# Monday, 12 August | Time: 8:30 - 12:30 | Room: B WS01: First IEEE Workshop on Green Mobile Computing Networks in China - half day

#### 8:30 - 10:30 Session 1

#### Research on RACH signal detection algorithm in TD-LTE System

Weiping Shi (Chongging University of Posts and Telecommunications, P.R. China)

### A green quasi-dynamic frequency resource division method for LTE-A relay systems

Su Xiaochen (Beijing University of Technology, P.R. China); Enchang Sun (Beijing University of Technology, P.R. China); Meng Li (Beijing University Of Technology, P.R. China); F. Richard Yu (Carleton University, Canada); Yanhua Zhang (Beijing University of Technology, P.R. China)

## A Selection Method for Cooperative User Based on Channel Quality in LTE Uplink Channel

Meng Li (Beijing University Of Technology, P.R. China); Enchang Sun (Beijing University of Technology, P.R. China); Su Xiaochen (Beijing University of Technology, P.R. China); Yanhua Zhang (Beijing University of Technology, P.R. China)

#### **User-Motivated Topology Formation for Green Communication Networks**

Tianyu Chen (South China University of Technology, P.R. China); Quansheng Guan (South China University of Technology & Chinese University of Hong Kong, P.R. China); Shengming Jiang (Shanghai Maritime University, P.R. China); Hongjiang Wang (South China Normal University, P.R. China)

#### 10:50 - 12:30 Session 2

#### **Energy Efficiency of Unicast Support Multicast with QoS Guarantee**

Zheng Chang (University of Jyväskylä, Finland); Tapani Ristaniemi (University of Jyväskylä, Finland)

# Rate Boundaries and Performance Comparison of Pure-Full-Duplex and Half-Duplex Systems

Yu Li (Shanghai Research Center for Wireless Communications, P.R. China); Bin Zhou (Shanghai Research Center for Wireless Communications & Shanghai Institute of Microsystem and Information Technology, Chinese Academy of Sciences, P.R. China); Jinling Du (Shanghai Research Center for Wireless Communications, P.R. China); Wei Li (Renesas, Finland); Zhenhong Li (Renesas Mobile Corporation, P.R. China)

### Optimal Resource Allocation Scheme in Green Cognitive Radio Networks

Huiqi Wang (Beijing University of Technology, P.R. China); Pengbo Si (Beijing University of Technology, P.R. China); Yanhua Zhang (Beijing University of Technology, P.R. China)

#### **Spectrum Management for Small Cell Cognitive Radio Networks**

Jia Liu (Beijing University of Technology, P.R. China); Pengbo Si (Beijing University of Technology, P.R. China); Yanhua Zhang (Beijing University of Technology, P.R. China); Ruizhe Yang (Beijing University of Technology, P.R. China)

# Monday, 12 August | Time: 8:30 – 10:30 | Room: C WS02: First IEEE Workshop on Interference Management of Wireless Networks in China – half day

#### 8:30 - 10:30 Session 1

### Performance Analysis of Hybrid MMSE/Max-log-MAP MIMO Detector (Invited Paper)

Rizwan Ghaffar (University of Waterloo, Canada); Khurram Shehzad (National University of Sciences and Technology, Pakistan); Pin-Han Ho (University of Waterloo, Canada)

### Security Module Analysis and Implementation in TD-LTE/TD-SCDMA Conformance Test System

Pei Zhang (Beijing University of Posts and Telecommunications, P.R. China); Junde Song (Beijing University of Posts and Telecommunications, Taiwan); Guili He (China Academy of Telecom Research, P.R. China); Bo Li (China Academy of Telecommunication Research of MIIT, P.R. China); Xiang Zhang (China Academy of Telecommunication Research of MIIT, P.R. China)

### Relay Assisted Interference Management in Co-Channel Interference Systems

Yao-Jen Liang (National Chiayi University, Taiwan); Tai-Yu Liu (National Taiwan University, Taiwan)

### Aggregation Based Spectrum Allocation in Cognitive Radio Networks

Chengbiao Li (Xidian University, P.R. China); Wei Liu (Xidian University, P.R. China); Jiandong Li (Xidian University, P.R. China); Qin Liu (Xidian University, P.R. China); Chuan Li (School of Computer and Technology, P.R. China)

### Utility-Related-Capacity of Interference Networks: A Cooperative Game View

Chungang Yang (Xidian University, P.R. China)

## Resource Allocation for Maximizing the Device-to-Device Communications Underlaying LTE-Advanced Networks

Hongguang Sun (Xidian University, P.R. China); Min Sheng (Xidian University, P.R. China); Xijun Wang (Xidian University, P.R. China); Yan Zhang (Xidian University, P.R. China); Junyu Liu (Xidian University, P.R. China); Kan Wang (Xidian University, P.R. China)

