

61st Annual IEEE Broadcast Symposium

Program – subject to change

19-21 October, 2011

Westin Alexandria Hotel, 400 Courthouse Square, Alexandria, VA 22314

All events in the Edison Ballroom unless otherwise noted

Wednesday, 19 October 2011

8-9AM

Continental breakfast

9AM – noon

Tutorial – Connected TV

Session co-chairs: **Rich Chernock, Triveni Digital**
Yiyang Wu, CRC

Papers include:

- *Connected TV: The U.S. Broadcast Perspective* – Skip Pizzi (NAB)
- *Emerging International Standards for Internet Television* – John Simmons (Microsoft)
- *The Connected TV Technology Landscape* – Scott Lincke (Yahoo!)
- *Dynamic Broadcast: Joint Optimization of Network Planning and Content Delivery Scheduling* – Junge Qi (Technical University Braunschweig), Javier Morgade (University of the Basque Country)

Noon – 12:30PM

Box lunch

12:30-1PM

Keynote luncheon speaker

Bridging the Gap – New IEEE BTS Initiative
Speaker – John Luff

Introduction by Ralph Hogan



John Luff

Television Technology Consultant
HD Consulting

1-5PM

Tutorial – HD Radio

Session chair: Bob Surette, Shively Labs

Papers include:

- *A Method for Measuring Hybrid FM IBOC Signals on Transmission Systems with Independent Digital and Analog Transmission Lines* – Randy Mullinax (Clear Channel Radio)
- *Power Measurement for HD and Analog FM Signals* – Lynn Strube (Bird Electronics)
- *Auxiliary Data Services for HD Radio – The Artist Experience* – Allen Hartle, (Jump2Go)
- *The Business Side of HD Radio Technology* – Rick Greenhut (iBiquity Digital)
- *New FCC Part 74, 101 Rule Changes Affect Broadcast Link Design* – Larry Miller (Schwartz, Woods and Miller)
- *A Brief Review and Update on Environmental Due-diligence Requirements for Tower Siting* – Kenneth Rosenbaum, Jr. (Environmental Resources Management)

6-8PM

Welcome reception (Wright room)

Entertainment by Da Vinci Strings

Thursday, 20 October 2011

8-9AM
Continental breakfast

9-11:45AM
Radio Engineering & RF Infrastructure
Session chair: Roz Clark, Cox Radio

- 9-9:30AM *FM Transmitter Cooling Technologies and Tradeoffs*
Gary Liebisch, Nautel
- 9:30-10AM *Asymmetrical Sideband Broadcasting using FM HD Radio*
Paul Shulins, Greater Media
- 10-10:30AM *Report from Brazilian Association of Broadcasting about the Test Results in AM and FM Stations that use the IBOC Standard*
Ronald Siqueira Barbosa, Valderez Donzelli, ABERT
- 10:30-10:45AM Coffee break
- 10:45-11:15AM *Efficiency Enhancement Technology for Linear RF Power Amplification*
Geoff Mendenhall, Harris
- 11:15-11:45AM *Tips and Tricks to make TIA-222-G Work for You*
Adam Jones, Shively Labs

Noon – 2PM
Joint BTS/AFCC Luncheon (Salon ABC room)
Keynote speaker:
Peter Doyle, Chief, Audio Division, Media Bureau, FCC



Peter Doyle
Chief, Audio Division,
Media Bureau
FCC

2-3PM
Network Distribution
Session chair: James O'Neal, TV Technology

- 2-2:30PM *Pitch Blue™: A Real Time HDTV Store and Forward Program Delivery System*
Robert P. Seidel, CBS Television Network
- 2:30-3PM *CBC's Next Generation Converged Network*
Pascal Marcoux, CBC
- 3-3:15PM Coffee break

3:15-5:15PM
Mobile DTV
Session chair: James O'Neal, TV Technology

- 3:15-3:45PM *Service Protection, Conditional Access and Digital Rights Management in Mobile DTV Systems*
Adam Goldberg and Robin Wilson, AGP, LLC
- 3:45-4:15PM *Field trials for Advanced T-DMB Systems*
Yun-Jeong Song, Young-su Kim, Hun-Hee Lee, Byungjun Bae, Kwang-Yong Kim, Joungil Yun, ETRI

(Thursday continued)

4:15-4:45PM *Parameters for Coverage Maps of ATSC Mobile/Handheld Digital Television*
John Kean, NPR Labs

4:45-5:15PM *Service Prediction Modeling for ATSC M/H*
Bill Meintel, Meintel, Sgrignoli & Wallace

6-9PM

Manufacturer's reception (Wright room)

Friday, 21 October 2011

8-9AM

Continental breakfast

8:30-11:45AM

DTV Implementation

Session chair: Charles Einolf, Consultant

8:30-9AM *Taming DTV Interference to Co-Sited Adjacent-Spectrum Users*
S. Merrill Weiss, Merrill Weiss Group, and Greg Best, Greg Best Consulting

9-9:30AM *Single Frequency Network (SFN) Experiences in NYC*
Jerome David, Thomson Broadcast

9:30-10AM *An Overview of the ISDB-T in Brazil*
Laisa C. C. De Biase, Marceo G. De Biase, Marcelo K. Zuffo, University of Sao Paulo

10-10:15AM Coffee break

10:15-10:45AM *New Results for ISDB-T_B in the VHF Band*
Gunnar Bedicks Jr., Renato de Mendonça Maroja, Francisco Sukys, Edson Lemos Horta, Gustavo de Melo Valeira, and Cristiano Akamine, Mackenzie Presbyterian University

10:45-11:15AM *HDTV and 3DTV services over DVB-T2 using Multiple PLPs with SVC and MVC*
Cornelius Hellge, Estibaliz Guinea Torre, David Gómez-Barquero, Thomas Schierl, and Thomas Wiegand, Fraunhofer HHI/Technische Universität Berlin

11:15-11:45AM *Update on FCC National Broadband Plan*
Bill Meintel, Meintel, Sgrignoli & Wallace

Noon – 2PM

IEEE BTS Awards luncheon (Salon ABC room)

Keynote speaker: Sterling Davis,
Recently retired VP, Engineering, Cox Media Group



Sterling Davis

Recently retired VP,
Engineering
Cox Media Group

2-4:45PM

Future of DTV

Session chair: Bill Hayes, Iowa Public TV

2-2:30PM *Broadcasting – The Technology and the Medium*
Mark Aitken, Sinclair Broadcasting

2:30-3PM *Reassessing Short - term Requirements for New Mobile Broadband Spectrum*
Steve Crowley, Steven J. Crowley, P.E.

(Friday continued)

3-3:15PM Coffee break

3:15-3:45PM *Augmented Data Transmission for the ATSC Terrestrial DTV System*

Sung Ik Park, Hyoungsoo Lim, and Heung Mook Kim, ETRI

3:45-4:15PM *ATSC 2.0 – What's Next?*

Rich Chernock, Triveni Digital

4:15-4:45PM *ATSC 3.0 - Next Generation Broadcast Television*

James A. Kutzner, PBS