Network Track

Monday 12 March 2007

11:00 - 12:10

T3S01: Routing in multihop - 1

Room Location: Salisbury I – Peninsula Hotel

Session Chair: Han-Chieh Chao (National Ilan University, Taiwan)

T3S01p01: An Energy Efficient and Coverage Guaranteed Wireless Sensor Network
Yun-Sheng Yen (National Dong Hwa University, Taiwan); Sheng Hong (National Dong Hwa University, Taiwan); Ruay-Shiung Chang (National Dong Hwa University, Taiwan); Han-Chieh Chao (National Ilan University, Taiwan)

T3S01p02: Routing with Hexagonal Virtual Coordinates in Wireless Sensor Networks
Jang-Ping Sheu (National Central University, Taiwan); Ming-Lung Ding (National Central University, Taiwan)

T3S01p03: Enforcing Cooperation in an Ad Hoc Network using a Cost-Credit Based Forwarding and Routing Approach
Chee-Wah Tan (Nanyang Technological University, Singapore); Sanjay Bose (Nanyang Technological University, Singapore)

P3s11: Mobility - 1

Room Location: Salisbury I – Peninsula Hotel

Session Chair: Yan Zhang (Simula Research Laboratory, Norway)

P3s11p01: An Analytical Model of the ODPLAU Scheme for Telecommunication Networks
Yang Xiao (The University of Alabama, USA); Hui Chen (Autozone Inc. IT Department, USA)

P3s11p02: A Vertical Handoff Decision Algorithm for Heterogeneous Wireless Networks
Enrique Stevens-Navarro (University of British Columbia, Canada); Vincent Wong (University of British Columbia, Canada); Yuxia Lin (University of British Columbia, Canada)
P3s11p03: Performance Modeling of Energy Management Mechanism in IEEE 802.16e WiMAX
Yan Zhang (Simula Research Laboratory, Norway)

P3s11p04: High Fidelity Simulation of Mobile Cellular Systems with Integrated Resource Allocation and Adaptive Antennas
Hyunok Lee (Stanford University, USA); Vahideh Manshadi (Stanford University, USA); Donald C. Cox (Stanford University, USA); Nim Cheung (Telcordia, USA)

T3s21: Cooperative networks - 1
Room Location: Salisbury 2 – Peninsula Hotel
Session Chair: Changcheng Huang (Carleton University, Canada)

T3s21p01: Coded Cooperation on Block-Fading Channel in OFDMA Systems
Jun Niu (Polytechnic University, Brooklyn, NY, USA)

T3s21p02: A Novel Path Selection and Recovery Mechanism for MANETs P2P File Sharing Applications
Changcheng Huang (Carleton University, Canada); Ahmed Abada (Carleton University, Canada); Hsiao-Hwa Chen (National Sun Yat-Sen University, Taiwan); Li Cui (Institute of Computing Technology, P.R. China)

T3s21p03: Hybrid Local Recovery Scheme for Reliable Multicast Using Group-aided Multicast Scheme
Alex Fung (Keio University, Japan); Iwao Sasase (Keio University, Japan)

T3s21p04: Detection in Dense Wireless Sensor Networks
Wee-Peng Tay (MIT, USA); John Tsitsiklis (MIT, USA); Moe Win (Massachusetts Institute of Technology, USA)

T3s31: Ad hoc and sensor networks - 1
Room Location: Salisbury 3- Peninsula Hotel
Session Chair: Peter Bosch (Bell Laboratories, USA)

T3s31p01: Reducing Congestion over Hotspot Clusters in WCDMA Networks
Na Yao (Queen Mary, University of London, United Kingdom); Laurie Cuthbert (Queen Mary, University of London, United Kingdom)
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<td>T3s31p02:</td>
<td><strong>POWER-SPEED: A Power-Controlled Real-Time Data Transport Protocol for Wireless Sensor-Actuator Networks</strong></td>
<td>Yangfan Zhou (The Chinese University of Hong Kong, Hong Kong); Edith Ngai (The Chinese University of Hong Kong, Hong Kong); Michael Lyu (The Chinese University of Hong Kong, Hong Kong); Jiangchuan Liu (Simon Fraser University, Canada)</td>
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<td>T3s31p03:</td>
<td><strong>Modeling Detection Metrics in Randomized Scheduling Algorithm in Wireless Sensor Networks</strong></td>
<td>Yang Xiao (The University of Alabama, USA); Hui Chen (Autozone Inc. IT Department, USA); Kui Wu (University of Victoria, Canada); Bo Sun (Lamar University, USA); Chong Liu (University of Victoria, Canada)</td>
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<td>T3s31p04:</td>
<td><strong>Ad hoc Network State Aware Routing Protocol</strong></td>
<td>Jie Xiang (Huazhong University of Science &amp; Technology, P.R. China)</td>
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<td>T3s41:</td>
<td>Location and handoff management - 1</td>
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<td>Session Chair</td>
<td>Binoy Ravindran (Virginia Tech, USA)</td>
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<td>T3s41p02:</td>
<td><strong>Experimental Analysis of Area Localization Scheme for Sensor Networks</strong></td>
<td>Vijay Chandrasekhar (Stanford University, USA); Zhi Ang Eu (Institute for Infocomm Research, Singapore); Winston Seah (Institute for Infocomm Research, Singapore); Venkatesh Pillai (National University of Singapore, Singapore)</td>
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<td>T3s41p03:</td>
<td><strong>Energy Consumption for Multiple Object Identification System with Active RFID Tags</strong></td>
<td>Xu Su (University of Texas at San Antonio, USA); Yang Xiao (The University of Alabama, USA)</td>
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<td>T3s41p04:</td>
<td><strong>Dual and Mixture Monte Carlo Localization Algorithms for Mobile Wireless Sensor Networks</strong></td>
<td>Enrique Stevens-Navarro (University of British Columbia, Canada); Vijayanth Vivekanandan (University of British Columbia, Canada); Vincent Wong (University of British Columbia, Canada)</td>
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14:00 – 15:25

T3s02:  Wireless network security and privacy – 1

Room Location:  Salisbury I – Peninsula Hotel

Session Chair:  Ratna Dutta (Research Fellow, Institute for Infocomm Research, Singapore, Singapore)

T3s02p01:  On mitigating malicious behavior against routing in wireless network
   Hailun Tan (University of New South Wales, Australia)

T3s02p02:  A Mobile Firewall Framework - Design and Implementation
   Han Chiang Tan (Institute for Infocomm Research, Singapore); Jianying Zhou (Institute for Infocomm Research, Singapore); Ying Qiu (Institute for Infocomm Research, Singapore)

T3s02p03:  Adding Identity Protection to EAP-TLS Smartcards
   Mohamad Badra (Laboratoire d'Informatique, de Modelisation et d'Optimisation des Systemes, France); Pascal Urien (ENST, Paris, France)

T3s02p04:  TTP Based Privacy Preserving Inter-WISP Roaming Architecture for Wireless Metropolitan Area Networks
   Haojin Zhu (University of Waterloo, Canada); Xiaodong Lin (University of Waterloo, Canada); Pin-Han Ho (University of Waterloo, Canada); Sherman Shen (University of Waterloo, Canada); Minghui Shi (University of Waterloo, Canada)

T3s02p05:  Improved Self-Healing Key Distribution with Revocation in Wireless Sensor Network
   Ratna Dutta (Research Fellow, Institute for Infocomm Research, Singapore, Singapore); Sourav Mukhopadhyay (National University of Singapore, Singapore)

T3s12:  Multimedia QoS and traffic management - 1

Room Location:  Nathan 1 – Peninsula Hotel

Session Chair:  Polychronis Koutsakis (McMaster University, Canada)

T3s12p01:  A Simple and Effective QoS Differentiation Scheme in IEEE 802.16 WiMAX Mesh Networking
   Yan Zhang (Simula Research Laboratory, Norway); Jun Zheng (Queens College - City University of New York, USA); Wei Li (University of Toledo, USA)
T3s12p02: *On Achieving Accurate Call Admission Control for Videoconference Traffic Transmission over Wireless Cellular Networks*
Stelios Chatziperis (Technical University of Crete, Greece); Polychronis Koutsakis (McMaster University, Canada); Michael Paterakis (Technical University of Crete, Greece)

T3s12p03: *Dynamic QoS Negotiation for Next-Generation Wireless Communications Systems*
Juan Carlos Fernandez (Tohoku University, Japan); Tarik Taleb (Tohoku University, Japan); Nirwan Ansari (NJIT, USA); Kazuo Hashimoto (Tohoku University, Japan); Yoshiaki Nemoto (Tohoku University, Japan); Nei Kato (Tohoku University, Japan)

T3s12p04: *QoS Routing and Scheduling in TDMA based Wireless Mesh Backhaul Networks*
Chi-Yao Hong (National Taiwan University, Taiwan); Ai-Chun Pang (National Taiwan University, Taiwan); Jean-Lien C. Wu (Department of Electronic Engineering, National Taiwan University of Science and Technology, Taiwan)

T3s22: Wireless multicasting - 1
Room Location: Salisbury 2 – Peninsula Hotel

Session Chair: Wei Ding (University of Maine at Fort Kent, USA)

T3s22p01: *Analyzing Resilience to Node Misbehaviors in Wireless Multi-hop Networks*
Fei Xing (North Carolina State University, USA); Wenye Wang (NC State University, USA)

T3s22p02: *A Low-Cost Flooding Algorithm for Wireless Sensor Networks*
Ou Liang (Monash University, Australia); Ahmet Sekercioglu (Monash University, Australia); Nallasamy Mani (Monash University, Australia)

T3s22p03: *Bootstrapping Chord over MANETs - All Roads Lead to Rome*
Wei Ding (University of Maine at Fort Kent, USA); Sundararaja Iyengar (Louisiana State University, USA)

T3s22p04: *An Implicit Cluster-based Overlay Multicast Protocol for Mobile Ad hoc Networks*
Younghwan Choi (Chungnam National University, Korea); Euisin Lee (Chungnam National University, Korea); Donghun Lee (Chungnam National University, Korea); Soochang Park (Chungnam National University, Korea); Fucai Yu (Chungnam National University, Korea); Sang-Ha Kim (Chungnam National University, Korea)
**T3s32: Congestion and admission control - 1**

**Room Location:** Salisbury 3 – Peninsula Hotel

**Session Chair:** Maria Luisa Merani (University of Modena and Reggio Emilia, Italy)

**T3s32p01: RTP-Primal: A New Congestion Control Scheme Suitable for Smooth Multimedia Delivery**
- Maria Luisa Merani (University of Modena and Reggio Emilia, Italy);
- Michele Borri (Advanced Telecom Systems S.p.A., Italy);
- Adriano Ferrarini (K Labs, Italy)

