

Wednesday, February 27, 2002

Monday 25Tuesday 26Wednesday 27Thursday 28

Time	Track A	Track B	Track C
9.00	Ad Hoc Wireless Networks 1	<u>Capacity of Wireless Networks</u>	<u>Signal Equalization and Channel Estimation</u>
9.15			
9.30			
9.45			
10.00			
10.15			
10.30	Coffee Break		
10.45			
11.00	<u>QoS in Wireless</u>	<u>QoS and Services in Mobile Internet</u>	<u>Modulation and Signal Synchronization</u>
11.15			
11.30			
11.45			
12.00			
12.15			
12.30	Lunch		
12.45			
13.00			
13.15			
13.30			
13.45			
14.00	<u>Energy Efficient Computation</u>	<u>Advanced Wireless Systems and Services</u>	<u>Space-Time Signal Processing for Wireless Systems</u>
14.15			
14.30			
14.45			
15.00			
15.15			
15.30	Coffee Break		
15.45	<u>New MAC Protocol for QoS Guarantees in Wireless Networks</u>	<u>Mobile Agents in Wireless Networks</u>	<u>Channel Coding: from Theory to Practice</u>
16.00			
16.15			
16.30			
16.45			
17.00	<u>Round Table: "Transition from 3G Deployment to 3G+/4G Design"</u>		
17.15			
17.30			
17.45			
18.00			
18.15			
20.00	<u>Conference Banquet</u>		

TRACK A

Ad Hoc Wireless Networks/1

Chair: Bijan Jabbari, George Mason University, Fairfax, Virginia, USA

- *On the Message and Time Complexity of a Distributed Mobility Adaptive Clustering Algorithm in Wireless Ad Hoc Networks*

C. Bettstetter, S. König
Technische Universität München, Germany

- *An On-Demand, Link-State, Multi-Path QoS Routing in a Wireless mobile Ad-Hoc Network*

Y.-S. Chen¹, Y.-C. Tseng², J.-P. Sheu³, P.-H. Kuo³

¹ National Taipei University, Taiwan; ² National Chao-Tung University, Taiwan; ³ National Central University, Taiwan

- *IPv6 Autoconfiguration in Large Scale Mobile Ad-Hoc Networks*

K. Weniger, M. Zitterbart
University of Karlsruhe, Germany

- *A Priority MAC Protocol to Support Real-time Multimedia Traffic in Ad Hoc Networks*

J.-P. Sheu¹, C.-H. Liu¹, S.-L. Wu², Y.-C. Tseng³

¹ National Central University, Taiwan; ² Chang-Gung University, Taiwan; ³ National Chao-Tung University, Taiwan

- *Power Control in Ad-Hoc Networks: Theory, Architecture, Algorithm and Implementation of the COMPOW Protocol*

S. Narayanaswamy, V. Kawadia, R.S. Sreenivas, P.R. Kumar
University of Illinois, Urbana, Illinois, USA

- *Scheduling of Broadcasts in Multihop Wireless Networks*

P.-K. Hung, J.-P. Sheu, C.-S. Hsu
National Central University, Taiwan

QoS in Wireless

Session Organizer: Marco Ajmone Marsan, Politecnico di Torino, Italy

Chair: Marco Ajmone Marsan

- *Design and Deployment of Link-Layer Boosters for Per-flow Improvement of QoS in Wireless Internet Access (Invited Paper)*

C. Hoene, I. Carreras, T. Chen, A. Wolisz
Technical University Berlin, Germany

- *Pricing Strategies for Broadband Radio Access to Network Services with Performance Guarantees (Invited Paper)*

N. Blefari-Melazzi, D. Di Sorte, G. Reali
Università degli Studi di Perugia, Italy

- *Performance Analysis of the IEEE 802.11 MAC Protocol*

C. H. Foh, M. Zukerman
The University of Melbourne, Australia

- *Remarks on per-flow differentiation in IEEE 802.11 (Invited Paper)*

I. Aad, C. Castelluccia
INRIA, France

- *A New Medium Access Control Protocol for TDD Mode Wideband CDMA Wireless Local Area Networks (Invited Paper)*

