NEWCOM++ DISSEMINATION DAY

18 June 2010

Sheraton Firenze
Florence, Italy

Program Chair: Prof. Hikmet Sari (CNRS/SUPELEC)

Local Arrangements: Prof. Andrea Conti (CNIT)

After the successful completion of its first phase over the period of March 2004 - February 2007, the European Network of Excellence in Wireless Communications (NEWCOM) was reconducted by the European Commission within the framework of FP7 for a second phase of 3 years starting in January 2008. The second phase of this network, known as NEWCOM++, gathers researchers from 17 major European institutions (universities, private and public R&D organizations). NEWCOM++ will be organizing each year a dissemination day to present to European wireless industry the results of joint research activities by its partners. The second NEWCOM++ Dissemination Day will be held in Florence on 18 June 2010 as part of the Future Network and Mobile Summit 2010. The dissemination day is a unique opportunity for R&D engineers and managers in wireless industry, operators and service providers to get familiarized with this network of excellence, see its major achievements, and build ties with its partner institutions.

PROGRAM

The program of the Second Dissemination Day of NEWCOM++ is composed of presentations by the Research Work Package (WP) Leaders in the morning, and demos and poster presentations in the afternoon. In their presentations, the WP Leaders will highlight the research results coming from their WPs that may be of interest to industry in the short and medium terms and will particularly focus on those that are not covered by the demos and posters in the afternoon. The afternoon program features 9 demos and 17 posters covering a large variety of hot topics in wireless communications and networking.

Morning Program (9:00 – 13:30)

PART 1 (9:00 – 11:00)

Welcome Addresses

Sergio Benedetto, NEWCOM++ Scientific Director, Politecnico di Torino, Italy
Hikmet Sari, Program Chair of the Dissemination Day, SUPELEC, France

WPR.1 – Modeling, Calibration and Validation of Multi-dispersive Multi-Link Channels
Bernard Fleury, Aalborg University, Denmark

WPR.2 – Feedback and Resolution of the Channel State
Raymond Knopp, Eurecom Institute, France

WPR.3 – Adaptive Coding/Modulation for the Wireless Channel
Andreas Polydoros, University of Athens, Greece

WPR.4 – Iterative Receivers for Wireless Communications
Erdal Arikan, Bilkent University, Turkey

WPR.5 – Coding for Multi-Hop Wireless Networks
Michael Heindlmaier, Technical University of Munich, Germany

WPR.6 – Relaying and Cooperation in Networks
Luc Vandendorpe, Université Catholique de Louvain, Belgium

WPR.7 – Joint Source and Channel Coding/Decoding
Christine Guillemot, CNRS, France

COFFEE BREAK (11:00 – 11:30)

PART 2 (11:30 – 13:15)

WPR.8 – Scheduling and Adaptive Radio Resource Assignment
Roberto Verdone, University of Bologna, Italy

WPR.9 – Joint RRM and Flexible Use of Radio Spectrum
Jordi Perez Romero, Universitat Politècnica de Catalunya, Spain

WPR.10 – Network Theory
Iordanis Koutsopoulos, Center for Research and Technology Hellas, Greece

WPR.11 – Opportunistic Networks
Sergio Palazzo, University of Catania, Italy

WPR.A – Security in Wireless Networks
Merouane Debbah, SUPELEC, France

WPR.B – Localization and Positioning Techniques
Davide Dardari, CNIT- Pisa, Italy

WPR.C – Flexible Radio Platforms
Dominique Noguet, CEA - LETI, France

LUNCH (13:15 – 14:30)

Afternoon Program (14:30 – 16:30)

1. Demos

D01. Software Defined Radio for All
S. Azarian, L. Cardoso, L. Rose, M. Debbah (CNRS/SUPELEC), and P. Jallon (CEA-LETI)

D02. The Software Simulation and Data Library (SSL) and the UWB-Related Database
A. Kliks (PUT), D. Dardari, R. Narcisi, A. Zanella (CNIT), and F. Sottile (ISMB)

D03. OpenAirInterface Platform
F. Kaltenberger and R. Knopp (CNRS/EURECOM)

D04. Robust Reception of H.264 SVC with Reduced Side Information, and Comparison with H.264 AVC
L. Hidd-Fonteles and P. Duhamel (CNRS)

