Monday June 15th

Registration (8:30 – 9:00am): CGS Lobby

Welcome & Keynote 1 (9:00 – 10:00am)
Room: CGS 129 (Jacob Sleeper Auditorium)

Coffee break (10:00 – 10:30am): The 5th floor alcove

SESSION 1A: Video Streaming (10:30am – 12:00pm)
Chair: Torsten Braun, Room: CGS 505

Green Video Delivery in LTE-based Heterogeneous Cellular Networks
Apostolos Galanopoulos (University of Thessaly, Greece); George Iosifidis (Yale University, USA); Antonios Argyriou (University of Thessaly, Greece); Leandros Tassiulas (Yale University, USA)

QoE-aware optimization for video delivery and storage
Alisa Devlic (Royal Institute of Technology (KTH), Sweden); Pavan Kumar Kamaraju (University Of Maryland Baltimore County & Royal Institute Of Technology KTH, USA); Pietro Lungaro (Royal Institute of Technology (KTH), Sweden); Zary Segal (KTH Royal Institute of Technology, Sweden); Konrad Tollmar (Royal Institute of Technology (KTH), Sweden)

Mobile HTTP-based streaming using flexible LTE base station control
Izhak Rubin (University of California at Los Angeles, USA); Stefania Colonnese (Università La Sapienza di Roma, Italy); Francesca Cuomo (University of Rome Sapienza, Italy); Federica Calanca (University of Rome Sapienza, Italy); Tommaso Melodia (Northeastern University, USA)

SESSION 1B: Mobility & Handover Management (10:30am – 12:00pm)
Chair: Jérôme Härri, Room: CGS 527

Network architecture supporting seamless flow mobility between LTE and WiFi networks
Dhathri R. Purohith and Aditya Hegde (IIT Madras, India); Krishna M. Sivalingam (Indian Institute of Technology Madras, India)

A Hybrid Centralized-Distributed Mobility Management Architecture for Network Mobility
Tien-Thinh Nguyen (EURECOM, France); Christian Bonnet (Institut Eurecom, France)

Handover triggering in IEEE 802.11 Networks
Nicolas Montavont (Institut Mines Telecom / Telecom Bretagne, France); Alberto P Blanc and Renzo Navas (Telecom Bretagne, France); German Castignani (University of Luxembourg / SnT, Luxemburg)
Lunch (12:00 – 1:30pm)
West Campus Dining Hall: 275 Babcock Street, Boston, MA 02215

SESSION 2A: Dynamic Offloading and Scheduling (1:30 – 3:00pm)
Chair: Vasilios Siris, Room: CGS 505

Offload (Only) the Right Jobs: Robust Offloading Using the Markov Decision Processes 56
Esa Hyytiä (Aalto University, Finland); Thrasyvoulos Spyropoulos (EURECOM, France); Joerg Ott (Aalto University, Finland)

Towards Optimal Priority and Deadline Driven Scheduling in Dynamic Wireless Environments 65
Viral Patel (State University of New York at Buffalo, USA); Nicholas Mastronarde (University at Buffalo, USA); Michael Medley (Air Force Research Laboratory, USA); John D. Matyjas (Air Force Research Laboratory, Rome, NY, USA)

Minimum Delay Scheduling with Multi-Packet Transmission in Wireless Networks 75
Ali Abbasi and Majid Ghaderi (University of Calgary, Canada)

SESSION 2B: Mobility Management in WSNs (1:30 – 3:00pm)
Chair: Nils Aschenbruck, Room: CGS 527

Lifetime Optimization with QoS of Sensor Networks with Uncontrollable Mobile Sinks 84
Francesco Restuccia and Sajal K. Das (Missouri University of Science and Technology, USA)

Analysis of Deployment and Movement Policies in Wireless Sensor and Robot Networks 93
Andrew Wichmann and Turgay Korkmaz (University of Texas at San Antonio, USA)

Water Flow Driven Sensor Networks for Leakage and Contamination Monitoring 102
Amitangshu Pal and Krishna Kant (Temple University, USA)

