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<th>Time</th>
<th>Level 2 - Regency I</th>
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<th>Level 3 - Events I-a</th>
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<td>Monday, August 12</td>
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<td>08:30-09:00</td>
<td>Opening Ceremony</td>
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<td>09:00-09:45</td>
<td>Keynote 1: Intelligent Wireless Resource Management: Learning and Optimization (Zhi-Quan (Tom) Luo)</td>
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<td>09:46-10:30</td>
<td>Keynote 2: The 5G Journey and the Next Frontiers (Peiying Zhu)</td>
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<td>11:00-11:45</td>
<td>Keynote 3: Deep Learning in Physical Layer Communications (Geoffrey Ye Li)</td>
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<td>11:46-12:30</td>
<td>Keynote 4: Deep Learning in Network Traffic Control (Nai Kato)</td>
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<td>14:00-15:30</td>
<td>Panel 1: Wireless 2030</td>
<td>IP1: Invited Papers 1</td>
<td>IP2: Invited Papers 2</td>
<td>CT1: Communications Theory 1</td>
<td>IOT1: Internet of Things 1</td>
<td>IOT2: Internet of Things 2</td>
<td>NGNI1: Next Generation Networks and Internet 1</td>
<td>OCS: Optical Communications and Systems</td>
<td>Security1: Security 1</td>
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<td>Tuesday, August 13</td>
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<td>09:00-09:45</td>
<td>Keynote 5: Future Wireless Network Architecture for the Machines of Artificial Intelligence (Kwang-Cheng Chen)</td>
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<td>11:00-12:30</td>
<td>CT2: Communications Theory 2</td>
<td>IOT3: Internet of Things 3</td>
<td>NGNI3: Next Generation Networks and Internet 3</td>
<td>WCS2: Wireless Communications 2</td>
<td>SPC3: Signal Processing for Communications 3</td>
<td>NGNI4: Next Generation Networks and Internet 4</td>
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Monday, August 12

Monday, August 12 8:30 - 9:00
Opening Ceremony
Rooms: Level 2 - Regency I, Level 2 - Regency II, Level 2 - Regency III

Monday, August 12 9:00 - 9:45
Keynote 1: Intelligent Wireless Resource Management: Learning and Optimization (Zhi-Quan (Tom) Luo)
Zhi-Quan (Tom) Luo
Rooms: Level 2 - Regency I, Level 2 - Regency II, Level 2 - Regency III

Monday, August 12 9:46 - 10:30
Keynote 2: The 5G Journey and the Next Frontiers (Peiying Zhu)
Peiying Zhu
Rooms: Level 2 - Regency I, Level 2 - Regency II, Level 2 - Regency III

Monday, August 12 11:00 - 11:45
Keynote 3: Deep Learning in Physical Layer Communications (Geoffrey Ye Li)
Geoffrey Ye Li
Rooms: Level 2 - Regency I, Level 2 - Regency II, Level 2 - Regency III

Monday, August 12 11:46 - 12:30
Keynote 4: Deep Learning in Network Traffic Control (Nei Kato)
Nei Kato
Rooms: Level 2 - Regency I, Level 2 - Regency II, Level 2 - Regency III

Monday, August 12 14:00 - 15:30
Panel 1: Wireless 2030
Klaus Moessner, Chin Lin I, John Thompson, Zhinong Ying, Andrew Lambert
Room: Level 2 - Regency I
Chair: Zhisheng Niu (Tsinghua University, P.R. China)

IP1: Invited Papers 1
Room: Level 2 - Regency II
Chair: Sheng Zhou (Tsinghua University, P.R. China)

Distributed Downloading Strategy for Multi-Source Data Fusion in Edge-Enabled Vehicular Network
Yue Yu and Jun Wu (Southeast University, P.R. China); Xiao Tang (Northwestern Polytechnical University, P.R. China); Tiecheng Song (National Mobile Communications Research Laboratory, Southeast University, P.R. China); BaekGyu Kim (Toyota Motor North America, Inc., USA); Zhu Han (University of Houston, USA)

Tunable Reflectors Enabled Environment Augmentation for Better mmWave WLANs
Lan Zhang (University of Florida, USA); Li Yan (Southwest JiaoTong University, P.R. China); Bin Lin (Dalian Maritime
**Towards a Blockchain-Based Healthcare Information System**
Vojislav B. Mišić and Jelena Mišić (Ryerson University, Canada); Xiaolin Chang (Beijing Jiaotong University, P.R. China)

**Deep Learning based Beamforming for FD-MIMO Downlink Transmission**
Yu Xiaoxiang, Xi Yang, Xiao Li and Shi Jin (Southeast University, P.R. China)

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**IP2: Invited Papers 2**

Room: Level 2 - Regency III
Chair: Teng Joon Lim (National University of Singapore, Singapore)

**Network Beamforming in Energy-Harvesting Relay Networks**
Dexin Wang (Department of Electrical and Computer Engineering, Colorado State University, Fort Collins, CO 80523, USA); Rongqing Zhang (Tongji University, P.R. China); Xiang Cheng (Peking University, P.R. China); Liuqing Yang (Colorado State University, USA)

**Joint Resource Allocation and Secrecy Capacity Optimization in V2V Communications**
Xuewen Luo (Harbin Institute of Technology, P.R. China); Hsiao-Hwa Chen (National Cheng Kung University); Weixiao Meng (Harbin Institute of Technology, P.R. China)

**A Predictive On-Demand Placement of UAV Base Stations Using Echo State Network**
Haoran Peng, Chao Chen, Chuan-Chi Lai and Li-Chun Wang (National Chiao Tung University); Zhu Han(University of Houston, USA)

**Detecting RSU Misbehavior in Vehicular Edge Computing**
Venkata Abhishek Nalam, Teng Joon Lim and Biplab Sikdar (National University of Singapore, Singapore); Ben Liang (University of Toronto, Canada)

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**CT1: Communications Theory 1**

Room: Level 3 - Events I-a
Chair: Zhenyu Xiao (Beihang University, P.R. China)

**Secure Communication with a SWIPT-based Energy Harvesting Eavesdropper**
Qun Li and Ding Xu (Nanjing University of Posts and Telecommunications, P.R. China)

**A Double-CNN BP Decoder on Fast Fading Channels Using Correlation Information**
Jun Li and Xiwei Zhao (Nanjing University of Science and Technology, P.R. China); Jihao Fan (School of Computer Science and Engineering, Southeast University & Nanjing Institute of Technology, P.R. China); Feng Shu (Nanjing University of Science and Technology, P.R. China); Shi Jin (Southeast University, P.R. China); Yu wen Qian (Nanjing University of Science and Technology, P.R. China)

**High-Accuracy Localization Using Single-Anchor Ultra-Wide Bandwidth Systems**
Tianyu Wang, Hanying Zhao and Yuan Shen (Tsinghua University, P.R. China)

**Sparsity Learning Based Blind Signal Detection for Massive MIMO with Generalized Spatial Modulation**
Xiaoyan Kuai, Xiaojun Yuan and Wenjing Yan (University of Electronic Science and Technology of China, P.R. China); Hang Liu and Ying Jun (Angela) Zhang (The Chinese University of Hong Kong)

**Single-Letterization of Supporting Hyperplanes to Outer Bounds for Broadcast Channels**
Yanlin Geng (State Key Lab. of ISN, Xidian University, P.R. China)