D05. Testbed for IR-UWB Based Ranging and Positioning: Experimental Performance and Comparison to CRLBs
A. Mallat, P. Gérard, F. Keshmiri, C. Oestges, C. Craeye, D. Flandre, and L. Vandendorpe (UCL)

D06. Evaluation of Tracking Algorithms using the WPRB Database Measurements
F. Sottile et al. (ISMB)

D07. Blind Standard Identification with Bandwidth Shape and GI Recognition using USRP Platforms and SDR4all Tools
H. Wang, W. Jouini, A. Nafkha, J. Palicot, P. Leray, C.Moy, L. S. Cardoso, M. Debbah (CNRS/SUPELEC)

D08. MAGALI Platform Demonstration
F. Clermidy (CEA-LETI)

D09. Execution Time Monitoring and Analysis with ALOE SDR Middleware
I. Gómez and A. Gelonch (UPC)

2. Poster Presentations

P01. Robust MSE-Based Transceiver Optimization in Downlink Cognitive Radio Network
X. Gong (RWTH Aachen)

P02. KauNet Triggers: A Mechanism to Emulate Opportunistic Networks
P. Hurtig**,** A. Brunstrom, J. Garcia (Chalmers/KAU)**,** and T. Pérennou (CNRS/ENSICA)

P03. On the Degrees of Freedom in the Multi-Antenna Block Fading Wiretap Channels
M. Kobayashi, S. Yang, P. Piantanida (CNRS/SUPELEC), and S. Shamai (Technion)

P04. Iterative MIMO-OFDM Channel Estimation Control Algorithm
D. Zhang (RWTH Aachen)

P05. Security Evaluation Framework for 6LoWPAN Networks
C. Pastrone, D. Mazzocchi, M. Spirito, O. Terzo (ISMB), A. Abou Al Kalam, K. Salih (CNRS), A. Atzeni (CNIT), and S. Lindskog (KAU/Chalmers)

P06. Bounds on the Capacity of the Relay Channel with Noncausal State Information at Source
A. Zaidi, L. Vandendorpe (UCL), P. Piantanida (CNRS/SUPELEC), and S. Shamai (Technion)

P07. Test-Bed Implementation for Evaluating and Deploying Heterogeneous Opportunistic WSNs
F. Mirko, M. Spirito (ISMB), J. M. Soares, R. M. Rocha (IST-TUL), and W. Zhang (CNIT)

P08. Analysis of Local Quasi-Stationarity Regions in an Urban Macrocell Scenario
A. Ispas (RWTH Aachen)

P09. Practical QAM Adaptation with Diversity and Ambiguous CSI under Energy Constraints
H. Bogucka (PUT) and A. Conti (CNIT-Ferrara)

P10. Crystallized Rate Regions for Multicarrier and Multiple Antenna Systems
A. Kliks, P. Sroka (PUT), and M. Debbah (CNRS/SUPELEC)

P11. ViCe-WICom: The Software Simulation, Data Library (SSL) and the WPR.B Database (WPR.B-DB)
A. Kliks (PUT), D. Dardari, R. Narcisi, A Zanella (CNIT), and F. Sottile (ISMB)

P12. Resource Allocation in OFDMA Underlay Cognitive Radio Systems Based on Ant Colony Optimization
R. Andreotti, I. Stupia, F. Giannetti, V. Lottici (CNIT-Pisa), and L. Vandendorpe (UCL)

P13. Empirical Study of Energy Detection-Based Spectrum Sensing for Different Radio Technologies
M. López-Benítez, F. Casadevall (UPC), and C. Martella (CNIT-Bologna)

P14. AMC Design Based on Effective SNR Mapping Techniques for Multi-Carrier Systems
I. Dagres, A. Zalonis, A. Polydoros (IASA), I. Stupia, F. Giannetti, V. Lottici (CNIT), and A. Kliks (PUT)

P15. ASIP Design and Low-Power Optimization for Flexible Turbo Decoding
P. Reddy, F. Clermidy (CEA-LETI), R. Alkhayat, and A. Baghdadi (CNRS-Telecom Bretagne)

P16. ASIP-based Flexible Soft-Input Soft-Output List Sphere Decoding
M. Troglia Gamba, G. Masera (CNIT-Polito), and A. Baghdadi (CNRS-Telecom Bretagne)

P17. Common Operator Approach for Flexible Radio Design
M. Naoues, D. Noguet (CEA-LETI), Y. Louet, Ch. Moy, and J. Palicot (CNRS/SUPELEC)