

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)

T3s31p02: *POWER-SPEED: A Power-Controlled Real-Time Data Transport Protocol for Wireless Sensor-Actuator Networks*

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)

T3s31p03: *Modeling Detection Metrics in Randomized Scheduling Algorithm in Wireless Sensor Networks*

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)

T3s31p04: *Ad hoc Network State Aware Routing Protocol*

Jie Xiang (Huazhong University of Science & Technology, P.R. China)

T3s41: Location and handoff management - 1

Room Location: Nathan 2 – Peninsula Hotel

Session Chair: Binoy Ravindran (Virginia Tech, USA)

T3s41p01: *A Resource Allocation Scheme for QoS Provision in Multi-beam Mobile Satellite Communication Systems*

Katsuya Nakahira (NTT Access Network Service Systems Laboratories, NTT Corporation, Japan); **Kiyoshi Kobayashi** (NTT Access Network Service Systems Laboratories, NTT Corporation, Japan); **Masazumi Ueba** (NTT Access Network Service Systems Laboratories, NTT Corporation, Japan)

T3s41p02: *Experimental Analysis of Area Localization Scheme for Sensor Networks*

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)

T3s41p03: *Energy Consumption for Multiple Object Identification System with Active RFID Tags*

Xu Su (University of Texas at San Antonio, USA); **Yang Xiao** (The University of Alabama, USA)

T3s41p04: *Dual and Mixture Monte Carlo Localization Algorithms for Mobile Wireless Sensor Networks*

Enrique Stevens-Navarro (University of British Columbia, Canada); **Vijayanth Vivekanandan** (University of British Columbia, Canada); **Vincent Wong** (University of British Columbia, Canada)

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); **Jiaying 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*

Huilong 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*

Nurcan Tezcan (North Carolina State University, USA); **Wenye Wang** (NC State University, USA)

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: Salibury 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 Mähönen (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)

T3s04p03: *Evolution of Wireless Sensor Networks*

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)

T3s04p04: *A Power Management Architecture for Sensor Nodes*

Jens Eliasson (Luleå University of Technology, Sweden); **Per Lindgren** (Luleå University of Technology, Sweden); **Jerker Delsing** (Luleå University of Technology, Sweden); **Simon Thompson** (Monash University, Australia); **Yi-Bing Cheng** (Monash University, Australia)

T3s04p05: *An Energy-Aware Periodical Data Gathering Protocol Using Deterministic Clustering in Wireless Sensor Networks (WSN)*

Mohammad Rajiullah (Waseda University, Japan)

T3s14: Location and handoff management - 2

Room Location: Nathan I – Peninsula Hotel

Session Chair: Tein-Yaw Chung (Yuan Ze University, Taiwan)

T3s14p01: *EVDO Rev. A Control Channel Bandwidth Analysis for Paging*

Thawatt Gopal (Huawei Technologies (USA), USA)

T3s14p01: *Reducing Power Consumption in Network Discovery with Motion Detection in Heterogeneous Wireless Networks*

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)

T3s14p02: *Performance Improvement of CDMA Hierarchical Cellular System with DAS Embedment in Macrocell*

Jiang Zhanjun (Southeast University, P.R. China)

T3s14p03: *Analyzing Topology Dynamics in Ad Hoc Networks Using A Smooth Mobility Model*

Ming Zhao (North Carolina State University, USA); **Wenye Wang** (NC State University, USA)

T3s14p04: *An Adaptive Location Estimator Based on Alpha-Beta Filtering for Wireless Sensor Networks*

Chin-Liang Wang (National Tsing Hua University, Taiwan); **Yih-Shyh Chiou** (National Tsing Hua University, Taiwan); **Yu-Sheng Dai** (National Tsing Hua University, Taiwan)

T3s24: Wireless network security and privacy – 2

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)

T3s34p02: *Application of ELECTRE to network selection in a heterogeneous wireless network environment*

Farooq Bari (Cingular Wireless/ University of British Columbia, USA);
Victor Leung (The University of British Columbia, Canada)