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**IOT1: Internet of Things 1**

Room: Level 3 - Events I-b
Chair: Lin Bai (Beihang University, P.R. China)

**Performance of 3D Massive MIMO with Transceiver Impairments for K Composite Fading Channel**
Haojin Li and Haijun Zhang (University of Science and Technology Beijing, P.R. China); Chunxiao Jiang (Tsinghua University, Beijing, P.R. China); Arumugam Nallanathan (Queen Mary University of London, United Kingdom (Great Britain))
Britain)

**Secure Transmission in Multicarrier Time-Switching Wireless Powered Communication Networks with Full-duplex Receivers**
Qun Li and Ding Xu (Nanjing University of Posts and Telecommunications, P.R. China)

**Reinforcement Learning Approaches for IoT Networks with Energy Harvesting**
Xiaolan Liu and Yue Gao (Queen Mary University of London, United Kingdom (Great Britain))

**Machine Learning and Location Verification in Vehicular Networks**
Ullah Ihsan and Robert Malaney (University of New South Wales, Australia); Shihao Yan (Macquarie University, Australia)

**Clustering-Aid Sparse Representation Classification**
Liangkun Xu, Wenbo Xu and Yifei Dang (Beijing University of Posts and Telecommunications, P.R. China); Xiaolin Wang (Beijing Institute of Control and Electronic Technology, P.R. China)

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**IOT2: Internet of Things 2**

Room: Level 3 - Events II

Chair: Jun Zhang (The Hong Kong Polytechnic University)

**Compressive Classification Based on One-Bit Measurements**
Qihang Liu (Beijing University of Posts and Telecommunications & Key Laboratory of Universal Wireless Communication, Ministry of Education, P.R. China); Wenbo Xu and Yifei Dang (Beijing University of Posts and Telecommunications, P.R. China); Xiaolin Wang (Beijing Institute of Control and Electronic Technology, P.R. China)

**Adaptive Data Storage System for Mobile Satellite-Terrestrial IoT**
Niannian Wang and Ye Wang (Harbin Institute of Technology (Shenzhen), P.R. China); Shushi Gu (Harbin Institute of Technology, Shenzhen, P.R. China); Qinyu Zhang (Shenzhen Graduate School, Harbin Institute of Technology, P.R. China); Wei Xiang (James Cook University, Australia)

**An Integrated Design of Cooperative Localization and Motion Control**
Xiaoxiang Li, Kai Ma, Jian Wang and Yuan Shen (Tsinghua University, P.R. China)

**Energy Efficient Fuzzy Time Slot Scheduling Scheme For Massive Connections**
Xiaorui Tang (Southeast University, P.R. China); Zaichen Zhang (National Mobile Communications Research Laboratory, Southeast University, P.R. China); Liang Wu (Southeast University, P.R. China); Jian Dang (Southeast University & National Mobile Communications Research Laboratory, P.R. China)

**Execution Latency and Energy Consumption Tradeoff in Mobile-Edge Computing Systems (Invited Paper)**
Xiaolong Lan (Southwest Jiaotong University, P.R. China); Lin Cai (University of Victoria, Canada); Qingchun Chen (Guangzhou University, P.R. China)

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**NGNI1: Next Generation Networks and Internet 1**

Room: Level 3 - Events III

Chair: Qinghe Du (Xi'an Jiaotong University, P.R. China)

**Quality of Service Assisted Mapping Strategy in Virtualization Environment**
Haotong Cao, Shengchen Wu, Yao Zhang, Meng Zhou, Longxiang Yang and Hongbo Zhu (Nanjing University of Posts and Telecommunications, P.R. China)

**Deep Reinforcement Learning for Edge Caching and Content Delivery in Internet of Vehicles**
Yueyue Dai and Du Xu (University of Electronic Science and Technology of China, P.R. China); Yunlong Lu (Beijing University of Posts and Telecommunications, P.R. China); Sabita Maharjan (Simula Research Laboratory, Norway); Yan Zhang (University of Oslo, Norway)

**Performance Analysis of an Intelligent Association Scheme in Ultra-Dense Networks Using Matern Cluster Process**
Qiao Zhu (JiLin University, P.R. China); Xue Wang, Zhihong Qian and Chunsheng Tian (Jilin University, P.R. China)

**Codebook Design based on Self-organizing Map Clustering for Limited Feedback MIMO Systems**
Jing Jiang (Xi'an University of Posts and Telecommunications, P.R. China); Danping Lu (Xi'an University of Posts and Telecommunications, P.R. China); Li Zhen (Xi'an University of Posts and Telecommunications, P.R. China)
Scheduling and Resource Allocation Over LAA-WLAN Co-sited Networks
Wenyan Ding, Pinyi Ren and Qinghe Du (Xi'an Jiaotong University, P.R. China)

OCS: Optical Communications and Systems
Room: Level 3 - Events V
Chair: Chen Gong (USTC, P.R. China)

Indoor Visible Light Sensing with Sight Blockage
Jia Zeng (University of Science and Technology of China, P.R. China); Chen Gong (USTC, P.R. China); Shuping Hu and Zhengyuan Xu (University of Science and Technology of China, P.R. China)

Pulse-laser Based Long-range NLOS Ultraviolet Communication: Pulse Response Position Estimation and Frame Synchronization Optimization
Ruixiong Xu (University of Science and Technology of China, P.R. China); Chen Gong (USTC, P.R. China); Zhengyuan Xu (University of Science and Technology of China, P.R. China)

A 427.5Mbps Automotive Headlight Visible Light Communication System Utilizing 64QAM-DMT Modulation with Software Pre-equalization
Siqi Han, Chaofan Wang, Guoqiang Li and Nan Chi (Fudan University, P.R. China)

Enhanced Performance of a Phosphorescent White LED CAP 64QAM VLC system utilizing Deep Neural Network (DNN) Post Equalization
Guoqiang Li, Fangchen Hu, Yiheng Zhao and Nan Chi (Fudan University, P.R. China)

The Structure Determined of Low Ill-condition Structure Constraint Spatial Modulation for Massive Multi-Color MIMO-VLC
Yumeng Zhang (Information Engineering University, P.R. China); Yijun Zhu (National Digital Switching System Engineering and Technological Research Center (NDSC) of China, P.R. China); Chao Wang (National Digital Switching System Engineering and Technological Research Center Zhengzhou China, P.R. China); Yu Mu (Information Engineering University, P.R. China)

Security1: Security 1
Room: Level 3 - Events VI
Chair: Kaigui Bian (Peking University, P.R. China)

A Neural Attack Model for Cracking Passwords in Adversarial Environments
Yushuo Guan (Peking University, P.R. China); Yuanxing Zhang (School of EECS, Peking University, P.R. China); Lin Chen (Yale University, USA); Kaigui Bian (Peking University, P.R. China)

Optimal Strategy in Covert Communication based on Game Theory
Jianquan Wang (University of Electronic Science and Technology of China, P.R. China); WanBin Tang (University of Electronic Science & Technology of China, P.R. China); Xiaoping Li and Shaoqian Li (University of Electronic Science and Technology of China, P.R. China)

