

IEEE VTC2011-Spring International Workshop on

Broadband Femtocell Technologies
'Key' to Next Generation of Mobile Internet

Workshop Programme

Workshop Chair: Dr. Thierry Lestable, SAGEMCOM
Date: Sunday 15th May 2011
Time: 09h30-17h30
Room:

Schedule:

Session 1: Opening session		
Chair: Dr. Thierry Lestable, Sagemcom SAS		
Time: 09.30-11.30		
09.30-09.40	Welcome by chair and Introduction of Agenda	Dr. Thierry Lestable
09.40-10.10	Keynote Talk Prof. Mérouane Debbah, Head of Alcatel-Lucent Flexible Radio Chair in Supélec	
10.10-10.30	Use Cases, Enablers and Requirements for Evolved Femtocells Alexander Tyrrell, DOCOMO Euro-Labs, Frank A. Zdarsky, NEC Europe Ltd., Emilio Mino, Telefonica ID, Mariano Lopez, TTI.	
10.30-10.50	LTE Femtocells: System Design and Performance Analysis Alan Barbieri, Qualcomm Inc., Aleksandar Damnjanovic, Qualcomm Inc., Tingfang Ji, Qualcomm Inc., Juan Montojo, Qualcomm Inc., Yongbin Wei, Qualcomm Inc., Durga Malladi, Qualcomm Inc.	
10.50-11.10	Localization of Data and Control Plane Traffic in Enterprise Femtocell Networks Frank A. Zdarsky, NEC Europe Ltd., Andreas Maeder, NEC Europe Ltd., Stefan Schmidt, NEC Europe Ltd.	
11.10-11.30	Coffee break	

Session 2:		
Chair: Dr. Mehdi Bennis, University of Oulu, Finland		
Time: 11.30-12.50		
11.30-11.50	Experimental Characterization of UMTS Femtocell Propagation Alessandro Bazzi, IEIIT-BO/CNR, University of Bologna, Gianni Pasolini, University of Bologna, Giovanni Chiurco, University of Bologna, Oreste Andrisano, University of Bologna, Piergiorgio Faraon, Telecom Italia.	
11.50-12.10	Graph-Based Dynamic Frequency Reuse in Femtocell Networks Serkan Uygungelen, DOCOMO Euro-Labs, Gunther Auer, DOCOMO Euro-Labs, Zubin Bharucha, DOCOMO Euro-Labs.	

12.10-12.30	<p>Distributed Learning in Multiuser OFDMA Femtocell Networks</p> <p>Ana Maria Galindo-Serrano, Centre Tecnologic de Telecomunicacions de Catalunya, Lorenza Giupponi, Centre Tecnologic de Telecomunicacions de Catalunya, Gunther Auer, DOCOMO Euro-Labs.</p>
12.30-12.50	<p>Opportunistic Spectrum Reuse for Femtocell Networks</p> <p>Mehrdad Shariat, University of Surrey, Atta ul Quddus, University of Surrey, Rahim Tafazolli, University of Surrey.</p>

