

# **2011 IEEE 16th International Workshop on Computer Aided Modeling and Design of Communication Links and Networks**

**(CAMAD 2011)**

**Kyoto, Japan  
10 – 11 June 2011**



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# Program

Friday, June 10

**Participants registration**

**Welcome address and workshop opening**

**Coffee break**

**Architectures and Protocols**

***TDMA Based MAC Protocol for Wireless Capsule Communications***

Lin Lin (Nanyang Technological University, Singapore); Kai-Juan Wong (Nanyang Technological University, Singapore); Su-Lim Tan (Nanyang Technological University, Singapore); Soo-Jay Phee (Nanyang Technological University, Singapore)

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***Survey on Signaling Techniques for Cognitive Networks***

Dzmitry Kliazovich (University of Luxembourg, Luxembourg); Fabrizio Granelli (University of Trento, Italy); Nelson L. S. da Fonseca (State University of Campinas, Brazil)

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***WWW@VDTN - A Web Browsing Application for Vehicular Delay-Tolerant Networks***

João Dias (Instituto de Telecomunicações, University of Beira Interior, Portugal); João Isento (Instituto de Telecomunicações, University of Beira Interior, Portugal); Mário Pereira (Instituto de Telecomunicações, University of Beira Interior, Portugal); Bruno Silva (Instituto de Telecomunicações, University of Beira Interior, Portugal); Vasco N. G. J. Soares (Polytechnic Institute of Castelo Branco; Instituto de Telecomunicações; University of Beira Interior, Portugal); Joel J. P. C. Rodrigues (Instituto de Telecomunicações, University of Beira Interior, Portugal); Paulo Pereira (INESC-ID & IST-TU Lisbon, Portugal); Augusto J. D. Casaca (Inesc/ IST, Portugal); Cristina Cervelló-Pastor (Universidad Politécnica de Catalunya, Spain); Javier Gallego (Universitat Politècnica de Catalunya (UPC), Spain)

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***A Real-World VDTN Testbed for Advanced Vehicular Services and Applications***

Maicke Paula (Institute of Telecommunications, University of Beira Interior, Fiat Automobile, Brazil); João Isento (Instituto de Telecomunicações, University of Beira Interior, Portugal); João Dias (Instituto de Telecomunicações, University of Beira Interior, Portugal); Joel J. P. C. Rodrigues (Instituto de Telecomunicações, University of Beira Interior, Portugal)

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***Three Node Client Relay System with Packet Retry Limit***

Sergey Andreev (Tampere University of Technology, Finland); Olga Galinina (Tampere University of Technology & SPIIRAS, Saint Petersburg, Finland); Yevgeni Koucheryavy (Tampere University of Technology, Finland); Alexandra Lokhanova (Speech Technology Center, Russia)

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***A Channel Management Protocol for Multi-Channel, Single-Radio 802.11-based Wireless Mesh Networks***

Chih-Yu Lin (Asia University, Taiwan); Shu-Hsien Lu (National Chiao Tung University, Taiwan); Yu-Chee Tseng (National Chiao-Tung University, Taiwan)

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**Lunch break**

**Performance Optimization and Routing**

***A Low-Complexity Cross-Antenna Rotation and Inversion Scheme for PAPR Reduction of STBC MIMO-OFDM Systems***

Yi-Sheng Su (Chang Jung Christian University, Taiwan); Tsung Cheng Wu (I-Shou University, Taiwan); Chung-Hsuan Wang (National Chiao Tung University, Taiwan); Min-Kuan Chang (National Chung Hsing University, Taiwan)

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***WLAN-WiMAX Vertical Handover Hybrid Satisfaction Mechanism***

Mohammed Shakil (University of Jordan, Jordan); Nizar Zorba (University of Jordan, Jordan); Cosmas Adam (MTN, Cyprus); Christos Verikoukis (Telecommunications Technological Centre of Catalonia, Spain)

