

# Plenary Session

## Day One Session Chair



**Dr. Yeheskel Bar-Ness**

*Distinguished Professor  
Director, CWCSRP*



## Session Speeches

### *IP/MPLS Network Planning, Design, Simulation, Audit, and Management*



**Dr. Dave Wang**

*President  
WANDL, Inc  
(Wide Area Network Design Lab)*

### *Opportunities and Challenges for Multimedia Communication*



**Dr. King L. Tai**

*Chairman of Tech. Advisory Board  
SyChip Inc.  
A Subsidiary of Murata*

### *Finding Startup Capital*



**Dr. Ken Kay**

*Chairman  
Jumpstart NJ Angel Network*

## Day Two Session Chair



**Dr. Qi Bi**

*Bell Laboratories Fellow  
Alcatel-Lucent*

## Session Speeches

### *Trends in Manufacturing Technology for Handset Power Amplifiers*



**Dr. Aditya Gupta**

*Vice President  
ANADIGICS, Inc.*

### *Going Out on Your Own – Commercializing Convergent Communications Technologies in a Start-up Environment*



**Anthony O. Pergola**

*Vice Chair,  
Tech Group  
Lowenstein Sandler PC*

### *Adaptive Demodulation Techniques for Next Generation Software Defined Radios*



**Dr. Wei Su**

*Senior Research Scientist  
US Army Communication  
Electronics RD&E Center*



# **WC1: Next Generation Wireless Communications I**

## **Session Chair**



**Dr. Qingqing Zhang**

*Alcatel-Lucent*

### ***Road to High Speed WLAN***



**Xiaowen Wang**  
*Agere Systems (LSI)*

### ***WiMAX : The Path to the Mobile Internet***



**Shupeng Li**  
*Alcatel-Lucent*

### ***Introduction to the New Generation WiFi Technology***

**Lushen Ji**  
*AT&T Labs - Research*

### ***UMTS Long Term Evolution***

**Fang-Chen Cheng &  
Lei Song**  
*Alcatel-Lucent*

### ***Baseband Algorithms for UMTS Long Term Evolution***

**Lei Song &  
Fang-Chen Cheng**  
*Alcatel-Lucent*

## **WC2: Wireless Fundamental Researches**

### **Session Chair**



**Dr. Jianghong Luo**

*Alcatel-Lucent*

***Recent Advances on  
Constant and Varying Power  
Orthogonal Spreading Codes in Radio  
Communications***



**Dr. Ali N. Akansu**

*Prof. ECE Dept.  
NJIT*

***Interference Suppression Techniques  
for Multiuser MIMO Systems***



**Xiaodong Wang**

*Electrical Engineering Dept.  
Columbia Univ.*

***Adaptive Transmission with  
Variable-Rate Turbo  
Bit-Interleaved Coded Modulation***



**Jianghong Luo,  
Ruoheng Liu,  
Predrag Spasojević**

*Alcatel-Lucent  
Princeton Univ.  
Rutgers Univ.*

***Cooperative Source and  
Channel Coding For  
Wireless Multimedia Transmission***



**Ozgu Alay**

*Dept of ECE  
Polytechnic Univ.  
Brooklyn, New York*

***Mapping Link SNRs of Real-World  
Wireless Networks onto an Indoor  
Testbed***

**Jing Lei, Roy Yates,  
Larry Greenstein, Hang Liu**

*WINLAB, Rutgers University,  
Thomson CR, Princeton, New Jersey.*

# NS1: New Services & Challenges in a Converged Network

## Session Chair



**Carlos Urrutia-Valdes**

*Alcatel-Lucent*

*Convergence, IMS and Beyond*



**Carlos Urrutia-Valdes**

*Alcatel-Lucent*

*Redefining How People Communicate:  
An Overview of Tele-Presence*



**Franck Noel**

*Consulting Systems Engineer  
Cisco*

*Operational Challenges of Deploying  
Converged Services over IP*



**Romel Khan**

*Technical Manager  
IDT Corporation*

*Challenges and Solutions in  
Applying Ad hoc and  
Sensor Networking  
for Public Safety Applications*



**Liang Cheng**

*Dept. of Computer Science and  
Engineering  
Lehigh University*

# MM1: P2P Technology and Its Applications

## Session Chairs

**Dr. Yang Guo**

*Thomson Corporate Research*



**Dr. Yong Liu**

*Polytechnic University  
Brooklyn, NY*

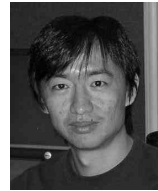
### *Content Security in P2P Networks*



**Heather Yu**

*Huawei Technologies*

### *Efficient Substream Encoding and Transmission for P2P Video on Demand*



**Zhengye Liu**

*ECE Dept.  
Polytechnic University  
Brooklyn, NY*

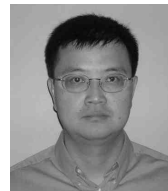
### *Peer-to-Peer Video Streaming: Successes and Limitations*