**T3s32p02: WTCP: Improved Performance of TCP for High Speed Wired/Wireless Internet**
- Fuzhe Zhao (Huazhong University of Science and Technology, P.R. China);
- Jianzhong Zhou (Huazhong University of Science and Technology, Canada);
- Yang Xiao (The University of Alabama, USA)

**T3s32p03: A Hierarchical Model for Bandwidth Management and Admission Control in Integrated IEEE 802.16/802.11 Wireless Networks**
- Ekram Hossain (University of Manitoba, Canada);
- Dusit Niyato (University of Manitoba, Canada)

**T3s32p04: Gaussian Approximation Based Admission Control for Variable Bit Rate Traffic in IEEE 802.11e WLANs**
- Yu-Wen Huang (National Chiao Tung University, Taiwan);
- Tsern-Huei Lee (National Chiao Tung University, Taiwan);
- Jing-Rong Hsieh (National Chiao Tung University, Taiwan)

**T3s32p05: A Distributed Call Admission Control and Network Selection Scheme for Hybrid CDMA-OFDMA Networks**
- Huiling Jia (Zhejiang University, P.R. China);
- Guanding Yu (Zhejiang University, P.R. China);
- Zhaoyang Zhang (Zhejiang University, P.R. China)

**T3s42: Interworking heterogeneous wireless/wireline networks – 1**

**Room Location:** Nathan 2 – Peninsula Hotel

**Session Chair:** Tibor Gyires (Illinois State University, USA)

**T3s42p01: Reaching Consensus in a Dual Fallible Scale Free Network**
- Shu-Ching Wang (Chaoyang University of Technology, Taiwan)

**T3s42p02: On Minimum-Delay Data Block Transport over Two-Connected Mesh Networks**
Yonggang Wen (Massachusetts Institute of Technology, USA); Jun Sun (Massachusetts Institute of Technology, USA)

T3s42p03: **Effective Power Control for Multimedia Streaming with QoS Constraints in Heterogeneous Networks**
Tsang-Ling Sheu (National Sun Yat-Sen University, Kaohsiung, Taiwan, Taiwan); Yi-Jen Lu (National Sun Yat-Sen University, Taiwan)

T3s42p04: **A Multi-Path Selection Protocol in Fourth Generation Wireless Networks**
Tibor Gyires (Illinois State University, USA)

T3s42p05: **RIA: An RF Interference Avoidance Algorithm for Heterogeneous Wireless Networks**
Manoj Pandey (Brigham Young University, USA); Daniel Delorey (Brigham Young University, USA); Qiuyi Duan (Brigham Young University, USA); Lei Wang (Brigham Young University, USA); Charles Knutson (Brigham Young University, USA); Daniel Zappala (Brigham Young University, USA); Ryan Woodings (Cypress Semiconductor, USA)

15:25 – 17:00

T3s03: **Performance of end-to-end protocols over wireless networks - 1**

Room Location: Salisbury I – Peninsula Hotel

Session Chair: Ekram Hossain (University of Manitoba, Canada)

T3s03p01: **SCTP-based Transport Protocols for Concurrent Multipath Transfer**
Claudio Casetti (Politecnico di Torino, Italy); Giulio Galante (Istituto Superiore Mario Boella, Italy); Federico Perotto (Politecnico di Torino, Italy)

T3s03p02: **Impact of Link Distance on End-to-End Throughput in Multi-Rate, Multi-Hop Wireless Networks**
Xiaoxin Wu (Intel, P.R. China); Gang Ding (Kiyon Inc., USA); Wenwu Zhu (Intel China, P.R. China)

T3s03p03: **A Tandem Queue Model for Performance Analysis in Multihop Wireless Networks**
Ekram Hossain (University of Manitoba, Canada); Long Le (University of Manitoba, Canada)

T3s03p04: **Distributed Coordination of Sensors for End-to-End Reliable Event and Query Delivery**
T3s13: Mobile and wireless IP - 1

Room Location: Nathan 1 – Peninsula Hotel

Session Chair: Hyung-Jin Choi (SungKyunKwan University, Korea)

T3s13p01: Simulation-Based Comparisons of Solutions for TCP Packet Reordering in Wireless Networks
Daiqin Yang (The University of Hong Kong, Hong Kong); Ka-Cheong Leung (The University of Hong Kong, Hong Kong); Victor Li (University of Hong Kong, P.R. China)

T3s13p02: Analysis of Mobile IPv6 Handover Optimizations and Their Impact on Real-Time Communication
Julien Montavont (Louis Pasteur University - LSIIT (UMR7005), France); Emil Ivov (Louis Pasteur University, France); Thomas Noel (University of Strasbourg, France)

T3s13p03: Performance Analysis of DNS with TTL Value 0 as Location Repository in Mobile Internet
Yi Wu (Nokia Research Center, Beijing, China, P.R. China); Janne Tuononen (Nokia Oyj, Finland); Mikael Latvala (Nokia, Finland)

T3s13p04: Efficient Handoff Scheme for Heterogeneous IPv6-based Wireless Networks
Christian Makaya (Ecole Polytechnique de Montreal, Canada); Samuel Pierre (Ecole Polytechnique de Montreal, Canada)

T3s23: Routing in multihop - 2

Room Location: Salisbury 2 – Peninsula Hotel

Session Chair: Weijia Jia (City University of Hong Kong, P.R. China)

T3s23p01: Energy-Efficient Dual Prediction-Based Data Gathering for Environmental Monitoring Applications
Guojun Wang (University of Aizu, Japan); Huan Wang (Central South University, P.R. China); Jiannong Cao (Hong Kong Polytechnic Univ, Hong Kong); Minyi Guo (The University of Aizu, Japan)

T3s23p02: Hole Avoiding in Advance Routing in Wireless Sensor Networks
Weijia Jia (City University of Hong Kong, P.R. China); Tian Wang (Central South University, P.R. China); Guojun Wang (University of Aizu, Japan); Minyi Guo (The University of Aizu, Japan)

T3s23p03: On the Connectivity of Hierarchical Directional Optical Sensor Networks
Unoma Okorafor (Texas A & M University, USA); Deepa Kundur (Texas A&M University, USA)

T3s23p04: New Algorithm for Minimum Multicast Time Problem in Wireless Sensor Networks
Jianming Zhu (Chinese Academy of Sciences, P.R. China); Weiping Shang (Institute of Applied Mathematics, Chinese Academy of Sciences, P.R. China); Xiaodong Hu (Institute of Applied Mathematics, Chinese Academy of Science, P.R. China)

T3s33: Mobility - 2
Room Location: Salisbury 3 – Peninsula Hotel
Session Chair: Alessandro Magnani (Imperial College London, United Kingdom)

T3s33p01: Algorithmic Approaches for Vertical Handoff in Heterogeneous Wireless Environment Based on Unified Link Layer Concept
Petri Mähonen (Aachen University, RWTH, Institute of Wireless Networks, Germany)

T3s33p02: Proactive Topology Reinforcement of Wireless Networks
Lillian Dai (Massachusetts Institute of Technology, USA); Vincent Chan (Massachusetts Institute of Technology, USA)

T3s33p03: A Network-Based Local Mobility Management Scheme for Wireless Mesh Networks
Hui Wang (NEC Laboratories China, P.R. China); Huang Quan (NEC Laboratories China, P.R. China); Xia Yong (NEC Laboratories China, P.R. China)

T3s33p04: Self-Organized, Scalable GPS-Free Localization of Wireless Sensors
Alessandro Magnani (Imperial College London, United Kingdom); Kin Leung (Imperial College, United Kingdom)

T3s43: Wireless multicasting - 2
Room Location: Nathan 2 – Peninsula Hotel
Session Chair: Salil Kanhere (University of New South Wales, Australia)

T3s43p01: General Ripple Mobility Model of Speed-Time Pairing
Chun-Hung Chen (National Taipei University of Technology, Taiwan); Ho-Ting Wu (National Taipei University of Technology, Taiwan); Kai-Wei Ke (National Taipei University of Technology, Taiwan)

T3s43p02: Towards Reliable Application Data Broadcast in Wireless Ad Hoc Networks
Bo Xing (University of California, Irvine, USA); Mayur Deshpande (University of California, Irvine, USA); Nalini Venkatasubramanian (University of California-Irvine, USA); Sharad Mehrotra (University of California, Irvine, USA)

T3s43p03: TrAM: Cross-Layer Efficient Application-Layer Multicast in Mobile Ad-hoc Networks
Peter Baumung (Universität Karlsruhe, Germany)

T3s43p04: Distance-based Local Geocasting in Multi-hop Wireless Networks
Quan Jun Chen (University of New South Wales, Australia); Salil Kanhere (University of New South Wales, Australia); Mahbub Hassan (University of New South Wales, Australia); Yuvraj Rana (University of New South Wales, Australia)

Tuesday 13 March 2007
10:45 - 12:30

T3s04: Ad hoc and sensor networks - 2
Room Location: Salisbury 1 – Peninsula Hotel

Session Chair: Stepan Kucera (Kyoto University, Japan)

T3s04p01: Asynchronous Distributed Power and Rate Control in Ad Hoc Networks with Stochastic Channels
Stepan Kucera (Kyoto University, Japan); Sonia Aissa (University of Quebec, INRS-EMT, Canada, Canada); Koji Yamamoto (Kyoto University, Japan); Susumu Yoshida (Graduate School of Informatics, Kyoto University, Japan)