Coffee break (3:00 – 3:30pm): The 5th floor alcove

SESSION 3A: WSN Data Dissemination and Gathering (3:30 – 5:00pm)
Chair: Yonghe Liu, Room: CGS 505

Ripple: High-throughput, Reliable and Energy-efficient Network Flooding in Wireless Sensor Networks 111
Dingwen Yuan (Technische Universität Darmstadt, Germany); Matthias Hollick (Technische Universität Darmstadt & Secure Mobile Networking Lab, Center for Advanced Security Research Darmstadt, Germany)
Adaptive Broadcast Suppression for Trickle-Based Protocols  120
Thomas Meyfroyt, Milosh Stolikj and Johan J. Lukkien (Eindhoven University of Technology, The Netherlands)

Joint Compressive Data Gathering and Scheduling in Wireless Sensor Networks under the Physical Interference Model  129
Dariush Ebrahimi and Chadi Assi (Concordia University, Canada)

SESSION 3B: Content-Centric Architectures for Multimedia (3:30 – 5:00pm)
Chair: Anand Seetharam, Room: CGS 527

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Claudio E. Casetti, Carla-Fabiana Chiasserini and Luciano Curto Pelle (Politecnico di Torino, Italy); Carolina Del Valle (Instituto Tecnológico y de Estudios Superiores de Monterrey, Mexico); Yufeng Duan and Paolo Giaccone (Politecnico di Torino, Italy)

EdgeBuffer: Caching and Prefetching Content at the Edge in the MobilityFirst Future Internet Architecture  147
Feixiong Zhang (Rutgers University & WINLAB, USA); Chenren Xu (Carnegie Mellon University & School of Computer Science, USA); Yanyong Zhang (Rutgers University, USA); K. K. Ramakrishnan (University of California, Riverside, USA); Shreyasee Mukherjee (WINLAB, Rutgers University, USA); Roy Yates and Thu Nguyen (Rutgers University, USA)

TCCN: Tag-Assisted Content Centric Networking for Internet of Things  156
Yuning Song, Huadong Ma and Liang Liu (Beijing University of Posts and Telecommunications, P.R. China)

Work in Progress & Demo Session (5:00 – 6:30pm)
CGS Hallway
Tuesday June 16th

Keynote 2 (8:30 – 9:30am)
Room: CGS 129 (Jacob Sleeper Auditorium)

Coffee break (9:30 – 10:00am): The 5th floor alcove

SESSION 4A: Dynamic Spectrum Access (10:00 – 11:30am)
Chair: Luca Bedogni, Room: CGS505

On 3-Dimensional Spectrum Sharing for TV White and Gray Space Networks 165
Luca Bedogni (University of Bologna & Department of Computer Science, Italy); Angelo Trotta and Marco Di Felice (University of Bologna, Italy)

Sean Rocke (The University of the West Indies, Trinidad and Tobago); Alexander M. Wyglinski (Worcester Polytechnic Institute, USA)

Floating Band D2D: Exploring and Exploiting the Potentials of Adaptive D2D-enabled Networks 181
Arash Asadi (IMDEA Networks Institute & University Carlos III of Madrid, Spain); Vincenzo Mancuso (IMDEA Networks Institute, Spain); Peter Jacko (Lancaster University, United Kingdom)

SESSION 4B: Internet of Things (10:00 – 11:30am)
Chair: Honggang Wang, Room: CGS 527

Scalability of Machine to Machine systems and the Internet of Things on LTE mobile networks 190
Jill Jermyn (Columbia University, USA); Roger Piqueras Jover, Ilona Murynets and Mikhail Istomin (AT&T Security Research Center, USA); Salvatore J. Stolfo (Columbia University, USA)

Ambient Control: A Mobile Framework for Dynamically Remixing the Internet of Things 199
Max Pagel and Darren Carlson (National University of Singapore, Singapore)

Prefix Coding of Hierarchical Categories for Publish-Subscribe in Mobile Wireless Environments 208
Bo Xu and Matei Stroila (HERE, USA)

