

Table of Contents

Track 1

Capacity Region of the Two-Way Multi-antenna Relay Channel with Analog Tx-Rx Beamforming	1
<i>Cristian Lameiro, Alfredo Nazábal, Fouad Gholam, Javier Vía, and Ignacio Santamaría</i>	
Analytical Foundation for Energy Efficiency Optimisation in Cellular Networks with Elastic Traffic	18
<i>Zhijiat Chong and Eduard Jorswieck</i>	
A Note on the Wiener Filter for Vector Random Processes	30
<i>Jesús Gutiérrez-Gutiérrez, Adam Podhorski, Iñaki Iglesias, and Javier Del Ser</i>	
Energy Efficient Network Coding-based Cooperative ARQ Scheme for Wireless Networks	37
<i>Angelos Antonopoulos and Christos Verikoukis</i>	
A Real-Time FPGA-Based Implementation of a High-Performance MIMO-OFDM Mobile WiMAX Transmitter	48
<i>Oriol Font-Bach, Nikolaos Bartzoudis, Antonio Pascual-Iserte, and David López Bueno</i>	

Track 2

Delay Modeling for 3G Mobile Multimedia Services QoE Estimation	67
<i>Ianire Taboada, Fidel Liberal, and Jose Oscar Fajardo</i>	
Route Recovery Algorithm for QoS-Aware Routing in MANETs	81
<i>Wilder Castellanos, Pau Arce, Patricia Acelas, and Juan C. Guerri</i>	
Cross-Layer Adaptation of H.264/AVC over 3G UMTS Mobile Video Services	94
<i>Jose Oscar Fajardo, Ianire Taboada, Fidel Liberal, and Armando Ferro</i>	
Concurrent and Distributed Projection through Local Interference for Wireless Sensor Networks	109
<i>Xabier Insausti, Pedro M. Crespo, Baltasar Beferull, and Javier Del Ser</i>	

SA-RI-MAC: Sender-Assisted Receiver-Initiated Asynchronous Duty Cycle MAC Protocol for Dynamic Traffic Loads in Wireless Sensor Networks	120
<i>Shagufta Henna</i>	

Track 3

Bluetooth Indoor Positioning System Using Fingerprinting	136
<i>Christian Frost, Casper Svenning Jensen, Kasper S� Luckow, Bent Thomsen, and Ren� Hansen</i>	
User Movements Forecasting by Reservoir Computing Using Signal Streams Produced by Mote-Class Sensors	151
<i>Claudio Gallicchio, Alessio Micheli, Paolo Barsocchi, and Stefano Chessa</i>	
Bayesian Filtering Methods for Target Tracking in Mixed Indoor/Outdoor Environments.....	169
<i>Katrin Achutegui, Javier Rodas, Carlos J. Escudero, and Joaqu�n M�quez</i>	
Social Acceptance and Usage Experiences from a Mobile Location-Aware Service Environment	186
<i>Bernhard Klein, Jorge Perez, Christian Guggenmos, Olli Pihlajamaa, Immo Heino, and Javier Del Ser</i>	

Track 4

Mobile-Human Interaction Monitoring System	198
<i>Ivan Pretel and Ana Belen Lago</i>	
Design and Implementation of a Simulation Environment for the Evaluation of Authentication Protocols in IEEE 802.11s Networks.....	206
<i>Ikb�l Daly, Faouzi Zarai, and Lotfi Kamoun</i>	
Re-authentication Protocol for Vertical Handoff in Heterogeneous Wireless Networks	219
<i>Ikb�l Daly, Faouzi Zarai, and Lotfi Kamoun</i>	
A Distributed Framework for Organizing an Internet of Things	231
<i>Jamie Walters, Theo Kanter, and Enrico Savioli</i>	
An Analysis of Smart Antenna Usage for WiMAX Vehicular Communications	248
<i>Mihai Constantinescu, Eugen Borcoci, Tinku Rasheed, and David Hayes</i>	

Real Time Traffic Capabilities Evaluation of a Hybrid Testbed for WiMAX Networks with Smart Antenna Support	258
<i>Șerban Obreja, Irinel Olariu, Alexey Baraev, and Eugen Borcoci</i>	
Multipath Network Coding in Wireless Mesh Networks	267
<i>Velmurugan Ayyadurai, Klaus Moessner, and Rahim Tafazolli</i>	
2G/3G-Connect: A Tool for Strategic Techno-Economical Studies on National-Wide Mobile Networks under a Hybrid 2G/3G Architecture ...	275
<i>Alberto E. García, Laura Rodríguez de Lope, Klaus D. Hackbarth, Dragan Illich, and Werner Neu</i>	
Strategic Mobile Network Planning Tool for 2G/3G Regulatory Studies	291
<i>Juan Eulogio Sánchez-García, Amir M. Ahmadzadeh, Beatriz Saavedra-Moreno, Sancho Salcedo-Sanz, and J. Antonio Portilla-Figueras</i>	
Impact of the HSPDA-Based Mobile Broadband Access on the Investment of the 3G Access Network.....	303
<i>Juan Eulogio Sánchez-García, Amir M. Ahmadzadeh, Silvia Jiménez-Fernández, Sancho Salcedo-Sanz, and J. Antonio Portilla-Figueras</i>	
Challenging Wireless Networks, an Underground Experience	312
<i>David Palma, Joao Goncalves, and Marilia Curado</i>	
Operational Support of Wireless Mesh Networks Deployed for Extending Network Connectivity	322
<i>Thomas Staub, Benjamin Nyffenegger, Desislava C. Dimitrova, and Torsten Braun</i>	
A Shared Opportunistic Infrastructure for Long-Lived Wireless Sensor Networks	330
<i>Xiuchao Wu, Cormac J. Sreenan, and Kenneth N. Brown</i>	
Wireless Sensor Networks for a Zero-Energy Home	338
<i>Rangarao Venkatesha Prasad, Vijay S. Rao, Ignas Niemegeers, and Sonia Heemstra de Groot</i>	
Analysis Methodology for Flow-Level Evaluation of a Hybrid Mobile-Sensor Network	347
<i>Desislava C. Dimitrova, Geert Heijenk, and Torsten Braun</i>	
Author Index	357