T3s04p02: SMART: Scalable Mobility Adaptive Routing Techniques for Heterogeneous Mobile Networks
Tomohiko Yagyu (NEC, Japan); Masahiro Jibiki (NEC Corporation, Japan); Ken-ichi Yoshida (University of Tsukuba, Japan)
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<td>T3s04p03:</td>
<td>Evolution of Wireless Sensor Networks</td>
<td>Li-jun Chen (Nanjing University, P.R. China); Daoxu Chen (Nanjing University, P.R. China); Li Xie (Dept of Computer Science and Technology, Nanjing University, P.R. China); Jiannong Cao (Hong Kong Polytechnic Univ, Hong Kong)</td>
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<td>T3s04p04:</td>
<td>A Power Management Architecture for Sensor Nodes</td>
<td>Jens Eliasson (Luleå University of Technology, Sweden); Per Lindgren (Luleå University of Technology, Sweden); Jerker Delsing (Lulea University of TEnchnology, Sweden); Simon Thompson (Monash University, Australia); Yi-Bing Cheng (Monash University, Australia)</td>
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<td>T3s04p05:</td>
<td>An Energy-Aware Periodical Data Gathering Protocol Using Deterministic Clustering in Wireless Sensor Networks (WSN)</td>
<td>Mohammad Rajiullah (Waseda University, Japan)</td>
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<td>T3s14:</td>
<td>Location and handoff management - 2</td>
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<td>Session Chair:</td>
<td>Tein-Yaw Chung (Yuan Ze University, Taiwan)</td>
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<td>T3s14p01:</td>
<td>EVDO Rev. A Control Channel Bandwidth Analysis for Paging</td>
<td>Thawatt Gopal (Huawei Technologies (USA), USA)</td>
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<td>T3s14p01:</td>
<td>Reducing Power Consumption in Network Discovery with Motion Detection in Heterogeneous Wireless Networks</td>
<td>Ming-Yen Lai (Yuan Ze University, Taiwan); Yung-Mu Chen (Yuan Ze University, Taiwan); Tein-Yaw Chung (Yuan Ze University, Taiwan); Chih-Hung Hsu (Yuan Ze University, Taiwan)</td>
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<td>T3s14p02:</td>
<td>Performance Improvement of CDMA Hierarchical Cellular System with DAS Embedment in Macrocell</td>
<td>Jiang Zhanjun (Southeast University, P.R. China)</td>
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<td>T3s14p03:</td>
<td>Analyzing Topology Dynamics in Ad Hoc Networks Using A Smooth Mobility Model</td>
<td>Ming Zhao (North Carolina State University, USA); Wenye Wang (NC State University, USA)</td>
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<td>T3s14p04:</td>
<td>An Adaptive Location Estimator Based on Alpha-Beta Filtering for Wireless Sensor Networks</td>
<td>Chin-Liang Wang (National Tsing Hua University, Taiwan); Yih-Shyh Chiu (National Tsing Hua University, Taiwan); Yu-Sheng Dai (National Tsing Hua University, Taiwan)</td>
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<td>Wireless network security and privacy – 2</td>
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Room Location: Salisbury 2 – Peninsula Hotel

Session Chair: Pin-Han Ho (University of Waterloo, Canada)

T3s24p01: *Trust-Assisted Handover Decision Algorithm in Hybrid Wireless Networks*
Mo Li (University of Technology, Sydney, Australia); Kumbesan Sandrasegaran (University of Technology, Sydney, Australia); Tracy Tung (University of Technology, Sydney, Australia)

T3s24p02: *A Novel Compromise-Resilient Authentication System for Wireless Mesh Networks*
Xiaodong Lin (University of Waterloo, Canada); Pin-Han Ho (University of Waterloo, Canada); Sherman Shen (University of Waterloo, Canada); Zhenfu Cao (SJTU, China, P.R. China)

T3s24p03: *P2P-AVS: P2P Based Cooperative VoIP Spam Filtering*
FEI WANG (HuaZhong University of Science & Technology, P.R. China)

T3s24p04: *Distributed Authentication method using Proxy node for WLAN-based Mesh Networks*
Insun Lee (Samsung Advance Institute of Technology, Korea); Jihoon Lee (Samsung Co., Korea)

T3s24p05: *A Novel Commitment-based Authentication Protocol Based on AAA Architecture for Mobile IP Networks*
Hui Jing (University of Tsukuba, Japan); Jie Li (University of Tsukuba, Japan); Kun Yang (University of Essex, United Kingdom); Hsiao-Hwa Chen (National Sun Yat-Sen University, Taiwan)

T3s24p06: *Authenticated Group Key Agreement against DoS in Heterogeneous Wireless Networks*
Joseph Teo (Nanyang Technological University, Singapore); Chik How Tan (Gjøvik University College, Norway); Jim Ng (Nanyang Technological University, Singapore)

T3s34: Multimedia QoS and traffic management - 2

Room Location: Salisbury 3- Peninsula Hotel

Session Chair: Ai-Chun Pang (National Taiwan University, Taiwan)

T3s34p01: *Influence of High Priority Users on the System Capacity of Mobile Networks*
Andreas Fernekess (TU Darmstadt, Germany); Anja Klein (TU Darmstadt, Germany); Bernhard Wegmann (Siemens AG, Germany); Karl Dietrich (Siemens AG, Germany)
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<td>T3s34p02</td>
<td><strong>Application of ELECTRE to network selection in a heterogeneous wireless network environment</strong></td>
<td>Farooq Bari (Cingular Wireless/ University of British Columbia, USA); Victor Leung (The University of British Columbia, Canada)</td>
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<td>T3s34p03</td>
<td><strong>Efficient Resource Management for mmWave WPANs</strong></td>
<td>Lin Cai (Univ. of waterloo, Canada); Lin Cai (University of Victoria, Canada); Sherman Shen (University of Waterloo, Canada); Jon Mark (University of Waterloo, Canada)</td>
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<td>T3s34p04</td>
<td><strong>Hierarchical Spectrum Sharing in Cognitive Radio: A Microeconomic Approach</strong></td>
<td>Ekram Hossain (University of Manitoba, Canada); Dusit Niyato (University of Manitoba, Canada)</td>
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<td>T3s34p05</td>
<td><strong>Traffic Aided Uplink Opportunistic Scheduling with QoS Support in Multiservice CDMA Networks</strong></td>
<td>Dan Liao (University of Electronic Science and Technology of China, P.R. China); Le Min Li (University of Electronic Science and Technology of China, P.R. China); Shizhong Xu (Univ. of electronic science and technology, P.R. China); Hongfang Yu (University of Electronic Science and Technology of China, P.R. China)</td>
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<td>T3s34p06</td>
<td><strong>Traffic Control for Cognitive Wireless Networks Composed of IEEE802.11 and IEEE802.16</strong></td>
<td>Yasuhisa Takizawa (ATR Adaptive Communications Research Laboratories, Japan)</td>
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<td><strong>Room Location:</strong> Nathan 2 – Peninsula Hotel <strong>Session Chair:</strong> Qi Zhang (Technical University of Denmark, Denmark)</td>
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<td>T3s44p01</td>
<td><strong>Optimal Partner Selection Strategies in Wireless Cooperative Networks with Fixed and Variable Transmit Power</strong></td>
<td>Yan Chen (Zhejiang University, P.R. China); Peng Cheng (Zhejiang University, P.R. China); Peiliang Qiu (Zhejiang University, P.R. China); Zhaoyang Zhang (Zhejiang University, P.R. China)</td>
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<td>T3s44p02</td>
<td><strong>QoS constrained, Cooperative and Opportunistic Transmission for Rate Adaptive Ad Hoc Networks</strong></td>
<td>Qing Chen (Tsinghua University, P.R. China); Qian Zhang (Hong Kong University of Science and Technology, Hong Kong); Zhisheng Niu (Tsinghua University, P.R. China)</td>
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<td>T3s44p03</td>
<td>Energy Efficient Multirate Interaction in Distributed Source Coding and Wireless Sensor Network</td>
<td>Wei Wang (Univ of Nebraska Lincoln, USA); Dongming Peng (Univ of Nebraska Lincoln, USA); Honggang Wang (Univ of Nebraska Lincoln, USA); Hamid Sharif (University of Nebraska Lincoln, USA)</td>
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<td>T3s44p04</td>
<td>Fair and Efficient Resource Allocation for Cooperative Diversity in Ad-Hoc Wireless Networks</td>
<td>Wei Chen (The Hong Kong University of Science and Technology, P.R. China); Lin Dai (University of Delaware, USA); Khaled Letaief (Hong Kong Univ. Science &amp; Technology, Hong Kong); Zhigang Cao (Tsinghua University, P.R. China)</td>
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<tr>
<td>T3s44p05</td>
<td>An Energy Efficient Cooperative Density Control Algorithm in Large Wireless Sensor Networks</td>
<td>Baiwei Yang (Zhengzhou Information Science and Technology Institute, P.R. China)</td>
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<td>T3s44p06</td>
<td>Cooperative Power Saving Strategies for IP-Services Supported Over DVB-H Networks</td>
<td>Qi Zhang (Technical University of Denmark, Denmark); Frank H.P. Fitzek (Aalborg University, Denmark); Marcos Katz (VTT Technical Research, Finland)</td>
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10:00 – 12:30

T3s51: Networking Program Posters Session - 1

Room Location: Salisbury Foyer, Peninsula Hotel

Session Chair: Fang Xie (DoCoMo Beijing Communications Laboratories Co., Ltd, P.R. China)

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<td>DPCCH gating gain for voice over IP on HSUPA</td>
<td>Oscar Fresan (Tampere university of technology, Spain); Tao Chen (Nokia Technology Platforms, Finland); Esa Malkamaki (Nokia Research Center, Finland); Tapani Ristaniemi (University of Jyväskylä, Finland)</td>
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<td>T3s51p02</td>
<td>Maximum End-to-end Throughput of Chain-topology Wireless Multi-hop Networks</td>
<td>Jaeyong Yoo (Gwangju Institute of Science and Technology, Korea); JongWon Kim (GIST (Gwangju Institute of Science &amp; Technology), Korea)</td>
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<td>T3s51p03</td>
<td>Network-adaptive Selection of Transport Error Control (NASTE) for Video Streaming over WLAN</td>
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<td>T3s51p04</td>
<td>A Hybrid DMB-T and WLAN Network for Broadband Wireless Access Services</td>
<td>SungTae Moon (Gwangju Institute of Science Technology (GIST), Korea); JongWon Kim (GIST (Gwangju Institute of Science &amp; Technology), Korea)</td>
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<td></td>
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<td>Long Long (Tsinghua University, P.R. China); Zhisheng Niu (Tsinghua University, P.R. China); Binjie Zhu (Tsinghua University, P.R. China)</td>
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<td>T3s51p05</td>
<td>Transport Capacity Estimations for Over-provisioned UTRAN IP-based Networks</td>
<td>Hiram Galeana (Universitat Politècnica de Catalunya, Spain); Ramon Ferrús (Universitat Politècnica de Catalunya, Spain); Joan Olmos (Universitat Politecnica de Catalunya, Spain)</td>
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<td>Azzedine Boukerche (Univ. of Ottawa, Canada)</td>
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<td>T3s51p06</td>
<td>Energy-Efficient Multi-Hop Virtual MIMO Wireless Sensor Networks</td>
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<td>T3s51p07</td>
<td>Probabilistic, Real-Time Scheduling of Distributable Threads Under Dependencies in Mobile, Ad Hoc Networks</td>
<td>Kai Han (Virginia Tech, USA); Binoy Ravindran (Virginia Tech, USA); Douglas Jensen (The MITRE Corporation, USA)</td>
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<td>T3s51p08</td>
<td>Reliable Energy Aware Routing Protocol for Mobile Ad Hoc Networks</td>
<td>Fang Xie (DoCoMo Beijing Communications Laboratories Co., Ltd, P.R. China); Lei Du (DoCoMo Beijing labs, P.R. China); Yong Bai (DoCoMo (Beijing) Communications Laboratories Co., Ltd, P.R. China); Lan Chen (DoCoMo Beijing Communication Laboratories Co., Ltd, P.R. China)</td>
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14:00 – 15:25