Lunch (11:30am – 1:00pm)
West Campus Dining Hall: 275 Babcock Street, Boston, MA 02215
Panel: Security & Privacy in the Internet of Things (1:00 – 2:30pm)
Room: CGS 129 (Jacob Sleeper Auditorium)

SESSION 5A: Localization and Positioning (3:00 – 4:30pm)
Chair: Majid Ghaderi, Room: CGS 505

ReNLoc: An anchor-free localization algorithm for indirect ranging  217
Marios A Fanourakis (University of Geneva, Switzerland); Katarzyna Wac (University of Geneva & Quality of Life group, Switzerland)

Cooperation among Smartphones to Improve Indoor Position Information  226
Chen Qiu and Matt Mutka (Michigan State University, USA)

A Passive WiFi Source Localization System based on Fine-grained Power-based Trilateration  235
Zan Li and Torsten Ingo Braun (University of Bern, Switzerland); Desislava Dimitrova (ETH Zurich, Switzerland)

SESSION 5B: Security and Privacy Issues (3:00 – 4:30pm)
Chair: Pericle Perazzo, Room: CGS 527

Privacy-preserving Routing in Delay Tolerant Networks based on Bloom Filters  244
Evangelos Papapetrou and Vasileios Bourgos (University of Ioannina, Greece); Artemios G. Voyiatzis (SBA Research, Austria)

In the shadows we trust: A secure aggregation tolerant watermark for data streams  253
Arezou Soltani Panah, Ron van Schyndel and Timos Sellis (RMIT University, Australia); Elisa Bertino (Purdue University, USA)

The Verifier Bee: a Path Planner for Drone-Based Secure Location Verification  262
Pericle Perazzo (University of Pisa, Italy); Kanishka Ariyapala (University of Florence, Italy); Mauro Conti (University of Padua, Italy); Gianluca Dini (University of Pisa, Italy)

Coffee break (4:30 – 5:00pm): The 5th floor alcove

SESSION 6: Ph.D. Forum (5:00 – 6:30pm)
Room: CGS 129 (Jacob Sleeper Auditorium)

Comparing Alternative Approaches for Mobile Content Delivery in Information-Centric Networking  271
Feixiong Zhang (Rutgers University & WINLAB, USA)

A Cell Biology Inspired Data Packet Forwarding Scheme in Mobile Ad-hoc Networks  273
Sulochana Sooriyaarachchi (University of Moratuwa, Sri Lanka)
Towards an Evolvable Cellular Architecture 275
Jill Jermyn (Columbia University, USA)

Design of a lightweight Control Plane for supporting MAC and Routing in industrial WSNs 277
Dario Fanucchi (University Augsburg, Germany)

An Analytic Evaluation of the Trickle Algorithm: Towards Efficient, Fair, Fast and Reliable Data Dissemination 279
Thomas Meyfroyt (Eindhoven University of Technology, The Netherlands)

Dinner Banquet (7:00 – 9:30pm)
Trustee Ballroom & Lounge: 1 Silber Way, 9th Floor, Boston, MA 02215
Wednesday June 17th

SESSION 7A: Network Analysis and Diagnosis (8:30 – 10:00am)
Chair: Krishna Kant, Room: CGS 505

NetTomo: A Tomographic Approach towards Network Diagnosis  
Paritosh Ramanan, Goutham Kamath and Wen-Zhan Song (Georgia State University, USA)

WiFo: A Diagnostic Tool for IEEE 802.11 MAC  
Hessan Feghhi (Hamilton Institute, National University of Ireland Maynooth, Ireland); David Malone (Maynooth University, Ireland)

On the Map Accuracy required for Network Simulations based on Ray Launching  
Thomas Hänel, Matthias Schwamborn, Alexander Bothe and Nils Aschenbruck (University of Osnabrück, Germany)

SESSION 7B: Opportunistic Networks and Prediction Mechanisms (8:30 – 10:00am)
Chair: Ibrahim Matta, Room: CGS 527

Social Cognitive Heuristics for Adaptive Data Dissemination in Opportunistic Networks  
Matteo Mordacchini (IIT, CNR, Pisa, Italy); Andrea Passarella and Marco Conti (IIT-CNR, Italy)

