

**2008 IEEE International Symposium on Broadband Multimedia Systems and Broadcasting
(Broadband Multimedia Symposium)
Preliminary Program
(Subject to Change)**

Monday, 31 March 2008

Room:

Ballroom E

Continental Breakfast

9:00 - 9:30 am

Plenary Session 1	9:30 - 12:00 noon	Tom Gurley Jerry Whitaker	Symposium Chair ATSC
	Opening Remarks Session Chair Panel Discussion: ATSC mobile and handheld Systems		

**Buffet Luncheon:
Ballroom E**

12:00 - 1:30 pm

PM Session 1: Mobile TV	1:30 - 3:10 pm	Jinyun Zhang Geoffrey Li	Mitsubishi Electric Research Labs, USA Georgia Institute of Technology, USA
	Session Co-Chairs		
	The Television Broadcasting Network of High Speed Railway in China	Lin Gui	Shanghai Jiaotong University, China
	An Efficient Multimedia System for JME Mobile Devices	Renaud Cazoulat	Orange Labs, France
	Fast Channel Switching for Hybrid Unicast/Broadcast Mobile Television	Markus Kampmann	Ericsson Research, Germany
	Mobile Broadcasting: Advanced Services using Innovative Electronic Service Guides	Philipp Steckel	Braunschweig Technical University, Germany

Coffee Break

3:10 - 3:30 pm

**Sponsored by
Mitsubishi Electric**

PM Session 3: Broadband Wireless Systems	3:30 - 4:40 pm	Markus Kampmann	Ericsson Research, Germany
	Session Chair		
	Distributed Detection in UWB-IR Sensor Networks with Randomization of the Number of Pulses	Tsang-Yi Wang	National Sun Yat-sen University, Taiwan
	Hot-Spot Wireless Access Exploiting Shadowing Diversity of Distributed Antennas	Ye (Geoffrey) Li	Georgia Institute of Technology, USA
	Design and Implementation of Frequency Domain Equalizer for ATSC System	Xianbin Wang	Communications Research Centre Canada

Room:

Conference Room 9/10

**PM Session 2:
Scalable Video Coding**

1:30 - 3:10 pm

	Session Co-Chairs	Philip Corrievau Jonathan Loo	Intel Corporation, USA Brunel University, United Kingdom
	The Motion Attention Directed Fast Mode Decision for Spatial and CGS Scalable Video Coding	Yun-Da Wu	National Central University, Taiwan
	GOP-based Unequal Error Protection for Scalable Video over Packet Erasure Channel	Lap-Pui Chau	Nanyang Technological University, Singapore
	A Fast Mode Selection Method for Spatially Scalable Video Coding	Bumshik Lee	Information and Communications University, Korea
	Robust Transcoding for Scalable Video Coding	Rachel Chiang	National Chung Cheng University, Taiwan

Coffee Break

3:10 - 3:30 pm

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PM Session 4: Security	3:30 - 5:10 pm	Gabriel-Miro Muntean Andreas U. Schmidt	Dublin City University, Ireland Fraunhofer Institute, Germany
	Session Co-Chairs		
	On the Integrity and Authentication Protection of Real Time Data in Broadcast Networks	Robin Wilson	Nagravision, Switzerland
	A Conditional Access System for Mobile Broadcasting Systems	Yusei Nishimoto	NHK, Japan
	OpenCA: Conditional Access System in MediaFLO	Jangwon Lee	Qualcomm Inc, USA
	National Security and Emergency Preparedness (NS/EP) Multimedia Service in a Congested Network	Arye Ephrath	Mythology, Inc, USA

**Welcome Reception:
Ballroom E**

6:00 - 8:30 pm

Tuesday, 1 April 2008

Room:

Ballroom G

Continental Breakfast 8:20 - 8:55 am

Plenary Session 2 8:55 - 10:05 am

Session Chair	Yiyun Wu	Communications Research Ctr CA, Canada
Hybrid Broadband/Broadcast Systems and Set-top Boxes	Peter Siebert	Siemens Schweiz AG, Switzerland
The LADIES Solution	Dario Di Zenobio	Ugo Bordonni Foundation, Italy