**T3s05: Congestion and admission control - 2**

Room Location: Salisbury I – Peninsula Hotel

Session Chair: Yan Zhang (Simula Research Laboratory, Norway)

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<td>An Enhancement of TFRC over Wireless Networks</td>
<td>Bin Zhou (Nanyang Technological University, Singapore)</td>
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<td>T3s05p02</td>
<td>Queue Dynamics Analysis of TCP Veno with RED</td>
<td>Ke Zhang (Nanyang Technological University, Singapore); Cheng Peng Fu (Nanyang Technological University, Singapore)</td>
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</table>
### T3s05p03: Call Admission Control in Wireless Networks over Rayleigh Fading Channel

Yan Zhang (Simula Research Laboratory, Norway)

### T3s05p04: Downlink Temporal Fairness in 802.11 WLAN Adopting the Virtual Queue Management

Jianxin Wang (Central South University, P.R. China); Jiawei Huang (Central South University, P.R. China)

### T3s05p05: Joint Rate Control and Resource Allocation in OFDMA Wireless Mesh Networks

Ekram Hossain (University of Manitoba, Canada); Long Le (University of Manitoba, Canada)

### T3s15: Interworking heterogeneous wireless/wireline networks - 2

**Room Location:** Nathan 1 – Peninsula Hotel

**Session Chair:** Yuanyuan Yang (State University of New York at Stony Brook, USA)

### T3s15p01: A Convergence Scheme for Digital Video/Audio Broadcasting Network and Broadband Wireless Access Network

Bo Bai (Tsinghua University, P.R. China); Zhigang Cao (Tsinghua University, P.R. China)

### T3s15p02: Performance Analysis of Common Radio Resource Management Scheme in Multi-service Heterogeneous Wireless Networks

Abdul Hasib (University of Calgary, Canada); Abraham Fapojuwo (University of Calgary, Canada)

### T3s15p03: A Cross-Layer Data Gathering Scheme for Heterogeneous Sensor Networks Based on Polling and Load-balancing

Ming Ma (State University of New York at Stony Brook, USA); Chi Ma (State University of New York at Stony Brook, USA); Yuanyuan Yang (State University of New York at Stony Brook, USA)

### T3s15p04: SmSCTP: SIP-Based MSCTP Scheme for Session Mobility over WLAN/3G Heterogeneous Networks

Yuh-Shyan Chen (National Taipei University, Taiwan); Kau-Lin Chiu (National Chung Cheng University, Taiwan)

### T3s15p05: Net Utility-Based Network Selection Scheme in CDMA Cellular/WLAN Integrated Networks

Litao Liang (Beijing University of Posts and Telecommunications, P.R. China); Ping Zhang (WTI-BUPT, P.R. China)
**T3s25: Performance of end-to-end protocols over wireless networks - 2**

**Room Location:** Salisbury 2- Peninsula Hotel

**Session Chair:** Hamid Sharif (University of Nebraska Lincoln, USA)

**T3s25p01: A Combinatorics-Based Wakeup Scheme for Target Tracking in Wireless Sensor Networks**

YewFai Wong (Institute for Infocomm Research, Singapore); Lek Heng Ngoh (Institute for Infocomm Research, Singapore); Lawrence Wong (National University of Singapore, Singapore); Winston Seah (Institute for Infocomm Research, Singapore)

**T3s25p02: Packet Size Optimization for Goodput Enhancement of Multi-Rate Wireless Networks**

Dalei Wu (University of Nebraska Lincoln, USA); Song Ci (University of Nebraska-Lincoln, USA); Yang Yang (University College London (UCL), United Kingdom); Hamid Sharif (University of Nebraska-Lincoln, USA)

**T3s25p03: Analysis of the Virtual-Timestamp-Based Scheduling for Multi-hop Wireless Backhaul Networks**

Ray-Guang Cheng (National Taiwan University of Science and Technology, Taiwan); Li-Hung Liao (Networks & Multimedia Institute, Institute for Information Industry, Taiwan); Kuo-Lun Hua (National Taiwan University of Science and Technology, Taiwan)

**T3s25p04: Optimizing the Use of Relays for Link Establishment in Wireless Networks**

Daniel Henkel (University of Colorado at Boulder, USA); Timothy Brown (University of Colorado, USA)

**T3s25p05: Improved IP-level Emulation for Mobile and Wireless Systems**

Emmanuel Conchon (Ensica / LAAS-CNRS, France); Johan Garcia (Karlstad University, Sweden); Tanguy Perennou (ENSICA and LAAS-CNRS, France); Michel Diaz (LAAS, France)

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**T3s35: Mobile and wireless IP - 2**

**Room Location:** Salisbury 3 – Peninsula Hotel

**Session Chair:** Pingyi Fan (Tsinghua University, P.R. China)

**T3s35p01: Congestion and Access Control Policies of Multi-Priority Instant Services for IP-Based CDMA Radio Access Networks**

Jianwei Xie (Tsinghua University, P.R. China); Pingyi Fan (Tsinghua University, P.R. China); Khaled Letaief (Hong Kong Univ. Science & Technology, Hong Kong)
T3s35p02: A Cross Layer Design for Handoff in 802.16e Network with IPv6 Mobility
Yen-Wen Chen (National Central University, Taiwan); Fu-Yia Hsieh (National Central University, Taiwan)

T3s35p03: A Comparative Study of Mobility Management Schemes in Mobile Hotspots
Sangheon Pack (University of Waterloo, Canada); Sherman Shen (University of Waterloo, Canada); Jon Mark (University of Waterloo, Canada); Jianping Pan (University of Victoria, Canada)

T3s35p04: Supporting end-to-end applications over HSDPA by cross-layer signalling
Niels Möller (Royal Institute of Technology, Sweden); Åke Arvidsson (Ericsson, Sweden); Justus Petersson (Ericsson, Sweden); Carlo Fischione (Royal Institute of Technology - KTH, Sweden); Robert Skog (Ericsson AB, Sweden); Patrik Karlsson (Ericsson AB, Sweden); Karl-Henrik Johansson (KTH, Sweden)

T3s35p05: Flat Cellular UMTS Networks
Peter Bosch (Bell Laboratories, USA); Sape Mullender (Bell Labs, USA); Louis Samuel (Lucent Technologies, United Kingdom); Paul A. Polakos (Lucent Technologies, USA); Gee Rittenhouse (Bell Labs, Lucent Technologies, USA)

T3s45: Routing in multihop - 3
Room Location: Nathan 2 – Peninsula Hotel
Session Chair: King-Shan Lui (The University of Hong Kong, Hong Kong)

T3s45p01: Achieving $360^\circ$ Angle Coverage with Minimum Transmission Cost in Visual Sensor Networks
Kit Yee Chow (The University of Hong Kong, Hong Kong); King-Shan Lui (The University of Hong Kong, Hong Kong); Edmund Lam (University of Hong Kong, Hong Kong)

T3s45p02: Tethys: A Distributed Algorithm for Intelligent Aggregation in Sensor Networks
Robin Snader (University of Illinois at Urbana-Champaign, USA); Albert Harris III (University of Padova, Italy); Robin Kravets (University of Illinois at Urbana-Champaign, USA)

T3s45p03: Sensor Traffic Patterns in Target Tracking Networks
YewFai Wong (Institute for Infocomm Research, Singapore); Winston Seah (Institute for Infocomm Research, Singapore); Lek Heng Ngoh
T3s45p04:  *Data Aggregation for Range Query in Wireless Sensor Networks*
Tzung-Shi Chen (National University of Tainan, Taiwan); Yi-Shiang Chang (National University of Tainan, Taiwan); Hua-Wen Tsai (National Cheng Kung University, Taiwan); Chih-Ping Chu (National Cheng Kung University, Taiwan)

T3s45p05:  *Joint Routing and Resource Partitioning in Relay Enhanced Cellular Network*
Tao Liu (Shanghai Jiao Tong University, P.R. China); Xue Yisheng (Siemens Ltd. China, P.R. China); Egon Schulz (Siemens AG, Germany); Mengtian Rong (Shanghai Jiao Tong University, P.R. China)

14:00 – 16:00
T3s52:  Networking Program Posters Session – 2
Room Location:  Salisbury Foyer, Peninsula Hotel
Session Chair:  Ernest Lo (The Hong Kong University of Science & Technology, Hong Kong)

T3s52p01:  *Beyond Sensor Networks: ZUMA Middleware*
Mikael Soini (Tampere University of Technology, Finland); Jana van Greunen (University of California, Berkeley, USA); Jan Rabaey (UC Berkeley, USA); Lauri Sydanheimo (Tampere University of Technology, Rauma Lab, Finland)

T3s52p02:  *Efficient Event Delivery in Publish/Subscribe Systems for Wireless Mesh Networks*
Yuan Zheng (Hong Kong Polytechnic University, Hong Kong); Jiannong Cao (Hong Kong Polytechnic Univ, Hong Kong); Ming Liu (University of Electronic Science and Technology of China, P.R. China)

T3s52p03:  *Capacity Analysis for Convergent Video and Data Services in OVSF-CDMA Systems*
Jun Xu (University of Waterloo, Canada); Sherman Shen (University of Waterloo, Canada); Jon Mark (University of Waterloo, Canada); Jun Cai (University of Manitoba, Canada)

T3s52p04:  *Fuzzy Logic based Congestion Estimation for QoS in Wireless Sensor Network*
Saad Munir (Beijing University of Posts and Telecommunications, P.R. China); Yu WenBin (Beijing University of Posts & Telecommunications,
P.R. China); Ren Biao (Nokia Research Center, China, P.R. China); Jian Ma (Nokia Research Center, PL 422, 00045 NOKIA GROUP, USA)

T3s52p05: Optimizing Downlink Throughput with User Cooperation and Scheduling in Adaptive Cellular Networks
Ernest Lo (The Hong Kong University of Science & Technology, Hong Kong); Khaled Letaief (Hong Kong Univ. Science & Technology, Hong Kong)

T3s52p06: A Functional End-to-End QoS Architecture Enabling Radio and IP Transport Coordination
Joan Olmos (Universitat Politècnica de Catalunya, Spain); Ramon Ferrús (Universitat Politècnica de Catalunya, Spain); Oriol Sallent (Universitat Politècnica de Catalunya, Spain); Jordi Perez-Romero (Universitat Politècnica de Catalunya, Spain); Ferran Casadevall (University Polyt. Catal., Spain)

T3s52p07: Performance of key distribution in 802.15.4 Beacon Enabled Cluster
Jelena Misic (University of Manitoba, Canada); Moazzam Khan (University of Manitoba, Canada); Feresteh Amini (University of Manitoba, Canada)

