SN&S: Smart Network and Service (Invited Session)

Room: B303

**Demystifying the Magic of Cache Thresholds in the Android Media Framework (Invited Paper)**
Jian Huang (Sun Yat-Sen University, P.R. China), Di Wu (Sun Yat-Sen University, P.R. China) and Jian He (Sun Yat-Sen University, P.R. China)

Weiwen Zhang (Nanyang Technological University, Singapore) and Yonggang Wen (Nanyang Technological University, Singapore)

**An Iterative Interference Cancellation Design and Analysis for Uplink Cooperation among Base Stations (Invited Paper)**
Zi Teng (Tongji University, P.R. China), Jun Wu (Tongji University China, P.R. China), Xin-Lin Huang (Tongji University, P.R. China) and Zhifeng Zhang (Tongji University, P.R. China)

**Queuing Theory Based Spectrum Allocation in Cognitive Radio Networks (Invited Paper)**
Xin-Lin Huang (Tongji University, P.R. China), Xiang Wu (Tongji University China, P.R. China), Jun Wu (Tongji University China, P.R. China), Yuan Xu (Tongji University, P.R. China) and Min Wang (Tongji University China, P.R. China)

C&CS: Crypto and Cloud Security

Room: B305

**Lightweight Lattice-based Homomorphic Privacy-Preserving Aggregation Scheme for Home Area Networks**
Asmaa R Abdallah (University of Waterloo, Canada) and Sherman Shen (University of Waterloo, Canada)

**Data Folding: A New Data Soft Destruction Algorithm**
Xiaolong Xu (Nanjing University of Posts & Telecommunications, P.R. China), Peipei Gong (Nanjing University of Posts and Telecommunications, P.R. China) and Jia Xu (Nanjing University of Posts and Telecommunications, P.R. China)

**Privacy-preserving Personalized Search over Encrypted Cloud Data Supporting Multi-keyword Ranking**
Ruihui Zhao (University of Electronic Science and Technology of China, P.R. China), Hongwei Li (University of Electronic Science and Technology of China, P.R. China), Yi Yang (University of Electronic Science and Technology of China, P.R. China) and Yu Liang (University of Electronic Science and Technology of China, P.R. China)

**Practical Private Information Retrieval Supporting Keyword Search in the Cloud**
Mengke Yu (USTC, P.R. China), Kaichen Yang (University of Science and Technology of China, P.R. China), Lingbo Wei (Shanghai Jiao Tong University, P.R. China) and Jinyuan Sun (University of Tennessee, USA)

MS&APP: Mobile Service & Application

Room: B308

**End-to-End Delay Analysis of WeChat Video Call Service in Live DC-HSPA+ Network**
Weijian Sun (University of Science and Technology of China, P.R. China) and Xiaowei Qin (University of Science and Technology of China, P.R. China)

**The Optimal Placement Method of Anchor Nodes toward RSS-based Localization Systems**
Rui Zhang (Southeast University, P.R. China), Weiwei Xia (National Mobile Communications Research Laboratory, Southeast University, P.R. China), Ziyian Jia (National Mobile Communications Research Laboratory, Southeast University, P.R. China), Lianfeng Shen (National Mobile Communications Research Laboratory, Southeast University, P.R. China) and Jinghong Guo (China Electric Power Research Institute & Research Institute of Information Technology & Communication, P.R. China)
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<td>Quality of Experience Modeling and Fair Scheduling for Instant Messaging Service</td>
<td>Xiaofeng Xin (Zhejiang University, P.R. China), Wei Wang (Zhejiang University, P.R. China), Aiping Huang (Zhejiang University, P.R. China) and Hangguan Shan (Zhejiang University, P.R. China)</td>
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<td>Facing the Signaling Storm: A Method with Stochastic Concept</td>
<td>Hong Zhang (University of Science and Technology of China, P.R. China), Kaiping Xue (University of Science and Technology of China, P.R. China) and Peilin Hong (Dept. EEIS &amp; USTC, P.R. China)</td>
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<td>Interest-based Content Delivery in Wireless Mesh Networks with Hybrid Antenna Mode</td>
<td>Chenlei Pan (Shanghai Jiao Tong University, P.R. China), Bo Liu (Shanghai Jiao Tong University, P.R. China), Haibo Zhou (University of Waterloo, Canada), Gui Lin (ShangHai JiaoTong University, P.R. China) and Jiacheng Chen (Shanghai Jiao Tong University, P.R. China)</td>
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<td>High-performance Beamforming and Spatial Channel Pairing Schemes at Relay Station for AF-based Multi-pair Two-way Relay Networks</td>
<td>Yu Chen (Nanjing University of Science and Technology, P.R. China), Feng Shu (Nanjing University of Science and Technology, P.R. China), Jin Wang (Nanjing University of Science and Technology, P.R. China), Linqing Gui (University of Toulouse, France) and Juanjuan Tong (School of Electronic and Optical Engineering, Nanjing University of Science and Technology, P.R. China)</td>
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<td>Joint Subcarriers Suppression and Relay Selection in PLNC based Two-Way OFDM Relaying System</td>
<td>Xianli Shen (PLA University of Science and Technology, P.R. China), Kui Xu (College of Communications Engineering, PLAUST, P.R. China), Ma Wenfeng (PLA University of Science &amp; Technology, P.R. China) and Youyun Xu (PLA University of Science &amp; Technology &amp; Shanghai JiaoTong University, P.R. China)</td>
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<td>On the Performance of Full-Duplex Decode-and-Forward Relaying over Nakagami-$m$ Fading Channels</td>
<td>Youyun Xu (PLA University of Science &amp; Technology &amp; Shanghai JiaoTong University, P.R. China), Yurong Wang (PLA University of Science and Technology, P.R. China), Cong Wang (PLA University of Science and Technology, P.R. China) and Kui Xu (College of Communications Engineering, PLAUST, P.R. China)</td>
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<td>Ergodic Capacity of Dual-hop Fixed Gain Relaying Systems over Mixed Multipath/Shadowing Channels</td>
<td>Weijun Cheng (Minzu University of China, P.R. China)</td>
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<td>NEMO-based Mobility Management in LISP Network</td>
<td>Yizhen Wu (University of Science and Technology of China, P.R. China), Ke Chen (University of Science and Technology of China, P.R. China), Kaiping Xue (University of Science and Technology of China, P.R. China) and Dan Ni (University of Science and Technology of China, P.R. China)</td>
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<td>Spectral and Energy Efficencies of a Hybrid Cellular Network Structure</td>
<td>Jinkang Zhu (University of Science and Technology of China, P.R. China), Na Deng (University of Science and Technology of China, P.R. China), Ming Zhao (University of Science and Technology of China, P.R. China) and Wuyang Zhou (University of Science and Technology of China, P.R. China)</td>
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<td>Multi-User Uplink Power Control under Imperfect-CSI and Probabilistic Constraints</td>
<td>Krishna Chitti (University of Stuttgart, Germany) and Xiaochen Tan (University of Stuttgart, Germany)</td>
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<td>Decentralized Multicell Coordinated Beamforming with Overlapped Clusters</td>
<td>Pan Chen (Beihang University, P.R. China), Shengqian Han (Beihang University, P.R. China) and Chenyang Yang (Beihang University, P.R. China)</td>
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<td>Achievable Rate of Multiuser Downlink for LOS-MIMO Systems with Uniform Circular Arrays</td>
<td>WeiQiang Tan (Southeast University, P.R. China), Shi Jin (Southeast University, P.R. China) and Jue Wang (Nantong University, P.R. China)</td>
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**SP&BF: Spatial Processing and Beamforming**

Room: B303

**Joint Relay Beamforming and Power Splitting Ratio Optimization in a Multi-Antenna Relay Network**
Yi Yuan (Newcastle University, United Kingdom), Zheng Chu (Newcastle University, United Kingdom), Zhiguo Ding (Lancaster University, United Kingdom), Kanapathippillai Cumanan (Newcastle University, United Kingdom) and Martin Johnston (Newcastle University, United Kingdom)

**A Joint SDMA and Interference Suppression Multiuser Transmission Scheme for Millimeter-Wave Massive MIMO Systems**
Yu Han (Southeast University, P.R. China), Shi Jin (Southeast University, P.R. China) and Xiao Li (Southeast University, P.R. China)

**UCA-based Orbital Angular Momentum Radio Beam Generation and Reception Under Different Array Configurations**
Huayang Wu (Zhejiang University, P.R. China), Yuqing Yuan (Zhejiang University, P.R. China), Zhaoyang Zhang (Zhejiang University, P.R. China) and Ji Cang (Zhejiang University, P.R. China)

**Energy-Efficient Cross-Layer Design of Delay-Aware MIMO Systems**
Kunlun Wang (Shanghai Jiao Tong University, P.R. China), Wen Chen (Shanghai Jiao Tong University, P.R. China) and Meixia Tao (Shanghai Jiao Tong University, P.R. China)

