

The 6th Brainstorming Workshop on 5G Wireless – Program

Time	Agenda	
Sep 11, 2015		
8:00 – 8:50	Registration: Building 1, Level 1, LT1	
8:50 – 9:00	Welcome: Prof. Tony Quek (SUTD, SG)	
9:00 – 9:20	Opening Address: Prof. Yeo Kiat Seng, Associated Provost (Graduate Studies & International Relations), SUTD	
9:20 – 10:40	Session 1: Roadmap and Recent Update on 5G. Moderator: Prof. Char-Dir Chung (National Taiwan Univ., TW)	
20 min/talk	Speaker 1: Prof. Xiaohu You (Dean, Southeast Univ. / Secretary General, Future Forum, CN)	Millimeter-Wave Transceivers and Key Building Blocks for 5G
	Speaker 2: Prof. Kiat Seng Yeo (Associate Provost, SUTD, SG)	Wireless Sensor Networks: Technology and Applications
	Speaker 3: Dr. Prof. Zhiyong Feng (Director of Key Laboratory of Universal Wireless Communications, Beijing Univ. Post and Telecommunications, CN)	Resource Management and Latency Reduction Methods for MTC in 5G
	Speaker 4: Dr. Bao Feng (Director of Security and Privacy Lab, Huawei, SG)	5G Security and Privacy
10:40 – 11:00	Coffee Break	
11:00 – 12:00	Session 2: Enabling Technologies: Network. Moderator: Prof. Zhiyong Feng (BUPT, CN)	
12 min/talk	Speaker 1: Prof. Vincent Lau (Professor, HKUST, HK)	Networked Control with Energy Harvesting Sensors
	Speaker 2: Prof. Kaibin Huang (Assistant Professor, Univ. of Hong Kong, HK)	Energy Efficient Mobile Cloud Computing Powered by Wireless Energy Transfer
	Speaker 3: Dr. Jemin Lee (Temasek Research Fellow, SUTD, SG)	Wireless Physical Layer Security: Challenges for Future Networks
	Speaker 4: Prof. Mugen Peng (Professor, Beijing Univ. Post and Telecommunications, CN)	Radio Access Network Evolution in 5G: From HetNet to EC-RAN
	Speaker 5: Prof. Phone Lin (Professor, National Taiwan Univ., TW)	Machine Type Communications
20 min	Open Discussion	
12:20 – 13:30	Buffet Lunch @SUTD	
13:30 – 14:50	Session 3: Enabling Technologies: Radio Access. Moderator: Prof. Bingli Jiao (Peking Univ., CN)	
12 min/talk	Speaker 1: Prof. Bingli Jiao (Professor, Peking Univ., CN)	A Proposal for Network Implementation of Co-Frequency and Co-Time Full Duplex
	Speaker 2: Prof. Char-Dir Chung (Executive Secretary, Board of Science and Technology, Executive Yuan / Professor, National Taiwan Univ., TW)	Spectrally Precoded OFDM Without Guard Insertion
	Speaker 3: Prof. Fanggang Wang (Associate Professor, Beijing Jiaotong Univ., CN)	A Novel Preamble Design for 5G Contention-based Uplink

	Speaker 4: Prof. Gang Wu (Professor, Univ. of Electronic Science and Technology of China, CN)	Filtered OFDM and SCMA for 5G Wireless Access
	Speaker 5: Prof. Chih-Peng Li (Professor, National Sun Yat-sen Univ., TW)	Elimination of Data Identification Problem for Data-Dependent Superimposed Training
20 min	Open Discussion	
14:50 – 16:10	Session 4: Enabling Technologies: Services. Moderator: Prof. Vincent Lau (HKUST, HK)	
12 min/talk	Speaker 1: Dr. Ying Chang Liang (Principal Scientist, Institute for Infocomm Research, SG)	5G in Unlicensed Spectrum
	Speaker 2: Prof. Min Sheng (Professor, Xidian Univ., CN)	BigSON: Big Data Meets Self Organization
	Speaker 3: Prof. Meixia Tao (Professor, Shanghai Jiaotong Univ., CN)	Physical Layer Multicasting and Caching towards Content-Centric Wireless Networks
	Speaker 4: Prof. Wenyi Zhang (Professor, Univ. of Science and Technology of China, CN)	How Good Need Your Transceivers Be?
	Speaker 5: Prof. Lingyang Song (Professor, Peking Univ., CN)	Full-Duplex Cognitive Radio: A New Design Paradigm for Enhancing Spectrum Usage
20 min	Open Discussion	
16:10 – 16:30	Coffee Break	
16:30 – 17:50	Session 5: Revolution Technologies in 5G. Moderator: Prof. Hsuan-Jung Su (National Taiwan Univ., TW)	
12 min/talk	Speaker 1: Prof. Hsuan-Jung Su (Professor, National Taiwan Univ., TW)	Channel Feedback Reduction for Multiuser MIMO Systems
	Speaker 2: Prof. Jianhao Hu (Vice Director, Univ. of Electronic Science and Technology of China, CN)	Next Generation Computation Architecture on Chip for 5G
	Speaker 3: Prof. Liqiang Zhao (Professor, Xidian Univ., CN)	Software Defined and Virtualized Radio Access Network
	Speaker 4: Prof. Yik-Chung Wu (Associate Professor, Univ. of Hong Kong, HK)	Distributed CFOs Estimation in Wireless Networks via Belief Propagation
	Speaker 5: Prof. Shaodan Ma (Assistant Professor, Univ. of Macau, MO)	Analysis on Full Duplex Amplify-and-Forward Relay Networks under Nakagami Fading Channels
20 min	Open Discussion	
17:50 – 18:30	Wrap-Up Session. Moderator: Prof. Russell Hsing (NCTU, TW)	
18:30 – 20:30	Dinner @East Coast Jumbo Restaurant (Invited Guests Only)	