HiPCV: A History Based Learning Model for Predicting Contact Volume in Opportunistic Networks  
Mehrab Shahriar (University of Texas at Arlington, USA); Yonghe Liu (The University of Texas at Arlington, USA); Sajal K. Das (Missouri University of Science and Technology, USA)

Mobile Network Resource Optimization under Imperfect Prediction  
Nicola Bui and Joerg Widmer (IMDEA Networks Institute, Spain)

Coffee break (10:00 – 10:30am): The 5th floor alcove

SESSION 8A: Resource management and QoS/QoE provisioning (10:30am – 12:00pm)
Chair: Turgay Korkmaz, Room: CGS 505

Analysis of MAC-level Throughput in LTE Systems with Link Rate Adaptation and HARQ Protocols  
Raffaele Bruno, Antonino Masaracchia and Andrea Passarella (IIT-CNR, Italy); Stefano Mangione (Università di Palermo, Italy)
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Francisco Javier Simó Reigadas (Universidad Rey Juan Carlos, Spain); Esteban Municio and Eduardo Morgado (Rey Juan Carlos University, Spain); Eva M. Castro and Andrés Martínez (Universidad Rey Juan Carlos, Spain)

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Chair: Thrasyvoulos Spyropoulos, Room: CGS 527

Navigo: Interest Forwarding by Geolocations in Vehicular Named Data Networking  359
Giulio Grassi (University Pierre et Marie Curie, France); Davide Pesavento (Université Pierre et Marie Curie, France); Giovanni Pau (UPMCSorbonne Universités & UCLA, France); Lixia Zhang (University of California at Los Angeles, USA); Serge Fdida (UPMCSorbonne Universités, France)

Lightweight Clustering of Spatio-Temporal Data in Resource Constrained Mobile Sensing  369
Ghulam Murtaza (University of New South Wales & Network Research Lab, Australia); Andreas Reinhardt (TU Clausthal, Germany); Salil S Kanhere (The University of New South Wales, Australia); Sanjay Jha (University of NSW, Australia)

Coop-DMAC: A Cooperative Directional MAC Protocol for Wireless Networks  378
Peng Wang, Marina Petrova and Petri Mähönen (RWTH Aachen University, Germany)

Lunch (12:00am – 1:30pm)
West Campus Dining Hall: 275 Babcock Street, Boston, MA 02215

SESSION 9A: Modeling, Measurements and Performance Analysis (1:30 – 3:00pm)
Chair: Joerg Widmer, Room: CGS 505

Impact of Country-scale Internet Disconnection on Structured and Social P2P Overlays  387
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Chair: Bo Sheng, Room: CGS 527

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Pouya Ostovari (Temple University & Computer and Information Sciences, USA); Jie Wu (Temple University, USA)

U-TV: User-centric Scalable DTV broadcast over Heterogeneous Wireless Networks 414
Chetna Singhal and Swades De (Indian Institute of Technology Delhi, India); Hari Gupta (Indian Institute of Technology, Delhi, India)
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An Analysis of Opportunistic Forwarding for Correlated Wireless Channels 426
Anand Seetharam (California State University Monterey Bay, USA); Jim Kurose (University of Massachusetts at Amherst, USA)

Impact of Network Monitoring in IEEE 802.15.4e-based Wireless Sensor Networks 429
Dario Fanucchi (University Augsburg, Germany); Barbara Staehle (Fraunhofer ESK, Germany); Rudi Knorr (Fraunhofer Institute for Embedded Systems and Communication Technologies (ESK), Germany)

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Nikos Perpinias, Alexandros Palaios, Janne Riihijärvi and Petri Mähönen (RWTH Aachen University, Germany)

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Denny Stohr and Matthias Schulz (Technische Universität Darmstadt, Germany); Matthias Hollick (Technische Universität Darmstadt & Secure Mobile Networking Lab, Center for Advanced Security Research Darmstadt, Germany); Wolfgang Effelsberg (University of Mannheim, Germany)