**CA: Comm. Algorithms**

Room: B308

**A New Dynamic K-Best SD Algorithm for MIMO Detection**
WeiLiang Fan (Peking University, P.R. China), Yang Liu (School of Electronics Engineering and Computer Science, Peking University, P.R. China), ZhiJun Wang (School of Electronics Engineering and Computer Science, Peking University, P.R. China) and Xinyu Mao (Peking University, P.R. China)

**Unambiguous Receiving Technique for Multiplexed Binary Offset Carrier Signal**
Hanqi Li (University of Science and Technology of China, P.R. China) and Canmei Yang (University of Science and Technology of China, P.R. China)

**A Conflict-free Access Method for Parallel Turbo Decoder**
Chen Gong (Beijing Institute of Technology, P.R. China), Xiaoyang Li (Beijing Institute of Technology, P.R. China), Zhenzhi Wu (Linköping University & Beijing Institute of Technology, Sweden) and Dake Liu (Beijing Institute of Technology, P.R. China)

**Lower Error Floor of LDPC Codes Based on Trapping Sets Elimination**
Le Dong (National University of Defense Technology, P.R. China), Ziyu Zhao (National University of Defense Technology, P.R. China), Jing Lei (National University of Defense Technology, P.R. China) and Erbao Li (National University of Defense Technology, P.R. China)

**OWC-I: Optical Wireless Communications I**

Room: B314

**Enhancement of indoor VLC communication system with optical path design and FEC code**
Xiang Zhang (Beijing University of Posts and Telecommunications, P.R. China), Min Zhang (Beijing University of Posts and Telecommunications, P.R. China), Dahai Han (Beijing University of Posts and Telecommunications, P.R. China) and Qing Li (Beijing University of Posts and Telecommunications, P.R. China)

**Visible Light Communication Based on Wavelet Packet Division Multiplexing**
Wei Huang (University of Science and Technology of China, P.R. China), Chen Gong (University of Science and Technology of China, P.R. China) and Zhengyuan Xu (University of Science and Technology of China, P.R. China)

**Joint Beamformer and Offset Design for Multi-color Visible Light Communications**
Qian Gao (University of Science and Technology of China, P.R. China), Rui Wang (Shanghai Jiaotong University, P.R. China), Zhengyuan Xu (University of Science and Technology of China, P.R. China) and Yingbo Hua (University of California, Riverside, USA)
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<tr>
<td>Real-time bi-directional visible light communication system utilizing a phosphor-based LED and RGB LED</td>
<td>Jianyang Shi (Fudan University, P.R. China), Xingxing Huang (Fudan University, P.R. China), Yiguang Wang (Fudan University, P.R. China) and Nan Chi (Fudan University, P.R. China)</td>
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<td>Optimal Symmetric Double-sided Signal Clipping in DCO-OFDM Visible Light Communication</td>
<td>Meishuang Yu (Southeast University, P.R. China), Zaichen Zhang (Southeast University, P.R. China), Liang Wu (Southeast University, P.R. China) and Jian Dang (Southeast University &amp; National Mobile Communications Research Laboratory, P.R. China)</td>
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<td>Undersampled Phase Shift ON-OFF Keying for Camera Communication</td>
<td>Pengfei Luo (Northumbria University, United Kingdom), Zabih Ghassemlooy (Northumbria University, United Kingdom), Hoa Le Minh (Northumbria University, United Kingdom), Xuan Tang (Tsinghua University, P.R. China) and Hsin-Mu Tsai (National Taiwan University, Taiwan)</td>
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**MCN: Multi-Cell Networks**

**Room: B319**

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<tr>
<td>An Improved Spanning Tree Algorithm for Baseband Processing Resource Allocation in the Baseband Pool Structure</td>
<td>Chen Yang (Southeast University, P.R. China), Yuan Zhang (Southeast University, P.R. China) and Xiqi Gao (Southeast University, P.R. China)</td>
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<td>Traffic-load Aware User Association in Dense Unsaturated Wireless Networks</td>
<td>Chen Zhao (Shanghai Jiao Tong University, P.R. China) and Cunqing Hua (Shanghai Jiao Tong University, P.R. China)</td>
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<td>Flow-Level Delay Optimization with Traffic Adaption and Inter-Cell Interference Coordination in Cellular Networks</td>
<td>Bei Liu (University of Science and Technology of China, P.R. China), Ming Zhao (University of Science and Technology of China, P.R. China), Xiaowen Liang (University of Science and Technology of China, P.R. China) and Jinkang Zhu (University of Science and Technology of China, P.R. China)</td>
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<td>Coordinated Fractional Frequency Reuse for Directional Relays in A Multicell Cellular Network</td>
<td>Jingjing Zhao (Southeast University, P.R. China), Wei Xu (Southeast University, P.R. China), Hua Zhang (Southeast University, P.R. China), Xiaohu You (National Mobile communication Research Lab., Southeast University, P.R. China) and Xiaojian Liu (Shanghai Radio Equipment Research Insitute, P.R. China)</td>
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<td>Random Beamforming Based on Homogeneous Feedback Threshold and O(1) Feedback Constraint for Multi-cell Systems</td>
<td>Xingwang Chen (USTC, P.R. China), Xiaodong Xu (University of Science and Technology of China, P.R. China), Xi Kan (USTC, P.R. China) and Xuchu Dai (University of Science and Technology of China, P.R. China)</td>
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<td>Max-Min Fair Resource Allocation in Multi-cell Ultra-High Throughput WLAN</td>
<td>Huayue Wu (National Mobile Communications Research Laboratory, Southeast University, P.R. China), Weiwei Xia (National Mobile Communications Research Laboratory, Southeast University, P.R. China), Junchao Li (National Mobile Communications Research Laboratory, Southeast University, P.R. China) and Lianfeng Shen (National Mobile Communications Research Laboratory, Southeast University, P.R. China)</td>
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**IV&MSP-I: Image, Video, and Multimedia Signal Processing I**

**Room: B321**

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<tr>
<td>Proportional Fair Resource Allocation Algorithm for Video Transmission in OFDMA Relay System</td>
<td>Yimin Zhang (Xi'an Jiaotong University, P.R. China) and Guizhong Liu (Xi'an Jiaotong University, P.R. China)</td>
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<td>SIFT-Preserving Compression of Mobile-Captured License Plate Images for Recognition</td>
<td>Dandan Wang (University of Science and Technology of China, P.R. China) and Dong Liu (University of Science and Technology of China, P.R. China)</td>
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<td>An Adaptive Background-frame Based Video Coding Method</td>
<td>Lulu Zhou (Zhejiang University, P.R. China) and Huiming Tang (Zhejiang University, P.R. China)</td>
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<td>Compressed sensing recovery of multi-view video sequences by targeted database</td>
<td>Yong You (University of Science and Technology of China, P.R. China), Bin Liu (University of Science and Technology of China, P.R. China) and Chang Wen Chen (State University of New York at Buffalo, USA)</td>
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**TFDC: Transceivers for Fading Dispersive Channels**

**Room: B303**

**Adaptive Vector OFDM System for Transmission Over Doubly Selective Fading Channels**
Panyu Fu (Zhejiang University, P.R. China), Zhaoyang Zhang (Zhejiang University, P.R. China), Xiqian Luo (Zhejiang University, P.R. China), Huazi Zhang (Zhejiang University, P.R. China) and Caijun Zhong (Zhejiang University, P.R. China)

**Performance Analysis of OP-HCM System with DPFFT Demodulation over Doubly-Selective Channels**
Yong Li (Communication Research Center, Harbin Institute of Technology, P.R. China) and Xuejun Sha (Communication Research Center, Harbin Institute of Technology, P.R. China)

**DSP Implementation of OFDM-based Underwater Acoustic Communication Transceiver**
Yimin Shi (University of Science and Technology of China, P.R. China), Zhankui Cao (University of Science and Technology of China, P.R. China), Haichao Wei (University of Science and Technology of China, P.R. China), Sihai Zhang (University of Science and Technology of China, P.R. China) and Wuyang Zhou (University of Science and Technology of China, P.R. China)

**A Lloyd-Max based quantizer of L-values for AWGN and Rayleigh Fading channel**
Yasser Samayoa (Gottfried Wilhelm Leibniz Universität Hannover, Germany) and Joern Ostermann (Leibniz Universitaet Hannover, Germany)

**On the Design of MLC-LDPC-OFDM in DRM MF and HF Channels**
Yuan Liang (Southeast University, P.R. China), Shulin Zhang (Southeast University, P.R. China), Pinbiao Gu (Southeast University, P.R. China) and Lenan Wu (Southeast University, P.R. China)

**CD: Chip Design**

**Room: B308**

**A Novel Hardware Gaussian Noise Generator using Box-Muller and CORDIC**
Yuting Wang (Beijing University of Posts and Telecommunications, P.R. China) and Zhisong Bie (BUPT, P.R. China)