Two-Factor Authentication Protocol Using Physical Unclonable Function for IoV
Qi Jiang and Xin Zhang (Xidian University, P.R. China); Ning Zhang (Texas A&M University-Corpus Christi, USA); Youliang Tian (Guizhou University, P.R. China); Xindi Ma and Jianfeng Ma (Xidian University, P.R. China)

On Secure UAV Communication Systems with Randomly Located Eavesdroppers
Hongjiang Lei and Wang Di (Chongqing University of Posts and Telecommunications, P.R. China); Ki-Hong Park (King Abdullah University of Science and Technology (KAUST), Saudi Arabia); Imran Shafique Ansari (University of Glasgow, United Kingdom (Great Britain)); Gaofeng Pan (Beijing Institute of Technology, P.R. China); Mohamed-Slim Alouini (King Abdullah University of Science and Technology (KAUST), Saudi Arabia)

A Novel Cache Replacement Scheme against Cache Pollution Attack in Content-Centric Networks
Ying Liu and Ting Zhi (Beijing Jiaotong University, P.R. China); Haidong Xi (Cisco System (China) Research and Development, P.R. China); Wei Quan and Hongke Zhang (Beijing Jiaotong University, P.R. China)

Monday, August 12 16:00 - 17:30
Panel 2: Driving into 5G and beyond: Vehicular Communications and Networking
Shanzhi Chen, Hui Zhang, Min Liu, Hongwei Gao, Liuqing Yang

IP3: Invited Papers 3
Room: Level 2 - Regency II
Chair: Wanjiun Liao (National Taiwan University)

- Distributed MIMO Cooperative Transmission Technique and Its Performance
  Fumiyuki Adachi (Tohoku University, Japan); Amnart Boonkajay (Institute for Infocomm Research, Singapore); Tomoyuki Saito (Tohoku University, Japan); Yuta Seki (Panasonic Corporation & Core Element Technology Development Center, Japan)

- Network Analysis of Collaborative Cyber-Physical Multi-Agent Smart Manufacturing Systems
  Jen-Hao Hsiao (Graduate Institute of Communication Engineering, National Taiwan University); Kwang-Cheng Chen (University of South Florida, USA)

- Efficient Caching for 360-Degree Videos with Dynamic View Selection
  Mengsi Yeh (National Taiwan University); Chih-Hang Wang and De-Nian Yang (Academia Sinica); Wanjiun Liao (National Taiwan University)

- Off-Grid Angle-Doppler Estimation for Space-Time Adaptive Processing: A Sequential Approach
  Lei Lu, Chengwei Zhou, Zhiguo Shi and Jiming Chen (Zhejiang University, P.R. China)

IP4: Invited Papers 4
Room: Level 2 - Regency III
Chair: Wei Yu (University of Toronto, Canada)

- Power Control for Interference Management via Ensembling Deep Neural Networks
  Fei Liang (University of Science and Technology of China, P.R. China); Cong Shen (University of Virginia, USA); Wei Yu (University of Toronto, Canada); Feng Wu (University of Science and Technology of China, P.R. China)

- Robust Resource Allocation in NOMA based Cognitive Radio Networks
  Yongjun Xu (Chongqing University of Posts and Telecommunications, P.R. China); Fanyi Shu (Chongqing University of Posts and Telecommunications & University of Electronic Science and Technology of China, P.R. China); Rose Qingyang Hu (Utah State University, USA); Ying-Chang Liang (University of Electronic Science and Technology of China, P.R. China)

- Accelerated Deep Reinforcement Learning For Wireless Coded Caching
  Zhe Zhang and Meixia Tao (Shanghai Jiao Tong University, P.R. China)

- Invited Paper: Grain Pile Temperature Forecasting from Weather Factors: A Support Vector Regression Approach
  Shanshan Duan and Weidong Yang (Henan University of Technology, P.R. China); Xuyu Wang (California State University, Sacramento, USA); Shiwen Mao (Auburn University, USA); Yuan Zhang (Henan University of Technology, P.R. China)

SPC1: Signal Processing for Communications 1
Room: Level 3 - Events I-a
Chair: Ya-Feng Liu (Chinese Academy of Sciences, P.R. China)

- A Receiver Design for Molecule Shift Keying Modulation in Diffusion-Based Molecular Communications
  Qingchao Li and Hui Li (University of Science and Technology of China, P.R. China)

- A Novel Wavelet Denoising Pre-processing Algorithm for TDOA Localization
  Wenping Zhu, Shujuan Hou and Yuan Yuan (Beijing Institute of Technology, P.R. China)

- Outage Analysis for Full-Duplex Cooperative Networks with Optimal Relay Selection
  Xuan Wang (Xidian University, P.R. China); Danyang Yu, Yi Liu and Tiantian Chen (Xidian University, P.R. China)
Learning Spatial-Channel Attention for Visual Tracking
Yingsen Zeng, Haiying Wang and Ting Lu (Beijing University of Posts and Telecommunications, P.R. China)

Robust Adaptive Beamforming Based on Covariance Matrix Reconstruction Against Steering Vector Mismatch
Xue Zhang, Jr., Shuai Liu, Feng-Gang Yan, Ming Jin and Jun Wang (Harbin Institute of Technology (Weihai), P.R. China)

NGNI2: Next Generation Networks and Internet 2
Room: Level 3 - Events I-b
Chair: Ning Zhang (Texas A&M University, USA)

Age-Constrained Content Access Strategy in D2D-Assisted Wireless Caching Networks
Shuonan Li, Xiaoxi Qin, Yunzhenhao Tao and Baoling Liu (Beijing University of Posts and Telecommunications, P.R. China); Ping Zhang (WITI-BUPT, P.R. China)

On the Performance of Cell-Free Massive MIMO with One-Bit ADCs and DACs
Yao Zhang, Haotong Cao, Meng Zhou, Xu Qiao and Longxiang Yang (Nanjing University of Posts and Telecommunications, P.R. China)

Expedited Eviction of Invalid Flow Entries for SDN-Based EPC Networks
Ruolan Ying, Wen-Kang Jia and Chunlan Luo (Fujian Normal University, P.R. China); Yi Wu (Fujian normal university, P.R. China)

Adaptive Consistency Protocol Based on Grouping Multi-Paxos
Yizhen Wang (Harbin Institute of Technology (Shenzhen), P.R. China); Ye Wang (Harbin Institute of Technology (Shenzhen), P.R. China); Shushi Gu (Harbin Institute of Technology, Shenzhen, P.R. China); Qinyu Zhang (Shenzhen Graduate School, Harbin Institute of Technology, P.R. China); Ning Zhang (Texas A&M University-Corpus Christi, USA)

A Dual Decomposition Method for Hierarchical Traffic Control in Inter-DC WANs
Qian Gao (State Key Laboratory of Networking and Switching Technology & Beijing University of Posts and Telecommunications, P.R. China); Jiang Liu (Beijing University of Posts and Telecommunications, P.R. China); Ningjie Gao (State Key Laboratory of Networking and Switching & Beijing University of Posts and Telecommunications, P.R. China); Tao Huang (Beijing University of Posts and Telecommunications, P.R. China)

Security2: Security 2
Room: Level 3 - Events II
Chair: Cheng Li (Memorial University of Newfoundland, Canada)

SCOD: A Novel Semi-supervised Outlier Detection Framework
Shentai Liu, Zhida Qin and Xiaoying Gan (Shanghai Jiao Tong University, P.R. China); Zhen Wang (The Third Research Institute Of The Ministry Of Public Security, P.R. China)