Coffee Break 10:05 - 10:20 am

AM Session 5: IPTV 10:20 - 12:00 noon

Session Chair	Peter Siebert	Siemens Schweiz AG, Switzerland
Optimizing Channel Change Time in IPTV Applications	Harald Fuchs	Fraunhofer IIS, Germany
A Comparison of Transport Protocols in IPTV Systems	Marcel Wagner	Nokia Siemens Networks GmbH & Co.KG, Germany
Reducing IPTV Channel Zapping Time Based on Viewer's Surfing Behavior and Preference	Yuna Kim	POSTECH, Korea
A Benchmark for Fast Channel Change in IPTV	Ivan Kopilovic	Nokia Siemens Networks GmbH & Co.KG, Germany

Keynote Luncheon: 12:00 - 2:00 pm
Conference Rooms 11-13

Presentation

Kamil Grajski
President FLO Forum/ Vice President, Engineering, QUALCOMM
The Expanding Global MediaFLO Ecosystem

PM Session 7: Datacasting and Interactive Systems 2:00 - 3:40 pm

Session Chair	Pablo Angueira Buceta	University of the Basque Country, Spain
Filecasting for Streaming Content Delivery in IP Datacast over DVB-H Systems	David Gómez-Barquero	Polytechnic University of Valencia, Spain
Optimal Carousel Stream for Interactive Digital TV Service	Yi-Chung Lo	National Taipei University of Technology, Taiwan
Social Interaction Features for Mobile TV Services	Sebastian Egger	Telecommunications Research Center Vienna, Austria
A Utility based Data Replication and Multimedia Presentation in Mobile Network	Seung-Bum Lee	Dublin City University, Ireland

Coffee Break 3:40 - 4:00 pm

Room:

Conference Room 9/10

AM Session 6: Video Processing 10:20 - 12:00 noon

Session Chair	Lap-Pui Chau	Nanyang Technological University, Singapore
Zoom and Slow Motion Replay of Color Video Sequences Using Fractals	Maurizio Murrioni	University of Cagliari, Italy
Bandwidth Efficient Error Resilience Scheme using Wyner-Ziv Coding for Wavelet-based Video Transmission	Jonathan Loo	Brunel University, United Kingdom
The Effects of Severity and Duration of Video Playback Errors on the Average End-User's Experience	Audrey Younkin	Intel Corporation, USA
Enhancement of Calibrated Stereo Vision Depth Map Estimation for Autostereoscopic Viewing	Sabri Gurbuz	NICT Cognitive Information Science Laboratories, Japan

Keynote Luncheon: 12:00 - 2:00 pm
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Presentation

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PM Session 8: Rate Control 2:00 - 3:40 pm

Session Chair	John Cosmas	Brunel University, United Kingdom
Rate Control with Stream Scaling for Motion-JPEG2000 Video over the Internet	Michael H Lee	CSIRO ICT Centre, Australia
Adaptive Rate Control in IPTV Applications over Wireless Channels	Taha Landolsi	American University of Sharjah, United Arab Emirates
A Scene Change Independent High Quality Constant Bit Rate Control Algorithm for MPEG4 Simple Profile Transcoding	Subarna Tripathi	STMICROELECTRONICS Pvt. Limited, India
Statistical Multiplexing using H.264/SVC	Marc Jacobs	University of Brussels, Belgium