Session 3: Posters + Lunch	
Time: 12.50-14.00	
<p>Interference Management in Femtocell Networks Using Distributed Opportunistic Cooperation</p> <p>Francesco Pantisano, University of Bologna, Mehdi Bennis, University of Oulu, Roberto Verdone, University of Bologna, Matti Latva-aho, University of Oulu</p>	
<p>Flexible Soft Frequency Reuse schemes for heterogeneous networks (macrocell and femtocell)</p> <p>Chrysovalantis Kosta, University of Surrey, Ali Imran, University of Surrey, Atta Quddus, University of Surrey, Professor Rahim Tafazolli, University of Surrey</p>	
<p>Alamouti Transmit Diversity for Energy Efficient Femtocells</p> <p>David Stuart Muirhead, University Of Surrey, Muhammad Ali Imran, University of Surrey</p>	
<p>Zero-Forcing Coordinated Base Station Transmission for Femtocell Systems</p> <p>Máximo Morales Céspedes, University Carlos III of Madrid, Ana García-Armada, Universidad Carlos III de Madrid</p>	
<p>Measurement-Based Small-Cell Coverage Analysis for Urban Macro-Offload Scenarios</p> <p>Paul Fuxjäger, FTW - Telecommunications Research Centre Vienna, Ivan Gojmerac, FTW - Telecommunications Research Centre Vienna, Hans Ronald Fischer, FTW - Telecommunications Research Centre Vienna, Peter Reichl, FTW - Telecommunications Research Centre Vienna</p>	
<p>Modeling of Femto Cells – Simulation of Interference and Handovers in LTE Networks</p> <p>Dennis M. Rose, Braunschweig Technical University, Thomas Jansen, Braunschweig Technical University, Thomas Kürner, Braunschweig Technical University</p>	
<p>New Coordination and Resource Allocation Schemes for Uniform Rate in Femtocell Networks</p> <p>Slim Ben Halima, Orange Labs, Maryline Helard, INSA (rennes), Dinh Thuy Phan Huy, France Telecom R&D</p>	
<p>Performance Evaluation of Spectrum Sharing Algorithms in Single and Multi Operator Scenarios</p> <p>Franco Mazzenga, University of Rome Tor Vergata, Marco Petracca, University of Rome Tor Vergata, Remo Pomposini, University of Rome Tor Vergata, Francesco Vatalaro, University of Rome Tor Vergata, Romeo Giuliano, Radiolabs</p>	

Session 4: Panel session	
Chair: Dr. Thierry Lestable	
Time: 14.00-15.40	
14.00-14.30	Keynote Talk

	Frédéric Pujol, Head of Radio Technologies & Spectrum practice in IDATE	
14.30-15.40	<p>Panel Discussion on Femtocells as Keystone of Heterogeneous Networks, driving the Offload revolution:</p> <ul style="list-style-type: none"> • New features and capabilities of Next Generation (LTE-A and Beyond) Femtocells • Femtocells Market forecast, business model trends • Multi-mode Femtocells: benefits for existing Network upgrade & role of Flexible Radio • Femtocells and WiFi: Complementary approach towards true ubiquitous and quality broadband solution 	<p>Panellists:</p> <p>Mr. Frédéric Pujol, (IDATE)</p> <p>Prof. Mérouane Debbah, (Supélec)</p> <p>Dr. Andreas Maeder (NEC Europe)</p> <p>Dr. Thierry Lestable, (Sagemcom SAS)</p>
15.40-16.00	Coffee break	

Session 5:		
Chair: Dr. Thierry Lestable		
Time: 16.00-17.30		
16.00-16.20	<p>Optimization of Dynamic Frame Offset in Time Division Duplex System</p> <p>Shahrukh Bin Ali, Aalto University School of Science and Technology, Chia-Hao Yu, Helsinki University of Technology, Olav Tirkkonen, Helsinki University of Technology, Cássio Ribeiro, Nokia Research Center.</p>	
16.20-16.40	<p>A Distributed Resource Allocation Scheme in Femtocell Networks</p> <p>Yuyu Wang, Beijing University of Posts and Telecommunications, Kan Zheng, Beijing University of Posts & Telecommunications, Wenbo Wang, Beijing University of Posts & Telecommunications.</p>	
16.40-17.00	<p>On Uplink Power Control Optimization and Distributed Resource Allocation in Femtocell Networks</p> <p>Zhong Zheng, Aalto University, Jyri Hämäläinen, Helsinki University of Technology, Ying Yang, Aalto University</p>	
17.00-17.20	<p>On Stateless Routing for an All-wireless Network of Femtocells. Implications in the 3GPP Architecture</p> <p>José Nuñez-Martínez, Centre Tecnologic de Telecomunicacions de Catalunya Jaime Ferragut, Centre Tecnologic de Telecomunicacions de Catalunya, Josep Mangués-Bafalluy, Centre Tecnològic de Telecomunicacions de Catalunya</p>	
17.20-17.30	Wrap-up & concluding remarks by chair	Dr. Thierry Lestable