T3s52p08:Improving Unresponsive Flow Control by Active Queue Management Algorithm
Jun Zheng (Alcatel Shanghai Bell, P.R. China); Liyuan Zhao (Lenovo Research (China), P.R. China)

15:55 – 17:00

T3s06 Mobility - 3

Room Location: Salisbury I – Peninsula Hotel

Session Chair: Usman Javaid (France Telecom R&D, France)

T3s06p01: Fundamental Limits of Wideband Localization Accuracy via Fisher Information
Yuan Shen (Massachusetts Institute of Technology, USA); Moe Win (Massachusetts Institute of Technology, USA)

T3s06p02: Cluster-Quality Based Hybrid Routing in Large Scale Mobile Multi-hop Networks
Tinku Mohamed Rasheed (Create-Net Research, Italy); Khaldoun Al Agha (University of Paris XI, France); Usman Javaid (France Telecom R&D, France); Laurent Reynaud (France Telecom R&D, France)
### T3s06p03: A Distributed Method to Localization for Mobile Sensor Networks

Clément Saad (Université Montpellier 2 - LIRMM, France); **Abderrahim Benslimane** (University of Avignon, France); **Jean-Claude König** (Université Montpellier 2 - LIRMM, France)

### T3s06p04: Enhanced Color-theory-based Dynamic Localization in Mobile Wireless Sensor Networks

**Tzu-Chien Chang** (National Chiao Tung University, Taiwan); **Kuochen Wang** (National Chiao Tung University, Taiwan); **Yi-Ling Hsieh** (National Chiao Tung University, Taiwan)

### T3s16: Wireless multicasting - 3

**Room Location:** Nathan I - Peninsula Hotel

**Session Chair:** Larissa Popova (University of Erlangen-Nuremberg, Germany)

#### T3s16p01: Efficiency and Dependability of Direct Mobile-to-Mobile Data Transfer for UMTS Downlink in Multi-Service Networks

Larissa Popova (University of Erlangen-Nuremberg, Germany); **Wolfgang Koch** (University of Erlangen, Germany); **Thomas Herpel** (University of Erlangen-Nuremberg, Germany)

#### T3s16p02: System Level Performance of Multimedia Broadcast Multicast Services (MBMS) with Macro Diversity

Kari Aho (University of Jyväskylä, Finland); **Janne Kurjenniemi** (Magister Solutions Ltd, Finland); **Ville Haikola** (Nokia, Finland); **Tapani Ristaniemi** (University of Jyväskylä, Finland)

#### T3s16p03: Analysis of Energy Efficiency and Power Saving in IEEE 802.15.4

**Yijin Zhang** (Southeast University, P.R. China); **Forrest Bao** (Nanjing University, P.R. China); **Pingping Xu** (Southeast University, P.R. China); **Guangguo Bi** (Southeast University, P.R. China)

#### T3s16p04: Adaptive Multicast with Power and Rate Control Over Fading Channels in Wireless Networks

**Xi Zhang** (Texas A&M University, ECE Department, USA); **Qinghe Du** (Texas A&M University, USA)

### T3s26: Ad hoc and sensor networks - 3

**Room Location:** Salisbury 2 – Peninsula Hotel

**Session Chair:** Ray-Guang Cheng (National Taiwan University University of Science and Technology, Taiwan)
T3s26p01: High Throughput Routing in Large-Scale Multi-Radio Wireless Mesh Networks
Weirong Jiang (University of Southern California, USA); Zhiming Zhang (Tsinghua University, P.R. China); Xiaofeng Zhong (Tsinghua University, P.R. China)

T3s26p02: A Battery Aware Scheme for Energy Efficient Coverage and Routing in Wireless MIMO Mesh Networks
Chi Ma (State University of New York at Stony Brook, USA); Ming Ma (State University of New York at Stony Brook, USA); Yuanyuan Yang (State University of New York at Stony Brook, USA)

T3s26p03: Connected Dominating Set in 3-dimensional Space for Ad Hoc Network
Xiaofeng Zhong (Tsinghua University, P.R. China); Ning Hu (Tsinghua Univ., P.R. China); Jing Wang (EE. Tsinghua University, P.R. China)

T3s26p04: Power-strength-based Selective-Forwarding (PSF) Method for Multihop Cellular Networks
Ray-Guang Cheng (National Taiwan University of Science and Technology, Taiwan); Jia-Yang Hung (Sunplus Technology Co., Ltd., Taiwan); Yao-Yuan Liu (National Taiwan University of Science and Technology, Taiwan); Li-Hung Liao (Networks & Multimedia Institute, Institute for Information Industry, Taiwan)

T4s36: Location and handoff management - 3

Room Location: Salisbury 3 – Peninsula Hotel

Session Chair: Christopher Lee (Georgia Institute of Technology, USA)

T4s36p01: Vertical-to-Horizontal Handovers: Architecture and Mobility Management
Nadine Adra (Ecole Nationale Superieure des Telecommunications, France); Samir Tohme (University of Versailles, France); Mahmoud Doughan (universit et libanaise, Lebanon)

T4s36p02: MobCast: Overlay Architecture for Seamless IP Mobility using Scalable Anycast Proxies
Christopher Lee (Georgia Institute of Technology, USA); Keshav Attrey (Georgia Institute of Technology, USA); Carlos Caballero (Internet Security Systems, USA); Milena Mihail (Georgia Institute of Technology, USA); Nick Feamster (Georgia Tech, USA); John Copeland (Georgia Institute of Technology, USA)

T4s36p03: Network-based Access Selection in Composite Radio Environments
**T3s36p04:** Impact of heterogeneous network controlled handovers on multi-mode mobile device design  
Daniel Corujo (Instituto de Telecomunicações Aveiro, Portugal); Telemaco Melia (NEC Europe Ltd, Germany); Albert Vidal (NEC Europe Ltd, Germany); Ignacio Soto (University Carlos III of Madrid, Spain); Antonio De La Oliva (Universidad Carlos III de Madrid, Spain); Rui Aguiar (Universidade de Aveiro, Portugal)

**T3s46:** Wireless network security and privacy - 3

Room Location: Nathan 2 – Peninsula Hotel

Session Chair: Jie Li (University of Tsukuba, Japan)

**T3s46p01:** Real-Time Anonymous Routing for Mobile Ad Hoc Networks  
Jung-Chun Kao (Carnegie Mellon University, USA)

**T3s46p02:** Two-layered Dynamic Key Management in Mobile and Long-lived Cluster-based Wireless Sensor Networks  
I-Hsun Chuang (National Cheng-Kung University, Taiwan, Taiwan); Wei-Tsung Su (National Cheng Kung University, Taiwan); Yaw Hwang Kuo (National Cheng Kung University, Taiwan)

**T3s46p03:** A Ticket ID System for Service Agent Based Authentication in WLAN/Cellular Integrated Networks  
Minghui Shi (University of Waterloo, Canada); Humphrey Rutagemwa (University of Waterloo, Canada); Sherman Shen (University of Waterloo, Canada); Jon Mark (University of Waterloo, Canada); Aladdin Saleh (Bell Canada, Canada)

**T3s46p04:** PRSA: A Path Redundancy Based Security Algorithm for Wireless Sensor Networks  
Sami Alwakeel (King Saud University, Saudi Arabia); Saad AL-Swailem (King saud University, Saudi Arabia)

Wednesday, 14 March 2007

8:30 - 10:15

**T3s07:** Multimedia QoS and traffic management - 3

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<td><strong>T3s07p03:</strong> A Loss Discrimination Scheme for TFRC in Last Hop Wireless Networks</td>
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<td><strong>T3s07p04:</strong> A wireless network deployment strategy jointly considering future traffic prediction</td>
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<td><strong>T3s07p06:</strong> Time Slot Allocation Schemes for Multihop TDD-CDMA Cellular System</td>
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<td><strong>T3s17p01:</strong> Resource Management in the Next-generation Integrated WLAN / 3G Cellular Networks</td>
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Chunming Liu (Florida International University, USA); Niki Pissinou (Florida International University, USA); Kia Makki (Florida International University, USA)

T3s17p02: *Energy-efficient Cache Replacement Policies for Cooperative Caching in Mobile Ad Hoc Network*

Wenzhong Li (Nanjing University, P.R. China); Edward Chan (City University of Hong Kong, Hong Kong); Daoxu Chen (Nanjing University, P.R. China)

T3s17p03: *Locating Remote Nodes in Anchor-free Wireless Sensor Network*

Wei Wang (Nanyang Technological University, Singapore); Boon Hee Soong (Nanyang Technological University, Singapore)

T3s17p04: *Opportunistic Network-Coded Cooperation in Wireless Networks*

Cong Peng (Dept. of EE, Tsinghua Univ., P.R. China); Qian Zhang (Hong Kong University of Science and Technology, Hong Kong); Ming Zhao (Tsinghua University, P.R. China); Yan Yao (Tsinghua University, P.R. China)

T3s17p05: *EERINA: an Energy Efficient and Reliable In-Network Aggregation for Clustered Wireless Sensor Networks*

Luca Necchi (Politecnico di Torino, Italy); Alvise Bonivento (UC Berkeley, USA); Luciano Lavagno (Politecnico di Torino, Italy); Alberto Sangiovanni-Vincentelli (UC. Berkeley, USA); Laura Vanzago (STMicroelectronics, Italy)

T3s17p06: *A Fully Integrated Scheme of self-Configuration and self-Organization for WSN*

Jia-Liang Lu (INSA Lyon, France); Fabrice Valois (INSA Lyon, France); Dominique Barthel (France Telecom R&D, France); Mischa Dohler (France Telecom R&D, France)

T3s27: Congestion and admission control - 3

Room Location: Salisbury 2 – Peninsula Hotel

Session Chair: Edward Chlebus (Illinois Institute of Technology, USA)

T3s27p01: *Finding an Optimum Maximum Congestion Window for TCP Reno over 802.11 based Ad Hoc Networks*

Xia Li (National University of Singapore, Singapore); Peng-Yong Kong (Institute for Infocomm Research, Singapore); Kee Chaing Chua (National University of Singapore, Singapore)
T3s27p02: The Pareto or Truncated Pareto Distribution? Measurement-Based Modeling of Session Traffic for Wi-Fi Wireless Internet Access
Edward Chlebus (Illinois Institute of Technology, USA); Gautam Divgi (Illinois Institute of Technology, USA)

T3s27p03: A Joint Admission Control and Bandwidth Allocation Scheme for Packet-Switched Wireless Networks
Nan Hu (Beijing University of Posts and Telecommunications, P.R. China); Shaopeng Feng (Beijing University of Posts and Telecommunications, P.R. China); Kai Niu (Beijing University of Posts and Telecommunications, Taiwan)