Anticipatory Quality Adaptation for Mobile Video Streaming: Reaching Perfect Fluency by Channel Prediction  458
Stefan Valentin (Huawei Technologies, France); Sami Mekki (France Research Center, Huawei Technologies, France)
Sunday June 14th

**Workshop Program (IoT-SoS 2015)**

*Room: CGS 421*

8:30 – 9:00: Registration

9:00 – 9:05: Opening Remarks (Nilanjan Banerjee and Salvatore Distefano)

9:05 – 10:00:

*Keynote Presentation: “Sonar Inside Your Body: Toward Implantable Sensor Networks”*

Dr. Tommaso Melodia,
Department of Electrical and Computer Engineering
Northeastern University.

10:00 – 10:30: Coffee Break

10:30 – 12:00: Session 1. IoT Applications. *(Chair: Dr. Nilanjan Banerjee)*

[1] A Rational Mechanism for Coordinating Crowdsourced Resources for Geo-temporal Request Satisfaction, *Christine Bassem and Azer Bestavros (Boston University, USA)* 562

[2] Experiments with Security and Privacy in IoT Networks, *Mary R Schurgot and David Shinberg (LGS Innovations, USA); Lloyd Greenwald (LGS Innovations / Bell Labs, USA)* 592


12:00 – 1:30: Lunch Break

1:30 – 2:45: Session 2. Wireless Systems. *(Chair: Dr. Mary R. Schurgot)*

[1] An IEEE 802.11ah Programmable Modem, *Raul Casas, Vakis Papaparaskeva and Xuehong Mao (Cadence Design Systems, USA); Rishi Kumar and Piyush Kaul (Cadence Design Systems, India); Samer Hijazi (Cadence Design Systems, USA)* 568

[2] Performance Analysis of IoT-Enabling IEEE 802.11ah Technology and its RAW Mechanism with Non-Cross Slot Boundary Holding Schemes, *Muhammad Qutab-ud-din and Ali Hazmi (Tampere University of Technology, Finland); Behnam Badihi, Anna Larmo and*
Johan Torsner (Ericsson Research, Finland); Mikko Valkama (Tampere University of Technology, Finland) 574

[3] Highly Scalable Fair Contention Resolution Scheme Based on Idle Time, Byung-Jae Kwak (Electronics and Telecommunications Research Institute, Korea); Junhyuk Kim (KAIST, Korea); Nah-Oak Song (Korea Advanced Institute of Science and Technology (KAIST), Korea); Kyounghe Kim and June-Koo Kevin Rhee (KAIST, Korea); Kapseok Chang (ETRI, Korea); Moon-Sik Lee (Electronics and Telecommunications Research Institute & Stanford University, Korea) 598

2:45 – 2:50: Closing Remarks

3:00: End of Workshop
Sunday June 14th

**Workshop Program (AoC 2015)**

**Room: CGS 423**

8:30 – 9:00: Registration

9:00 – 9:05: Opening Remarks

9:05 – 10:00: Keynote Presentation: "Opportunistic Offloading on the Edge"

Thrasyvoulos Spyropoulos (EURECOM, France)

10:00 – 10:30: Coffee Break

10:30 – 12:00: Session 1: Modeling (Chair: Dr. Matteo Mordacchini)

1. Characterizing Opportunistic Communication with Churn for Crowd-counting, Ljubica Pajevic (KTH, Royal Institute of Technology, Sweden); Gunnar Karlsson (KTH Royal Institute of Technology, Sweden)  473

2. A Markov chain model for drop ratio on one-packet buffers DTNs, Victor Ramiro (University of Toulouse & ISAE, France); Dinh Khanh Dang (University of Toulouse - ISAE, France); Gwilherm Baudic (ISAE - Université de Toulouse, France); Tanguy Perennou and Emmanuel Lochin (University of Toulouse - ISAE, France)  491

3. Inferring Content-Centric Traffic for Opportunistic Networking from Geo-location Social Networks, Pavlos Sermpezis and Thrasyvoulos Spyropoulos (EURECOM, France)  461