Uplink Secrecy Rate for Artificial Noise Aided Full-Duplex VLC System
Baoying Huang, Xuefen Chi, Linlin Zhao, Lei Qian and Wenxiao Shi (Jilin University, P.R. China)

Joint PHY/MAC Layer AN-Assisted Security Scheme in SVD-Based MIMO HARQ system
Huiyun Xia and Shuai Han (Harbin Institute of Technology, P.R. China); Cheng Li (Memorial University of Newfoundland, Canada); Weixiao Meng (Harbin Institute of Technology, P.R. China)

A Trust-based Real-time Map Updating Scheme
Chengzhe Lai (Xi'an University of Posts and Telecommunications, P.R. China); Yangyang Du and Jiawei Men (Xi'an University of Posts and Telecommunications, P.R. China); Dong Zheng (Xi'an University of Posts & Telecommunications, P.R. China)

A Secure Blockchain-Based Group Mobility Management Scheme in VANETs
Chengzhe Lai (Xi'an University of Posts and Telecommunications, P.R. China); Yuhan Ding (Xi'an University of Posts and Telecommunications, P.R. China)

SPC2: Signal Processing for Communications 2
Room: Level 3 - Events III
Chair: Weizheng Zhang (University of New South Wales, Australia)
Pedestrian detection based on improved Faster RCNN algorithm
Xiaoqian Yu, Yujuan Si and Liangliang Li (Jilin University, P.R. China)

Statistical assessment of MIMO cooperative networks with selective OFDMA relaying
Yi Liu, Bo Li, Fu Gang Sun, Teng Ma, Hai Rui Yu and Kai Feng Guo (Systems Engineering Research Institute, P.R. China)

Outage Performance of Millimeter-Wave Band NOMA Downlink System in Satellite-based IoT
Yizhi He (Harbin Institute of Technology, P.R. China); Jian Jiao (Harbin Institute of Technology - Shenzhen, P.R. China); Liang Xiao (Harbin Institute of Technology (Shenzhen), P.R. China); Shaohua Wu (Harbin Institute of Technology, P.R. China); Ye Wang (Harbin Institute of Technology (Shenzhen), P.R. China); Qinyu Zhang (Shenzhen Graduate School, Harbin Institute of Technology, P.R. China)

Zero-Forcing Based Limited Feedback Hybrid Precoding in mmWave Communications
Shijian Gao (Colorado State University, USA); Xiang Cheng (Peking University, P.R. China); Liuqing Yang (Colorado State University, USA); Rongqing Zhang (Tongji University, P.R. China)

WCS1: Wireless Communications 1
Room: Level 3 - Events V
Chair: Wenchi Cheng (Xidian University, P.R. China)

Outage Minimized Joint Power Splitting and Resource Allocation Optimization for Multiuser OFDM Systems with SWIPT
Qun Li and Ding Xu (Nanjing University of Posts and Telecommunications, P.R. China)

Clustered Block Diagonal Digital Precoding for BDMA Downlink Transmissions
Guanchong Niu, Qi Cao and Man-On Pun (The Chinese University of Hong Kong, Shenzhen, P.R. China)

Improved Preamble Detection and Round-Trip Delay Estimation for Random Access in High-Mobility Airborne Communications Systems
Songkang Huang, Lei Zhao and Ming Jiang (Sun Yat-sen University, P.R. China); Wei Liu (The 7th Research Institute of China Electronics Technology Group Corporation, P.R. China)

Achievable Rate Optimization for WET Enabled mmWave D2D Communication Systems
Xiaoyan Ma, Xiaotian Zhou, Haixia Zhang, Guannan Dong and Dongfeng Yuan (Shandong University, P.R. China)

Enhanced Sensing-Based Resource Scheduling Algorithm for 5G V2V Communications
Xiaoran Wen (Beijing University of Posts and Telecommunications, P.R. China); Mugen Peng (Beijing University of Posts & Telecommunications, P.R. China); Xinran Zhang, Shi Yan and Yong Li (Beijing University of Posts and Telecommunications, P.R. China)

WN1: Wireless Networking 1
Room: Level 3 - Events VI
Chair: Zhiqing Wei (Beijing University of Posts and Telecommunications, P.R. China)

Price-Based Resource Allocation in Cooperative Cognitive Wireless Powered Communication Networks
Li Wang and Ding Xu (Nanjing University of Posts and Telecommunications, P.R. China)

Stackelberg Differential Game based Resource Allocation in Wireless Networks with Fog Computing
Bingjie Liu, Haitao Xu and Xianwei Zhou (University of Science and Technology Beijing, P.R. China); Zhu Han (University of Houston, USA)

Spectrum Sharing for High Altitude Platform Networks
Zhan Gao, Zhiqing Wei, Ziyu Wang, Jialin Zhu, Gang Deng and Zhiyong Feng (Beijing University of Posts and Telecommunications, P.R. China)

Streaming Transfer Model and Forward Scheme for Satellite Opportunistic Network
Guoqing Chen and Shushi Gu (Harbin Institute of Technology, Shenzhen, P.R. China); Ye Wang (Harbin Institute of Technology, Shenzhen, P.R. China)
Tuesday, August 13

Tuesday, August 13 9:00 - 9:45

Keynote 5: Future Wireless Network Architecture for the Machines of Artificial Intelligence (Kwang-Cheng Chen)

Kwang-Cheng Chen

Rooms: Level 2 - Regency I, Level 2 - Regency II, Level 2 - Regency III

Tuesday, August 13 9:46 - 10:30


Petar Popovski

Rooms: Level 2 - Regency I, Level 2 - Regency II, Level 2 - Regency III

Tuesday, August 13 11:00 - 12:30

CT2: Communications Theory 2

Room: Level 3 - Events I-a
Chair: Weizheng Zhang (University of New South Wales, Australia)

Tandem Spreading Multiple Access with Successive Interference Cancellation
Zichao Wei, Fanggang Wang and Guoyu Ma (Beijing Jiaotong University, P.R. China); Bo Ai (Beijing Jiaotong University & State Key Lab of Rail Traffic Control and Safety, P.R. China); Zhangdui Zhong (Beijing Jiaotong University, P.R. China)

User Association for Cache Enabled Millimeter Wave Ultra Dense Downlink Networks
Hongxin Lin, Cheng Zhang and Yongming Huang (Southeast University, P.R. China); Rui Zhao (National Huaqiao University, P.R. China); Luxi Yang (Southeast University, P.R. China)

LDPC-Coded Generalised Spatial Modulation Systems with Arbitrary Transmit Antenna Combinations
Dan Feng, Mengmeng Liu and Baoming Bai (Xidian University, P.R. China)

An Algorithm for Transmitting VR Video Based on Adaptive Modulation
Jie Feng, Yongpeng Wu, Guangtao Zhai, Ning Liu and Wenjun Zhang (Shanghai Jiao Tong University, P.R. China)

Adaptive Construction and Decoding of Random Convolutional Network Error-correction Coding
Mingye Liu (School of Telecommunications Engineering Xidian University, P.R. China); Wangmei Guo (Xidian University, P.R. China)

IOT3: Internet of Things 3

Room: Level 3 - Events I-b
Chair: Sheng Zhou (Tsinghua University, P.R. China)