Coffee Break 3:40 - 4:00 pm

	Session Chair	Shuji Hirakawa	Toshiba Corporation, Japan
Multimedia Systems	Video Telephony performance over cellular CDMA EVDO	Kashyap K. R. Kambhata	San Diego State University, USA
	Intelligent Playlist for the Optimal IP Distribution of H264 SVC/MDC Services over Broadband and Broadcast Platforms	Francesc Enrich	Universitat Ramon Llull, Spain
	Development of SVG based Data Broadcasting Services in Terrestrial DMB	Byungjun Bae	ETRI, Korea
	An Inter-Burst UEP-Scheme for DVB-H using Redundant Transmission	Hussain M. Mohammed	Fraunhofer IIS, Germany
	A New Context-related Advertisement Method for an Interactive Television	Jae-hoon Cho	Korea Advanced Institute of Science and Technology, Korea
	Multicast Delivery of File Download Services in 3G Mobile Networks with MBMS	David Gómez-Barquero	Polytechnic University of Valencia, Spain
	Time-Frequency Scrambling Scheme for Improving Cell-Edge Performance in Multi-Cell Multimedia Broadcast Multicast Service	Ming-Chien Tseng	Industry Technology Research Institute, Taiwan
	Multiresolution MBMS Transmissions for MIMO UTRA LTE Systems	Nuno Souto	ISCTE/ADETTI/Instituto de Telecomunicações, Portugal
	Session Chair	Xianbin Wang	The University of Western Ontario, Canada
	Error rotated Decision Feedback Equalizer for Chinese DTTB Receiver	Dazhi He	Shanghai Jiao Tong University, China
Multimedia Transmission	Validation of a DVB-H Dynamic System Simulator using Field Measurements	Jussi Poikonen	University of Turku, Finland
	Research on simple QPSK demodulation method in hierarchically modulated T-DMB system with DQPSK-QPSK	JaeHwi Bae	ETRI, Korea
	Pipelined DFE Equalizer Design for ATSC DTXR System	Sung-Hoon Kim	ETRI, Korea
	Robustness of MIMO-OFDM Schemes for Future Digital TV to Carrier Frequency Offset	Youssef Nasser	Institute of Electronics and Telecommunications of Rennes, France
	A New Transmitter Identification system for ATSC DTV Standards	Tae-hoon Kwon	Korean Broadcasting System, Korea
	Multi-Band Wavelet-Based Spectrum Agile Communications for Cognitive Radio Secondary User Communication	Jacek Ilow	Dalhousie University, Canada
	Performance Enhancement by Applying FPTC and Franks Windowing in DVB-T Receiver	Kun-Yi Lin	National Taipei University of Technology, Taiwan
	Locations Correction Factor for Coverage Planning Tools for DRM (Digital Radio Mondiale) in 26 MHz Band	José Maria Matias	University of the Basque Country, Spain
	Design and Simulation of the BS Transceiver for IEEE 802.16e OFDMA Mode	Qing Wang	Tsinghua University, China
	Measurement Results of Transmit Delay Diversity for DVB-T Networks	Raffaele Di Bari	Brunel University, United Kingdom
Multimedia Networking	Session Chair	Lin Gui	Shanghai Jiaotong University, China
	Quality Multimedia Distribution Through Resource Management and Performance Monitoring over DSL Networks	Jaume Rius i Riu	Robotiker-Tecnalia, Spain
	An Adaptive Routing Algorithm in Wireless Mesh Networks	Minseok OH	Kyonggi University, Korea
	A Novel Idea to Combat of 4G Challenges to Establish All Wireless Internet Services	Chowdhury Sajadul Islam	
Multimedia Processing	Session Chair	Harald Fuchs	Fraunhofer IIS, Germany
	Motion Estimation using Partial Cost Function Calculation	Myo Tun	Brunel University, United Kingdom
	An Approach for an Intelligent Crop and Scale Application to Adapt Video for Mobile TV	Joerg Deigmoeller	Institut fuer Rundfunktechnik, Germany
	Video Index and Search Services Based on Content Identification Features	Serafeim Papastefanos	National Technican University of Athens, Greece
Video Coding	Rate Distortion Optimization for Efficient Watermarking in the DCT Domain	Ofer Hadar	Ben Gurion University of the Negev, Israel
	Session Chair	Demin Wang	Communications Research Centre, Canada
	Semi-Hierarchical Motion Estimation for Dirac Video Codec	Jonathan Loo	Brunel University, United Kingdom
	A Fast 4x4 Intra Mode Decision for Inter Frame Coding in H.264/AVC	Taeyoung Na	Information and Communications University, Korea
	Low Complexity Video Encoding Using New Motion Vector Skip Mode Coding	Bongsoo Jung	Sungkyunkwan University, Korea
	On Wavelet Coding of Arbitrarily Sized Images and Video	Liang Zhang	Communications Research Centre, Canada
	Video Quality Based Adaptive Wireless Video Streaming to Multiple Users	Maria G. Martini	University of Ferrara, Italy

Wednesday, 2 April 2008

Room:

Ballroom G

Continental Breakfast 8:20 - 8:50 am

Plenary Session 3	8:50 - 9:50 am	Session Chair	Tom Gurley	Symposium Chair
		Pulling Ahead with Unified Transactional Policy Architectures	Andrew D'Souza	Openet, Ireland
		Traffic and Network Modeling for Next Generation Applications	Michael Needham	Motorola Labs, USA

