



**Monday**

**June 11, 2007**

**08:30 AM -  
09:00 AM**

**Welcome and Opening Remarks**

K. K. Ramakrishnan, Robert Doverspike, Jacobus van der Merwe, Stein Gjessing, Virgil Dobrota



[http://www.ieee-lanman.org/presentations/General\\_Co\\_Chairs.pdf](http://www.ieee-lanman.org/presentations/General_Co_Chairs.pdf)



[http://www.ieee-lanman.org/presentations/TPC\\_Co\\_Chairs.pdf](http://www.ieee-lanman.org/presentations/TPC_Co_Chairs.pdf)

**09:00 AM -  
10:00 AM**

**Keynote Speech: "GEN: Global Environment for Network Innovation"**

Larry Peterson (Princeton University, USA)

Coffee Break

**10:30 AM -  
12:10 PM**

**Session 1: Wireless AdHoc Networks**

Chair: Shivkumar Kalyanaraman (RPI, USA)

***Persistent Pseudo-Clearance Problem in IEEE802.11 Mesh Networks and its Multicast Based Solutions***

Jian Zhang (Rutgers University, USA); Yuanzhu Chen (Memorial University of Newfoundland, Canada); Ivan Marsic (Rutgers University, USA)



<http://www.ieee-lanman.org/presentations/zhang.pdf>

***Power Control for Cognitive Radio Ad Hoc Networks***

Lijun Qian (Prairie View A&M University, USA); Xiangfang Li (WINLAB, Rutgers Univ., USA); Zoran Gajic (Rutgers University, USA); John Attia (PVAMU, USA)



<http://www.ieee-lanman.org/presentations/qian.pdf>

***Distributed Backlog-Driven Power Control in Wireless Networking***

Aditya Dua (Stanford University, USA); Nicholas Bambos (Stanford University, USA)



<http://www.ieee-lanman.org/presentations/dua.pdf>

***Balancing Loss-Tolerance between Link and Transport Layers in Multi-Hop Wireless Networks***

Vijaynarayanan Subramanian (RPI, USA); Shivkumar Kalyanaraman



(RPI, USA); K. K. Ramakrishnan (AT&T Labs. Research, USA)  
<http://www.ieee-lanman.org/presentations/vijay.pdf>

### ***An Energy Efficient MAC in Wireless Sensor Networks to Provide Delay Guarantee***



Anirudha Sahoo, Prashant Baronia (IIT Bombay, India)  
<http://www.ieee-lanman.org/presentations/prashant.pdf>

Lunch

**1:20 PM – 2:45 PM**

### **Session 2: Optical Networks (I)**

Chair: Robert Doverspike (AT&T Labs - Research, USA)

### ***IPTV Bandwidth Demands in Metropolitan Area Networks***



John Simsarian (Bell Labs, USA); Marcus Duellk (Bell Labs / Lucent Technologies, USA)  
<http://www.ieee-lanman.org/presentations/simsarian.pdf>

### ***Mesh Free Space Optical System: A method to Improve Broadband Neighborhood Area Network backhaul***



David Britz (AT&T labs Research, USA); Robert Miller (AT&T Research Laboratories, USA)  
<http://www.ieee-lanman.org/presentations/britz.pdf>

### ***Multi-channel Communication in Free-Space Optical Networks for the Last-mile***



Jayasri Akella (Rensselaer Polytechnic Institute, USA); Murat Yuksel (University of Nevada - Reno, USA); Shivkumar Kalyanaraman (Rensselaer Polytechnic Institute, USA)  
<http://www.ieee-lanman.org/presentations/yuksel.pdf>

### ***Invited paper: "A Practical Approach for Data Networking in the TV Bands"***



Srihari Narlanka, Ranveer Chandra, Victor Bahl, John Ian Ferrell, Microsoft Research, USA  
<http://www.ieee-lanman.org/presentations/narlanka.pdf>

Coffee Break

**3:00 PM - 4:05 PM**

### **Session 3: Optical Networks (II)**

Chair: Krishna Pattabhiraman (Reva Systems, Inc., USA)

### ***Optical Burst Switching with Burst Access Mode Passive Optical Networks***



Chun-Yin Li (The Hong Kong Polytechnic University, Hong Kong); Ping-Kong, Alex Wai (Hong Kong Polytechnic University, Hong Kong); Victor Li (University of Hong Kong, P.R. China)  
<http://www.ieee-lanman.org/presentations/cyli.pdf>

### ***Wavelength-Enhanced Passive Optical Networks with Extended Reach***

Kenneth Reichmann (AT&T, USA); Patrick Iannone (AT&T, USA)  
<http://www.ieee-lanman.org/presentations/reichmann.pdf>



**Invited paper: "Enhanced Ethernet for Data Centers: Reliable, Differentiated, Robust"**

Manoj Wadekar, Intel Corporation, USA

<http://www.ieee-lanman.org/presentations/wadekar.pdf>



Coffee Break

**4:30 PM - 6:00 PM**

**Panel on "RFID Infrastructure"**

David Husak (moderator) (Reva Systems, USA)