T3s27p04: A Joint Power Control, Link Scheduling and Rate Control Algorithm for Wireless Ad hoc Networks
Xinming Zhang (University of Science and Technology of China, P.R. China)

T3s27p05: A Fast Adaptive Congestion Control Scheme for Improving TCP Performance during Soft Vertical Handoff
Neng-Chung Wang (National United University, Taiwan); Ying-Yuan Wang (Chaoyang University of Technology, Taiwan); Shih-Chien Chang (Chaoyang University of Technology, Taiwan)

T3s27p06: Tunable Preemption Controls for a Cellular Emergency Network
Jiazhen Zhou (University of Missouri - Kansas City, USA); Cory Beard (University of Missouri-Kansas City, USA)

T3s37: Interworking heterogeneous wireless/wireline networks - 3
Room Location: Salisbury 3 – Peninsula Hotel
Session Chair: Jun Zou (McMaster University, Canada)

T3s37p01: Slave-slave bridging in 802.15.4 beacon enabled networks
Jelena Misic (University of Manitoba, Canada); Ranjith Udayshankar (University of Manitoba, Canada)

T3s37p02: Packet Scheduling for Cellular Networks with Relaying to Support User QoS and Fairness
Rui Zhou (Keio University, Japan); Hoang Nam Nguyen (NICT, Japan); Iwao Sasaki (Keio University, Japan)

T3s37p03: Impact of MAP Selection on Handover Performance for Multimedia Services in Multi-level HMIPv6 Networks
Yi-Xue Lei (BUPT, P.R. China); Geng-Sheng Kuo (National Chengchi University, Taiwan)
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<td>T3s37p04:</td>
<td>A Mixed Integer Programming Model for Optimum Placement of Base Stations and Optical Network Units in a Hybrid Wireless-Optical Broadband Access Network (WOBAN)</td>
<td>Suman Sarkar (University of California at Davis, USA); Hong-Hsu Yen (Shih-Hsin University, Taiwan); Sudhir Dixit (Nokia Research Center, USA); Biswanath Mukherjee (Dept. of Computer Science - Univ. of California Davis, USA)</td>
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<td>T3s37p01:</td>
<td>A DCCP Congestion Control Mechanism for Wired-cum-Wireless Environments</td>
<td>Ijaz Naqvi (INSA Rennes, France); Tanguy Perennou (ENSICA and LAAS-CNRS, France)</td>
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<td>T3s37p01:</td>
<td>A Hybrid Approach to Optimize Node Placements in Hierarchical Heterogeneous Networks</td>
<td>Santosh Pandey (Auburn University, USA); Shaoqiang Dong (Auburn University, USA); Prathima Agrawal (Auburn University, USA); Krishna Sivalingam (University of Maryland, Baltimore County (UMBC), USA)</td>
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**T3s47: Performance of end-to-end protocols over wireless networks - 3**

**Room Location:** Nathan 2- Peninsula Hotel

**Session Chair:** Yang Yang (University College London (UCL), United Kingdom)

| T3s47p01: | Cross-layer Throughput Analysis with Capture Effect in Wireless Local Area Networks | Xiaohu Ge (Huazhong University of Science and Technology, P.R. China); Yang Yang (University College London (UCL), United Kingdom); Hsiao-Hwa Chen (National Sun Yat-Sen University, Taiwan); Zhu Yaoting (Huazhong University of Science & Technology, P.R. China) |
| T3s47p02: | The Effect of Hybrid ARQ Schemes on the TCP Connection over Wireless Link | Yifan Yu (DoCoMo Beijing Communications Laboratories Co., Ltd, P.R. China) |
| T3s47p03: | An Analytical Method for Capacity Dimensioning of WCDMA with High Speed Wireless Link | Xinsheng Zhao (Southeast University, P.R. China) |
| T3s47p04: | A Performance Modeling of Vehicular Ad Hoc Networks (VANETs) | Mustafa Mehmet Ali (Concordia University, Canada); Mehdi Khabazian (Concordia university, Canada) |
Performance Evaluation of MC-CDMA Systems with EGC Diversity over Correlated Selective Fading Channels
Joy Chen (University of Da Yeh, Taiwan)

Interference-Aware Service Differentiation in Multihop Wireless Networks
Kun-Da Wu (National Taiwan University, Taiwan); Wanjiun Liao (National Taiwan University, Taiwan)

10:45 - 12:30

Wireless network security and privacy - 4
Room Location: Salisbury I – Peninsula Hotel
Session Chair: Farid Nait-Abdesselam (University of Sciences and Technologies of Lille, France)

A Flow Based Detection Mechanism against Flooding Attacks in Mobile Ad Hoc Networks
Yinghua Guo (University of South Australia, Australia); Steven Gordon (Thammasat University, Thailand); Sylvie Perreau (University of South Australia, Australia)

Securing Channel Assignment in Multi-Radio Multi-Channel Wireless Mesh Networks
Aftabul Haq (University of New South Wales, Australia); Anjum Naveed (University of New South Wales, Australia); Salil Kanhere (University of New South Wales, Australia)

Detecting and Avoiding Wormhole Attacks in Optimized Link State Routing Protocol
Farid Nait-Abdesselam (University of Sciences and Technologies of Lille, France); Jinkyu Yoo (Seoul National University, Korea); Brahim Bensaou (Hong Kong University of Science and Technology, Hong Kong)

A Trust-Based Geographical Routing Scheme in Sensor Networks
Ka Shun Hung (The University of Hong Kong, Hong Kong); King-Shan Lui (The University of Hong Kong, Hong Kong); Yu-Kwong Kwok (University of Hong Kong, Hong Kong)

Is AIS Based Misbehavior Detection Suitable for Wireless Sensor Networks?
Martin Drozda (Leibniz University of Hannover, Germany); Sven Schaus (Leibniz University of Hannover, Germany); Helena Szczerbicka (Leibniz University of Hannover, Germany)
T3s08p06:  *Evaluating Secure Cluster formation in Personal Networks*
  Assed Jehangir (University of Twente, The Netherlands); Sonia Heemstra de Groot (University of Twente, The Netherlands)

T3s18:  Routing in multihop - 4

Room Location:  Nathan I – Peninsula Hotel

Session Chair:  Wenye Wang (NC State University, USA)

T3s18p01:  *A Communication Architecture to Reflect User Mobility Issue in Wireless Sensor Fields*
  Soochang Park (Chungnam National University, Korea); Donghun Lee (Chungnam National University, Korea); Euisin Lee (Chungnam National University, Korea); Fucai Yu (Chungnam National University, Korea); Younghwan Choi (Chungnam National University, Korea); Sang-Ha Kim (Chungnam National University, Korea)

T3s18p02:  *QoS routing in MANETs with imprecise information using actor-critic reinforcement learning*
  Wipawee Usaha (Suranaree University of Technology, Thailand); Javier Barria (Imperial College London, United Kingdom)

T3s18p03:  *Effective Coverage and Connectivity Preserving in Heterogenous Sensor Networks*
  Nurcan Tezcan (North Carolina State University, USA); Wenye Wang (NC State University, USA)

T3s18p04:  *SmartBone: An Energy-Efficient Smart Backbone Construction in Wireless Sensor Networks*
  Shuen-Yu Chuang (National Chiao Tung University, Taiwan); Chien Chen (National Chiao Tung University, Taiwan, Taiwan)

T3s18p05:  *Support of Anonymity in VANETs – Putting Pseudonymity into Practice*
  Emanuel Fonseca (NEC Deutschland GmbH, Portugal); Andreas Festag (NEC Europe Ltd, Germany); Roberto Baldessari (NEC Europe Ltd., Germany); Rui Aguiar (Universidade de Aveiro, Portugal)

T3s18p06:  *An Energy-Efficient Transmission Strategy for Wireless Sensor Networks*
  Jeong Kim (Kyung Hee University, Korea); CA PHAN (Kyung Hee University, Korea)

T3S28:  Mobility – 4

Room Location:  Salisbury 2 – Peninsula Hotel
### Session Chair: Kuochen Wang (National Chiao Tung University, Taiwan)

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<td>Effects of Terminal Mobility on Prioritized Handover of Multimedia Traffic over Cellular Wireless Networks</td>
<td>Nasser-Eddine Rikli (King Saud University, Saudi Arabia)</td>
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<td>T3S28p02</td>
<td>Paging Group Layout with Overlapped Edge for IEEE 802.16e Wireless Networks</td>
<td>Wenchao Ma (Lenovo Corporate Research &amp; Development, P.R. China)</td>
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<td>T3S28p03</td>
<td>Terminal-assisted Network Mobility Management</td>
<td>Teck Meng Lim (Nanyang Technological University, Singapore); Juki Tantra (Nanyang Technological University, Singapore); Bu Sung Lee (Nanyang Technological University, Singapore); Chai Kiat Yeo (Nanyang Technological University, Singapore)</td>
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<td>T3S28p04</td>
<td>Customer’s Satisfaction Based Flexible Bound Resource Allocation Scheme for Heterogeneous Wireless Networks</td>
<td>Jong Min Lee (Information and Communications University, Korea)</td>
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<td>T3S28p05</td>
<td>Robust Region Based Localization For Practical Sensor Networks</td>
<td>Zhen FENG (Huazhong University of Science and Technology, P.R. China); Wei Liu (Huazhong University of Science and Technology, P.R. China); Kanru Xu (Huazhong University of Science and Technology, P.R. China); Wengqing Cheng (Huazhong University of Science and Technology, China, P.R. China)</td>
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<td>T3S28p06</td>
<td>Delay-Minimized Route Design for Wireless Sensor-Actuator Networks</td>
<td>Edith Ngai (The Chinese University of Hong Kong, Hong Kong); Jiangchuan Liu (Simon Fraser University, Canada); Michael Lyu (The Chinese University of Hong Kong, Hong Kong)</td>
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**T3s38: Location and handoff management - 4**

**Room Location:** Salisbury 3 – Peninsula Hotel

**Session Chair:** Chin-Der Wann (National Sun Yat-Sen University, Taiwan)

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<th>Paper ID</th>
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<tr>
<td>T3s38p01</td>
<td>Mosaic Localization for Wireless Sensor Networks</td>
<td>Jihoon Kang (Information and Communications University, Korea); Daeyoung Kim (Information and Communications University, Korea); Sungjin Ahn (Information and Communications University, Korea)</td>
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<td>T3s38p02</td>
<td>An analytical estimation of the failover time in SCTP multihoming scenarios</td>
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Lukasz Budzisz (Universitat Politècnica de Catalunya, Spain); Ramon Ferrús (Universitat Politècnica de Catalunya, Spain); Anna Brunstrom (Karlstad University, Sweden); Karl-Johan Grinnemo (Karlstad University/TietoEnator, Sweden); Ferran Casadevall (University Polyt. Catal., Spain)