Monday, 12 August | Time: 14:00 – 17:40 | Room: B WS03: First International Workshop on Device-to-Device

#### Communications and Networks - half day

#### 14:00 - 15:40 Session 1

## Multicast Capacity of Ad hoc Networks with Transmission Uncertainty (Invited Paper)

Guanglin Zhang (The Chinese University of Hong Kong, Hong Kong); Lin Wang (Shanghai Jiao Tong University, P.R. China)

#### Radio Resource Management for Network Assisted D2D in Cellular Uplink

Qianxi Lu (Ericsson Research, P.R. China); Qingyu Miao (Ericsson Research, P.R. China); Gabor Fodor (Ericsson Research & Royal Institute of Technology (KTH), Sweden); Nadia Brahmi (ERICSSON, Germany)

### A new distributed transmission scheduling scheme for balancing lifetime and fairness in WBAN

Yingqi Yin (Jilin University, P.R. China); Fengye Hu (Jilin University, P.R. China); Yunlei Deng (Jilin University, P.R. China); Liying Zhao (Jilin University, P.R. China)

### BER Performance Analysis of MIMO Physical-Layer Network Coding Based on VBLAST Detection

Yiping Li (Shenzhen University, P.R. China); Shengli Zhang (Shenzhen University, P.R. China); Hui Wang (Shenzhen University, P.R. China)

### Discovery of Device-Device Proximity - Physical layer design for D2D discovery

Ying Peng (State Key Laboratory of Wireless Mobile Communication, China Academy of Telecommunication Technology, P.R. China); Qiubin Gao (China Academy of Telecommunications Technology (CATT), P.R. China); Shaohui Sun (China Academy of Telecommunications Technology (CATT), P.R. China); Yan-Xiu Zheng (Researcher, Taiwan)

#### 16:00 - 17:20 Session 2

#### Social Network Enhanced Device-to-Device Communication Underlaying Cellular Networks (Invited Paper)

Yanru Zhang (University of Houston, USA); Erte Pan (University of Houston, USA); Lingyang Song (Peking University, P.R. China); Walid Saad (University of Miami, USA); Zaher Dawy (American University of Beirut, Lebanon); Zhu Han (University of Houston, USA)

### **Graph-based Resource Allocation for D2D Communications Underlaying Cellular Networks**

Hongliang Zhang (Peking University, P.R. China); Tianyu Wang (Peking University, P.R. China); Lingyang Song (Peking University, P.R. China); Zhu Han (University of Houston, USA)

#### Downlink Interference Management for D2D Communication Underlying Cellular Networks

Bin Guo (Beihang University, P.R. China); Shaohui Sun (China Academy of Telecommunications Technology (CATT), P.R. China); Qiubin Gao (China Academy of Telecommunications Technology (CATT), P.R. China)

#### On the Connectivity of Underlay Ad-hoc D2D Networks

Leiyi Yao (The Chinese University of Hong Kong, Hong Kong); Ying Jun (Angela) Zhang (The Chinese University of Hong Kong, Hong Kong)

# Monday, 12 August | Time: 10:50 - 17:40 | Room: C WS04: First IEEE Workshop on Internet of Things in China - half day

#### 10:50 - 12:30 Session 1

## Interference-Aware Routing for Hop-Count Minimization in Wireless D2D Networks (Invited Paper)

Pinyi Ren (Xi'an Jiaotong University, P.R. China); Qinghe Du (Xi'an Jiaotong University, P.R. China); Li Sun (Xi'an Jiaotong University, P.R. China)

#### **Throughput Capacity of ALOHA MANETs**

Yin Chen (Future University Hakodate, Japan); Yulong Shen (Xidian University & Wayne State University, USA); Xiaohong Jiang (Future University-Hakodate, Japan); Jie Li (University of Tsukuba, Japan)

## Traffic Analysis and Policy Control Considerations in EV-DO System

Fengyi Yang (Technology Innovation Center, China Telecom Corp. Ltd, P.R. China); Mei Chengli (Technology Innovation Center, China Telecom Corp. Ltd, P.R. China); Yingqi Li (China Telecom Corp. Ltd, P.R. China); Min Zhang (China Telecom Corporation Limited Technology Innovation Center, P.R. China); Haining Wang (Technology Innovation Center, China Telecom Corp. Ltd, P.R. China)

# Cooperative Spectrum Sharing in Cognitive Radio Networks with Proactive Primary System

Qionghua Zhu (Zhejiang University of Technology, P.R. China); Yuan Wu (Zhejiang University of Technology, P.R. China); Danny H. K. Tsang (Hong Kong University of Science and Technology, Hong Kong); Hong Peng (Zhejiang University of Technology, P.R. China)