I. F. Akyildiz, X. Wang
Georgia Institute of Technology, USA

- *End-to-end Adaptive Multimedia over Bluetooth Scatternets (Invited Paper)*

M. Kazantzidis, A. Zanella, M. Gerla
UCLA, CA, USA

Energy Efficient Computation

Session Organizer: Carla Fabiana Chiasserini, Politecnico di Torino, Italy
Chair: Carla Fabiana Chiasserini

- *The long-term average capacity region per unit energy with application to protocols for sensor networks (Invited Paper)*

D. Tuninetti, G. Caire
 Institut Eurécom, France

- *Computationally Simple Battery Management Techniques for Wireless Nodes (Invited Paper)*

M. Adamou, S. Sarkar
 University of Pennsylvania, Philadelphia, PA, USA

- *Energy Efficiency of Ad Hoc Wireless Networks with Selfish Users (Invited Paper)*

V. Srinivasan⁺, P.n Nuggehalli⁺, C. F. Chiasserini^{*}, R. R. Rao⁺
⁺University of California, La Jolla, CA, USA; ^{*}Politecnico di Torino, Italy

- *A trace-based approach for determining the energy consumption of a WLAN network interface*

J.-P. Ebert, B. Burns, A. Wolisz
 Technical University Berlin, Germany

- *Distributed Power Control for Power-aware Energy-efficient Routing in Ad-Hoc Networks (Invited Paper)*

P. Bergamo, D. Maniezzo, A. Giovanardi, G. Mazzini, M. Zorzi
 Università di Ferrara, Italy

New MAC Protocols for QoS Guarantees in Wireless Networks

Chair: Kenneth L. Stanwood, Ensemble Communication Inc., San Diego, USA

- *Wireless Tree Protocols for QoS Guarantees in Wireless Networks with Bursty Traffic*

C.-H. Yeh
 Queen's University, Ontario, Canada

- *Design Issues of Media Access Control (MAC) Protocol for Multimedia Traffic over DS-CDMA Systems*

L. Wang, A.H. Aghvami, W.G. Chambers
 King's College London, University of London, UK

- *MAC Protocol for Supporting QoS in All-IP HiperLAN2 (Invited Paper)*

C. Politis, R. Tafazolli
 University of Surrey, UK

TRACK B

Capacity of Wireless Network

Chair: Michele Zorzi, University of Ferrara, Italy

- *BRuIT: Bandwidth Reservation under InTerferences Influence*

C. Chaudet, I. Guérin Lassous
 ENS Lyon, France

- *Impact of Interference on the GPRS Multislot Link Level Performance*

J. Gozalvez, J. Dunlop
 University of Strathclyde, Scotland

- *Dynamic Code Assignment in Hybrid MC-CDMA/TDMA System*

C.-L. Yang, J.-F. Chang
 National Taiwan University and National Chi Nan University, Taiwan

- *Capacity Analysis of Multicell CDMA Networks with Fast Power Control under Multipath Fading*

J.M. Romero Jerez, M. Ruiz Garcia, A. Diaz Estrella
 University of Malaga, Spain

- *Enhanced Formulations for Call Capacity Improvement of Distributed DCA Schemes Based on Hopfield Neural Networks*

O. Lazaro, D. Girma
University of Strathclyde, Scotland

- *Link Adaptation Techniques for High-Speed Packet Data in Third Generation Cellular Systems*
E. Esteves, P.J. Black, M.I. Gurelli
Qualcomm Inc., USA

QoS and Services in Mobile Internet Environment

Session Organizer: Seshaiah Ponnekanti, Fujitsu Laboratories of Europe Ltd, UK
Chair: Seshaiah Ponnekanti

- *Enabling Mobile Heterogeneous Networking Environments with End-to-End QoS - The BRAIN vision and the MIND approach (Invited Paper)*

A. Kessler¹, T. Guenkova-Luy¹, D. Mandato², P. Schoo³, I. Armuelles⁴, T. Robles⁴, P. Ruiz⁵, A. Bascuñana⁶

¹University of Ulm, Germany; ²Sony International (Europe) GmbH, Germany; ³DoCoMo Communications Labs GmbH, Germany;