**Yong Liu**

*Polytechnic University  
Brooklyn, NY*

### *QoS Aware Peer-to-Peer Video-on-Demand Service*

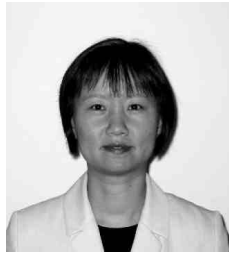


**Dr. Yang Guo**

*Thomson Corporate Research*

# OC1: Optical Network Architecture, Design and Planning

## Session Chair



**Dr. Angela L. Chiu**

*AT&T Labs - Research*

*IP over Optical Cross-Connect  
Architectures*



**Guangzhi Li**

*AT&T Labs - Research*

*Design and Planning Tool  
for Optical Networks*



**Yunfeng Shen**

*CIENA Corporation*

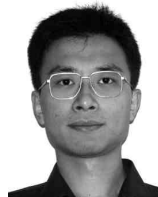
*A Systematic Approach of  
Incremental Design for Optical  
Network*



**Dah-Min Hwang**

*AT&T Labs*

*Optimal Provisioning of  
Elastic Service Availability*



**Dahai Xu**

*Dept. of Electrical Engineering  
Princeton University*

## **WC3: Mobile Applications (Panel Session)**

### **Session Chair**



**T. C. Chiang**

*TC Consulting Group*

***Converged Networks, Location Based Services, and Mobile Applications***



**T. C. Chiang**

*TC Consulting Group*

***How to Deploy Location-based Services Now and in the Future***

**Greg Burdett**

*Andrew Corporation*

***Location-based (Push) Services  
– Are we there yet?***



**Vishy Poosala**

*Chief Technologist –  
Geographic Messaging Service  
Bell Labs / Alcatel-Lucent  
Ventures*

***Automotive Networking and Applications  
- Opportunities and Challenges***

**Wai Chen**

*Telcordia Technologies*

***Mobile Phone Platforms  
and Service Enablers***



**John N. Wong**

*Senior Consultant  
Huawei Technologies*

## **NS2: Network Reliability**

### **Session Chair**



**Mohcene Mezhoudi**

*Alcatel-Lucent*

***Metrics  
for Network Resilience and  
Robustness***



**Michael Tortorella**

*Rutgers University*

***Probabilistic Solution Discovery  
for Network Reliability Optimization***



**Jose E. Ramirez-Marquez**

*Stevens Institute of Technology*

***Developing  
Quantitative Reliability Roadmap  
to Meet Market Expectation***



**Xuemei Zhang**

*Alcatel-Lucent*

***Convergent Communications  
for the Olympics - Network  
Reliability Challenges***



**Spilios E. Makris**

*Telcordia Technologies*

# NS3: Migration to NGN and Mobile Broadband

## Session Chair



**Amit Mukhopadhyay**

*Bell Labs,  
Alcatel-Lucent*

*Wireless – Wireline Convergence*



**Theodore (Tod) Sizer II**

*Bell Laboratories / Alcatel-Lucent*

*Mobile WiMax  
in Next Generation Networks*



**Zulfiquar Sayeed**

*Bell Labs, Alcatel-Lucent*

*On TCP-Jersey*



**Dr. Nirwan Ansari**

*Dept of ECE  
New Jersey Institute of Technology*

*RF Radiation  
– Environmental Effects*



**K. Raghunandan**

*New York City Transit*

*Network Mobility  
for IPv4 Private Domain Networks*



**Harish Viswanathan,**

*Alcatel-Lucent*

## **MM2: Multimedia Applications**

### **Session Chair**



**Zhen Wen**

*IBM T. J. Watson Research*

***Context-aware User Interfaces  
for Information Seeking***



**Zhen Wen**

*IBM T. J. Watson Research*

***Berkeley-DB  
for Text/Multimedia Retrieval***



**Chun Jin**

*Language Technologies Institute,  
School of Computer Science  
Carnegie Mellon University,*

***Providing Intelligent Conversation  
Notation Services in Enterprises***



**Xiaotao Wu**

*Avaya Labs Research*

***ViCo: A Large-Scale On-line Video  
Correlation System***



**Xiaohui Gu**

*IBM T. J. Watson Research*

## **OC2: Optical Communications Technologies**

### **Session Chair**



**Xiang Liu**

*Alcatel-Lucent, Bell Laboratories*

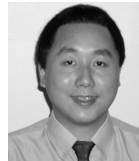
***Technologies, Economics, and  
Deployment of Optical Access  
Networks***



**Kevin W. Lu**

*Telcordia Technologies, Inc*

***Optical Technologies for High  
Capacity Fiber Transmission***



**Xiang Liu**

*Alcatel-Lucent, Bell Laboratories*

***Optical Power Transients and Its  
Control in a Photonic Network***



**Xiang Zhou**

*AT&T Labs-Research,*

***Transient Control in Dynamically  
Reconfigured Networks  
With Cascaded Erbium Doped Fiber  
Amplifiers***



**Lei Zong**

*NEC Laboratories America, Inc.*