A Distributed User Association Method for LTE-U by Enabling Q-Learning in Minority Game
Yunjia Wang and Guanding Yu (Zhejiang University, P.R. China); Rui Yin (Zhejiang University City, P.R. China & KwaZulu-Natal University, South Africa)
Unequal Recovery Time Random Access Protocol for Massive MIMO IoT System
Liang Xu (Harbin Institute of Technology (Shenzhen), P.R. China); Jian Jiao (Harbin Institute of Technology - Shenzhen, P.R. China); Xiaoyu Suo (Harbin Institute of Technology Shenzhen, P.R. China); Shaohua Wu (Harbin Institute of Technology, P.R. China); Ye Wang (Harbin Institute of Technology (Shenzhen), P.R. China); Qinyu Zhang (Shenzhen Graduate School, Harbin Institute of Technology, P.R. China)

A High Accuracy Integrated Bagging-Fuzzy-GBDT Prediction Algorithm for Heart Disease Diagnosis
Xiaoming Yuan, Xue Wang, Jianchao Han, Jiemin Liu and Haiyan Chen (Northeastern University, P.R. China); Kuan Zhang (University of Nebraska-Lincoln, USA); Qiang Ye (University of Waterloo, Canada)

Priority-Based Massive Random Access of M2M Communications in LTE Networks: Throughput Analysis and Optimization
Changwei Zhang (Nanjing University of Posts and Telecommunications, P.R. China); Xinghua Sun (Sun Yat-sen University, P.R. China); Jun Zhang (Nanjing University of Posts and Telecommunications, P.R. China); Hongbo Zhu (Nanjing University of Post and Telecommunications, P.R. China)

AP Deployment Optimization for WLAN: a fruit fly Optimization Approach
Peng Liu, Xin Meng, Jianghong Wu, Mengqian Yao and Zhenzhou Tang (Wenzhou University, P.R. China)

NGN3: Next Generation Networks and Internet 3
Room: Level 3 - Events II
Chair: Hongzi Zhu (Shanghai Jiao Tong University, P.R. China)

Learning-Based Content Caching with Update Strategy for Fog Radio Access Networks
Fan Jiang (Xian University of Posts and Telecommunications, P.R. China); Zeng Yuan (Xi’an University of Posts and Telecommunications, P.R. China); Changyin Sun (College of Xi’an Post and Communication, P.R. China); Yuan Ren and Junxuan Wang (Xi’an University of Posts and Telecommunications, P.R. China)

Exact Performance Analysis for Mixed k-µ Shadowed and Exponentiated Weibull Distributed Dual-Hop RF/FSO Systems
Yamin Wang and Peng Yue (Xidian University, P.R. China); Xiang Yi (State Key Laboratory on ISN, Xidian University, P.R. China); Cong Shen (Xidian University, P.R. China)

Transmit Antenna Selection in Massive MIMO Systems: An Online Learning Framework
Zhenran Kuai, Tianyu Wang and Shaowei Wang (Nanjing University, P.R. China)

Throughput Analysis of WPT Network Over Two-Way Log-Normal Fading Channels
Yingting Liu, Zhengwei Pan, Ruyi Xiao and Hongwu Yang (Northwest Normal University, P.R. China); Chun-man Yan (Xidian University & Institute of Intelligent Control and Image Engineering, P.R. China)

An Area-based Offloading Policy for Computing Offloading in MEC-assisted Wireless Mesh Network
Wenxiao Shi, Jiadong Zhang, Ruidong Zhang and Kegang Hu (Jilin University, P.R. China)

WCS2: Wireless Communications 2
Room: Level 3 - Events III
Chair: Shuai Han (Harbin Institute of Technology, P.R. China)

Physical-Layer Security of Visible Light Communications with Jamming
Dinghui Tian and Wensheng Zhang (Shandong University, P.R. China); Jian Sun (ShanDong University, P.R. China); Cheng-Xiang Wang (Southeast University & Heriot-Watt University, P.R. China)

Slotted ALOHA Game for Medium Access Control in Satellite Networks
Bo Zhao (Xidian University); Guangliang Ren and Huining Zhang (Xidian University, P.R. China)

Robust Beamforming Design for SWIPT in Cellular Internet of Things
Qiao Qi (ZheJiang University, P.R. China); Xiaoming Chen (Zhejiang University, P.R. China); Derrick Wing Kwan Ng (University of New South Wales, Australia); Caijun Zhong and Zhaoyang Zhang (Zhejiang University, P.R. China)

A Scalable Implementation for Real-Time Phased Antenna Array mmWave Testbeds
Xi Yang (Southeast University, P.R. China); Jing Zhang (Southeast University & National Mobile Communications Research Lab, P.R. China); Bingqi Yang (State Key Laboratory of Millimeter Waves, Southeast University, P.R. China); Kang
A Two-Sided Matching Approach for Distributed Edge Computation Offloading
Hongyi Bao and Yuan Liu (South China University of Technology, P.R. China)

SPC3: Signal Processing for Communications 3
Room: Level 3 - Events V
Chair: Rui Wang (Tongji University, P.R. China)

Fingerprinting-based Indoor Localization with Relation Learning Network
Lingyan Zhang and Hongyu Wang (Dalian University of Technology, P.R. China)

Automatic Brain Tumor Segmentation Using Cascaded FCN with DenseCRF and Kmeans
Lizhu Yang, Weinan Jiang, Hongkun Ji, Zijun Zhao, Xukang Zhu and Alin Hou (Changchun University of Technology, P.R. China)

Sequence Set Design With Min-Max Criterion using Majorization-Minimization
Zhiyu Zhou, Shengjie Zhao, Qingjiang Shi and Rongqing Zhang (Tongji University, P.R. China)

Speeding up LDPC Decoder by Inter-Frame Pipeline for Wireless Laser Communications
Jipeng Zhang (Xidian University, P.R. China); Zhongyang Yu (Xidian University & State Key Laboratory of Integrated Service Networks, P.R. China); Ji Zhang and Baoming Bai (Xidian University, P.R. China); Fuwei Huang (Xidian University, P.R. China)

Research on Feature Selection and Classification Algorithm of Medical Optical Tomography Images
Hongkun Ji, Kaiwen Guo, Lizhu Yang, Weinan Jiang, Zijun Zhao, Xukang Zhu and Alin Hou (Changchun University of Technology, P.R. China)

NGN4: Next Generation Networks and Internet 4
Room: Level 3 - Events VI
Chair: Ning Zhang (Texas A&M University-Corpus Christi, USA)

A Study of Disparity Map Based on Improved Dynamic Programming Algorithm
Ziwei Zhao, Yan Piao and Che Liu (Changchun University of Science and Technology, P.R. China)

Reinforcement Learning Based VNF Scheduling with End-to-End Delay Guarantee
Junling Li and Weisen Shi (University of Waterloo, Canada); Ning Zhang (Texas A&M University-Corpus Christi, USA); Sherman Shen (University of Waterloo, Canada)

Reducing Redundant Control Messaging for Fast Response in SDN
Gang Wu, Peng Yang and Jingjing Luo (Huazhong University of Science and Technology, P.R. China); Li Yu (Huazhong University of Science & Technology, P.R. China)

