

A full day event on Non-Orthogonal Multiple Access (NOMA) for 5G and IoT networks: Tutorial and Workshop

(Thursday, 16 August 2018, The Zhongjia Xinyuan Hot-spring Hotel Beijing, 北京中家鑫园温泉酒店)

<http://iccc2018.ieee-iccc.org/hotel-and-travel/>

International workshop on Non-Orthogonal Multiple Access (NOMA) for 5G and IoT networks
(Location: Conference Hall 6)

Invited Talk Session

11: 00 am – 11: 20 am: “Recent standardization progress of NOMA”, Dr. Chih-Lin I, Chief Scientist, Wireless Technologies, China Mobile Research Institute.

11: 20 am – 11: 40 am: “Uplink NOMA: Coding and Random Access”, Prof. Jinho Choi, GIST

11: 40 am – 12: 00 am: “Sparse Code Multiple Access”, Dr. Yan Chen, Huawei, P.R. China

Poster Session

12:00 pm – 12:30 pm:

1. Diversity Enhancing for Downlink Cooperative Non-Orthogonal Multiple Access Systems

Dehuan Wan (South China University of Technology, P.R. China); Fang-Jiong Chen (South China University of Technology, P.R. China); Fei Ji (South China University of Technology, P.R. China); Hua Yu (South China University of Technology, P.R. China); Yun Liu (South China University of Technology, P.R. China)

2. User Fairness Non-orthogonal Multiple Access (NOMA) in Millimeter-Wave Communications

Lipeng Zhu (Beihang University, P.R. China); Jun Zhang (Beihang University, Algeria); Zhenyu Xiao (Beihang University, P.R. China); Xianbin Cao (Beihang University, P.R. China)

3. Practical Power Allocation Schemes for Cooperative Relay Networking with NOMA

Wei Duan (Nantong University, P.R. China); Jaeho Choi (Chonbuk National University, Korea); Haiyang Yu (Chonbuk National University, Korea); Jinjuan Ju (Nantong University, P.R. China)

4. On the Performance of Multi-Relay Cellular Networks with NOMA

Wei Duan (Nantong University, P.R. China); Qiang Sun (Nantong University, P.R. China); Guo-An Zhang (Electronic and Information School, Nantong University, Jiang-Su province, P.R. China); Li Jin (Nantong University, P.R. China); Jinjuan Ju (Nantong University, P.R. China)

5. Study of the Symbol Error Rate/Bit Error Rate in Non-orthogonal Multiple Access (NOMA) Systems

Weijia Han (Shaanxi Normal University, P.R. China); Yu Wang (Shaanxi Normal University, P.R. China); Di Tang (The Third Research Institute of Ministry of Public Security, P.R. China); Ronghui Hou (Xidian University, P.R. China); Xiao Ma (Shaanxi Normal University, P.R. China)

6. Dynamic QoS-Aware Resource Allocation for Narrow Band Internet of Things

Wei Chen (Beijing University Of Posts And Telecommunications, P.R. China); Heli Zhang (Beijing University of Posts and Telecommunications, P.R. China); Hong Ji (Beijing University of Posts and Telecommunications, P.R. China); Xi Li (Beijing University of Posts and Telecommunications, P.R. China)

7. Uplink Grant-free Multi-codebook SCMA Based on High-overload Codebook Grouping

Hanyuan Huang (Beijing University of Posts and Telecommunications, P.R. China)

8. A Universal Receiver for Uplink NOMA Systems

Xiangming Meng (Huawei Technologies, Co., Ltd., P.R. China); Yiqun Wu (Huawei, P.R. China); Chao Wang (Huawei Technologies Co. Ltd., P.R. China); Yan Chen (Huawei, P.R. China)

9. A Sparse Superposition Multiple Access Scheme and Performance Analysis for 5G Wireless Communication Systems

Zhang Kai (Beijing University of Posts and Telecommunications, P.R. China); Jin Xu (Beijing University of Posts and Telecommunications, P.R. China); Changchuan Yin (Beijing University of Posts and Telecommunications, P.R. China); Weiqiang Tan (Guangzhou University, P.R. China); Chunguo Li (Southeast University, P.R. China)

12:30 pm – 14:00 pm: Lunch Break

Tutorial: Invoking Emerging Analytical Tools for NOMA: Matching Theory, Stochastic Geometry and Machine Learning

(Location: Conference Hall 1)

<http://iccc2018.ieee-iccc.org/program/invited-talks-2/>

Presenter: Prof. Zhiguo Ding, Manchester University, U.K. and Dr. Yuanwei Liu, Queen Mary University of London, U.K.

14:00 pm – 15:30 pm:

1. NOMA Basics - discuss the Basic Principles of NOMA.
2. Addressing three critical issues for NOMA
3. Invoking Matching Theory for NOMA.

15:30 pm – 16:00 pm: Coffee Break

16:00 pm – 17:30 pm:

4. Invoking Stochastic Geometry for NOMA: Large Scale Network Analysis
5. Invoking Machine Learning for NOMA
6. Research Challenges and Opportunities for NOMA

18:30 pm – 21:00 pm:

Dinner Buffet (Heyuan Buffet)