T3s38p03: **Underground Broadband: Design of a Reliable WLAN Gap Filler Solution**
Tom Van Leeuwen (Ghent University, Belgium); Ingrid Moerman (Ghent University, Belgium); Piet Demeester (Ghent University, Belgium)

T3s38p04: **Hybrid TOA/RSSI Wireless Location with Unconstrained Nonlinear Optimization for Indoor UWB Channels**
Chin-Der Wann (National Sun Yat-Sen University, Taiwan); Hao-Chun Chin (National Sun Yat-Sen University, Taiwan)

T3s38p05: **A SIP-based Soft-handoff (S-SIP) Scheme for Heterogeneous Mobile Networks**
Jie Zhang (University of British Columbia, Canada); Henry Chan (The Hong Kong Polytechnic University, Hong Kong); Victor Leung (The University of British Columbia, Canada)

T3s38p06: **Fundamental Limits of Wideband Cooperative Localization**
Yuan Shen (Massachusetts Institute of Technology, USA); Henk Wymeersch (Massachusetts Institute of Technology, USA); Moe Win (Massachusetts Institute of Technology, USA)

T3s48: **Ad hoc and sensor networks - 4**

Room Location: Nathan 2 – Peninsula Hotel

Session Chair: Jingyao Zhang (Hongkong University of Science and Technology, Hong Kong)

T3s48p01: **A Novel QoS Admission Control for Ad Hoc Networks**
Szu-Lin Su (NCKU, Taiwan); Yi-Wen Su (National Cheng Kung University, Taiwan); Jing- Yen Jung (National Cheng Kung University, Taiwan)

T3s48p02: **Connectivity Ascertainment based Distributed Topology Control for Wireless Sensor Networks**
Shinji Motegi (KDDI R&D Laboratories Inc., Japan)

T3s48p03: **Tree-based Routing Protocol for Cognitive Wireless Access Networks**
Bing Zhang (ATR Adaptive Communications Research Lab., Japan); Yasuhisa Takizawa (ATR Adaptive Communications Research
Laboratories, Japan); **Akio Hasegawa** (ATR Adaptive Communications Research Lab., Japan); **Akira Yamaguchi** (ATR Adaptive Communications Research Labs., Japan); **Sadao Obana** (Advanced Telecommunication Research Institute International, Japan)

**T3s48p04: Power-aware Markov Chain Based Tracking Approach for Wireless Sensor Networks**

**Hui Kang** (Oklahoma State University, USA); **Xiaolin Li** (Oklahoma State University, USA); **Patrick Moran** (AirSprite Technologies, Inc., USA)

**T3s48p05: 7ieve Load Balancing for Wireless Sensor Networks**

**Ren-Song Ko** (National Chung Cheng University, Taiwan); **Chi-Hung Huang** (National Chung Cheng University, Taiwan)

**T3s48p06: A Network Coding Unicast Strategy for Wireless Multi-hop Networks**

**Jingyao Zhang** (Hongkong University of Science and Technology, Hong Kong); **Kai Cai** (the Hong Kong University of Science and Technology, Hong Kong); **Khaled Letaief** (Hong Kong Univ. Science & Technology, Hong Kong); **Pingyi Fan** (Tsinghua University, P.R. China)

10:00 – 12:30

**T3s53: Networking Program Posters Session - 3**

**Room Location:** Salisbury Foyer, Peninsula Hotel

**Session Chair:** **Karim Seada** (Nokia Research Center, USA)

**T3s53p01: Performance of Routing in Sensor Networks with a Mobile Access Point**

**Cedric Westphal** (Nokia, USA)


**Chih-Yung Chang** (Tamkang University, Taiwan); **Hsu-Ruey Chang** (Tamkang Univeristy, Taiwan); **Chen-Chi Hsieh** (Tamkang University, Taiwan); **Chao-Tsun Chang** (Hsiuping Institute of Technology, Taiwan)

**T3s53p03: Analyzing Path Accumulation for Route Discovery in Ad hoc Networks**

**Karim Seada** (Nokia Research Center, USA); **Cedric Westphal** (Nokia, USA); **Charles Perkins** (Nokia Research Center, USA)
### T3s53p04: An Energy Efficient Spanning Tree Based Multi-hop Routing in Wireless Sensor Networks
Sajid Hussain (Acadia University, Canada); Obidul Islam (Acadia University, Canada)

### T3s53p05: Traffic-Adapted Load Balancing in Sensor Networks Employing Geographic Routing
Matthew Fyffe (Rensselaer Polytechnic Institute, USA); Min-Te Sun (Auburn University, USA); Xiaoli Ma (Georgia Institute of Technology, USA)

### T3s53p06: EraMobile: Epidemic-based Reliable and Adaptive Multicast for MANETs
Zulkuf Genc (Delft University of Technology, The Netherlands); Oznur Ozkasap (Koc University, Turkey)

### T3s53p07: An Adaptive Topology Control Scheme for Energy-efficient Routing in Mobile Ad Hoc Networks
An Kai Jeng (Department of Computer Science, Taiwan); Rong-Hong Jan (National Chiao Tung University, Taiwan)

### T3s53p08: Virtual Vertex Routing (VVR) for Course-Based Vehicular Ad Hoc Networks
Hojin Lee (Seoul National University, Korea); Youndo Lee (Seoul National University, Korea); Taekyoung Kwon (Seoul National University, Korea); Yanghee Choi (Seoul National University, Korea)

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**14:00 – 15:25**

### T3s09: Cooperative networks - 4

**Room Location:** Salisbury 1 – Peninsula Hotel

**Session Chair:** Cheng-Zen Yang (Yuan Ze University, Taiwan)

#### T3s09p01: On Scatternet Formation in Bluetooth Networks using Fuzzy Logic
Cheng-Zen Yang (Yuan Ze University, Taiwan); Chih-Chun Chung (Yuan Ze University, Taiwan); Chun-Ta Lin (Yuan Ze University, Taiwan)

#### T3s09p02: The impact of wakeup schedule distribution in asynchronous power save protocols on the performance of multihop wireless network
Laura Feeney (Swedish Institute of Computer Science, Sweden); Christian Rohner (Uppsala Universitet, Sweden); Bengt Ahlgren (SICS, Sweden)
T3s09p03:  *TDMA and FDMA Based Resource Allocations for Quality of Service Guarantees Over Wireless Relay Networks*
  Xi Zhang (Texas A&M University, ECE Department, USA);  **Lin Xie** (Texas A&M University, USA)

T3s09p04:  *Network Lifetime Optimization for Heterogeneous Sensor Networks With Mixed Communication Modes*
  Xi Zhang (Texas A&M University, ECE Department, USA);  **Hang Su** (Texas A&M University, USA)

T3s09p05:  *Power Control using Distributed Reinforcement Learning for Forward Link Soft Handoff in Cellular CDMA Systems*
  Jianxin Yao (National University of Singapore, Singapore);  **Chen Khong Tham** (National University of Singapore, Singapore)

T3s19:  **Congestion and admission control – 4**

Room Location:  Nathan 1 – Peninsula Hotel

Session Chair:  **Homayoun Yousefi'zadeh** (University of California, Irvine, USA)

T3s19p01:  *An End-to-End Cross-Layer Profiling Study of Congestion Control in High BDP Wireless Networks*
  Homayoun Yousefi'zadeh (University of California, Irvine, USA);  Xiaolong Li (University of California, Irvine, USA);  **Ali Habibi** (UC, Irvine, USA)

T3s19p02:  *Dynamic Bandwidth Reservation Admission Control Scheme for the IEEE 802.16e Broadband Wireless Access Systems*
  Xin Guo (University of Science and Technology of China, P.R. China);  Wenchao Ma (Lenovo Corporate Research & Development, P.R. China);  Zihua Guo (Lenovo, P.R. China);  **Zifeng Hou** (Lenovo Corporate Research and Developmnet, P.R. China)

T3s19p03:  *EERS: Energy Efficient Rate Selection Approach for Wireless Battery Operated Networks*
  Jie Li (University of Tsukuba, Japan);  Chunyan Su (Central China Normal University, P.R. China);  **Liansheng Tan** (Central China Normal University, P.R. China)

T3s19p04:  *Downlink Power Control with Throughput and Rate Variation Guarantees*
  Scott Jordan (University of California at Irvine, USA);  **Na Chen** (University of California, Irvine, USA)

T3s19p05:  *Multi-service Admission on Sectored CDMA Networks - An analytical model*
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<td>T3s29: Multimedia QoS and traffic management - 4</td>
<td>Adaptive and Reliable Multi-path Transmission in Wireless Sensor Networks using Forward Error Correction and Feedback</td>
<td>Youssef Charfi (Osaka University, Japan); Naoki Wakamiya (Osaka University, Japan); Masayuki Murata (Osaka University, Japan)</td>
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<td>T3s29p02: Real Time Video Transmission Control in Wireless-Wired IP Networks</td>
<td>Effect of Leaky-Bucket-Based Traffic Shaping on Capacity Enhancement for VSG-CDMA Cellular Networks</td>
<td>Youssef Charfi (Osaka University, Japan); Naoki Wakamiya (Osaka University, Japan); Masayuki Murata (Osaka University, Japan)</td>
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<td>T3s29p03: A Dynamic Admission Control Scheme for QoS Supporting in IEEE 802.11e EDCA</td>
<td>How many traffic classes do we need in WiMAX?</td>
<td>Kangalakaker (Ecole Nationale Superieure des Telecommunications de Bretagne, France); Mounir Achir (University Pierre and Marie Curie, France); Annie Gravey (ENST Bretagne, France)</td>
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<td>T3s39: Routing in multihop-5</td>
<td>Time Delay based Clustering in Wireless Sensor Networks</td>
<td>Tao Zhong (University of Electronic Science and Technology of China, P.R. China); Sheng Wang (University of Electronic Science and Technology of China, P.R. China); Shizhong Xu (Univ. of electronic science and technology, P.R. China); Hongfang Yu (University of Electronic Science and Technology of China, P.R. China); Du Xu (University of Electronic Science and Technology of China, P.R. China)</td>
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T3s39p02: A Multi-hop MAC Forwarding Protocol for High-Speed Mobile Nodes
Hyukjoon Lee (Kwangwoon University, Korea); Woosin Lee (University of Kwangwoon, Korea)

T3s39p03: Sub Cluster Aided Data Collection in Multihop Wireless Sensor Networks
Fei Ye (Tsinghua University, P.R. China); Yao Hua (Tsinghua University, P.R. China); Zhisheng Niu (Tsinghua University, P.R. China)