IPTV User QoE Prediction based on Broad Learning System
Liqiu Xu, Xin Wei, Yun Gao and Jiali Mao (Nanjing University of Posts and Telecommunications, P.R. China)

Energy Minimization for Fog Computing-Enabled Hierarchical Networks with Dynamic TDD
Qi Zhang, Haina Zheng, Zhangdui Zhong and Siqi Mu (Beijing Jiaotong University, P.R. China)

Tuesday, August 13 14:00 - 15:30
WCS3: Wireless Communications 3
Room: Level 2 - Regency I
Chair: Zan Li (Jilin University, P.R. China)

Full-Duplex Relay Assisted Secure Transmission for NOMA Networks
Yang Cao (Dalian University of Technology, P.R. China); Jie Tang (South China University of Technology, P.R. China); Nan Zhao (Dalian University of Technology, P.R. China); Yunfei Chen (University of Warwick, United Kingdom (Great Britain));
Cancellation Symbol Insertion Technique for Sidelobe Suppression in OFDM Pilot Waveform
Wei-Chang Chen (National Taiwan University of Technology); Jia-Ling Jiang and Char-Dir Chung (National Taiwan University)

Optimal Altitude of UAV-BS for Minimum Boundary Outage Probability with Imperfect Channel State Information
Bo Wang and Jian Ouyang (Nanjing University of Posts and Telecommunications, P.R. China); Wei-Ping Zhu (Concordia University, Canada); Min Lin (Nanjing University of Posts and Telecommunications, P.R. China)

Coupled or Uncoupled? Multi-path TCP Congestion Control for High-Speed Railway Networks
Chengxiao Yu and Wei Quan (Beijing Jiaotong University, P.R. China); Nan Cheng (University of Waterloo, Canada); Shihua Chen and Hongke Zhang (Beijing Jiaotong University, P.R. China)

Crowd-sourcing and Model-driven based Online Dictionary Learning for FDD Massive MIMO Systems
Tong Yue (Army Engineering University, P.R. China); Aijun Liu (PLA University of Science and Technology, P.R. China); Kui Xu (Army Engineering University of PLA, P.R. China)

Non-Orthogonal Coded Access Based Uplink Grant-Free Transmission for URLLC
Mingshan Zhang and Mengting Lou (Beijing Jiaotong University, P.R. China); Hong Zhou and Yuantao Zhang (Nokia Bell Labs, P.R. China); Ming Liu (Beijing Jiaotong University & Beijing Key Lab of Transportation Data Analysis and Mining, P.R. China); Zhangdui Zhong (Beijing Jiaotong University, P.R. China)

Capacity Characterization of UAV-Enabled Multiple Access Channel with Trajectory Optimization
Peiming Li and Jie Xu (Guangdong University of Technology, P.R. China)

A New Low-Resolution Min-Sum Decoder Based on Dynamic Clipping for LDPC Codes
Huanyu He and Lei Chu (Shanghai Jiaotong University, P.R. China); Robert Caiming Qiu (Tennessee Tech University, USA)

Reinforcement Learning-Based User Scheduling and Resource Allocation for Massive MU-MIMO System
Gaojing Bu and Jing Jiang (Xi'an University of Posts and Telecommunications, P.R. China)

Frequency Offset Estimation for 5G Based LEO Satellite Communication Systems
Ding Tian, Yue Zhao and Tong Jianfei (Beijing University of Posts and Telecommunications, P.R. China); Gaofeng Cui and Weidong Wang (Beijing University of Posts and Telecommunications, P.R. China)

Improved ComNet Based on Expectation Propagation for CP-Free OFDM System
Jing Zhang (Southeast University & National Mobile Communications Research Lab, P.R. China); Xi Yang (Southeast University, P.R. China); Chao-Kai Wen (National Sun Yat-sen University); Xiao Li and Shi Jin (Southeast University, P.R. China)

Capacity Analysis and Scheduling for Distributed LIS-aided Large-Scale Antenna Systems
Fan Cao, Yu Han and Qi Liu (Southeast University, P.R. China); Chao-Kai Wen (National Sun Yat-sen University); Shi Jin (Southeast University, P.R. China)

Effective Capacity Analysis for VR-HARQ Systems
Zheng Shi and Theodoros Tsiftsis (Jinan University, P.R. China); Weiqiang Tan (Guangzhou University, P.R. China); Guanghua Yang (Jinan University, P.R. China); Shaodan Ma (University of Macau, P.R. China); Mohamed-Slim Alouini (King Abdullah University of Science and Technology (KAUST), Saudi Arabia)

Distortion-aware Virtual Environments Transmission Scheme over a Bandwidth-limited Network
Jingfeng Guo (Beijing University of Posts and Telecommunications, P.R. China); Yitong Liu (Beijing University of Posts and Telecommunications, P.R. China)
Deep Learning Method of Polar Codes under Colored Noise
Danqiu Xiong and Bin Tian (Xidian University, P.R. China)

Shape-unconstrained Privacy-preserving Range Query for Fog Computing Supported Vehicular Networks Using Image
Haoran Liang and Jun Wu (Shanghai Jiao Tong University, P.R. China); Zhi Liu (Shizuoka University, Japan); Jianhua Li (Shanghai Jiao Tong University, P.R. China)

Cooperative Two-Key Generation in Source-Type Model With Partial-Trusted Helpers
Shixun Gong (Beijing University of Posts and Telecommunications, Xitu Cheng Road 10, P.R. China); Na Li, Huici Wu and Xiaofeng Tao (Beijing University of Posts and Telecommunications, P.R. China)

Location Privacy Preservation Based Incentive Scheme for Crowd Sensing Networks
Minghui Dai, Zhou Su and Qichao Xu (Shanghai University, P.R. China)

Secrecy Performance Analysis of Cognitive Radio Networks with Full-duplex Relaying
Zhihui Shang (Army Engineering University of PLA, P.R. China); Tao Zhang and Yongxiang Liu (The Sixty-third Research Institute, National University of Defense Technology, P.R. China); Yueming Cai and Weiwei Yang (Army Engineering University of PLA, P.R. China)

Protecting Access Privacy for Bitcoin Lightweight Client Using Trusted Hardware
Xudong Li, Zhe Yang, Lingbo Wei and Chi Zhang (University of Science and Technology of China, P.R. China)

Link data optimization based on PSO algorithm in Ethernet protocol
Hongzhi Wang, Hao Wang and Hongwu Lyu (Changchun University of Technology, P.R. China)

Research on Power Allocation of Cognitive Radio Based on Robust Cooperative Relay
Mingyue Zhou, Tianyuan Cai and Hongzhi Wang (Changchun University of Technology, P.R. China)

An LLR-Based Segmented Flipped SCL Decoding Algorithm for Polar Codes
Anqi Cao, Li Zhang, Jian Qiao and Yejun He (Shenzhen University, P.R. China)

An Efficient Piecewise Nonlinear Companding Transform for PAPR Reduction in UFMC Systems
Kaiming Liu and Yaning Ge (Beijing University of Posts and Telecommunications, P.R. China); Yuanan Liu (Beijing University of Posts and Telecom, P.R. China)

MISO Wireless Communication Systems via Intelligent Reflecting Surfaces (Invited Paper)
Xianghao Yu (Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany); Dongfang Xu (University of Erlangen-Nuremberg, Germany); Robert Schober (Friedrich-Alexander University Erlangen-Nuremberg, Germany)

