

Monday, 3 December 2012; 8:30 – 18:00

W5: Workshop on Heterogeneous, Multi-hop, Wireless and Mobile Networks (HETERWMN)

Organizer: **Waltenegus Dargie, Dresden University; Jaafar Elmirghani, Leeds University, Vincent LAU, Hong Kong University of Science and Technology;**

**Session I) Heterogeneous Networks Designs and Optimizations (Room G)
8:30 – 9:50**

- A Distance-dependent Mode Selection Algorithm in Heterogeneous D2D and IMT-Advanced Network, Shang Xiang (Beijing University of Posts and Telecommunications, P.R. China); Tao Peng (Beijing University of Posts & Telecommunications, P.R. China); Ziyang Liu (Beijing University of Post and Telecommunication, P.R. China); Wenbo Wang (Beijing University of Posts and Telecommunications, P.R. China)
- Heterogeneous LTE/802.11a Mobile Relays for Data Rate Enhancement and Energy-Efficiency in High Speed Trains, Rachad Atat (King Abdullah University of Science and Technology, Saudi Arabia); Elias Yaacoub (Qatar University Wireless Innovations Center (QUWIC), Qatar); Mohamed-Slim Alouini (King Abdullah University of Science and Technology (KAUST), Saudi Arabia); Adnan Abu-Dayya (QMIC, Qatar)
- Improved Mobility Performance in LTE Co-Channel HetNets Through Speed Differentiated Enhancements, Simone Barbera (Aalborg University, Denmark); Per Henrik Michaelsen (Nokia Siemens Networks, Denmark); Mikko Säily (Nokia Siemens Networks, Finland); Klaus Pedersen (Nokia Siemens Networks, Denmark)

**Session II) Multi-access and Cooperative Relays (Room H)
8:30 – 9:50**

- In-Network Area Estimation and Localization in Wireless Sensor Networks, Nabanita Das (Indian Statistical Institute, India); Srabani Kundu (Guru Nanak Institute of Technology, Kolkata, India)
- Handling Randomness of Multi-Class Random Access Loads in LTE-Advanced Network, Ki-Dong Lee (LG Electronics Mobile Research, USA)
- On the Exact Capacity of Dual-Hop AF Relaying With Adaptive Channel Inversion, Samy S. Soliman (University of Alberta, Canada); Norman C. Beaulieu (University of Alberta, Canada)

- Dual-Hop AF Relaying Systems in Mixed Nakagami-m and Rician Links, Samy S. Soliman (University of Alberta, Canada); Norman C. Beaulieu (University of Alberta, Canada)

Session III) QoS Issues (Room G)

10:20 – 12:00

- Role-based Quality of Service for Web Services, Frank T. Johnsen (Norwegian Defence Research Establishment (FFI), Norway); Trude H Bloebaum (Norwegian Defence Research Establishment (FFI), Norway); Jørgen Nordmoen (NTNU, Norway)
- Delay Performance of Opportunistic Network Coding for a Bidirectional Relaying Link, Hadi Meshgi (McMaster University, Canada); Dongmei Zhao (McMaster University, Canada)
- Aggregated RSVP in Nested HMIPv6: Analytical Approach, Esmat Mirzamany (Middlesex University, United Kingdom)
- A Reputation based Vertical Handover Decision making Framework (R-VHDF), Mehdi Loukil (TELECOM SudParis, France); Mariem Zekri (Telecom SudParis, France); Takoua Ghariani (Institut Telecom / Telecom SudParis, France); Badii Jouaber (Institut TELECOM - Telecom SudParis, France)
- A Joint Polling and Contention Based Opportunistic Scheduling Algorithm with Fairness Constraint, Mohammed Eltayeb (The University of Akron, USA); Hamid Reza Bahrami (The University of Akron, USA)

Session IV) Geolocation Assisted Network Routing (Room H)

10:20 – 12:00

- Weighted Signed Graph (WSG) Power-aware Routing in Distributed Wireless Networks, Hemant Kumar Rath (Tata Consultancy Services, India); Akash Chaturvedi (IIT Patna, India); Rajan Ma (Tata Consultancy Services, India); Anantha Simha (Tata Consultancy Services, India)
- A Novel Device and Application-Aware Energy Efficient Routing Algorithm for WLANs, Ruiqi Ding (Dublin City University, Ireland); Gabriel-Miro Muntean (Dublin City University, Ireland)
- Inter-MAC Green Path selection for Heterogeneous Networks, Olivier Bouchet (France Télécom, Orange Labs, France); Abdesselem Kortebi (France Telecom, Orange Labs, France); Mathieu Boucher (Neo-Soft, France)

- Available Bandwidth Probing for Path Selection in Heterogeneous Home Networks, Oscar Olvera-Irigoyen (Orange Labs, France); Abdesselem Kortebi (France Telecom, Orange Labs, France); Laurent Toutain (Telecom Bretagne, France)

Session V) Geolocation Assisted Network Routing (Room G)

14:00 – 15:10

- A Novel Insight Into Beaconless Geo-Routing, Ahmed Bader (Telecom Paris Tech, France); Karim Abed-Meraim (Dept TSI, Télécom Paris, France); Mohamed-Slim Alouini (King Abdullah University of Science and Technology (KAUST), Saudi Arabia)
- Network Coding Based Geographical Opportunistic Routing for Ad Hoc Cognitive Radio Networks, Xing Tang (City University of Hong Kong, Hong Kong)
- A Cross-Layer Routing Protocol with Quality of Service Support for Flexible Deployment in MANETs, Giovanni Rigazzi (University of L' Aquila, Italy); Veronica Palma (University of ROMA TRE, Italy); Gabriele Tamea (Universtà di Roma "La Sapienza", Italy); Fortunato Santucci (University of l'Aquila, Italy); Alessandro Neri (University of ROMA TRE, Italy)

Session VI) Heterogeneous Networks Designs and Optimizations (Room H)

14:00 – 15:10

- A Dynamic Network Gateway Selection Scheme Based on Autonomous Clustering for Heterogeneous Mobile Ad Hoc Network Environment, Keisei Okano (Hiroshima City University, Japan); Tomoyuki Ohta (Hiroshima City University, Japan); Yoshiaki Kakuda (Hiroshima City University, Japan)
- Secrecy Broadcast Transmission Capacity for Heterogeneous Correlated Wireless Ad Hoc Networks, Xiaohui Sun (Beijing University of Posts and Telecommunications, P.R. China); Changchuan Yin (Beijing University of Posts and Telecommunications, P.R. China); Yang Liu (Beijing University of Posts and Telecommunications, P.R. China); Jing Gao (Beijing Key Laboratory of Beijing University of Posts and Telecommunications, P.R. China)
- An Energy Efficient Clustering in Heterogeneous Wireless Sensor and Actuators Networks, Dong Sung Kim (Kumoh National Institute of Technology, Korea); Quang Pham (Kumoh National Institute of Technology, Korea)