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***Multi-Stage Optimization Framework for Transporting 100-GbE over OTN with Distributed Differential Delay Compensation***

João Santos (Nokia Siemens Networks Portugal SA, Portugal); João Manuel Ferreira Pedro (Instituto de Telecomunicações, Portugal); Paulo Monteiro (Nokia Siemens Networks Portugal, Portugal); João Pires (Instituto de Telecomunicações & Instituto Superior Técnico, Portugal)

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***Link longevity-based routing mechanisms for Aviation Ad Hoc network***

Nguyen My (Chulalongkorn University, Thailand); Yoshikazu Miyanaga (Hokkaido University, Japan); Chaichet Saivichit (Chulalongkorn University, Thailand)

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***Geographic Location-based Distributed Routing System***

Kumiko Kobayashi (Japan Radio Co., Ltd., Japan); I Gusti Bagus Baskara Nugraha (The University of Electro-Communications, Japan); Hiroyoshi Morita (University of Electro-Communications, Japan)

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## Coffee break

## Smart Grid and Energy-Efficient Communications

### ***Analysis of Plug-in Hybrid Electrical Vehicle Admission Control in the Smart Grid***

Melike Erol-Kantarci (University of Ottawa, Canada); Jahangir H. Sarker (University of Ottawa, Canada); Hussein Mouftah (University of Ottawa, Canada)  
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### ***Integrated Simulation of Power and Communication Networks for Smart Grid Applications***

Kevin Mets (Ghent University, Belgium); Tom Verschueren (Ghent University, Belgium); Chris Develder (Ghent University - IBBT, Belgium); Tine Vandoorn (Ugent, Belgium); Lieven Vandeveldde (Ghent University, Belgium)  
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### ***Energy Efficient Predictive AMC with Adaptive SNR-based Power Allocation in MIMO Radio Networks***

Ying-Hsin Liang (Nankai University of Technology, Taiwan); Ben-Jye Chang (National Yunlin University of Science and Technology, Taiwan); Ren-Hung Hwang (National Chung-Cheng University, Taiwan); Tzung-Shiun Tsai (Chaoyang University of Technology, Taiwan)  
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### ***Self-Management for Energy-Efficiency Adaptations in Access Networks***

Cornelia Kappler (Huawei Technologies Duesseldorf GmbH, Germany); Rudolf Roth (Fraunhofer FOKUS, Germany); Mirko Schramm (Huawei Technologies Duesseldorf GmbH, Germany); Jens Tiemann (Fraunhofer FOKUS, Germany)  
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### ***Energy Efficiency Analysis for MIMO Transmission Schemes in LTE***

Olayinka Adigun (Kingston University, United Kingdom); Christos Politis (Kingston University, United Kingdom)  
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## Workshop Dinner

Saturday, June 11

## Modeling and Simulation Tools

### ***Modeling and Analysis of CFO Pre-Synchronization for STBC-OFDM-based Multi-hop Cooperative Transmissions in WSNs***

Zhen Gao (Tianjin University & Georgia Institute of Technology, P.R. China); Mary Ann Ingram (Georgia Teck, USA)

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***Design and Implementation of a Simulation Environment for Network Virtualization***

Marc De Leenheer (Ghent University & University of California - Davis, Belgium); Jens Buysse (Ghent University & INTEC, Belgium); Kevin Mets (Ghent University, Belgium); Bart Dhoedt (Ghent University, Belgium); Chris Develder (Ghent University - IBBT, Belgium)

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***Iterative Partitioning Scheme for Distributed Simulation of Dynamic Networks***

Aditya Kurve (The Pennsylvania State University, USA); Christopher H. Griffin (The Pennsylvania State University, USA); George Kesidis (Pennsylvania State University, USA)

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***Relaying in Wireless Networks Modeled through Cooperative Game Theory***

Luca Canzian (University of Padova, Italy); Leonardo Badia (Università degli Studi di Padova, Italy); Michele Zorzi (Università degli Studi di Padova, Italy)