12:00 – 1:30: Lunch Break

1:30 – 2:20: Session 2 - Opportunistic computation (Chair: Dr. Matteo Mordacchini)

1. Computational Ferrying: Challenges in Deploying a Mobile High Performance Computer, Alireza Monfared, Mostafa Ammar and Ellen Zegura (Georgia Institute of Technology, USA); David Doria and David Bruno (United States Army Research Laboratory, USA)  485

2. The design of a generalised approach to the programming of systems of systems, Geoff Coulson, Gordon Blair, Yehia Elkhatib and Andreas U. Mauthe (Lancaster University, United Kingdom)  479

2.20 – 3:10: Session 3 - Information processing (Chair: Dr. Matteo Mordacchini)
[1] Inter-Session Network Coding in Delay Tolerant Mobile Social Networks: an Empirical Study, Neetya Shrestha and Lucile Sassatelli (I3S - Université Nice Sophia Antipolis/CNRS UMR 7271, France)  467

[2] Socially-Aware Content Retrieval using Random Walks in Disruption Tolerant Networks, Tuan Le and Haik Kalantarian (University of California, Los Angeles, USA); Mario Gerla (University of California at Los Angeles, USA)  497

3:10: End of Workshop
Sunday June 14th

Workshop Program (SmartVehicles 2015)
Room: CGS 521

8:30 – 8:50: Registration

8:50 – 9:00: Opening Remarks

9:00 – 10:00:
  Keynote Presentation: "Beyond Position: Scaling Challenges in Future Vehicular Networks"
  Marco Gruteser, Rutgers University, USA

10:00 – 10:30: Coffee Break

10:30 – 11:45: Session 1: Communications & Data Dissemination (Chair: Dr. Jérôme Härri)

[1] Performance Evaluation of a Mixed Vehicular Network with CAM-DCC and LIMERIC Vehicles, Bin Cheng and Ali Rostami (Rutgers University, WINLAB, USA); Marco Gruteser (WINLAB / Rutgers University, USA); John Kenney and Gaurav Bansal (Toyota InfoTechnology Center, USA); Katrin Sjoberg (Volvo, Sweden) 604

[2] Taxi-Cab Cloud Architecture to Offload Data Traffic from Cellular Networks, Kenneth U Ezirim (Graduate Center, City University of New York, USA); Shweta Jain (York College CUNY & Graduate Center of CUNY, USA) 628

[3] Throughput Analysis of IEEE 802.11p-based Multi-Hop V2I Communications, Ribal Atallah (Concordia University, Canada); Maurice J. Khabbaz (Notre-Dame University, Lebanon); Chadi Assi (Concordia University, Canada) 634

12:00 – 1:30: Lunch Break

1:30 – 2:20: Session 2 - Traffic Estimation (Chair: Dr. Raffaele Bruno)

[1] Opportunistic Calibration of Smartphone Orientation in a Vehicle, Bahador Khaleghi (Intelligent Mechatronic Systems (IMS), Canada); Akrem Saad El-ghazal and Allaa R. Hilal (University of Waterloo, Canada); Jason Toonstra and Ben Miners (Intelligent Mechatronic Systems (IMS), Canada); Otman Basir (University of Waterloo, Canada) 610

[2] V2X Data Dissemination Delay for Vehicular Traffic Density Estimations, Sosina Gashaw and Jérôme Härri (EURECOM, France) 616

2:20 – 3:10: Session 3 – ITS Applications (Chair: Dr. Salil Kanhere)
[1] Min-Max Fair Car-Parking Slot Assignment, Elisabetta Alfonsetti (KTH, USA); Pradeep Chathuranga Weeraddana (KTH, Stockholm, Sweden); Carlo Fischione (KTH, Sweden) 622

[2] A Fail Safe Broadcast Protocol for Collaborative Intelligent Vehicles, Yitian Gu, Shou-pon Lin and Nick Maxemchuk (Columbia University, USA) 640

3:10: End of Workshop
Sunday June 14th

Workshop Program (VidEv 2015)
Room: CGS 523

8:30 - 9:00: Registration

9:00 - 10:00: Keynote Presentation: “Video everywhere will require dense networking”
Thomas DC Little (Boston University, USA)

