Saturday, 14 April: Day 1

8:30-8:45 Opening, Introductions and Sponsorship Message
Speakers: Peter Ludé, Senior VP Engineering, Sony Electronics, Inc., President, SMPTE
Barbara Lange, Executive Director, SMPTE
Paul Hearty, VP Technology Standards Office, Sony Electronics, Inc., Editorial Vice President, SMPTE
Susie Beiersdorf, Director, Sales, Digital Cinema Solutions, Sony Electronics, Inc.

8:45-9:15 Digital Cinema Deployment Update
Moderator: Michael Karagosian, President, MKPE Consulting LLC
Speakers: Michael Karagosian, President, MKPE Consulting LLC
Chuck Goldwater, Consultant, Goldwater Partners
Joe Hart, SVP Digital Cinema, Deluxe Digital Cinema

Deployment of Digital Cinema continues to grow. As well, many Virtual Print Fee contracts require deployment in 2012. This session will give an update on current and forecasted deployment, as well as an appreciation of the challenges and opportunities involved.

9:15-10:15 Theatrical Piracy and Countermeasures
Moderator: Jim Williams, President and Founder, Media Strategies and Solutions, LLC
Speakers: Mike Robinson, EVP, Content Protection, Chief of Operations, MPAA
Jean-Michel Masson, SVP Watermarking Solutions, Civolution
Michael Ayers, SVP Business & Legal Affairs and General Counsel, Verance
Steve Weinstein, President and Chief Executive Officer, MovieLabs

Illegal recording of movies in the theater remains a serious problem for content owners, resulting in billions of dollars in losses each year. Over ninety percent of newly released movies that are pirated can be traced to thieves who use a digital recording device in a movie theater to literally steal the image and sound off the screen. This camcorder theft is one of the biggest problems facing the film industry. To address this problem, virtually all theatrically released films now employ two types of watermarking – forensic and playback control. Forensic watermarking enables film companies to discern the source of a stolen film through forensic analysis and trace it back to the very theater in which it was recorded. Playback control watermarking diminishes the usability of pirated movies on increasingly common consumer devices, such as Blu-ray Disc players. The content industry also continues to pursue new technologies to stop and delay the first pirated copy to give the legitimate distribution market a few more all-important days of “exclusivity” before pirated copies pollute the market. This session pulls together leading experts to provide an overview of worldwide theatrical piracy, technologies and processes being used to identify and thwart sources of piracy, technologies and policies being deployed and adopted to reduce the impact of camcorded movies and also new technologies that enable automatic detection of digital recording devices in a theatrical exhibition.

10:15-10:45 Break
10:45-11:30  **Green Lighting on the Set**  
Speaker: Ryan Fletcher, Product Manager, LED, ARRI

Advances in solid-state illumination technology are now making LED luminaires practical for many television and motion picture applications. LED lighting provides the benefits of reduced power consumption and less cooling requirements. It also provides the opportunity for color adjustments without the need for gels, but the light emissions from LEDs have fundamentally different chromaticity than the familiar tungsten and HMI luminaries in use today. This session will review the fundamentals of making white light with LEDs, including trichromatic and pumped phosphor systems. You will learn why illumination with identical color temperature measurements can look very different to the eye, and even more different to a digital camera. This session also explores the relationship between trichromatic illumination and three-color camera sensors. In addition, you will hear about why new emerging standards for measuring illumination quality will be important in the future.

11:30-1:00  **Lunch Break**

1:00-1:45  **View from the Academy: Advancing Motion Picture Art, Science and Technology**  
Speaker: George Joblove, Co-Chairman, Science and Technology Council  
Academy of Motion Picture Arts and Sciences

The motion picture industry continues its technological evolution to a fully digital infrastructure. The Academy of Motion Picture Arts and Sciences’ Science and Technology Council will report on its current work to ensure that this evolution expands, rather than limits, filmmakers’ creative palette.