**Integrated Chip Design of a 10GHz Band Voltage Controlled Oscillator and Charge-Injected Mixer with Low Phase Noise and Wide Tuning Range**
Wen-Cheng Lai (National Taiwan University of Science and Technology, P.R. China)

**Analysis on Scattering Parameters for Coupled Microstrip Lines with Bend Discontinuities**
Jiao He (Huazhong University of Science and Technology, P.R. China), Liangqi Gui (Huazhong University of Science and Technology, P.R. China), Tao Jiang (Huazhong University of Science and Technology, P.R. China), Cong Zhou (Huazhong University of Science and Technology, P.R. China) and Lang Lv (Huazhong University of Science and Technology, P.R. China)

**Chip Design of a 10-MHz Switched Capacitor Low-Pass Filter for Wireless Application**
Jhin-Fang Huang (National Taiwan University of Science and Technology, Taiwan), Jiun-Yu Wen (National Taiwan University of Science and Technology, Taiwan) and Yen-Jung Lin (National Taiwan University of Science and Technology, Taiwan)

**OWC-II: Optical Wireless Communications II**

**Room: B314**

**Lower Bounds on the Capacity for Poisson Optical Wireless Channel**
Yingying Yu (Southeast University, P.R. China), Zaichen Zhang (Southeast University, P.R. China), Liang Wu (Southeast University, P.R. China) and Jian Dang (Southeast University & National Mobile Communications Research Laboratory, P.R. China)

**Downlink Scheduling in Visible Light Communications**
Ojemma Babatundi (Prairie View A & M University, USA), Lijun Qian (Prairie View A&M University, USA) and Julian Cheng
High Speed LED based Visible Light Communication Networks for Beyond 10Gb/s Wireless Access
Yiguang Wang (Fudan University, P.R. China), Nan Chi (Fudan University, P.R. China), Yuanquan Wang (Fudan University, P.R. China), Li Tao (Fudan University, Shanghai, P.R. China) and Jianyang Shi (Fudan University, P.R. China)

Average Bit Error Rate Performance of Direct Current biased Orthogonal Frequency Division Multiplexing in Free-Space Optical Communications over Weak Turbulence
Ying Zhang (College of Electronic and Information Engineering, NUAA, P.R. China), ShanShan Tang (College of Electronic and Information Engineering, NUAA, P.R. China) and Jin-Yuan Wang (Southeast University, P.R. China)

Performance of Indoor VLC and Illumination under Multiple Reflections
Jupeng Ding (University of Science and Technology of China, P.R. China) and Zhengyuan Xu (University of Science and Technology of China, P.R. China)

Impact of Different LED-Spacing in Arrayed LED Transmitter on VLC Channel Modeling
Jupeng Ding (University of Science and Technology of China, P.R. China), Kun Wang (University of Science and Technology of China, P.R. China) and Zhengyuan Xu (University of Science and Technology of China, P.R. China)

Underdetermined Blind Identification Based on Charrelation Matrix and Tucker Decomposition
Zhongqiang Luo (University of Electronic Science and Technology of China, P.R. China), Lidong Zhu (University of Electronic Science and Technology of China, P.R. China) and Li Chengjie (University of Electronic Science and Technology of China, P.R. China)

Fourth-Order Cumulant based Sources Number Estimation from Mixtures of Unknown Number of Sources
Fanglin Gu (National University of Defense Technology, P.R. China), Wei Li (Unit 75753 of PLA, P.R. China) and Wenwu Wang (University of Surrey, United Kingdom)

DOA Estimation of the Coherent Sources Based on SVD and the Fractional Lower Order Statistics
Sen Li (Dalian Maritime University, P.R. China) and Zhenxing Liang (Dalian Maritime University, P.R. China)

Blind Signal Separation of Complex-valued Sources Based on Gaussian Mixture Model for Time-varying Environment
Liu Yang (PLA University of Science and Technology, P.R. China), Hang Zhang (PLA University of Science & Technology, P.R. China) and Xinhai Tong (PLA University of Science and Technology, P.R. China)

Gibbs sampling based parameter estimation for RSC sub-codes of turbo codes
Hua Peng (Zhengzhou Institute of Information Science and Technology, P.R. China), Peidong Yu (Zhengzhou Institute of Information Science and Technology, P.R. China) and Jing Li (Zhengzhou Institute of Information Science and Technology, P.R. China)

Outage and Capacity of Heterogeneous Cellular Networks with Intra-tier Dependence
Na Deng (University of Science and Technology of China, P.R. China), Wuyang Zhou (University of Science and Technology of China, P.R. China) and Martin Haenggi (University of Notre Dame, USA)

Full Space-Time Network Code
Jian Yang (Institute of Automation, Chinese Academy of Science, P.R. China), Xia Shen (Peking University, P.R. China), Xiang Cheng (Peking University, P.R. China) and Liuqing Yang (Colorado State University, USA)

D-GLDPC Codes with 3-D Single Parity-Check Product Codes as Super Check Nodes
Yejun He (Shenzhen University, P.R. China), Guiyuan Sun (Shenzhen University, P.R. China), Jie Yang (Shenzhen University, P.R. China)
Optimization of OTT Small Data Services: Network Capacity and Cost Analysis
Yuxi Han (University of Science and Technology of China, P.R. China), Ming Zhao (University of Science and Technology of China, P.R. China) and Wuyang Zhou (University of Science and Technology of China, P.R. China)

IO-MAC: A Novel Hybrid MAC Protocol with Implicit Ordering in WLANs
Bing Feng (University of Science and Technology of China, P.R. China), Shuangjun Hong (University of Science and Technology of China, P.R. China) and Zhen Wang (University of Science and Technology of China, P.R. China)

OFDM&MC: OFDM & Multicarrier

Adaptive Double Thresholds Handover Mechanism in Small Cell LTE-A Network
Qiang Shen (Shanghai JiaoTong University, P.R. China), Jing Liu (Shanghai Jiao Tong University, P.R. China), Zhangpeng Huang (Shanghai Jiao Tong University, P.R. China), Xiaoying Gan (Shanghai Jiao Tong University, P.R. China), Zhifeng Zhang (Shanghai Jiao Tong University, P.R. China) and Dong Chen (Shanghai Jiao Tong University, P.R. China)

Cyclic Prefix-based Time and Frequency Synchronization for TD-LTE Downlink Transmission
Wei Guo (University of Electronic Science and Technology of China, P.R. China), Su Hu (University of Electronic Science and Technology of China, P.R. China) and Shaoqian Li (University of Electronic Science and Technology of China, P.R. China)

Resource Allocation with Beamforming Technique for MDC Multicast in OFDM-based CRNs
Yidi Yang (Beijing University of Posts and Telecommunications, P.R. China), Kai Niu (Beijing University of Posts and Telecommunications, P.R. China) and Zhicheng Li (Beijing University of Posts and Telecommunications, P.R. China)

Exploiting Side Information for Efficient Multicast Transmission in Multicarrier Wireless Networks
Yuan Qi (Shanghai Jiao Tong University, P.R. China) and Cunqing Hua (Shanghai Jiao Tong University, P.R. China)

Joint Power Allocation and Antenna Selection for Energy-Efficient OFDM D-MIMO Systems
Bo Hu (Nantong University, P.R. China), Qiang Sun (Nantong University, P.R. China), Jue Wang (Nantong University, P.R. China) and Chen Xu (Nantong University, P.R. China)

CH&TrM: Channel and Traffic Modeling

Channel Modeling based on Ultra-Wide Bandwidth(UWB) Radar in Soil Environment with different pH values
Miao Liu (University of Electronic Science and Technology of China, P.R. China), Fangqi Zhu (University of Electronic Science and Technology of China, P.R. China) and Jing Liang (University of Electronic Science and Technology of China, P.R. China)

Radio Propagation Prediction in Restricted Spaces
Feixiang Zhang (Southern Illinois University Carbondale, USA) and Xiangwei Zhou (Southern Illinois University Carbondale, USA)

The Periodic Data Traffic Modeling Based on Multiplicative Seasonal ARIMA Model
Dandan Miao (University of Science and Technology of China, P.R. China), Xiaowei Qin (University of Science and Technology of China, P.R. China) and Weidong Wang (University of Science and Technology of China, P.R. China)

Time-Correlation Analysis of GSM Telephone Traffic in Dense Population District
Dandan Yin (University of Science and Technology of China, P.R. China), Sihai Zhang (University of Science and Technology of China, P.R. China), Wuyang Zhou (University of Science and Technology of China, P.R. China) and Yi Zheng (Beijing Cloud Vally, P.R. China)

IV&MSP-II: Image, Video, and Multimedia Signal Processing II

Moving Object Detection of dynamic scenes using Spatio-temporal Context and background modeling
Chong Shen (University of Science and Technology of China, P.R. China)

**Topology-Based Automatic 3D Modeling from Multiple Images**
Long Zhang (University of Science and Technology of China, P.R. China) and Xuejin Chen (University of Science and Technology of China, P.R. China)