<http://www.ieee-lanman.org/presentations/husak.ppt>

Art Howarth (Cisco Systems, USA)

<http://www.ieee-lanman.org/presentations/howarth.pdf>



Krishna Pattabhiraman (Reva Systems, Inc., USA)

<http://www.ieee-lanman.org/presentations/pkrishna.ppt>

Craig W. Thompson (University of Arkansas, USA)

<http://www.ieee-lanman.org/presentations/thompson.pdf>



**Tuesday**

**June 12, 2007**

**08:30 AM - 10:10 AM**

**Session 4: QoS**

Chair: Kris Steenhaut (Vrije Universiteit Brussel, Belgium)

***Improving TCP Performance with Bufferless Token Bucket Policing: A TCP Friendly Policer***

Ronald van Haalen (Alcatel-Lucent, The Netherlands); Richa Malhotra (Lucent Technologies, The Netherlands)

<http://www.ieee-lanman.org/presentations/haalen.pdf>



***Aggregate Flow Fairness in MANs***

Paul Stoian (Technion - Israel Institute of Technology, Israel); Israel Cidon (Technion, Israel)

<http://www.ieee-lanman.org/presentations/stoian.pdf>



***Multilayer QoS in GMPLS based IP/DWDM Metro Networks***

Walter Colitti (Vrije Universiteit Brussel, Belgium); Kris Steenhaut (Vrije Universiteit Brussel, Belgium); Ann Nowé (University of Brussels, Belgium)

<http://www.ieee-lanman.org/presentations/colitti.pdf>



***An Efficient Scheduling Algorithm for Time-Driven Switching Networks***

Huong Truong (University of Trento, Italy); Yoram Ofek (Università di Trento, Italy); Mario Baldi (Politecnico di Torino, Italy)



<http://www.ieee-lanman.org/presentations/truong.pdf>

### ***Dynamics of End-to-End Bandwidth Allocations in QoS-Adaptive Data Connections***

Mohammad Rabby (City University of New York, USA); Kaliappa Ravindran (City University of New York, USA)



<http://www.ieee-lanman.org/presentations/rabby.pdf>

Coffee Break

**10:35 AM – 12:00 PM**

### **Session 5: Measurement and Cross-Layer Design**

Chair: Kaliappa Ravindran (City University of New York, USA)

#### ***Invited paper: "On Scalable Measurement-Driven Modelling of Traffic Demand in Large WLANs"***

Maria Papadopouli (University of Crete & FORTH, Greece), Merkouris Karaliopoulos (ETH-Zurich, Switzerland), Elias Raftopoulos (University of Crete & FORTH, Greece) & Haipeng Shen (UNC, USA)



<http://www.ieee-lanman.org/presentations/papadopouli.pdf>

### ***Optimizing Operation of a Hierarchical Campus-wide Mobile Grid for Intermittent Wireless Connectivity***

Konstantinos Katsaros (Athens University of Economics and Business, Greece); George Polyzos (Athens University of Economics and Business, Greece)



<http://www.ieee-lanman.org/presentations/katsaros.pdf>

### ***Designing Terminals and Infrastructure Components for Cognitive Wireless Networks***

Peter Jung (Universität Duisburg-Essen, Germany); Arjang Hessamian Alinejad (University Duisburg-Essen, Germany)



<http://www.ieee-lanman.org/presentations/hessamian.pdf>

Lunch

**1:00 PM - 1:40 PM**

### **Poster Session**

#### **IntelliCarTS: Intelligent Car Transportation System**

Ashwin Gumaste (Indian Institute of Technology, Bombay/University of Texas at Dallas, India); Rahul Singhai (Indian Institute of Technology, Bombay, India); Anirudha Sahoo (IIT Bombay, India)



<http://www.ieee-lanman.org/posters/1569030043.pdf>

#### **SMAT - A Simplified MAC Address Translation Scheme**

Stephan Kubisch (University of Rostock, Germany); Harald Widiger (University of Rostock, Germany); Dirk Timmermann (University of Rostock, Germany); Daniel Duchow (University of Rostock, Germany); Thomas Bahls (Siemens AG Communications, Germany)



<http://www.ieee-lanman.org/posters/1569032300.pdf>

**"Input Here – Execute There" through Networks: the Case of Gaming**

Christos Bouras (University of Patras, Greece); Vassilis Pouloupoulos (Research Academic Computer Technology Institute, Greece); Ioannis Sengounis (Research Academic Computer Technology Institute, Greece); Vassilis Tsogkas (Research Academic Computer Technology Institute, Greece)



<http://www.ieee-lanman.org/posters/1569035025.pdf>

### **Joint Power Control and Admission Control for CDMA Cognitive Radio Networks**

Lijun Qian (Prairie View A&M University, USA); Xiangfang Li (WINLAB, Rutgers Univ., USA); John Attia (PVAMU, USA); Zoran Gajic (Rutgers University, USA)



<http://www.ieee-lanman.org/posters/1569035621.pdf>

### **Comparing Different Topology Construction Algorithms for Wireless Sensor Networks**

Hugues Smeets (Vrije Universiteit Brussel, Belgium)