1:45-2:15  **Accessibility**  
Moderator: Paul Hearty, VP Technology Standards Office, Sony Electronics, Inc.  
Editorial Vice President, SMPTE
Speakers: Nanci Linke-Ellis, General Manager, Captionfish  
Michael Karagosian, President, MKPE Consulting LLC

There is increasing effort to make the cinema experience enjoyable by, and accessible to, those with perceptual challenges. This session will give an appreciation of accessibility requirements, together with an update and forecast on the deployment of assistive technologies and services. Challenges associated with the development and delivery of assistive content will be discussed.

2:15-2:30  **Digital Cinema Standards Update**  
Speaker: John Hurst, CTO, CineCert

This session will give selected highlights of current activities in standards for Digital Cinema, as well as a forecast of standards work to come, such as consideration of higher frame rates.

2:30-3:30  **Cinema Sound Advances**  
Moderator: Dr. Sunil Bharitkar, CTO Office, Dolby Laboratory
Speakers: Brian Vessa, Chair, SMPTE Theatre B-Chain Study Group  
Brian Claypool, Sr. Director Strategic Business Dev., Barco
Charles Q Robinson, Senior Member Technical Staff,
Sound Technology Research, Dolby Laboratory

There have been exciting recent advances and ongoing standards work in sound for Cinema exhibition. This session will provide an update on the progress of the SMPTE B-Chain Study Group focusing on acoustical measurement techniques for improved interchange and interoperability for the Cinema, a novel approach on packaging and playback of audio tracks for 3D, and a presentation on challenges for next generation Cinema audio systems.

3:30-4:00 Break

4:00-5:30 Laser Projection
[Co-Produced with Laser Illuminated Projector Association]

Moderator: Peter Ludé, Senior VP of Engineering, Sony Electronics, Inc. President, SMPTE; Chairman, LIPA

Speakers: Casey Stack, President, Laser Compliance
Jim Houston, Principal, Starwatcher Digital
Bill Beck, Founder/ EVP, Business Dev., Laser Light Engines

Brighter 3D images in the theater in the next big challenge in digital cinema projection systems. One potential solution involves replacing traditional xenon short-arc lamps with laser illumination systems. In addition to potentially brighter images, lasers promise lower operating costs, reduced power consumption, longer life and in increased color gamut. The session will explain laser technology as it applies to projector technology, and dispel some of the myths surrounding the use of lasers. You will learn about recent developments in laser technology, including the dramatic progress in mitigating one of the important challenges in laser projectors, despeckling. In addition, this session will explain the current regulatory landscape relating to laser projectors in the US and worldwide, with updates on recent activities within the IEC and other standards bodies. Recent research data relating to the optical properties of laser systems compared with legacy xenon lamp projectors will also be revealed. This session is produced in association with LIPA, the Laser Illuminated Projector Association, a recently established association of over 20 industry leading companies representing laser suppliers, projector manufacturers, technology organizations and exhibitors. The session will also include a demonstration of new laser projector technology, based on a standard model (xenon) projector fitted with a hybrid RGB laser engine. This demo supports 3D imaging on a silver screen with improved brightness, expanded color gamut and high frame rate capability.

5:30-5:55 Wrap-up Day 1
Speaker: Leon Silverman, General Manager Digital Studio, The Walt Disney Studios

5:55-6:00 Adjourn

Sunday, 15 April: Day 2

8:30-8:45 Opening, Session Introductions and Sponsorship Message

Speakers: Paul Hearty, VP Technology Standards Office, Sony Electronics, Inc., Editorial Vice President, SMPTE
Susie Beiersdorf, Director, Sales, Digital Cinema Solutions, Sony Electronics, Inc.
Paul Hearty, VP Technology Standards Office, Sony Electronics, Inc., Editorial Vice President, SMPTE
8:45-9:45  **3DIY: Toolsets for Independent 3D Filmmaking**  
Moderator: Ray Zone, President, 3-D Zone  
Speakers: Eric Kurland, Filmmaker  
Perry Hoberman, Research Associate Professor, USC School of Cinema and Television

Emerging digital toolsets are driving a wave of independent production of stereoscopic motion pictures. New 3D movies in every conceivable genre, from documentaries and avant-garde experiments, to dramatic and humorous narratives, are being made by fiercely individual filmmakers all around the world. In their hands, the 3D film is evolving a new visual grammar for the motion picture screen. Four independent 3D moviemakers discuss the digital toolsets they used for capture, post-production and deliverables of their stereoscopic motion pictures. Each of the three indie 3D filmmakers shows a short 3D clip of their work and discusses the toolsets used. Ray Zone, a historian of stereoscopic cinema and a producer of independent 3D films, moderates the discussion.