**Simple and Effective Image Quality Assessment Based on Edge Enhanced Mean Square Error**
Ziguan Cui (Nanjing University of Posts and Telecommunications, P.R. China), Zongliang Gan (Nanjing University of Posts and Telecommunications, P.R. China), Guijin Tang (Nanjing University of Posts and Telecommunications, P.R. China), Feng Liu (Nanjing University of Posts and Telecommunications, P.R. China) and Xiuchang Zhu (Nanjing University of Posts and Telecommunications, P.R. China)

**3D face registration by Depth-based Template Matching and Active Appearance Model**
Rong Liu (Zhejiang University, P.R. China), Haoji (Roland) Hu (Zhejiang University, P.R. China) and Huimin Yu (Zhejiang University, P.R. China)

**Topics in Comm.: Topics in Communications**

Topic: B319

**Construction of 16-QAM Complementary Sequences from Non-standard Generalized Boolean Functions**
Fanxin Zeng (Chongqing Communication Institute, P.R. China), Linjie Qian (Chongqing Communication Institute, P.R. China) and Zhenyu Zhang (Chongqing Communication Institute, P.R. China)

**The Local Delay in Underwater Acoustic Sensor Networks**
Haichao Wei (University of Science and Technology of China, P.R. China) and Wuyang Zhou (University of Science and Technology of China, P.R. China)

**Time Varying Channel Estimation for SC-FDMA System under HST Scenario**
Lihua Yang (Nanjing University of Posts and Telecommunications, P.R. China) and Yan Liang (Nanjing University of Posts and Telecommunications, P.R. China)

**A Novel Channel Estimation Method Based on Kalman Filter Compressed Sensing for Time-Varying OFDM System**
Baohao Chen (Beijing University of Posts and Telecommunications, P.R. China), Qimei Cui (Beijing University of Posts and Telecommunications, P.R. China), Fan Yang (Beijing University of Posts and Telecommunications, P.R. China) and Jin Xu (Beijing University of Posts and Telecommunications, P.R. China)

**STD&D: Space-time Detection and Decoding**

Topic: B321

**A Partial Inter-layer Parallel Sphere Decoder for Multiple-Input Multiple-Output Systems**
Adong Fan (University of Science and Technology of China, P.R. China), Xiaowei Qin (University of Science and Technology of China, P.R. China) and Xuchu Dai (University of Science and Technology of China, P.R. China)

**Low-Complexity Sphere Decoding for Generalised Spatial Modulation**
Yuanqiang Wang (Xidian University, P.R. China), Jianhua Ge (Xidian University, P.R. China) and Juan Chen (Xidian University, P.R. China)

**Improved K-Best Algorithm for Low-Complexity MIMO Detector**
Junmei Yang (National Mobile Communications Research Laboratory, Southeast University, P.R. China), Chuan Zhang (National Mobile Communications Research Laboratory, Southeast University, P.R. China), Xiaohe You (National Mobile communication Research Lab., Southeast University, P.R. China) and Shugong Xu (Intel Labs, P.R. China)

**Iterative Detection with Soft Decision in Spectrally Efficient FDM Systems**
Seyed Javad Heydari Khormizi (Sharif University of Technology, Iran), Mahmoud Ferdosizadeh (ACRI, Iran) and Farokh Marvasti (Sharif university of Technology, Iran)

14:00 - 15:30

**SDN&SysInnov: SDN and System Innovation**
A Round-Trip-Time based Concurrent Transmission Scheduling for MPTCP
Rui Chen (Nanjing University of Posts and Telecommunication, P.R. China), Wen-Nai Wang (Nanjing University of Posts and Telecommunications, P.R. China), Jing-Ling Zhu (Nanjing University of Posts and Telecommunications, P.R. China) and Bing Wang (Nanjing University of Posts and Telecommunications, P.R. China)

A Load-based Joint Call Admission Control Scheme in Heterogeneous Wireless Networks and Performance Analysis
Weiwei Xia (National Mobile Communications Research Laboratory, Southeast University, P.R. China), Lianfeng Shen (National Mobile Communications Research Laboratory, Southeast University, P.R. China) and Wang Pei (Southeast University, P.R. China)

Supporting "One Big AP" Illusion in Enterprise WLAN: an SDN-based solution
Dong Zhao (National University of Defense Technology, P.R. China), Ming Zhu (National University of Defense Technology, P.R. China) and Ming Xu (National University of Defense Technology, P.R. China)

An Adaptive Scheme for Data Forwarding in Software Defined Network
Liang Xie (Zhejiang University, P.R. China), Zhifeng Zhao (Zhejiang University, P.R. China), Yifan Zhou (Zhejiang University, P.R. China), Gang Wang (Zhejiang University, P.R. China), Qianlan Ying (Zhejiang University, P.R. China) and Honggang Zhang (Université Européenne de Bretagne (UEB) and Supelec & Zhejiang University, France)

Packet-Level Clustering for Memory-Assisted Compression of Network Packets
Liling Huang (Shanghai Jiao Tong University, P.R. China), Ahmad Beirami (Duke University, USA), Mohsen Sardari (Georgia Institute of Technology, USA), Faramarz Fekri (Georgia Institute of Technology, USA), Bo Liu (Shanghai Jiao Tong University, P.R. China) and Gui Lin (ShangHai JiaoTong University, P.R. China)

SP-Comm-I: Signal Processing for Communications I

Room: B305

Differential Evolution Algorithm Based Pilot Aided Weighted Data Fusion Scheme for Uplink Base-Station Cooperation System
Zhe Zhang (School of Information Engineering, Zhengzhou University, P.R. China), Jing Yang (Henan University of Technology, P.R. China), Jiankang Zhang (Zhengzhou University, P.R. China) and Xiaomin Mu (Zhengzhou University, P.R. China)

Performance Analysis of Symbol Interleaving for Next Generation mm-Wave MIMO WLAN
Changgeng Li (Southeast University, Nanjing, P.R. China), Shiwen He (School of Information Science and Engineering, Southeast University, P.R. China), Su Gao (Southeast University, P.R. China), Haiming Wang (Southeast University, P.R. China), Xiongsheng Yao (Zte Wavetone, P.R. China), Yongming Huang (Southeast University, P.R. China) and Yang Luxi (SouthEast University, P.R. China)

A New Sparse Channel Estimation for 2D MIMO-OFDM Systems Based on Compressive Sensing
Yunqiang Pan (Southeast University, P.R. China), Xin Meng (Southeast University, P.R. China) and Xiqi Gao (Southeast University, P.R. China)

Preamble-based Channel Estimation Methods with High Spectral Efficiency for Pulse Shaping OFDM/OQAM Systems
Xiaowu Chen (Zhejiang University, P.R. China), Minjian Zhao (Zhejiang University, P.R. China) and Chenlei Xu (Zhejiang University, P.R. China)

Independent Component Analysis for Carrier Synchronization in OFDM Systems
Zhongqiang Luo (University of Electronic Science and Technology of China, P.R. China)

Distributed Precoding for Wireless Information and Power Transfer in MIMO DF Relay Networks
Bing Fang (College of Communications Engineering, PLA University of Science and Technology, P.R. China), Wei Zhong (College of Communications Engineering, PLAUST, P.R. China), Zuiping Qian (PLA University of Sci. & Tech., P.R. China), Shi Jin (Southeast University, P.R. China), Jiaheng Wang (Southeast University & National Mobile Communications Research Lab, P.R. China) and Wei Shao (College of Communications Engineering, PLA University of Science and Technology, P.R. China)

SComm-I: Satellite Communications I

Room: B308
**WN&Tech: Wireless Network & Technology**

**Room: B314**

**Mutual Coupling Calibration for Uniform Circular Array Using a Single Source**
Tingting Ouyang (Shanghai Jiao Tong University, P.R. China), Liang Qian (Shanghai Jiao Tong University, P.R. China), Lianghui Ding (Shanghai Jiao Tong University, P.R. China) and Feng Yang (Shanghai Jiaotong University, P.R. China)

**Joint Design of Density of Access Points and Partially Overlapped Channel Assignment for Capacity Optimization in Wireless Networks**
Wei Zhao (Tohoku University, Japan), Zubair Fadlullah (Tohoku University, Japan), Hiroki Nishiyama (Tohoku University, Japan), Nei Kato (Tohoku University, Japan) and Kiyoshi Hamaguchi (NICT, Japan)

**Three-dimensional Coverage Control of Common Control Signals for Coverage Holes Elimination and Interference Suppression**
Cheng Wang (Zhejiang University, P.R. China) and Aiping Huang (Zhejiang University, P.R. China)

**Research on Improved Coding and Decoding Algorithm for Fountain Codes**
Zhu Zhifeng (Soochow University, P.R. China), Liulei Zhou (Soochow University, P.R. China) and Jia Hou (Soochow University, P.R. China)

**A Novel Unitary Precoder Design for TIMO Multicasting with SIC Receivers**
Zilong Zhang (University of Science and Technology of China, P.R. China), Xiaodong Xu (University of Science and Technology of China, P.R. China), Baisheng Du (University of Science and Technology of China, P.R. China) and Jiaqi Ren (University of Science and Technology of China, P.R. China)