T3s34p03: *Efficient Resource Management for mmWave WPANs*

Lin Cai (Univ. of Waterloo, Canada); Lin Cai (University of Victoria, Canada); Sherman Shen (University of Waterloo, Canada); Jon Mark (University of Waterloo, Canada)

T3s34p04: *Hierarchical Spectrum Sharing in Cognitive Radio: A Microeconomic Approach*

Ekram Hossain (University of Manitoba, Canada); Dusit Niyato (University of Manitoba, Canada)

T3s34p05: *Traffic Aided Uplink Opportunistic Scheduling with QoS Support in Multiservice CDMA Networks*

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)

T3s34p06: *Traffic Control for Cognitive Wireless Networks Composed of IEEE802.11 and IEEE802.16*

Yasuhisa Takizawa (ATR Adaptive Communications Research Laboratories, Japan)

T3s44: Cooperative networks - 2

Room Location: Nathan 2 – Peninsula Hotel

Session Chair: Qi Zhang (Technical University of Denmark, Denmark)

T3s44p01: *Optimal Partner Selection Strategies in Wireless Cooperative Networks with Fixed and Variable Transmit Power*

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)

T3s44p02: *QoS constrained, Cooperative and Opportunistic Transmission for Rate Adaptive Ad Hoc Networks*

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)

T3s44p03: *Energy Efficient Multirate Interaction in Distributed Source Coding and Wireless Sensor Network*

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)

T3s44p04: *Fair and Efficient Resource Allocation for Cooperative Diversity in Ad-Hoc Wireless Networks*

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 & Technology, Hong Kong); **Zhigang Cao** (Tsinghua University, P.R. China)

T3s44p05: *An Energy Efficient Cooperative Density Control Algorithm in Large Wireless Sensor Networks*

Baiwei Yang (Zhengzhou Information Science and Technology Institute, P.R. China)

T3s44p06: *Cooperative Power Saving Strategies for IP-Services Supported Over DVB-H Networks*

Qi Zhang (Technical University of Denmark, Denmark); **Frank H.P. Fitzek** (Aalborg University, Denmark); **Marcos Katz** (VTT Technical Research, Finland)

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)

T3s51p01: *DPCCH gating gain for voice over IP on HSUPA*

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)

T3s51p02: *Maximum End-to-end Throughput of Chain-topology Wireless Multi-hop Networks*

Jaeyong Yoo (Gwangju Institute of Science and Technology, Korea); **JongWon Kim** (GIST (Gwangju Institute of Science & Technology), Korea)

T3s51p03: *Network-adaptive Selection of Transport Error Control (NASTE) for Video Streaming over WLAN*

SungTae Moon (Gwangju Institute of Science Technology (GIST), Korea);
JongWon Kim (GIST (Gwangju Institute of Science & Technology),
Korea)

T3s51p04: *A Hybrid DMB-T and WLAN Network for Broadband Wireless Access Services*

Long Long (Tsinghua University, P.R. China); **Zhisheng Niu** (Tsinghua University, P.R. China); **Binjie Zhu** (Tsinghua University, P.R. China)

T3s51p05: *Transport Capacity Estimations for Over-provisioned UTRAN IP-based Networks*

Hiram Galeana (Universitat Politècnica de Catalunya, Spain); **Ramon Ferrús** (Universitat Politècnica de Catalunya, Spain); **Joan Olmos** (Universitat Politècnica de Catalunya, Spain)

T3s51p06: *Energy-Efficient Multi-Hop Virtual MIMO Wireless Sensor Networks*

Azzedine Boukerche (Univ. of Ottawa, Canada)

T3s51p07: *Probabilistic, Real-Time Scheduling of Distributable Threads Under Dependencies in Mobile, Ad Hoc Networks*

Kai Han (Virginia Tech, USA); **Binoy Ravindran** (Virginia Tech, USA);
Douglas Jensen (The MITRE Corporation, USA)

T3s51p08: *Reliable Energy Aware Routing Protocol for Mobile Ad Hoc Networks*

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)