⁴Technical University of Madrid, Spain; ⁵Agora Systems S.A., Spain; ⁶Ericsson España S.A., Spain

- *Implementation Options, QoS Aspects and Economics of Phased UMTS deployments*

D. Grillo, M. Montagna, F. Alfano, A. Colombo, S. Ricci
Alcatel Italia, Vimercate, Italy

- *Adam Smith Goes Mobile: Managing Serviced Beyond 3G with the Digital Marketplace (Invited Paper)*

J. Irvine
University of Strathclyde, Scotland

- *Estimating Commitment in Digital Marketplace Environment*

R. Mathur, J. Irvine, J. Dunlop
University of Strathclyde, Scotland

- *Interoperability of Structured and Unstructured Services in Personal Mobility Information Space*

A. Mingkhwan, M. Merabti, B. Askwith
Liverpool John Moores University, Liverpool, UK

- *QoS provisioning in mobile Internet environment*

S. Lepaja, R. Fleck, N. Nam Hoang
Technical University of Vienna, Austria

Advanced Wireless Systems and Services

Chair: Iwao Sasase, Keio University, Yokohama, Japan

- *An Ultra Wide Bandwidth System for In-Home Wireless Networking*

D. Gerakoulis¹, P. Salmi², S.S. Ghassemzadeh¹

¹ AT&T Labs - Research, NJ, USA - ² University of Bologna, Italy

- *Dynamic channel filtering method for multi-mode & multi-service software radio communication systems*

R. Sawai¹, H. Harada², H. Shirai¹, M. Fujise²

¹ Chuo University, Japan, ² Communications Research Laboratory, Japan

- *An Intelligent Handoff Scheme Based On Location Prediction Technologies*

M.-H. Jin, E. H.-K. Wu, J.-T. Horng
National Central University, Chungli Taiwan

- *Enhanced Location Techniques based on Accurate and Fast Propagation Models in Urban and Indoor Environments*

G. Woelfle*, R. Hoppe⁺, D. Zimmermann⁺, F.M. Landstorfer⁺

* AWE communications, Germany; ⁺ University of Stuttgart, Germany

- *Localising GSM Mobiles Inside Prisons*

D. Mansel, E. Mârza, C. Dumitrescu²

Fachbereich Informatik, Gelsenkirchen, Germany; ² Facultatea de Electronică și Telecomunicații, Romania

Mobile Agents in Wireless Networks

Session Organizer: Antonio Puliafito, University of Messina, Italy
Chair: Antonio Puliafito

- Tracker: A Universal Location Management System for Mobile Agents (Invited Paper)

G. Samaras¹, C. Spyrou¹, E. Pitoura², D. Marios¹

¹ University of Cyprus, Cyprus; ² University of Ioannina, Greece

- Flexible Mobile Agent based Intrusion Detection for Dynamic Networks

C. Krugel, T. Toth

Technical University of Vienna, Austria

- Digital still cameras and mobile agents: How to create a distributed service for image processing (Invited Paper)

M. Mancuso¹, M. Guarnera¹, A. Puliafito², M. Villari²

¹ St Microelectronics, Milano, Italy; ² Università di Messina, Italy

- CORTEX: Towards Supporting Autonomous and Cooperating Sentient Entities (Invited Paper)

P. Verissimo¹, V. Cahill², A. Casimiro¹, K. Cheverst³, A. Friday³, J. Kaiser⁴

¹ University of Lisboa, Portugal; ² Trinity College Dublin, Ireland; ³ University of Lancaster, UK; ⁴ University of Ulm, Germany

TRACK C

Signal Equalization and Channel Estimation

Chair: Kung Yao, University of California, Los Angeles, USA

- Frequency Scaled Time Domain Equalization for OFDM in Wireless Communication

V.S. Abhayawardhana, I.J. Wessel

University of Cambridge, UK

- Channel Estimation with Pilot-Symbols over WSSUS Channels

I. Perisa, J. Egle, J. Lindner

University of Ulm, Germany

- A New Unified Approach to Adaptive Blind Equalization for Multicarrier CDMA Systems with Receiver Diversity

D. Chen and K. Yao

UCLA, CA, USA

- Comparative Study of Efficient Decision-Feedback Equalization Schemes for MIMO Systems