**Sec-I: Secrecy and Security I**

**Room: B319**

**A Feedback-based Secrecy Coding Scheme Using Polar Code over Wiretap Channels**
Liyuihan Song (Zhejiang University, P.R. China), Lei Xie (Zhejiang University, P.R. China), Huifang Chen (Zhejiang University, P.R. China) and Kuang Wang (Zhejiang University, P.R. China)

**Security Analysis of Mobile QQ**
Fei Yu (Science and Technology on Communication Security Laboratory, P.R. China), Xinyu Zhao (Shanghai General Recognition Technology Institute, P.R. China), Qingbing Ji (Science and Technology on Communication Security Laboratory, P.R. China) and Lijun Zhang (Science and Technology on Communication Security Laboratory, P.R. China)
**Security Analysis for Rayleigh Fading Channel by Artificial Noise**
Hao Wei (Southeast University, P.R. China), Xiaoyun Hou (Nanjing University of Posts and Telecommunications, P.R. China), Yan Zhu (Nanjing University of Posts and Telecommunications, P.R. China) and Dongming Wang (Southeast University & National Mobile Communications Research Lab., P.R. China)

**Enhancing Physical Layer Security Through Beamforming and Noise Injection**
Hao Wang (University of Science and Technology of China, Hefei, P.R. China), Li Chen (University of Science and Technology of China, P.R. China) and Weidong Wang (University of Science and Technology of China, P.R. China)

**MSC-I: Advances in Mobile Satellite Communications, Part I (Invited Session)**

Room: B321

**Enhanced LT Decoding Scheme in Satellite Communication (Invited Paper)**
Qixian Zhang (University of Science and Technology of China, P.R. China), Sihai Zhang (University of Science and Technology of China, P.R. China) and Wuyang Zhou (University of Science and Technology of China, P.R. China)

**Pilot Sequence Design for GEO Multi-Beam MIMO Satellite Communication System (Invited Paper)**
Bo Qiang (Southeast University, P.R. China), Bin Jiang (Southeast University & National Mobile Communications Research Lab., P.R. China) and Xiqi Gao (Southeast University, P.R. China)

**Satellite Radio Interfaces for IMT-Advanced system (Invited Paper)**
Sooyoung Kim (Chonbuk National University, Korea), Hee Wook Kim (Electronics and Telecommunications Research Institute, Korea), Kunseok Kang (ETRI, Korea) and Dae-Ig Chang (Electronics and Telecommunications Research Institute, Korea)

**Location-based Centralized Dynamic Channel Assignment with Channel Segregation for Multi-beam Mobile Satellite Networks (Invited Paper)**
Masahiro Umehira (Ibaraki University, Japan), Sunao Fujita (Ibaraki University, Japan), Zhen Gao (Tsinghua University, P.R. China) and Wang Jing (Tsinghua University, P.R. China)

16:00 - 17:30

**MIMO: MIMO**

Room: B303

**FIR Transceiver Design for Broadband MIMO Multicast System**
Zilong Zhang (University of Science and Technology of China, P.R. China), Xiaodong Xu (University of Science and Technology of China, P.R. China), Zhiyong Chen (University of Science and Technology of China, P.R. China) and Jun Chen (University of Science and Technology of China, P.R. China)

**Full Duplex 2×2 MIMO Radios**
Zhilong Zhang (University of Electronic Science and Technology of China & Jincheng College of Sichuan University, P.R. China), Ying Shen (University of Electronic Science and Technology of China, P.R. China), Shihai Shao (University of Electronic Science and Technology of China, P.R. China), Wensheng Pan (University of Electronic Science and Technology of China, P.R. China) and Youxi Tang (University of Electronic Science and Technology of China, P.R. China)

**Low Complexity LMMSE Beamforming Design for Uplink Virtual MIMO Systems**
Niwei Wang (Beijing Institute of Technology, P.R. China), Chengwen Xing (Beijing Institute of Technology & University of Hong Kong, P.R. China), Yuan Zhou (Beijing Institute of Technology, P.R. China), Zesong Fei (Beijing Institute of Technology, P.R. China) and Jingming Kuang (Beijing Institute of Technology, P.R. China)

**Circular Polarization Benefits In Outdoor to Indoor Scenarios For MIMO Cellular Networks**
Zhimeng Zhong (Research Institute of Space Radio Technology, P.R. China) and Xuewen Liao (Xi'an Jiaotong University, P.R. China)

**Joint Transceiver Design for Simultaneous Wireless Information and Power Transfer in Multi-User MIMO Interference Networks**
Zhiyuan Zong (Fudan University, P.R. China), Hui Feng (Fudan University, P.R. China), Shiyu Zhang (Fudan University, P.R. China), Tao Yang (Fudan University, P.R. China) and Bo Hu (Fudan University, Shanghai, P.R. China)
<table>
<thead>
<tr>
<th>Title</th>
<th>Authors</th>
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<tbody>
<tr>
<td>A Low-complexity Transceiver Scheme Based on Minimum Euclidean Distance Criterion</td>
<td>Zhiyong Chen (University of Science and Technology of China, P.R. China), Xiaodong Xu (University of Science and Technology of China, P.R. China) and Xuchu Dai (University of Science and Technology of China, P.R. China)</td>
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<tr>
<td>SPAPP: Signal Processing Applications</td>
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<tr>
<td>Analysis of CMMB signal for Passive Radar Detection</td>
<td>Yang Xu (USTC, P.R. China), Lin Sun (USTC, P.R. China), Tianyun Wang (University of Science and Technology of China, P.R. China), Xinfei Lu (USTC, P.R. China), Chang Chen (University of Science and Technology of China, P.R. China) and Weidong Chen (University of Science &amp; Technology of China, P.R. China)</td>
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<tr>
<td>Air Targets Recognition Using a Fuzzy Logic Approach</td>
<td>Fangqi Zhu (University of Electronic Science and Technology of China, P.R. China) and Jing Liang (University of Electronic Science and Technology, P.R. China)</td>
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<td>SFT-based Algorithm of Acquisition and Anti-jamming of GPS Signals</td>
<td>Ma Ying (Beijing Institution of Technology, P.R. China), Bu Xiangyuan (Beijing Institute of Technology, P.R. China), Qiaoxian Gong (Beijing Institution of Technology, P.R. China) and Hangcheng Han (Beijing Institution of Technology, P.R. China)</td>
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<tr>
<td>Sparse Damage Localization Using Lamb Waves Based on a Finite Element Model</td>
<td>Pan Pan (Shanghai Jiao Tong University, P.R. China), Yiyin Wang (Shanghai Jiao Tong University, P.R. China), Fucai Li (Shanghai Jiao Tong University, P.R. China), Cailian Chen (Shanghai Jiao Tong University, P.R. China) and Xinping Guan (Shanghai Jiao Tong University, P.R. China)</td>
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<tr>
<td>Category-Based Dynamic Recommendations Adaptive to User Interest Drifts</td>
<td>Kaixiang Lin (University of Science and Technology of China, P.R. China) and Dong Liu (University of Science and Technology of China, P.R. China)</td>
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<tr>
<td>A Phase-based Ranging Method for Fast Frequency Hopping System</td>
<td>Yue Liu (PLA University of Science and Technology, P.R. China), Wangdong Qi (Nanjing University of Posts and Telecommunications, P.R. China), Su Zhang (PLA University of Science and Technology, P.R. China) and Zhi Wang (PLA University of Science and Technology, P.R. China)</td>
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<tr>
<td>CR-I: Cognitive Radio I</td>
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<tr>
<td>Optimal Multi-slot Spectrum Sensing and Transfer in Multichannel Cognitive Radio</td>
<td>Xin Liu (Nanjing University of Aeronautics and Astronautics, P.R. China), Weizhi Zhong (Nanjing University of Aeronautics and Astronautics, P.R. China), Qian Hu (Nanjing University of Aeronautics and Astronautics, P.R. China), Fanqiang Kong (Nanjing University of Aeronautics and Astronautics, P.R. China) and Jing Qingfeng (College of Astronautics, Nanjing University of Aeronautics and Astronautics, P.R. China)</td>
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<tr>
<td>Counteracting Malicious Users in Cognitive Radio Networks over Imperfect Reporting Channels</td>
<td>Jun Du (PLA University of Science &amp; Technology, P.R. China)</td>
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<td>Resource Allocation in Delay-QoS Constrained Multiuser Cognitive Radio Networks</td>
<td>Ding Xu (Nanjing University of Posts and Telecommunications, P.R. China) and Qun Li (Nanjing University of Posts and Telecommunications, P.R. China)</td>
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<tr>
<td>A set of Closed Form Approximate Formulae for Optimal Sensing Duration of Cognitive Radio</td>
<td>Bin Gu (Southeast University &amp; Nanjing College of Information Technology, P.R. China), Tiecheng Song (National Mobile Communications Research Laboratory, Southeast University, P.R. China), Dafei Sun (Southeast University, P.R. China), Lei Zhang (Southeast University, P.R. China), Ming Wu (Southeast University, P.R. China) and Jie Guo (Southeast University, P.R. China)</td>
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<tr>
<td>Energy Efficient Cooperative Sensing in Cognitive Radio Sensor Networks</td>
<td>Wei Yang (Naval Academy of Armament &amp; National University of Defense Technology, P.R. China)</td>
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</table>
**D2D&EH: D2D, Power Transfer, and Energy Harvesting Communication**