14:00 – 15:25

T3s05: Congestion and admission control - 2

Room Location: Salisbury I – Peninsula Hotel

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

T3s05p01: *An Enhancement of TFRC over Wireless Networks*

Bin Zhou (Nanyang Technological University, Singapore)

T3s05p02: *Queue Dynamics Analysis of TCP Veno with RED*

Ke Zhang (Nanyang Technological University, Singapore); **Cheng Peng Fu** (Nanyang Technological University, Singapore)

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)

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 Paek (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° 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 Ngho**

(Institute for Infocomm Research, Singapore); **Lawrence Wong** (National University of Singapore, Singapore)

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); **Kuo-Chen 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 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** (universitet 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 Techonology, USA)

T4s36p03: *Network-based Access Selection in Composite Radio Environments*

George Koundourakis (National Technical University of Athens, School of Electrical and Computer Engineering, Greece); **Dimitrios Axiotis** (National Technical University of Athens, Greece, Greece); **Michalis Theologou** (Technical University of Athens, Greece)

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

Room Location: Salisbury 1 – Peninsula Hotel

Session Chair: Bong Jun Ko (IBM T. J. Watson Research, USA)

T3s07p01: *Multi-Class Resource Management in a Cellular/WLAN Integrated Network*

Wei Song (University of Waterloo, Canada); **Weihua Zhuang** (University of Waterloo, Canada)

T3s07p02: *Multi-Service Access Capacities Analysis of TDD-CDMA System with Soft Blocking*

Yu Qian (Beijing University of Posts and Telecommunications, P.R. China); **Bin Fan** (Beijing University of Posts & Telecommunications, P.R. China); **Kan Zheng** (Beijing University of Posts&Telecommunications, P.R. China); **Wenbo Wang** (Beijing University of Posts and Telecommunications, P.R. China)

T3s07p03: *A Loss Discrimination Scheme for TFRC in Last Hop Wireless Networks*

Hyungho Lee (Seoul National University, Korea); **Chong-Ho Choi** (Seoul National University, Korea)

T3s07p04: *A wireless network deployment strategy jointly considering future traffic prediction*

Qiming Wu (National University of Singapore, Singapore); **Yong Huat Chew** (Institute for Infocomm Research, Singapore); **Boon Sain Yeo** (Wavex Technologies, Singapore)

T3s07p05: *A Route-Aware Load-Balanced Resource Allocation in Wireless Mesh Networks*

Ching-Ju Lin (National Taiwan University, Taiwan); **Cheng-Fu Chou** (NTU, Taiwan)

T3s07p06: *Time Slot Allocation Schemes for Multihop TDD-CDMA Cellular System*

Ming Yang (Nanyang Technological University, Singapore); **Peter H. J. Chong** (Nanyang Technological University, Singapore)

T3s17: Cooperative networks - 3

Room Location: Nathan I – Peninsula Hotel

Session Chair: Wei Chen (The Hong Kong University of Science and Technology, P.R. China)

T3s17p01: *Resource Management in the Next-generation Integrated WLAN / 3G Cellular Networks*

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 Sasase** (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)

T3s37p04: *A Mixed Integer Programming Model for Optimum Placement of Base Stations and Optical Network Units in a Hybrid Wireless-Optical Broadband Access Network (WOBAN)*

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)

T3s37p01: *A DCCP Congestion Control Mechanism for Wired-cum-Wireless Environments*

Ijaz Naqvi (INSA Rennes, France); **Tanguy Perennou** (ENSICA and LAAS-CNRS, France)

T3s37p01: *A Hybrid Approach to Optimize Node Placements in Hierarchical Heterogeneous Networks*

Santosh Pandey (Auburn University, USA); **Shaoqiang Dong** (Auburn University, USA); **Prathima Agrawal** (Auburn University, USA); **Krishna Sivalingam** (University of Maryland, Baltimore County (UMBC), USA)

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)

T3s47p05: *Performance Evaluation of MC-CDMA Systems with EGC Diversity over Correlated Selective Fading Channels*

Joy Chen (University of Da Yeh, Taiwan)