<http://www.ieee-lanman.org/posters/1569035898.pdf>

### **UCLA/Cisco Metropolitan Wi-Fi Research Network**

Vidyut Samanta (University of California Los Angeles, USA); Jason Ryder (University of California at Los Angeles, USA); Sona Chaudhuri (University of California at Los Angeles, USA); Jeff Burke (University of California Los Angeles, USA); Deborah Estrin (University of California at Los Angeles, USA); Fabian Wagmister (University of California at Los Angeles, USA)



<http://www.ieee-lanman.org/posters/1569035906.pdf>

**1:40 PM - 2:40 PM**

### **Session 6: Wireless Access Networks**

Chair: Maria Papadopouli (University of Crete, FORTH, Greece, UNC, USA)

### **Channel Access Unfairness of Wireless LAN Access Methods**

Elena Lopez-Aguilera (Technical University of Catalonia (UPC), Spain); Martin Heusse (LSR IMAG, France); Franck Rousseau (IMAG, France); Andrzej Duda (Institut Polytechnique de Grenoble, LIG Laboratory, France); Jordi Casademont (Technical University of Catalonia UPC, Spain)



<http://www.ieee-lanman.org/presentations/lopez-aguilera.pdf>

Coffee Break

**3:00 PM - 4:30 PM**

### **Panel on "Impact of Video Distribution on the MAN and LAN Architectures"**

Charles Kalmanek (moderator) (Internet & Network Systems Research V.P., AT&T Labs, USA)

Chris Chase (AT&T Labs Austin, USA)



<http://www.ieee-lanman.org/presentations/chase.pdf>

Ron Haberman (Alcatel-Lucent, USA)



<http://www.ieee-lanman.org/presentations/haberman.pdf>

Mod Marathe (Cisco Systems, USA)



<http://www.ieee-lanman.org/presentations/marathe.pdf>

K. K. Ramakrishnan ((AT&T Research Laboratories, USA)



<http://www.ieee-lanman.org/presentations/ramakrishnan.pdf>

Dipankar Raychaudhuri (Director, WINLAB, Rutgers University, USA)



<http://www.ieee-lanman.org/presentations/raychaudhuri.pdf>

5:15 PM

Travel, Banquet

<http://www.ieee-lanman.org/trip2007.htm>

Wednesday

June 13, 2007

08:30 AM – 09:55 AM

Session 7: Routing

Chair: Jack Brassil (HP Labs, USA)

***On Growth of Parallelism within Routers and Its Impact on Packet Reordering***

Abhijit Bare (Colorado State University, USA); Anura Jayasumana (Colorado State University, USA); Nischal Piratla (Deutsche Telekom Laboratories, Germany)



<http://www.ieee-lanman.org/presentations/jayasumana.pdf>

***A Connection Oriented Internet Architecture for Restricting Reachability***

Sneha Kasera (University of Utah, USA)



<http://www.ieee-lanman.org/presentations/kasera.pdf>

***Directional Routing for Wireless Mesh Networks: A Performance Evaluation***

Bow-Nan Cheng (Rensselaer Polytechnic Institute, USA); Murat Yuksel (University of Nevada - Reno, USA); Shivkumar Kalyanaraman (RPI, USA)



<http://www.ieee-lanman.org/presentations/cheng.pdf>

Invited paper: "Revisiting Ethernet: Plug-and-Play Made Scalable and Efficient"

Changhoon Kim & Jennifer Rexford (Princeton University, USA)



<http://www.ieee-lanman.org/presentations/rexford.pdf>

Coffee Break

10:20 AM – 12:20 PM

Session 8: Measurement

Chair: Arata Koike (NTT, Japan)

***Measurements of Multicast Television over IP***

Kashif Imran (Blekinge Institute of Technology, Sweden); Marco Mellia (Politecnico di Torino, Italy); Michela Meo (Politecnico di Torino, Italy)



<http://www.ieee-lanman.org/presentations/mellia.pdf>

***Link Layer Traceback in Ethernet Networks***

Michael Snow (ARIAS Lab of Virginia Tech, USA); Jung-Min Park (Virginia

Polytechnic Institute and State University, USA)



<http://www.ieee-lanman.org/presentations/snow.pdf>

***An Efficient Call Admission Control for IEEE 802.16 Networks***

P. Sarat Chandra (IIT Bombay, India); Anirudha Sahoo (IIT Bombay, India)



<http://www.ieee-lanman.org/presentations/chandra.pdf>

***Coping with Instant Messaging Worms - Statistical Modeling and Analysis***

Zhijun Liu (The Ohio State University, USA); David Lee (The Ohio State University, USA)



<http://www.ieee-lanman.org/presentations/liu.pdf>

***MIDAS: An Impact Scale for DDoS Attacks***

Rangarajan Vasudevan (University of Michigan, USA); Z. Morley Mao (University of Michigan, USA); Oliver Spatscheck (AT&T Labs - Research, USA); Kobus van der Merwe (AT&T Labs - Research, USA)



<http://www.ieee-lanman.org/presentations/vandermerwe.pdf>

12:20 PM

Adjourn



<http://www.ieee-lanman.org/program.pdf>