**Room: B314**

* Dedicated Resource Allocation for D2D Communications in Cellular Systems Employing FFR  
  Wenbin Wu (Southeast University, P.R. China) and Yuan Zhang (Southeast University, P.R. China)

* Constructing Conflict Graph for D2D Communications in Cellular Systems  
  Wenbin Wu (Southeast University, P.R. China) and Yuan Zhang (Southeast University, P.R. China)

* Interference-Mitigation Based Antenna Selection Scheme in Device-to-Device Communication Underlaying Cellular Networks  
  Yuyang Wang (Southeast University, P.R. China), Shi Jin (Southeast University, P.R. China), Yiyang Ni (Nanjing University of Posts and Telecommunications, P.R. China) and Kai-Kit Wong (University College London, United Kingdom)

* Opportunistic Interference Alignment Networks for Simultaneous Wireless Information and Power Transfer through User Selection  
  Nan Zhao (Dalian University of Technology, P.R. China), F. Richard Yu (Carleton University, Canada) and Victor CM Leung (The University of British Columbia, Canada)

* Throughput-Optimal User Association in Energy Harvesting Relay-Assisted Cellular Networks  
  Yanzi Song (University of Science and Technology of China, P.R. China), Ming Zhao (University of Science and Technology of China, P.R. China), Wuyang Zhou (University of Science and Technology of China, P.R. China) and Hui Han (Chongqing Communication Institute, P.R. China)

**MSC-II: Advances in Mobile Satellite Communications, Part II (Invited Session)**

**Room: B321**

* Satellite Mobile Multicast for Aeronautical Communication (Invited Paper)  
  Esua Jaff (University of Bradford, United Kingdom), Muhammad Ali (University of Bradford, United Kingdom), Prashant Pillai (University of Bradford, United Kingdom) and Yim-Fun Hu (University of Bradford, United Kingdom)

* Dynamic Channel Assignment Scheme with Cooperative Beam Forming for Multi-beam Mobile Satellite Networks (Invited Paper)  
  Hang Li (Tsinghua University, P.R. China), Masahiro Umehira (Ibaraki University, Japan), Zhe Zhu (Tsinghua University, P.R. China), Zhen Gao (Tsinghua University, P.R. China) and Wang Jing (Tsinghua University, P.R. China)

  Jian Wang (Beijing University of Posts and Telecommunications, P.R. China), Gaofeng Cui (Beijing University of Posts and Telecommunications, P.R. China), Yizhou He (Beijing University of Posts and Telecommunications, P.R. China), Li Jian (Beijing University of Post and Telecommunication, P.R. China), Weidong Wang (Beijing University of Posts and Telecommunications, P.R. China) and Yinghai Zhang (Beijing University of Posts and Telecommunications, P.R. China)

**Saturday, October 25**

**11:00 - 12:30**

**EE: Energy Efficiency**

**Room: B303**

* A Balanced and Energy-Efficient Clustering Algorithm for Heterogeneous Wireless Sensor Networks  
  Jingjing Liu (Anhui University, P.R. China) and Yanjun Hu (Anhui University, P.R. China)

* An Energy-Efficient Sensor Selection Strategy Based on Spatial Correlation for Wireless Sensor Networks  
  Tuanfei Yan (College of Communications Engineering, PLA University of Science and Technology, Nanjing, P.R. China), Zhang JianFeng (PLA University of Science & Technology, P.R. China), Wei Xie (PLA University of Science and Technology, P.R. China) and Lianguo Wu (PLA University of Science and Technology, P.R. China)

* Maximizing Energy Efficiency in Analog Network Coding Based Two-Way Relay-assisted System  
  Ming Zhao (University of Science and Technology of China, P.R. China), Zhi Zhang (University of Science and Technology of China, P.R. China), Wuyang Zhou (University of Science and Technology of China, P.R. China) and Jinkang Zhu
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<th>Topic</th>
<th>Authors</th>
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<tr>
<td>Energy Management Scheme for Mobile Terminals in Energy Efficient Heterogeneous Network</td>
<td>Di Zhang (Xi'an Jiaotong University, P.R. China), Pinyi Ren (Xi'an Jiaotong University, P.R. China), Yichen Wang (Xi'an Jiaotong University, P.R. China), Qinghe Du (Xi'an Jiaotong University, P.R. China) and Li Sun (Xi'an Jiaotong University, P.R. China)</td>
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<tr>
<td>Energy Efficient Resource Allocation for OFDM Multi-Relay Cellular Networks</td>
<td>Shuang Yang (College of Communications Engineering, PLA University of Science and Technology, P.R. China), Yueming Cai (Institute of Communications Engineering, PLAUST, P.R. China), Wendong Yang (Institute of Communications Engineering, P.R. China), Jianchao Zheng (Institute of Communications Engineering, PLA University of Science and Technology, P.R. China) and Tao Zhang (PLA University of Science and Technology, P.R. China)</td>
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<td>Copyright Protection in Named Data Networking</td>
<td>Xiaobin Tan (University of Science and Technology of China, P.R. China), Zifei Zhou (University of Science and Technology of China, P.R. China), Cliff Zou (University of Central Florida, USA), Yukun Niu (University of Science and Technology of China, P.R. China) and Xin Chen (University of Science and Technology of China, P.R. China)</td>
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<tr>
<td>PHY Security Enhancement in Analog Network Coding Based on Artificial Noise</td>
<td>Dan Deng (Guangzhou Panyu Polytechnic, P.R. China), Zhen-lun Yang (Guangzhou Panyu Polytechnic, P.R. China) and Ming Zhao (University of Science and Technology of China, P.R. China)</td>
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<td>An Anonymous Payment System to Protect the Privacy of Electric Vehicles</td>
<td>Tianyu Zhao (University of Science and Technology of China, P.R. China), Chang Chen (University of Science and Technology of China, P.R. China), Lingbo Wei (Shanghai Jiao Tong University, P.R. China) and Mengke Yu (USTC, P.R. China)</td>
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<td>A Low Complexity Energy Efficiency Optimization Algorithm Based on Optimal Switching-off eNB Selection in LTE Networks</td>
<td>En Tong (Southeast University, P.R. China), Yu Wan (China Mobile, P.R. China), Zhiwen Pan (Southeast University, P.R. China) and Xiaohu You (National Mobile communication Research Lab., Southeast University, P.R. China)</td>
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<tr>
<td>A Range-Based Sleep Scheduling Algorithm for Desired Area Coverage in Solar-Powered Wireless Sensor Networks</td>
<td>Xueyan Li (Guilin University of Electronic Technology, P.R. China), Hongbin Chen (Guilin University of Electronic Technology, P.R. China), Feng Zhao (Guilin University of Electronic Technology, P.R. China) and Xiao Huan Li (South China University of Technology, P.R. China)</td>
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<tr>
<td>Energy Efficient Pico Base Station Switching-on/off in Heterogeneous Cellular Network with Minimum Rate Requirement</td>
<td>Liang Dong (University of Electronic Science and Technology of China, P.R. China), Gang Wu (University of Electronic Science and Technology of China, P.R. China), Zhiqun Xu (China Mobile Research Institute, P.R. China) and Shaoqian Li (University of Electronic Science and Technology of China, P.R. China)</td>
</tr>
<tr>
<td>A Game-Theoretic Approach for Optimal Base Station Sleeping in Green Cellular Networks</td>
<td>Jianchao Zheng (Institute of Communications Engineering, PLA University of Science and Technology, P.R. China), Yueming Cai (Institute of Communications Engineering, PLAUST, P.R. China), Xianfu Chen (VTT Technical Research Centre of Finland, Finland), Rongpeng Li (Zhejiang University, P.R. China) and Honggang Zhang (Université Européenne de Bretagne (UEB) and Supelec &amp; Zhejiang University, France)</td>
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<tr>
<td>Small Cell Switch Policy: a Reinforcement Learning Approach</td>
<td>Luyang Wang (Shanghai Jiao Tong University, P.R. China), Xinxin Feng (Shanghai Jiao Tong University, P.R. China), Xiaoying Gan (Shanghai Jiao Tong University, P.R. China), Jing Liu (Shanghai Jiao Tong University, P.R. China) and Hui</td>
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Het&SC: HetNets and Small Cells

Room: B314

**Resource Allocation in Heterogeneous Networks with eICIC**
Aiyun Li (University of Science and Technology of China, P.R. China) and Ling Qiu (University of Science and Technology of China, P.R. China)