Outage Analysis and Optimization of NOMA-based Integrated Satellite-Terrestrial System with an AF Relay
Silin Xie, Bangning Zhang, Daoxing Guo and Kongzhe Yang (Army Engineering University of PLA, P.R. China)

Impact of Prediction Uncertainty of Popularity Distribution on Proactive Caching
Pengyu Cong, Kaiqiang Qi and Chenyang Yang (Beihang University, P.R. China)
**Performance of Joint Radar and Communication Enabled Cooperative Detection**
Zixi Fang, Zhiqing Wei, Zhiyong Feng, Xu Chen and Zijun Guo (Beijing University of Posts and Telecommunications, P.R. China)

**Joint Computing and Radio Resource Allocation in C-RAN Systems Under Imperfect CSI**
Kangkang Wang, Ying Wang and Runcong Su (Beijing University of Posts and Telecommunications, P.R. China)

**A 3-Dimensional Matching Method for Resource Allocation in D2D-Assisted Indoor Wireless Communications**
Chenglin Li, Zhi Zhang and Baoling Liu (Beijing University of Posts and Telecommunications, P.R. China)

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**WN2: Wireless Networking 2**

**Room:** Level 3 - Events III

**Chair:** Tingting Yang (Dalian Maritime University, P.R. China)

**Throughput Analysis of MRT-ZF Wireless Body Area Network with Multi-Antenna AP**
Zhi Mao (Jilin University, Jilin, P.R. China); Fengye Hu and He Liu (Jilin University, P.R. China); Zhuang Ling (Jilin University, P.R. China)

**Range-free Localization Based on Adaptive Anchor Selection for Wireless Sensor Networks**
Wenjie Ji (Sun Yat-sen University, P.R. China); Xingcheng Liu (Sun Yat-sen University & Xinhua College of SYSU, P.R. China); En Zou (Xinhua College of SYSU, P.R. China)

**Design and Analysis of Bidirectional Relaying NCed-HARQ Transmission Scheme for S-IoT**
Zilin Ni (Harbin Institute of Technology, P.R. China); Jian Jiao (Harbin Institute of Technology - Shenzhen, P.R. China); Xiaoxin Li (Harbin Institute of Technology, P.R. China); Ye Wang (Harbin Institute of Technology, Shenzhen, P.R. China); Qinyu Zhang (Shenzhen Graduate School, Harbin Institute of Technology, P.R. China)

**Intelligent Maritime Communications Enabled by Deep Reinforcement Learning**
Jiabo Li, Tingting Yang and Hailong Feng (Dalian Maritime University, P.R. China)

**Predictive Service Placement in Mobile Edge Computing**
Huirong Ma, Zhi Zhou and Xu Chen (Sun Yat-sen University, P.R. China)

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**SPC4: Signal Processing for Communications 4**

**Room:** Level 3 - Events V

**Chair:** Sangtae Kim (Seoul National University, Korea)

**Automotive Radar Signal Classification Using Bypass Recurrent Convolutional Networks**
Sangtae Kim and Kwangjin Lee (Seoul National University, Korea); Seungho Doo (Hyundai Mobis, Korea); Byonghyo Shim (Seoul National University, Korea)

**Object-aware Image Compression with Adversarial Learning**
Yunfei Du and Nan Zhao (Xidian University, P.R. China); Yiping Duan and Chaoyi Han (Tsinghua University, P.R. China)

**Location Information Based Beam Training for UAV mmWave System**
Weizheng Zhang (University of New South Wales, Australia); Wei Zhang (The University of New South Wales, Australia); Shengli Zhang (Shenzhen University, P.R. China)

**A Near-Optimal Condition for Exact Sparse Recovery with Orthogonal Least Squares**
Junhan Kim and Byonghyo Shim (Seoul National University, Korea)

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**WCS8: Wireless Communications 8**

**Room:** Level 3 - Events VI

**Chair:** Shiying Han (Nankai University, P.R. China)

**QAM Constellation Division Based User Grouping Transmission for Massive MIMO Uplink Systems**
Jingjie Zong, Gangtao Han and Dalong Zhang (Zhengzhou University, P.R. China); Di Zhang (Zhengzhou University, P.R. China & Seoul National University, Korea); Xiaomin Mu (Zhengzhou University, P.R. China)
Optimal Precoding Design for Uniform Linear Antenna Arrays with the Spherical-Wave Model
Lei Yang and Xumin Pu (Chongqing University of Posts and Telecommunications, P.R. China); Jide Yuan (Queen's University Belfast & Institute of Electronics, Communications and Information Technology, United Kingdom (Great Britain)); Shi Jin (Southeast University, P.R. China); Qianbin Chen (Chongqing University of Posts and Telecommunications, P.R. China)

Comparison of OTFS Diversity Performance over Slow and Fast Fading Channels
Hongyang Zhang (University of Technology Sydney, Australia); Xiaojing Huang (University of Technology, Sydney, Australia); J. Andrew Zhang (University of Technology Sydney, Australia)

CSI Feedback Based on Spatial and Frequency Domains Compression for 5G Multi-User Massive MIMO Systems
Zhengxuan Liu (China Academy of Telecommunications Technology, P.R. China); Shaohui Sun, Qibin Gao and Hui Li (China Academy of Telecommunications Technology (CATT), P.R. China)

Demonstration of DCSK-aided OFDM Design for Cognitive Radio System via USRP
Zuwei Chen and Lin Zhang (Sun Yat-sen University, P.R. China); Zhiquang Wu (Wright State University, USA)

A Low Complexity Multiuser Detection Scheme with Dynamic Factor Graph for Uplink SCMA Systems
Jiansong Miao, Xuejia Hu and Zhenmin Zhao (Beijing University of Posts and Telecommunications, P.R. China)

Tuesday, August 13 16:00 - 17:30

WCS9: Wireless Communications 9
Room: Level 3 - Events I-a
Chair: Rui Wang (Tongji University, P.R. China)

Joint Downlink-Uplink Throughput Optimization in Wireless Powered Communication Networks
Syam M. S., Yueling Che, Sheng Luo and Kaishun Wu (Shenzhen University, P.R. China)

Diversity-Achieving Secure Scheme for SIMO-MBM Systems
Shaozhuan Bai, Zhenzhen Gao and Xuewen Liao (Xi'an Jiaotong University, P.R. China)

Multi-factor based Dynamic Offloading with Coalitional Game in Mobile Cloud Computing
Shan Guo, Ying Wang and Hong Wang (Beijing University of Posts and Telecommunications, P.R. China)

Slice-Aware Resource Management in SDN Enabled Heterogeneous Cellular Networks
Jinliang Ma, Chunyu Pan and Changchuan Yin (Beijing University of Posts and Telecommunications, P.R. China); Xuehua Li (BITI, P.R. China)

Popularity Tracking for Proactive Content Caching with Dynamic Factor Analysis
Sajad Mehrizi (Khaje Nasir Toosi, Iran); Anestis Tsakmalis (University of Luxembourg, Luxembourg); Shahram ShahbazPanahi (University of Ontario Institute of Technology, Canada); Symeon Chatzinotas (University of Luxembourg, Luxembourg); Björn Ottersten (University of Luxembourg, Luxembourg)