C. Degen, C. Walke, B. Rembold

Aachen University of Technology, Germany

- Reduction of Co-Channel Interference in GSM by Joint Channel and Data Estimation

M. Loncar, C. F. Mecklenbrauker, R. Muller

Telecommunications Research Center Vienna, Austria

- Estimation of Time-Varying Wireless Channels and Application to the UMTS W-CDMA FDD Downlink

M. Lenardi, D.T.M. Slock

Institut Eurecom, France

Modulation and Signal Synchronization

Chair: Helmut Boeleskei, University of Illinois at Urbana-Champaign, USA

- Acquisition of Orthogonal Modulated Signals in Rayleigh-Fading Channels

P. Xiao, E. Strom

Chalmers University of Technology, Goteborg, Sweden

- *A Novel Carrier Phase Recovery Method for Turbo-Coded QPSK Systems*

L. Zhang, A. Burr
University of York, UK

- *LPDC-coded adaptive modulation on slowly varying Nakagami-fading channels*

B. Myhre*, V. Markhus⁺, G.E. Øien⁺

* SINTEF Telecom and Informatics, Norway; ⁺ Norwegian University of Science and Technology, Norway

- *Blind Estimation of the Modulation Scheme Adapted to Noise Power Based on a Concept of Software Define Radio*

K. Umebayashi, S. Ishii, R. Kohno
Yokohama National University, Japan

- *Frame Synchronization and Digital AGC for OFDM Based WLAN*

C.-S. Peng, C.-H. Cho, K.-A. Wen
National Chiao Tung University, Taiwan

- *Iterative Carrier Phase Synchronization for Coherent Detection of Turbo-Coded Modulations*

V. Lottici, M. Luise
University of Pisa, Italy

Space-Time Signal Processing for Wireless Systems

Chair: Sergio Barbarossa, University of Rome "La Sapienza", Italy

- *On the equivalence of Space-Time Block Coding with Multipath Propagation and/or Cyclic Delay Diversity in OFDM*

A. Dammann¹, P. Lusina², M. Bossert²,

¹ German Aerospace Center (DLR) - ² University of Ulm, Germany

- *Enhancement of Hiperlan/2 System using Space-Time Coding*

M. Gidlund
Royal Institute of Technology, Stockholm, Sweden

- *Optimized Design and Performance of Multiple-Antenna 4th Generation WLANs for Partially Coherent Decoding*

E. Baccarelli, M. Biagi, A. Fasano
Università di Roma 1, Italy

- *Space-time UMTS uplink system for future generation mobile radio communication system*

S.L. Ling, M.F. Siyau, R.F. Ormondroyd
Cranfield University, RMCS, Swindon, UK

- *Reflections on Smart Antennas for MAC Protocols in Multihop Ad Hoc Networks*

H. Koubaa
LORIA INRIA, Vandoeuvre-Les-Nancy, France

Channel Coding: from Theory to Practice

Chair: Marco Luise, University of Pisa, Italy

- *On Diagonal Space-Time Codes Using Algebraic Rotations*

M.O. Damen, N.C. Beaulieu
University of Alberta, Canada

- *Adaptive Coding Schemes Using Finite State Machine for Software Defined Radio*

K. Ikemoto, R. Kohno
Yokohama National University, Japan

- *Coding of short control frames for UMTS mobile communication*

W. Adi, F. Kriaa
University of Braunschweig, Germany

Round Table: Transition from 3G Deployment to 3G⁺/4G Design (plenary)

Chair: Davide Grillo, UMTS Initiatives and Coordination Group, Alcatel Italia S.p.A., Italy

Panelists:

- Dr. Stanley Chia, Vodafone, USA
- Prof. Radu Popescu-Zeletin, Technical University Berlin, Germany
- Dr. Walter Tuttlebee, Mobile Virtual Centre of Excellence, UK
- Prof. Bernhard Walke, Aachen University of Technology, Germany

Conference banquet

This was held in a historical building in the city center.

<i><u>Monday 25</u></i>	<i><u>Tuesday 26</u></i>	<i><u>Wednesday 27</u></i>	<i><u>Thursday 28</u></i>
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