**An Incentivized Offloading Mechanism via Truthful Auction in Heterogeneous Networks**
Yulin Jia (University of Science and Technology of China, P.R. China), Ming Zhao (University of Science and Technology of China, P.R. China), Kaiwei Wang (University of Science and Technology of China, P.R. China) and Wuyang Zhou (University of Science and Technology of China, P.R. China)

**A User-Centric Load Balance Scheme for Small Cell Networks**
Luyang Wang (Shanghai Jiao Tong University, P.R. China), Xinxin Feng (Shanghai Jiao Tong University, P.R. China), Xu Wang (Shanghai Jiao Tong University, P.R. China), Xiaoying Gan (Shanghai Jiao Tong University, P.R. China) and Jinsong Wu (Bell Laboratories, Alcatel-Lucent, P.R. China)

**MPSO-based Power Adjustment and User Association Algorithm for Energy Efficiency in LTE Heterogeneous Networks**
Mengling Qin (Southeast University, P.R. China), Nan Liu (Southeast University, P.R. China), Huilin Jiang (Southeast University, P.R. China), Zhiwen Pan (Southeast University, P.R. China), Tianle Deng (Huawei Technologies Co. Ltd, P.R. China) and Xiaohu You (National Mobile communication Research Lab., Southeast University, P.R. China)

**A Cascaded Precoding Scheme for Two-Tier Heterogeneous Networks**
Shengjie Guo (Southern Illinois University Carbondale, USA) and Xiangwei Zhou (Southern Illinois University Carbondale, USA)

S&A-SP: Speech and Audio Signal Processing

Room: B319

**An Improved Bayesian NMF-Based Speech Enhancement Method Using Multivariate Laplace Distribution**
Zhang Liwei (PLA University of Science and Technology, P.R. China)

**Memory Proportionate APSA with Individual Activation Factors for Highly Sparse System Identification in Impulsive Noise Environment**
Yi Yu (Southwest Jiaotong University, P.R. China) and Haiquan Zhao (Southwest Jiaotong University, P.R. China)

**F0 Prediction from Linear Predictive Cepstral Coefficient**
Xueqin Chen (Soochow University, P.R. China), Yibiao Yu (Soochow University, P.R. China) and Heming Zhao (Soochow University, P.R. China)

**Enhancement of Reverberant Speech in Noisy Acoustical Environments**
Marjan Joorabchi (Sharif University of Technology-International Campus, Iran), Seyed Ghorshi (Sharif University of Technology, Iran) and Ali Sarafnia (Sharif University of Technology, International Campus, Iran)

SN&LOC: Sensor Networks, Localization

Room: B321

**A Low-Complexity Cooperative Localization Algorithm based on Variational Message Passing in Wireless Networks**
Weijie Yuan (Beijing Institute of Technology, P.R. China), Nan Wu (Beijing Institute of Technology, P.R. China), Bin Li (Beijing Institute of Technology, P.R. China), Hua Wang (Modern Comm. Lab, P.R. China) and Jingming Kuang (Beijing Institute of Technology, P.R. China)

**Adaptive and distributed homology computation with application to large scale sensor networks**
Mengyi Zhang (University of Reims Champagne-Ardenne & CReSTIC, France), Alban Goupil (Université de Reims Champagne-Ardenne, France), Maxime Colas (DéCom/University of REIMS CHAMPAGNE-ARDENNE, France) and Guillaume Gelle (University of Reims Champagne-Ardenne & CReSTIC, France)
Clustering Combined Indoor Localization Algorithms for Crowdsourcing Devices: Mining RSSI Relative Relationship
Zhengyong Huang (Shanghai Jiao Tong University, P.R. China), Jun Xia (Shanghai Jiaotong University, P.R. China), Hui Yu (Shanghai Jiao Tong University, P.R. China), Yunfeng Guan (Shanghai Jiao Tong University, P.R. China) and Jiawei Chen (Shanghai Jiao Tong University, P.R. China)

An Automatic Approach to Fingerprint Construction of Indoor Localization by Crowd Paths
Jun Xia (Shanghai Jiaotong University, P.R. China), Zhengyong Huang (Shanghai Jiao Tong University, P.R. China), Hui Yu (Shanghai Jiao Tong University, P.R. China) and Xiaoying Gan (Shanghai Jiao Tong University, P.R. China)

14:00 - 15:30

D2D&M2M: D2D, M2M & Sensor Network

Room: B303

Mode Selection for D2D Communication Underlaying a Cellular Network with Shared Relays
Qin Wang (Nanjing University of Posts and Telecommunications, P.R. China), Wei Wang (San Diego State University, USA), Shi Jin (Southeast University, P.R. China), Hongbo Zhu (Nanjing University of Posts and Telecommunications, P.R. China) and Naitong Zhang (Communication Research Center, Harbin Institute of Technology, P.R. China)

Secure Communications of Cellular Users in Device-to-Device Communication Underlaying Cellular Networks
Yuhang Wang (Shanghai Jiao Tong University, P.R. China), Zhiyong Chen (Shanghai Jiao Tong University, P.R. China), Yao Yao (Huawei Technologies Co., Ltd., P.R. China), Manyuan Shen (Shanghai Jiao Tong University, P.R. China) and Bin Xia (Shanghai Jiao Tong University, P.R. China)

Uplink Dynamic Resource Sharing of Underlaying D2D and Cellular Communications
Dan Wu (Institute of Communications Engineering, PLAUST, P.R. China), Yueming Cai (Institute of Communications Engineering, PLAUST, P.R. China), Jiannan Qi (The Armed Police Commanding Colledge, P.R. China) and Joel J. P. C. Rodrigues (Instituto de Telecomunicações, University of Beira Interior, Portugal)

A Radio Resource Scheduling Scheme for Periodic M2M Communications in Cellular Networks
Chunhua You (Southeast University, P.R. China) and Yuan Zhang (Southeast University, P.R. China)

A Spectrum Allocation Algorithm for Device-to-device Underlaying Networks Based on Auction Theory
Ang Li (University College London, United Kingdom), Xuwen Liao (Xi'an Jiaotong University, P.R. China) and Di Zhang (Xi'an Jiaotong University, P.R. China)

A Distributed Synchronous Clock for Sensor Networks
Liefeng Liu (University of Science and Technology of China, P.R. China), Jie Wu (University of Science and Technology of China, P.R. China) and Kaiyun Tian (University of Science and Technology of China, P.R. China)

SP-Comm-II: Signal Processing for Communications II

Room: B305

QoS-Aware Energy-Efficient Optimization for Massive MIMO Systems in 5G
Yuan Zhou (Beijing Institute of Technology, P.R. China), Dan Li (Beijing Institute of Technology, P.R. China), Haoyu Wang (Beijing Institute of Technology, P.R. China), Ang Yang (Beijing Institute of Technology, P.R. China) and Shaozhen Guo (Beijing Institute of Technology, P.R. China)

Complexity Reduction Techniques for Blind Adaptive Beamforming in OFDM Antenna Arrays
Boya Qin (Zhejiang University, P.R. China), Yunlong Cai (Zhejiang University, P.R. China), Benoit Champagne (McGill University, Canada) and Minjian Zhao (Zhejiang University, P.R. China)

Compressed Sampling using Structurally Mixed Cyclic Measurement Matrices
Guangjie Xu (College of Communications Engineering, PLA University of Science and Technology, P.R. China), Huali Wang (College of Communications Engineering, PLA University of Science and Technology, P.R. China), Weijun Zeng (PLA University of Science and Technology, P.R. China), Qingguo Wang (College of Communications Engineering, PLA University of Science and Technology, P.R. China) and Jun Jin (College of Communications Engineering, PLA University of Science and Technology, P.R. China)

Cooperative FPT-based Spectrum Sensing Algorithm With Decision Fusion
Lei Wang (Nanjing University of Posts and Telecommunications, P.R. China), Haitao Xue (Nanjing University of Posts and Telecommunications, P.R. China), Guoping Jiang (Nanjing University of Posts and Telecommunications, P.R. China), Baoyu Zheng (Nanjing University of Posts and Telecommunications, P.R. China) and JingWu Cui (Nanjing University of Posts And Telecom, P.R. China)

**Energy Efficiency Analysis for Cognitive Radio Network With Data Collision**
Lei Wang (Nanjing University of Posts and Telecommunications, P.R. China), Haitao Xue (Nanjing University of Posts and Telecommunications, P.R. China), Guoping Jiang (Nanjing University of Posts and Telecommunications, P.R. China), Baoyu Zheng (Nanjing University of Posts and Telecommunications, P.R. China) and JingWu Cui (Nanjing University of Posts And Telecom, P.R. China)

**SC-II: Satellite Communications II**

Room: B308

**Power Spectrum Analysis of Interference to a Beidou Satellite Receiver from UWB Impulse Radio Systems**
Tingting Lu (Ocean University of China, P.R. China), Hao Zhang (Ocean University of China, P.R. China), Xuerong Cui (China University of Petroleum, P.R. China) and T. Aaron Gulliver (University of Victoria, Canada)

