. Van Der Burgt, and Bernard A. Gebs, Belden Electronics; *Editing MPEG*



Charles Hintz, Conference Co-chair.



Richard Mizer, Conference Co-chair.



Peter Ludé, General Arrangements Chair.



SMPTE President Charles Jablonski opening the Get-Together Luncheon



Conference Vice-President Thomas Jordan.



Larry Kaplan, luncheon keynote speaker.



Bill Miller, Bob Kisor, and Ed Hobson enjoy a brief chat.



Attendance was high at the informative papers sessions.



Attendees had a chance to socialize and at the Get-Together Luncheon.



Members of the Napa Valley Student Chapter during a coffee break.

Streams, Mark D. Conover, PixelTools Corp.; *IEEE-1394*, Michael Johas Teener, Zayante, Inc.

Technical Program

Friday morning began with the "Acquisition" session, co-chaired by Laurence J. Thorpe, Sony Electronics, and John Carlson, Monaco Film Labs. Topics addressed included *Reference Test*, David Corley, DCS Labs; *HDTV Lens Development*, Thom Calabro, Fujinon Inc.; *Advantages of 24-Frame Progressive HDTV Production*, Laurence J. Thorpe; *HD Lens Development from Panavision*, John Galt, Panavision; *The Upconversion Option*, Peter Wilson, Snell & Wilcox.

The afternoon session on "Compression/Transmission" was co-chaired by Robin Wilson, DiviCom, and Brad Medford, Pacific Bell. The following topics were addressed: *Monitoring for Multi-Program DTV*, Michael Waidson, Tektronix; *High-Definition Encoding and Digital TV System Architecture*, Matthew W. Goldman and Mark Balch, DiviCom; *Universal Half-Inch VTR Based on MPEG 422@MPL for Production Application*, Hugo Gaggioni, Sony Electronics; *Digital Image Compression in the Film Chain*, Steven A. Morley, Qualcomm, Inc.; *Digital VSB Fundamentals and Applications*, Wayne Bretl, Zenith Electronics Corp; *MPEG-4, The Standard for Audio-Visual IP Services*, Isabelle Corset, Philips Digital Networks; *Implementing*

Worldwide Uncompressed Video Networks, Steven L. Storozum, Video Products Group, Inc.

The Saturday sessions began with "Switching/Storage," co-chaired by Rick Reagan and Beth Rogozinski, SGI. Papers presented were *Tapeless Tape at Fox*, John Hennessy, Ampex Corp.; *A Survey of Video Server Architectures*, Al Kovalick, Pinnacle Systems; *The HD Still Store Challenge*, Harris Rogers, Accom, Inc.; *Advanced M/E Architectures for Multi-Program Environments*, Mark Naverson, Grass Valley Group; *Digital Plant Synchronization*, Birney Dayton, NVision; *DVD Meets Internet*, Jim Taylor, Microsoft Corp.

The technical program concluded on Saturday afternoon with the "Exhibition" session, co-chaired by Garret Smith, Paramount Pictures; and Phil Livingston, Panasonic Broadcast & Television Systems Co. Papers presentations included *SMPTTE Digital Cinema Task Force*, Ioan Allen, Dolby Labs; *Making MPEG-2 Video Display Agnostic*, Jeff McVeigh, Patty Gray, and Mark Buxton, Intel Corp.; *Film Into Pixels, A Practical Look at Current D-Cinema Image Quality*, Harry Mathias, Schneider Optics, Inc.; *Digital Cinema Projector*, Chris Genereaux, Panasonic Broadcast & Television Systems Co.; *Multi-Purpose Mastering Formats from Film*, Allan Peach, DemoGraFX; *An All-Digital Pipeline: Toy Story 2*, Bill Kinder, Pixar Animation Studios.

Social Events and Attractions

The conference wasn't all business. On Thursday night, February 3, there was a Welcome Reception at the hotel, which included hors d'ouvres and cocktails. Attendees had a chance to relax, socialize, and network with peers.

An address by keynote speaker Larry Kaplan, Omneon Video Networks, was delivered at the Get-Together Luncheon on Friday, February 4. Kaplan highlighted the changes brought about in the industry through the Internet and world wide web.

On Friday night, an off-site reception was held at the Exploratorium, an interactive museum in San Francisco. Sponsored by Dolby, Grass Valley Group, and Sony, a wine and cheese party provided an opportunity to experience hands-on exhibits while socializing with other attendees.

The conference ended with a special digital screening of *Toy Story 2* at the AMC Theater on Saturday, February 5. The presentation, made by Disney and Dolby Labs, was all-electronic from creation through display and demonstrated how far D-Cinema technology has progressed.

Sponsors

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