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***LTE PHY Performance Analysis under 3GPP Standards Parameters***

Fahimeh Rezaei (University of Nebraska Lincoln, USA); Michael Hempel (University of Nebraska-Lincoln, USA); Hamid Sharif (University of Nebraska-Lincoln, USA)

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***Agent Based Middleware for Private Data Mashup in IPTV Recommender Services***

Ahmed M. Elmisery (WIT, Ireland); Dmitri Botvich (WIT, Ireland)

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## Coffee break

## Keynote speech

Prof. Masayuki Murata, Osaka University "Introduction to R&D Activities for New-Generation Networks", Dr. Hideaki Yoshino, NTT "Towards QoE oriented design and management of communication services"

## Lunch break

## Quality of Experience

***Performance Analysis of Sleep Mode Operation in IEEE 802.16m with both Uplink and Downlink Packet Arrivals***

Sangkyu Baek (Korea University, Korea); Bong Dae Choi (Korea University, Korea)

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***Service Continuity over Intertechnology RATs***

Michail Tsagkaropoulos (University of Patras, Greece); Ilias Politis (Technological Educational Institute of Messolonghi, Greece); Christos Tselios (University of Patras, Greece); Tasos Dagiuklas (Technological Educational Institute of Mesolonghi, Greece); Stavros Kotsopoulos (Wireless Telecommunications Laboratory, Greece)

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***Impact of Channel Estimation Errors on Effectiveness of Eigenvector-Based Jamming for Physical Layer Security in Wireless Networks***

James Taylor (University of Nebraska, USA); Michael Hempel (University of Nebraska-Lincoln, USA); Hamid Sharif (University of Nebraska-Lincoln, USA); Shichuan Ma (University of Nebraska-Lincoln, USA); Yaoqing (Lamar) Yang (University of Nebraska-Lincoln, USA)

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***Scalable Video Streaming over P2P Networks: a Matter of Harmony?***

Samir Medjiah (University of Bordeaux-1 / CNRS-LaBRI, France); Toufik Ahmed (University of Bordeaux-1 / CNRS-LaBRI, France); Eleni Mykoniati (University College London, United Kingdom); David Griffin (University College London, United Kingdom)

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***A Method for Seamless Codec Changeover During Active Video Calls***

Blazej Lewcio (Deutsche Telekom Laboratories, Berlin University of Technology, Germany); Sebastian Möller (TU Berlin, Deutsche Telekom Laboratories, Germany); Pablo Vidales (T-Systems & Deutsche Telekom, Mexico)

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**Coffee break**

**Cognitive Radio**

***Design and Analysis of Multi-Stage Quadrature Sigma-Delta A/D Converter for Cognitive Radio Receivers***

Jaakko Marttila (Tampere University of Technology, Finland); Markus Allén (Tampere University of Technology, Finland); Mikko Valkama (Tampere University of Technology, Finland)

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***On Partially Overlapping Coexistence for Dynamic Spectrum Access in Cognitive Radio***

Ebrahim Bedeer (Memorial University of Newfoundland, Canada); Mohamed Fawzy Marey (Memorial University, Canada); Octavia A. Dobre (Memorial University of Newfoundland, Canada); Kareem E. Baddour (Communications Research Centre, Canada)

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***Cognitive Radio for Medical Wireless Body Area Networks***

Raul Chávez-Santiago (Oslo University Hospital, Norway); Ilanko Balasingham (Norwegian University of Science & Technology & Oslo University Hospital, Norway)  
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***Optimization of Spectrum Sensing Schemes for Multi-Mini Slots Distribution***

Wu ZhiJie (Beihang University, P.R. China); Qi Zhao (Beihang University, P.R. China)  
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***A Game Theoretic Approach for Power Allocation in the Downlink of Cognitive Radio Networks***

Naeemeh Omidvar (Sharif University of Technology, Iran); Babak Hossein Khalaj (Sharif University of Technology, Iran)  
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**Workshop Closing Session**