**Traffic-Based Dynamic Beam Coverage Adjustment in Satellite Mobile Communication**
Cen Qian (University of Science and Technology of China, P.R. China), Sihai Zhang (University of Science and Technology of China, P.R. China) and Wuyang Zhou (University of Science and Technology of China, P.R. China)

**Design and Performance Analysis of Adaptive Coding and Modulation for Broadband Satellite Networks**
Desheng Shi (Beijing Institute of Technology, P.R. China), Hua Wang (Modern Comm. Lab, P.R. China), Nan Wu (Beijing Institute of Technology, P.R. China), Huaifeng Liu (Research Center of Beijing Space Information Relay Transmission Technology, P.R. China) and Jingming Kuang (Beijing Institute of Technology, P.R. China)

**EH-I: Energy Harvesting Wireless Communications, Part I (Invited Session)**

Room: B314

**Achieving Energy Diversity with Multiple Energy Harvesting Relays (Invited Paper)**
Yaming Luo (The Hong Kong University of Science and Technology, Hong Kong), Jun Zhang (The Hong Kong University of Science and Technology, Hong Kong) and Khaled B. Letaief (The Hong Kong University of Science and Technology, Hong Kong)

**Distributed Coalition Formation Algorithms for Cooperative Broadcast Networks with SWIPT (Invited Paper)**
Wei Chen (Beihang University, P.R. China), Mai Xu (Beihang University, P.R. China), Yue Tao (Newcastle University, United Kingdom), Zhiqiu Ding (Lancaster University, United Kingdom) and Zulin Wang (Beihang University, P.R. China)

Koji Ishibashi (The University of Electro-Communications, Japan)

**Sec-II: Secrecy and Security II**

Room: B319

**Secure Beamforming Based on Sparsity in Multiple Amplify-and-Forward MIMO Relay Networks**
Mingxiong Zhao (South China University of Technology, P.R. China), Suili Feng (South China University of Technology, P.R. China), Yuan Liu (South China University of Technology, P.R. China) and Xiangfeng Wang (Nanjing University, P.R. China)

**Security Performance of Multiple Antennas Multiple Relaying Networks with Outdated Relay Selection**
Wang Lei (PLA University of Science and Technology, P.R. China), Shiming Xu (College of Communications Engineering, PLA University of Science and Technology, P.R. China), Weiwei Yang (Institute of Communications Engineering, PLAUST, P.R. China), Yang Wendong (Institute of Communications Engineering, PLAUST, P.R. China) and Yueming Cai (Institute of Communications Engineering, PLAUST, P.R. China)

**Beamforming Design of Sum Secrecy Rate Optimization for MU-MISO Channel under Sum Power Constraint**
Pu Zhao (Shanghai Jiao Tong University, P.R. China), Meng Zhang (Shanghai Jiao Tong University, P.R. China), Hui Yu (Shanghai Jiao Tong University, P.R. China), Hanwen Luo (Shanghai Jiao Tong University, P.R. China) and Wen Chen
### Energy Harvesting for Secure OFDMA Systems
Meng Zhang (South China University of Technology, P.R. China), Yuan Liu (South China University of Technology, P.R. China) and Suili Feng (South China University of Technology, P.R. China)

### A Cooperative Scheme for Secure Communications with Partner Selection and Incentive Mechanism
Ning Zhang (University of Waterloo, Canada), Nan Cheng (University of Waterloo, Canada), Xiang Zhang (University of Electronic Science and Technology of China, Canada), Ning Lu (University of Waterloo, Canada), Jon Mark (University of Waterloo, Canada) and Sherman Shen (University of Waterloo, Canada)

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<td>16:00 - 17:30</td>
<td>CPSys: Cyber Physical Systems</td>
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#### Low-latency Energy-balanced Data Collection in Wireless Sensor Networks
Xingmiao You (Southeast University, P.R. China), Pingping Xu (Southeast University, P.R. China) and Wenxiang Zhu (Southeast University, P.R. China)

#### User Association for Green Heterogeneous Cellular Networks with Hybrid Energy Supplies
Qiao Kong (Huazhong University of Science and Technology (HUST), P.R. China) and Bang Wang (Huazhong University of Science and Technology, P.R. China)

#### Gaussian Message-based Cooperative Localization on Factor Graph in Wireless Sensor Networks
Bin Li (Beijing Institute of Technology, P.R. China), Nan Wu (Beijing Institute of Technology, P.R. China), Hua Wang (Modern Comm. Lab, P.R. China), Jingming Kuang (Beijing Institute of Technology, P.R. China) and Chengwen Xing (Beijing Institute of Technology & University of Hong Kong, P.R. China)

#### The Optimal Energy Allocation Scheme for Decision Fusion in Heterogeneous Radar Sensor Networks
Yangyang Huo (University of Electronic Science and Technology & UESTC, P.R. China) and Jing Liang (University of Electronic Science and Technology, P.R. China)

#### Quadtree Routing for Hybrid Satellite/Terrestrial Networks
Guke Huang (University of Science and Technology of China, P.R. China), Bing Feng (University of Science and Technology of China, P.R. China), Zhen Wang (University of Science and Technology of China, P.R. China) and Dapeng Wang (Chinese Academy of Sciences, P.R. China)

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<th>Time</th>
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<td>18:00 - 19:00</td>
<td>LC&amp;Trk: Localization, Positioning, and Tracking</td>
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#### On the Localizability of Cooperative Positioning: Two User Model
Yaning Liu (Institute of Communication Engineering, PLA University of Science and Technology, P.R. China), Shiwei Tian (Institute of Communication Engineering, PLA University of Science and Technology, P.R. China), Guangxia Li (PLA University of Science and Technology, P.R. China), Wei Heng Dai (Institute of Communication Engineering, PLA University of Science and Technology, P.R. China) and Jiang Chang (Institute of Communication Engineering, PLA University of Science and Technology, P.R. China)

#### A Multi-hop Localization Algorithm in Underwater Wireless Sensor Networks
Zhwen Zhu (Nanjing University of Posts and Telecommunications, P.R. China), Wenbing Guan (Nanjing University of Posts and Telecommunications, P.R. China), Linfeng Liu (Nanjing University of Posts and Telecommunications, P.R. China), Sheng Li (Nanjing University of Posts and Telecommunications, P.R. China), Shanshan Kong (Nanjing University of Posts and Telecommunications, P.R. China) and Yudao Yan (Nanjing University of Posts and Telecommunications, P.R. China)

#### Bluetooth Low Energy Based Motion Sensing System
Menghan Zhang (National Mobile Communications Research Laboratory, Southeast University, P.R. China), Weiwei Xia (National Mobile Communications Research Laboratory, Southeast University, P.R. China) and Lianfeng Shen (National Mobile Communications Research Laboratory, Southeast University, P.R. China)
CR-II: Cognitive Radio II

Room: B308

**Analysis of Cognitive Radio Spectrum Access Based on Fractional Channel Reservation**
Ting Feng (University of Electronic Science and Technology of China, P.R. China), WanBin Tang (University of Electronic Science & Technology of China, P.R. China) and Shaoqian Li (University of Electronic Science and Technology of China, P.R. China)

**Cost-Efficient Cooperative Spectrum Sensing via Utility Maximization**
Hang Hu (PLA University of Science and Technology, P.R. China), Hang Zhang (PLA University of Science & Technology, P.R. China) and Yewen Guan (PLA University of Science and Technology, P.R. China)

**Throughput Analysis of Cognitive Radio Networks Via Stochastic Network Calculus**
Jun Zheng (Huazhong University of Science & Technology, P.R. China), Li Yu (Huazhong University of Science & Technology, P.R. China) and Peng Yang (Huazhong University of Science & Technology, P.R. China)

**Optimal and Low Complexity Algorithm for Energy Efficient Power Allocation with Sensing Errors in Cognitive Radio Networks**
Lei Dong (Xidian University, P.R. China) and Guangliang Ren (Xidian University, P.R. China)

EH-II: Energy Harvesting Wireless Communications, Part II (Invited Session)

Room: B314

**Green Device-to-Device Communication with Harvesting Energy in Cellular Networks (Invited Paper)**
Howard Yang (Singapore University of Technology and Design, Singapore), Jemin Lee (Singapore University of Technology and Design (SUTD), Singapore) and Tony Q. S. Quek (Singapore University of Technology and Design, Singapore)

Jing Zhao (University of Science and Technology of China, P.R. China), Ming Zhao (University of Science and Technology of China, P.R. China) and Wuyang Zhou (University of Science and Technology of China, P.R. China)

**Optimal Power Allocation for a Two-Link Interference Channel with SWIPT (Invited Paper)**
Baosheng Xu (Fudan University, P.R. China), Yu Zhu (Fudan University, P.R. China) and Rui Zhang (National University of Singapore, Singapore)