10:00 - 10:30: Coffee Break

10:30 - 12:00: Session 1 (Chair: Yousof Naderi)

[1] An Adaptation Mechanism for Robust OTT Video Transmission, Fakher Oueslati and Jean-Charles Grégoire (University of Quebec, INRS) 658


[3] LiTMaS: Live Road Traffic Maps for Smartphones, S. M. Iftekharul Alam, Sonia Fahmy and Yung-Hsiang Lu (Purdue University) 652

12:00 - 1:30: Lunch Break

1:30 - 2:30: Session 2 (Chair: Yousof Naderi)

[1] Streaming 4K/UHD Video to the Rest of Us: Can Bandwidth Sharing Help?, Isabel Montes, Jaymari Chua, Joseph Michelangelo Cruz, Augusto Remillano, II, Joseph Darwin Young, Roel Ocampo and Cedric Angelo Festin (University of the Philippines) 670


2:30: End of Workshop
Sunday June 14th

**Workshop Program (CORAL 2015)**

**Room: CGS 527**

8:30 – 9:00: Registration

9:00 – 9:15: Introduction from the Workshop Chairs

9:15 – 10:00:  
*Keynote Presentation*  
Alexander M. Wyglinski (Worcester Polytechnic Institute, USA)

10:00 – 10:30: Coffee Break

10:30 – 12:00: Session 1 - Sensing I *(Chair: Dr. Yue (Frank) Gao)*

1. An Experimental Study on the Statistical Properties of Radio Environment Noise  
   **Alexandros Palaios, Hauke Dose, Janne Riihijärvi and Petri Mähönen** (RWTH Aachen University, Germany) 550

2. A Multi-Channel Spectrum Sensing Scheme with Filter Bank Realization for LTE Signals  
   **Trung Thanh Nguyen** (Faculty of Engineering, The University of Duisburg-Essen, Germany);  
   **Hanwen Cao** (Huawei European Research Center, Germany);  
   **Theo Kreul** (University of Duisburg-Essen, Germany);  
   **Thomas Kaiser** (Universität Duisburg-Essen, Germany) 521

3. Spectrum Sensing based on Maximum Eigenvalue Approximation in Cognitive Radio Networks  
   **Adeel Ahmed, Yim-Fun Hu, Jim M. Noras and Prashant Pillai** (University of Bradford, United Kingdom) 544

12:00 – 1:30: Lunch Break

1:30 – 3:00: Session 2 – Sensing II *(Chair: Dr. Antonio G. Marques)*

1. Sub-Nyquist Rate Wideband Spectrum Sensing over TV white space for M2M Communications  
   **Yuan Ma, Yue Gao and Clive Parini** (Queen Mary University of London, United Kingdom) 556

2. A Weighted Diversity Combining Technique for Cyclostationarity Detection Based Spectrum Sensing in Cognitive Radio Networks  
   **Daiki Cho and Shusuke Narieda** (National Institute of Technology, Akashi College, Japan) 538

3. Unified Approach for Performance Analysis of Cognitive Radio Spectrum Sensing over Correlated Multipath Fading Channels  
   **Salam Al-Juboori and Xavier N Fernando** (Ryerson University, Canada) 515
3:00 - 3:30: Coffee Break

3:30 - 5:30: Session 3 – Spectrum Access (Chair: Dr. Luca Bedogni)

[1] Rendezvous in cognitive radio ad-hoc networks with asymmetric channel view
Akbar Hossain and Nurul I Sarkar (Auckland University of Technology, New Zealand)  503

Ahmad Naeem Akhtar (National University of Science and Technology (NUST), College of
Telecommunication Engineering, Islamabad, Pakistan)  509

Networks
Michael Doering, Anatolij Zubow and Adam Wolisz (Technische Universität Berlin, Germany)  526

Antonio G. Marques (Universidad Rey Juan Carlos, Spain); Sergio Molinero (King Juan Carlos
University, Spain); Georgios B. Giannakis (University of Minnesota, USA)

5:30: End of Workshop