#### Probability Weighted Based Spectral Resources Allocation Algorithm in Hetnet under Cloud-RAN Architecture

Zejue Wang (Institute of Acoustics, Chinese Academy of Sciences, P.R. China); Hongjia Li (Institute of Acoustics, Chinese Academy of Sciences & Beijing University of Posts and Telecommunications, P.R. China); Heng Wang (Chongqing University, P.R. China); Song Ci (University of Nebraska-Lincoln, USA)

#### 14:00 - 16:00 Session 2

Research and implementation on demodulation algorithm of

#### parameters-adjustable soft spread spectrum system in IOT

Liu Yaqing (Northwestern Polytechnical University, P.R. China); Lian Baowang (Northwestern Polytechnical University, P.R. China)

### **Genetic-Based Randomized Network Coding for Dynamic Satellite Multicast**

Tao Zhang (Beijing University of Aeronautics and Astronautics, P.R. China); Qiaoyu Li (Beihang University, P.R. China); Hongyong An (Beihang University, P.R. China)

### Fairness Based Admission Control and Beamforming Design for the MISO Downlink

Lele Ge (University of Science and Technology of China, P.R. China); Zhenyuan Chen (University of Science and Technology of China, P.R. China); Li Chen (University of Science and Technology of China, P.R. China); Guo Wei (University of Sci. & Tech. of China, P.R. China)

### An Interference Coordination Mechanism Based on Resource Allocation for Network Controlled Device-to-Device Communication

Wei Zhou (Shanghai Jiao Tong University, P.R. China); Xiaodong Sun (Shanghai Normal University, P.R. China); Chuan Ma (Shanghai Jiao Tong University, P.R. China); Jianting Yue (Shanghai Jiao Tong University, P.R. China); Hui Yu (Shanghai Jiao Tong University, P.R. China); HanWen Luo (Shanghai JiaoTong University, P.R. China)

# Adaptive Resource Allocation and Grouping for Device-to-Device Communications Underlaying Cellular Networks

Qiang Liu (Southeast University, P.R. China); Yanxiang Jiang (Southeast University, P.R. China)

#### Intelligent Controls for Cyber Physical Energy Buildings

Kun Hua (Lawrence Technological University, USA)

#### 16:20 - 18:20 Session 3

#### An Energy-efficient Spectrum Handoff and Access Mechanism for the WBAN System

Changcheng Ren (Dept. of Electronic and Engineering, Shanghai Jiao Tong University, P.R. China); Hui Yu (Shanghai Jiao Tong University, P.R. China); Chuan Ma (Shanghai Jiao Tong University, P.R. China); Yunfeng Guan (Shanghai Jiao Tong University, P.R. China); Yunfeng Guan (Shanghai Jiao Tong University, P.R. China)

#### Joint Viterbi Decoding and Decision Feedback Equalization for Monobit Digital Receiver

Xin Li (University of Science and Technology of China, P.R. China); Huarui Yin (University of Science and Technology of China, P.R. China); Zhiyong Wang (University of Science and Technology of China, P.R. China); Zhengdao Wang (Iowa State University, USA)

#### Space-Time Trellis Coded Transmission scheme for Dual-polarized LMS MIMO Channels

DongYu Liang (Harbin Institute of Technology, P.R. China); Ming-Chuan Yang (Harbin Institute of Technology, P.R. China); Run nan Cai (Harbin Institute of Technology, P.R. China); Shao-na Tan (Harbin Institute of Technology, P.R. China); Ricai Tian (Harbin Institute of Technology, P.R. China)

China)

#### Optimization of Cooperative Sensing in Multi-channel Environment for Cognitive Radio Networks

Yang Liu (Information Engineering University, P.R. China); Cui Ying (Troop 65017, P.R. China); Ou Li (National Digital Switching Center, P.R. China)

# Design and Experiment Evaluation of Long-distance and High-Mobility ZigBee Transceivers for WSNs

Jianyu Niu (Northwestern Polytechnical University, P.R. China); Ruonan Zhang (Northwestern Polytechnical University, P.R. China); Guangde Wang (Northwestern Polytechnical University, P.R. China); Shuguang Li (Northwestern Polytechnical University, P.R. China); Shuai Wan (Northwestern Polytechnical University, P.R. China)

### An Improved Routing Metric Based on Link States for Vehicular Ad hoc Networks

Liran Wang (Xidian University, P.R. China); Changle Li (Xidian University, P.R. China); Chunchun Zhao (Xidian University, P.R. China); Hang Lin (Xidian University, P.R. China)