T3s47p06: *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

T3s08: 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)

T3s08p01: *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)

T3s08p02: *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)

T3s08p03: *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)

T3s08p04: *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)

T3s08p05: *Is AIS Based Misbehavior Detection Suitable for Wireless Sensor Networks?*

Martin Drozda (Leibniz University of Hannover, Germany); **Sven Schaust** (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)

T3S28p01: *Effects of Terminal Mobility on Prioritized Handover of Multimedia Traffic over Cellular Wireless Networks*

Nasser-Eddine Rikli (King Saud University, Saudi Arabia)

T3S28p02: *Paging Group Layout with Overlapped Edge for IEEE 802.16e Wireless Networks*

Wenchao Ma (Lenovo Corporate Research & Development, P.R. China)

T3S28p03: *Terminal-assisted Network Mobility Management*

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)

T3S28p04: *Customer's Satisfaction Based Flexible Bound Resource Allocation Scheme for Heterogeneous Wireless Networks*

Jong Min Lee (Information and Communications University, Korea)

T3S28p05: *Robust Region Based Localization For Practical Sensor Networks*

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); **Wenqing Cheng** (Huazhong University of Science and Technology, China, P.R. China)

T3s28p06: *Delay-Minimized Route Design for Wireless Sensor-Actuator Networks*

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)

T3s38: Location and handoff management - 4

Room Location: Salisbury 3 – Peninsula Hotel

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

T3s38p01: *Mosaic Localization for Wireless Sensor Networks*

Jihoon Kang (Information and Communications University, Korea); **Daeyoung Kim** (Information and Communications University, Korea); **Sungjin Ahn** (Information and Communications University, Korea)

T3s38p02: *An analytical estimation of the failover time in SCTP multihoming scenarios*

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: *Tieve 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)

T3s53p02: *OFRD:Obstacle-Free Robot Deployment Algorithms for Wireless Sensor Networks*

Chih-Yung Chang (Tamkang University, Taiwan); **Hsu-Ruey Chang** (Tamkang University, 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)

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 Development, 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 Sectorized CDMA Networks - An analytical model

Jean-Marc Kelif (France Telecom R&D, France)

T3s29: Multimedia QoS and traffic management - 4

Room Location: Salisbury 2 – Peninsula Hotel

Session Chair: Youssef Charfi (Osaka University, Japan)

T3s29p01: Adaptive and Reliable Multi-path Transmission in Wireless Sensor Networks using Forward Error Correction and Feedback

Youssef Charfi (Osaka University, Japan); **Naoki Wakamiya** (Osaka University, Japan); **Masayuki Murata** (Osaka University, Japan)

T3s29p02: Real Time Video Transmission Control in Wireless-Wired IP Networks

Yu-ning Dong (Nanjing University of Posts and Telecommunications, P.R. China); **Meng-yue Chen** (Nanjing University of Posts and Telecommunications, P.R. China)

T3s29p03: Effect of Leaky-Bucket-Based Traffic Shaping on Capacity Enhancement for VSG-CDMA Cellular Networks

Farid Ashtiani (Sharif University of Technology, Iran); **Amir Seyfi** (Sharif University of Technology, Iran)

T3s29p04: A Dynamic Admission Control Scheme for QoS Supporting in IEEE 802.11e EDCA

Jing Liu (Tsinghua University, P.R. China); **Zhisheng Niu** (Tsinghua University, P.R. China)

T3s29p05: How many traffic classes do we need in WiMAX?

Kamal Gakhar (Ecole Nationale Supérieure des Télécommunications de Bretagne, France); **Mounir Achir** (University Pierre and Marie Curie, France); **Annie Gravey** (ENST Bretagne, France)

T3s39: Routing in multihop-5

Room Location: Salisbury 3 – Peninsula Hotel

Session Chair: Ehssan Sakhaee (The University of Sydney, Australia)

T3s39p01: Time Delay based Clustering in Wireless Sensor Networks

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)

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 Mehdi 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); **Hidetoshi 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 Rodriguez 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

Sessin 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*

Xiaoqiao 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)