WN3: Wireless Networking 3
Room: Level 3 - Events I-b
Chair: Hao Ma (Beijing University of Posts and Telecommunications, P.R. China)

Optimization of Joint Load Balancing and Bandwidth Allocation in Space Information Networks
Siyang Liu (Shanghai Jiao Tong University, P.R. China); Jingchao Wang (Institute of China Electronic System Engineering Corporation, P.R. China); Shentai Liu and Xiaoying Gan (Shanghai Jiao Tong University, P.R. China)

Performance Analysis of Joint Radar and Communication Enabled Vehicular Ad Hoc Network
Hao Ma, Zhiqing Wei, Xu Chen, Zixi Fang, Yunfeng Liu, Fan Ning and Zhiyong Feng (Beijing University of Posts and Telecommunications, P.R. China)

Fingerprint Similarity Indoor Localization: An AP Selection Based Approach
Chengyi Zhou, Junyu Liu, Min Sheng, Linlin Peng, Danni Hou and Jiandong Li (Xidian University, P.R. China)

Delay Outage Probability of Multi-relay Selection for Mobile Relay Edge Computing System
WCS10: Wireless Communications 10
Room: Level 3 - Events II
Chair: Yi Chen (The Chinese University of Hong Kong)

- The analysis of mobility performance in mmWave-microwave heterogeneous networks
  Fangchao Du, Guangji Chen and Ling Qiu (University of Science and Technology of China, P.R. China)

- Uplink Spectral Efficiency Analysis in Vehicle-to-Infrastructure Massive MIMO systems
  Yuanxue Xin (Hohai University, P.R. China); Rongqing Zhang (Tongji University, P.R. China); Pengfei Shi and Xuewu Zhang (Hohai University, P.R. China); Lei Zhang (Jiangsu University of Technology, P.R. China)

- Optimal Power Allocation with a Cooperative Relay in Multi-point WBAN
  Shuang Li, Fengye Hu, Jingjing Yu and Ziqiu Huang (Jilin University, P.R. China)

- Proactive Proportional Fair: A Novel Scheduling Algorithm Based on Future Channel Information in OFDMA Systems
  Linzhi Shen, Tianyu Wang and Shaowei Wang (Nanjing University, P.R. China)

- CRT Sequences for Medium Access Control
  Yi Chen (The Chinese University of Hong Kong); Kenneth W. Shum (Institute of Network Coding); Wing Shing Wong (The Chinese University of Hong Kong, P.R. China)

WN4: Wireless Networking 4
Room: Level 3 - Events III
Chair: Tingting Yang (Dalian Maritime University, P.R. China)

- Task-oriented and Disruption-tolerant Traffic Steering in UAV Networks
  Taiheng Ge and Chi Zhang (University of Science and Technology of China, P.R. China); Miao Pan (University of Houston, USA)

- Maritime Opportunistic Transmission: When and How Much Can DTN Node Deliver?
  Lingzheng Kong and Tingting Yang (Dalian Maritime University, P.R. China); Nan Zhao (Dalian University of Technology, P.R. China)

- Statistical Priority Control for Ad Hoc Networks with Different Communication Ranges
  Junzhi Hao (Shanghai Jiao Tong University, P.R. China); Yuan Cao (Naval Research Academy, P.R. China); Lianghui Deng and Liang Qian (Shanghai Jiao Tong University, P.R. China); Feng Yang (Shanghai Jiaotong University, P.R. China); Yunfeng Guan (Shanghai Jiao Tong University, P.R. China)

- Joint Power and Channel Allocation Based on Caching with User Preferences in D2D HetNets
  Xinpeng Lyu, Ying Wang, Man Liu, Zhendong Li, Zixuan Fei and Weichen Ning (Beijing University of Posts and Telecommunications, P.R. China)

- A Distributed Bi-connectivity Maintenance Mechanism for Flying Ad hoc Network Topology
  Xiaohan Qi (Communication Engineering Research Center, Harbin Institute of Technology Shenzhen Graduate School, P.R. China); Haojie Jin and Qinyu Zhang (Harbin Institute of Technology Shenzhen Graduate School, P.R. China); Zhihua Yang (Harbin Institute of Technology, P.R. China)

WCS11: Wireless Communications 11
Room: Level 3 - Events V
Chair: Rui Yin (Zhejiang University City, P.R. China & KwaZulu-Natal University, South Africa)

- A 3D GBSM for Ship-to-land Communications
  Yubei He, Hengtai Chang, Yu Liu and Wensheng Zhang (Shandong University, P.R. China); Jian Sun (ShanDong
Energy Efficient Prediction Based D2D-Assisted Pushing in Heterogeneous Ultra-dense Networks
Rui Liu (Beijing University of Posts and Telecommunications, P.R. China); Xiaodong Xu (Beijing University of Posts and Telecommunications & Wireless Technology Innovation Institute, P.R. China); Wenwan Chen (Rice University, America); Mengying Sun and Xiaofeng Tao (Beijing University of Posts and Telecommunications, P.R. China)

Performance Analysis for the Coexistence of Radar and Communication in VANETs
Bingqi Jia, Zhiqing Wei, Baoling Liu and Zhiyong Feng (Beijing University of Posts and Telecommunications, P.R. China)

Reinforcement Learning Based Matching for Computation Offloading in D2D Communications
Bingxin Tian, Li Wang, Yutong Ai and Aiguo Fei (Beijing University of Posts and Telecommunications, P.R. China)

Reliable Rotation Transform Aided MIMO Scheme for Underwater Visible Light Communication
Guixun Huang and Lin Zhang (Sun Yat-sen University, P.R. China)

Explore adaptive dropout deep computing and reinforcement learning to large-scale tasks processing for big data
Jia Zhao (Changchun Institute of Technology & Jilin University, P.R. China); Ming Hu and Yan Ding (Changchun Institute of Technology, P.R. China); Gaochao Xu (Jilin University, P.R. China); Chunyi Wu (Changchun Institute of Technology & Jilin University, P.R. China)

Secure Transmission in NOMA-based mMTC Networks under Statistical Delay QoS Guarantees
Suyu Lv and Shujun Han (Beijing University of Posts and Telecommunications, P.R. China); Xiaodong Xu (Beijing University of Posts and Telecommunications & Wireless Technology Innovation Institute, P.R. China); Xiaofeng Tao (Beijing University of Posts and Telecommunications, P.R. China)

A Privacy-preserving Ethereum Lightweight Client Using PIR
Yankai Xie, Chi Zhang, Lingbo Wei, Yukun Niu and Faxing Wang (University of Science and Technology of China, P.R. China); Jianqing Liu (University of Alabama in Huntsville, USA)

Smart Cyber Forensics of Rear-End Collision based on Multi-Access Edge Computing
Xianwei Wang, Yi Zhou and Xiaoyong Ma (Henan University, P.R. China); Ning Lu (Thompson Rivers University, Canada); Nan Cheng (University of Waterloo, Canada); Kuan Zhang (University of Nebraska–Lincoln, USA)

Data Compression Optimization Strategy based on Piecewise Fitting and Matrix Completion for WSNs
Shuang Zhai (Jilin University, P.R. China); Zhihong Qian (Jilin University, P.R. China); Xin Wang (Jilin University, P.R. China); Xue Wang (Jilin University, P.R. China)