9:45-10:45  **Enhanced Cinema: Second Screen and Beyond**  
Moderator: Pat Griffis, Senior Director, Technology Strategies, Dolby Laboratory;  
Speakers: Sapth Sholingapuram, Vice President, Deluxe (pocketBLU)  
Al Kovalick, Founder, Media Systems Consulting  
Peter Wilson, Director, High Definition and Digital Cinema Ltd.  
Mark Schubin, Technology Consultant, SchubinCafe.com

The use of second screens such as PC's, iPad's, etc. to control or complement a main screen viewing experience in the home is a growing phenomenon. However, there are a number of interesting use cases of how this approach is influencing the creation of content for the Cinema as well. In this session, we will examine innovative developments in this area and their impact from both a creative and technical perspective in a Cinema context.

10:45-11:15  **Break**

11:15-12:15  **4K (and beyond!) Update**  
Coordinator: Jim Houston, Principal, Starwatcher Digital  
Moderator: Jim Houston, Principal, Starwatcher Digital  
Speakers: Hugo Gaggioni, CTO, Sony Electronics, Inc.  
Craig Todd, CTO, Dolby Laboratory  
Dr. Yoshiaki Shishikui, Head of Advanced TV Systems Research Division, NHK Research

65mm film has long set a benchmark for clarity and resolution in cinema images and has consistently amazed audiences with the feel of “being there”. In digital systems, 4K resolution is close to achieving the same effect on viewers. This session will cover 4K and beyond, illustrating the maturity of cinema cameras and commercial projectors operating at 4K, and tracking work towards even higher resolution for cinema and the home. What standards are needed for consumers to see 4K in the home? Is 8K practical? How are plans for UHDTV progressing both in standards bodies and in Japan? This session will include simulated demonstrations of the difference between all of these resolutions.
A Change Is Gonna Come – In fact, It’s Here

Very few professionals are able to witness and be involved first hand in a paradigm shift... a complete change in the way business is done. We, in the entertainment business, are in that enviable place as theatres, one of the last bastions of analog media, transform to digital specs. And, this transformation is a complete game changer – not just for the exhibition community, but for the entertainment industry as a whole. No longer is there one tried-and-true way to approach business, nor one way to make profits. Digital has changed that, from using theatres like TV channels - premiering recurring, relevant content targeted to specific, niche audiences - to offering an enhanced audience experience via LIVE 3D programming to groups of avid fans ranging from cheering Foo Fighters crowds to BCS and World Cup Soccer mavens.

During this session, we’ll address our need to be innovators and how – together - we can conquer and thrive in the exciting, burgeoning new technological world.

What do opera, games, music, and sports all have in common? They're marketed as alternative content to cinemas. Digital technology provides an exciting opportunity to entertain audiences with non-cinematographic content. This session will give an overview of the business of alternative content, from licensing to booking to performance.

Higher Frame Rate (HFR) 3D has become of great interest to the creatives, including such notables as James Cameron and Peter Jackson, as a way to improve overall 3D presentation quality. Both are pursuing projects to produce 3D at high frame rates. In this session, we will
explore some of the scientific, technical, and business issues this creative direction elicits, including: the science of Higher Frame Rate 3D perception; production issues in HFR 3D content creation including 48 to 24 FPS conversion, subtitling creation, wide shutter angle capture, etc.; HFR 3D theatrical distribution challenges; and, post-theatrical HFR 3D distribution issues.

5:30-5:55 Wrap-up and Close
Speaker: Leon Silverman, General Manager Digital Studio, The Walt Disney Studios

5:55-6:00 Adjourn