T3s39p04: A Novel Scheme to Reduce Control Overhead and Increase Link Duration in Highly Mobile Ad Hoc Networks
Ehssan Sakhaee (The University of Sydney, Australia); Tarik Taleb (Tohoku University, Japan); Abbas Jamalipour (University of Sydney, Australia); Nei Kato (Tohoku University, Japan); Yoshiaki Nemoto (Tohoku University, Japan)

T3s39p05: Distributed Channel Assignment in Multi-Radio 802.11 Mesh Networks
Bong Jun Ko (IBM T. J. Watson Research, USA); Vishal Misra (Columbia University, USA); Jitendra Padhye (Microsoft Research, USA); Dan Rubenstein (Columbia University, USA)

T3s49: Ad hoc and sensor networks-5
Room Location: Nathan 2- Peninsula Hotel
Session Chair: Tsung-Chuan Huang (National Sun Yat-Sen University, Taiwan)

T3s49p01: Maximizing End-to-End Reliability of Routing with Redundant Path by Optimal Link Layer Scheduling
Haiguang Wang (Institute for Infocomm Research, Singapore); Winston Seah (Institute for Infocomm Research, Singapore); Peng-Yong Kong (Institute for Infocomm Research, Singapore)

T3s49p02: Optimization of Accurate Top-k Query in Sensor Networks with Cached Data
Qunhua Pan (Shanghai Jiaotong University, P.R. China); Minglu Li (Mr., P.R. China); Wei Shu (The University of New Mexico, USA); Min-You Wu (Shanghai JiaoTong University, P.R. China)

T3s49p03: Caching Strategies for Dynamic Source Routing in Mobile Ad Hoc Networks
Tsung-Chuan Huang (National Sun Yat-Sen University, Taiwan); Chi-Chen Chan (National Sun Yat-sen University, Taiwan)
### T3s49p04: Local Retransmission-based Gossip Protocol in Mobile Ad Hoc Networks

Weijia Jia (City University of Hong Kong, P.R. China); Dingzhu Lu (the City University of Hong Kong, P.R. China); Guojun Wang (The Central South University, P.R. China)

### T3s49p05: Improving Routing Performance under the Fading Environment by Utilizing Position Information

Suhua Tang (ATR Adaptive Communications Research Laboratories, Japan); Masahiro Watanabe (ATR Adaptive Communications Research Laboratories, Japan); Naoto Kadowaki (ATR, Japan); Sadao Obana (Advanced Telecommunication Research Institute International, Japan)

**14:00 – 16:00**

### T3s54: Networking Program Poster Session - 4

**Room Location:** Salisbury Foyer, Peninsula Hotel

**Session Chair:** Sajid Hussain (Acadia University, Canada)

#### T3s54p01: Multi-level Tabu Search for 3G Network Dimensioning

Brigitte Jaumard (Concordia University, Canada); Samir Sebbah (Concordia University, Canada)

#### T3s54p02: Maximizing Throughput of UAV-Relaying Networks with the Load-Carry-and-Deliver Paradigm

Chen-Mou Cheng (Harvard University, USA); Pai-Hsiang Hsiao (Harvard University, USA); H. t. Kung (Harvard University, USA); Dario Vlah (Harvard University, USA)

#### T3s54p03: Localization in Sensor Networks with Limited Number of Anchors and Clustered Placement

King-Yip Cheng (Dept. of EEE, HKU, Hong Kong); King-Shan Lui (The University of Hong Kong, Hong Kong); Vincent Tam (University of Hong Kong, Hong Kong)

#### T3s54p04: Super MDS: Source Location from Distance and Angle Information

Giuseppe Abreu (CWC, University of Oulu, Finland); Giuseppe Destino (CWC, University of Oulu, Finland)

#### T3s54p05: Novel MAC Layer Handoff Schemes for IEEE 802.11 Wireless LANs

Venkata Chintala (University of Cincinnati, USA); Qing-An Zeng (University of Cincinnati, USA)
T3s54p06: **Stable Energy-Efficient Position-Based Multicast Routing (SE2PBM) in Mobile Ad hoc Networks**  
Matin Bagherpour (Tarbiat Modares University, Iran); Mohammad Mehd Sepehri (Tarbiat Modares University, Iran)

T3s54p07: **Large Scale Routing in a Multi-Hop Cellular Network Using a Radial Geometric Approach**  
C. c. Lee (Northwestern University, USA); Alan Wolff (Northwestern University, USA)

15:55 – 17:00

T3s10: **Mobility - 5**

Room Location: Salisbury 1 – Peninsula Hotel

**Session Chair:** Tsunehiko Chiba (KDDI R&D Laboratories, Inc., Japan)

T3s10p01: **Trombone Routing Mitigation Techniques for IMS/MMD Networks**  
Tsunehiko Chiba (KDDI R&D Laboratories, Inc., Japan); Hldetoshi Yokota (KDDI Labs, Japan); Akira Idoue (KDDI Res. Labs, Japan); Ashutosh Dutta (Telcordia Technologies, USA); Kyriakos Manousakis (Telcordia Technologies, USA); Subir Das (Telcordia Technologies, USA); Henning Schulzrinne (Columbia University, USA)

T3s10p02: **System Level Model for the Wireless Channel Unreliability in CDMA Mobile Cellular Networks**  
Carmen Rodríguez Estrello (CINVESTAV-IPN, Mexico); Felipe Cruz-Pérez (Centro de Investigación y de Estudios Avanzados del IPN (CINVESTAV-IPN), Mexico); Genaro Hernandez-Valdez (CINVESTAV-IPN, Mexico); Lauro Ortigoza-Guerrero (WFI, USA)

T3s10p03: **A new 2D Direction-Based Predictive Reservation Scheme for WLAN Environments with Passive Advanced Reservations**  
Floriano De Rango (University of Calabria, Italy)

T3s10p04: **Beacon Deployment for Sensor Network Localization**  
Rui Huang (The University of Texas at Arlington, USA); Gergely Zaruba (University of Texas at Arlington, USA)

T3s20: **Ad hoc and sensor networks - 6**

Room Location: Nathan 1 – Peninsula Hotel

**Session Chair:** Xiangqian Liu (University of Louisville, USA)
T3s20p01: **Supporting Adaptive Sampling in Wireless Sensor Networks**  
Hejun Wu (The Hong Kong University of Science and Technology, P.R. China); Qiong Luo (The Hong Kong University of Science and Technology, P.R. China)

T3s20p02: **Scalable Topology and Energy Management in Wireless Sensor Networks**  
Rong Yu (Tsinghua University, P.R. China); Zhi Sun (Tsinghua University, P.R. China); ShunLiang Mei (Tsinghua University, P.R. China)

T3s20p03: **Energy-Aware Geographic Routing for Sensor Networks with Randomly Shifted Anchors**  
Gang Zhao (University of Louisville, USA); Xiangqian Liu (University of Louisville, USA); Min-Te Sun (Auburn University, USA)

T3s20p04: **Route Design for Multiple Ferries in Delay Tolerant Networks**  
Zhen Zhang (University of Kentucky, USA); Zongming Fei (University of Kentucky, USA)

T3s30: Congestion and admission control -5  
Room Location: Salisbury 2 – Peninsula Hotel

**Session Chairs:**  
Nan Hu (Beijing University of Posts and Telecommunications, P.R. China) and Xinming Zhang (University of Science and Technology of China, P.R. China)

T3s30p01: **Performance Evaluation of CFDP in Deferred NAK Mode over Point-to-Point LEO-Satellite Links**  
Sujeet Pradhanang (Lamar University, USA)

T3s30p02: **Experimental Investigation of Rate-based and Delay-Tolerant Transmission Mechanisms over GEO-Satellite Communication Links**  
Ruhai Wang (Lamar University, USA)

T3s30p03: **Second-Order Rate-Control Based Transport Protocols Over Mobile**  
Xi Zhang (Texas A&M University, ECE Department, USA)

T3s30p04: **Experiences using Gateway-Enforced Rate-Limiting Techniques in Wireless Mesh Networks**  
Kamran Jamshaid (University of Waterloo, Canada); Paul Ward (University of Waterloo, Canada)

T3s40: Routing in multihop-6  
Room Location: Salisbury 3 – Peninsula Hotel
**Session Chair:** Jiazhen Zhou (University of Missouri - Kansas City, USA)

**T3s40p01:** **Optimal Multipath Routing for Performance Guarantees in Multi-hop Wireless Networks**  
Sastry Kompella (Naval Research Laboratory, USA); Shiwen Mao (Auburn University, USA); Thomas Hou (Virginia Tech, USA); Hanif Sherali (Virginia Tech, USA)

**T3s40p02:** **Performance Comparison of SPIN based Push-Pull Protocols**  
Ravish Khosla (Purdue University, USA); Xuan Zhong (Purdue University, USA); Gunjan Khanna (Purdue University, USA); Saurabh Bagchi (Purdue University, USA); Edward Coyle (Purdue University, USA)

**T3s40p03:** **A Single Node Decomposition Based Analytic Model for Multiclass Route Optimization in Wireless Mesh Networks**  
Jiazhen Zhou (University of Missouri - Kansas City, USA); Kenneth Mitchell (University of Missouri-Kansas City, USA)

**T3s40p04:** **An Edge Constrained Localized Delaunay Graph for Geographic Routing in Mobile Ad Hoc Networks**  
Yan Sun (University of Kentucky, USA); Qiangfeng Jiang (University of Kentucky, USA); Mukesh Singhal (University of Kentucky, USA)

**T3s50:** Multimedia QoS and traffic management - 5

**Room Location:** Nathan 5 – Peninsula Hotel

**Session Chair:** Sang Kyu Park (Hanyang University, Korea)

**T3s50p01:** **Intra-RAT Spectrum Management Methodology for WCDMA Systems Encompassing Uplink and Downlink**  
Jad Nasreddine (UPC, Spain); Jordi Perez-Romero (Universitat Politècnica de Catalunya, Spain); Oriol Sallent (Universitat Politècnica de Catalunya, Spain); Ramon Agusti (Universitat Politècnica de Catalunya, Spain)

**T3s50p02:** **Scheduling Delay-Constrained Data in Wireless Data Networks**  
Xiaqiao Meng (NEC Laboratories America Inc., USA); Thyaga Nandagopal (Bell Labs, Alcatel-Lucent Inc., USA); Starsky H.Y. Wong (University of California at Los Angeles, USA); Hao Yang (IBM T.J. Watson Research Center, USA); Songwu Lu (University of California at Los Angeles, USA)

**T3s50p03:** **Real-Time Centralized Scheduling and Its Optimization in IEEE 802.11 Infrastructure-Based Wireless Mesh Networks**
Jun Zou (McMaster University, Canada); Dongmei Zhao (McMaster University, Canada)