Coffee Break 9:50 - 10:05 am

AM Session 9: Channel Modeling and Estimation	10:05 am - 12:10 pm	Session Chair	Hsiao-Chun Wu	Louisiana State University, USA
		Evaluation of the Lee Method for the Analysis of Long-term and Short-term Variations in the Digital Broadcasting Services at the MW Band	David de la Vega	University of the Basque Country, Spain
		Studies on Channel Models and Channel Characteristics for Mobile Broadcasting	Heidi Himmanen	University of Turku, Finland
		On the Selection of Optimum Diversity and Code Rate for FH/DFSK under Partial Band Interference for Multimedia Data Transmission	Junghwan Kim	University of Toledo, USA
		A Novel Channel Estimation based on Spread Pilots for Terrestrial Digital Video Broadcasting	Oudomsack Pierre Pasquero	Institute of Electronics and Telecommunications in Rennes, France
		Spectrum Optimization in DVB-H Single Frequency Networks with Local Content Areas	Peter Unger	Braunschweig Technical University, Germany

Keynote Luncheon: 12:10 - 2:00 pm
Conferece Rooms 11-13

Andy Setos

President of Engineering, Fox Entertainment Group

PM Session 11: WiMAX	2:00 - 3:15 pm	Session Chair	Youssef Nasser	Institute of Electronics and Telecommunications of Rennes, France
		Scanning on Handover Enhancement Issues in Video Application Deployments on WiMAX Mobile Networks	Marina Aguado	ETSI- Bilbao, Spain
		Cross-Layer Adaptation for Real-Time Broadband Multimedia over IEEE 802.16e Networks	Dionysia Triantafylopoulou	University of Athens, Greece
		Remote Device Management of WiMAX Devices in Multi-Mode Multi-Access Environment	Ted Alonso	Motorola, USA

Coffee Break 3:15 - 3:30 pm

PM Session 13: Channel Coding and Modulation	3:30 - 4:45 pm	Session Co-Chairs	Sean McCarthy	Motorola, USA
			Peter Unger	Braunschweig Technical University, Germany
		On the Performance and Efficiency of Generic Stream Encapsulation Combined with LDPC Coding for the Terrestrial DVB Systems	Piritta Hakala	University of Turku, Finland
		On Enhancing Hierarchical Modulation	Shu Wang	LG Electronics Mobile Research, USA
		Programmable Bandwidth OFDM Radio System for High Capacity ENG Applications	Weihua Bing	Microwave Radio Communications, USA

Room:

Conferece Room 9/10

AM Session 10: Signal Processing for Transmission	10:05 am - 12:10 pm	Session Chair	Philipp Steckel	Braunschweig Technical University, Germany
		A Novel Peak-to-Average Power Ratio Reduction Method for Coded OFDM Systems	Dong Wang	Philips Research North America, USA
		PAPR Reduction Method for OFDM Systems Using Dedicated Subcarriers: A Proposal for the Future DVB-T Standard	Irène Masinjara Mahafeno	Institut National des Sciences Appliquées (INSA) de Rennes, France
		A New Multi-Symbol Differential Detection with Linear Interpolation based on Symbol Error Position Detection	SoonChan Kwon	Yonsei University, Korea
		A Synchronization Scheme for OFDM Systems Using the Super-Imposed Perfect Sequences	Tsang-Yi Wang	National Sun Yat-sen University, Taiwan
		Performance analysis of substituting LDPC code for DVB-T error control coding system	Tero Jokela	University of Turku, Finland

Keynote Luncheon: 12:10 - 2:00 pm
Conferece Rooms 11-13

Andy Setos

President of Engineering at Fox Entertainment Group

PM Session 12: Transmitter and Receiver Design	2:00 - 3:15 pm	Session Co-Chairs	Jong-Soo Seo	Yonsei University, Korea
			David de la Vega	University of the Basque Country, Spain
		Optimum DVB-T/H Receiver Architecture for advanced System Performance Measurement	Carlos Fernandez	University of the Basque Country, Spain
		Design of Multimode modulator Utilizing SDR Technology for DVB-T/Wireless Communication Systems	Shiann-Shiun Jeng	National Dong Hwa University, Taiwan
		Broadband Receiver Design on FPGA	Beilei Zhang	The University of Texas at Dallas, USA

Coffee Break 3:15 - 3:30 pm

PM Session 14: Handover Issues	3:30 - 4:45 pm	Session Chair	Heidi Himmanen	University of Turku, Finland
		A prioritization Method for Handover Algorithm in IPDC over DVB-H System	Jani Väre	Nokia Corporation, Finland
		Synchronization Architecture for DVB-H Seamless Handover	Alejandro López González	Universitat Ramon Llull, Spain
		An Approach to Handover Between DVB-H and WIFI Network	Adrian Homsby	Tampere University of Technology, Finland