IEEE GLOBECOM™ IEEE Global Communications Conference 9-13 December 2018 // Abu Dhabi, UAE Gateway to a Connected World

7th International Workshop on Emerging Technologies for 5G and Beyond Wireless and Mobile Networks (ET5GB)

In conjunction with IEEE GLOBECOM 2018, Sunday December 9, 2018 Abu Dhabi, UAE, http://www.et5gb.com/

http://globecom2018.ieee-globecom.org/workshop/ws-02-et5gb-emerging-technologies-5g-and-beyond-wireless-and-mobile-networks

Workshop Chairs

Tommy Svensson, Chalmers U. of Technology, Sweden
Halim Yanikomeroglu, Carleton University, Canada
Peiying Zhu, Huawei Technologies, Canada

Technical Program Chairs

Huseyin Arslan, University of South Florida, Tampa, USA
Lingjia Liu, Virginia Tech, USA
Charlie (Jianzhong) Zhang, Samsung Electronics, USA

Keynote Speakers

To be confirmed

Panel Program

To be confirmed

Technical Program Committee (confirmed sofar)

Abdulkareem Adinoyi, Saudi Telecommunications Company (STC)
Raviraj Adve, University of Toronto
İbrahim Altunbaş, Istanbul Technical University
Sergey Andreev, Tampere University of Technology
Imran Ansari, Texas A&M University at Qatar (TAMUQ)
Hadi Baligh, Huawei Technologies Canada co. Ltd.
Paolo Baracca, Nokia Bell Labs
Ebrahim Bedeer, Ulster University
Mats Bengtsson, KTH Royal Institute of Technology
Haotong Cao, Nanjing University of Posts and Telecommunications
Houda Chafnaji, INPT Rabat
Rong-Rong Chen, University of Utah
Oussama Damen, University of Waterloo
Qinghe Du, Xi'an Jiaotong University
Lutfiye Durak-Ata, Istanbul Technical University
Ozgur Ertug, Gazi University
Carlo Fischione, KTH
David Gonzalez G., Continental Automotive
Ekram Hossain, University of Manitoba
Hazer Inaltekin, Princeton University
Toufiqul Islam, Huawei Canada Research Center
Omneya Issa, Communications Research Centre Canada
Aman Jassal, Huawei
Gunes Karabulut Kurt, Istanbul Technical University
Michel Kulhandjian, University of Ottawa
Yicheng Lin, Huawei Technologies
Liang Liu, University of Toronto
Liangping Ma, Interdigital
Behrooz Makki, Chalmers University of Technology
Nicholas Mastronarde, University at Buffalo
Masoumeh Nasiri-Kenari, Sharif University of Technology
Keivan Navaie, Lancaster University
Apostolos Papathanassiou, Intel Corporation
Nikolaos Pappas, Linköping Univ.
S. Mohammad Razavizadeh, IUST
Frank Schaich, Nokia Bell Labs
Karim Seddik, American University in Cairo
Cong Shen, University of Science and Technology of China
Gokul Sridharan, Qualcomm In
Mehrdad Taki, University of Qom
Miurel Tercero, Ericsson AB
Olav Tirkkonen, Aalto University
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Hugo Tullberg, Ericsson Research
Joerg Widmer, IMDEA Networks Institute
Xiaodong Xu, Beijing University of Posts and Telecommunications
Rui Yang, Interdigital
Yang Yi, Virginia Tech
Di Yuan, Linköping University
Wolfgang Zirwas, Nokia Siemens Networks GmbH&CoKG

Important Dates

Full Paper Submission:	~~01 July 2018~~ **14 July 2018**
Acceptance Notification:	15 August 2018
Camera-Ready Submission:	15 September 2018
Workshop:	09 December 2018

EDAS link for paper submission:
https://edas.info/newPaper.php?c=25048&track=91829
Authors should follow the Globecom submission guidelines (max 6 pages + 1 with overlength charge).

Call for papers

The 5G standards are expected to be approved by ITU around 2020 timeframe followed by the initial commercial deployments in the early 2020s. As such, it is time to initiate a brainstorming endeavour towards the beyond-5G wireless networks; we refer to such networks as 5G+ in order to include the evolution of the 5G standards in 2020s and to perform the groundwork for those to be developed towards 2030. This workshop will be a venue to brainstorm on and to identify the emerging concepts, technologies, and analytical tools for 5G+ networks.

We aim to bring together leading researchers in both academia and industry, and to provide a forum for researchers from diverse backgrounds to share their views on 5G+ and to have an open dialogue on the future of wireless research. The goal is to identify the key 5G+ technologies that can deliver significant capacity, coverage, user-experience benefits, and can integrate well with the vertical industries. Topics of interest include, but are not limited to the following.

Novel radio access network (RAN) architectures
- Non-terrestrial networks, very low-earth orbit (VLEO) satellites, aerial/drone/UAV-BSs, high altitude platforms (HAPs)
- Multi-tier HetNets, small cells, moving cells
- Advanced relaying, user terminal relaying, mesh relaying, COMP
- Network slicing enablers, NFV

Novel enablers for wireless networks
- Machine learning, deep learning, artificial intelligence
- Data analytics, context awareness
- Edge computing, coded caching

Advanced radio resource management (RRM) techniques
- Interference management, interference awareness
- Inter-cell/node/beam-space interference coordination

Emerging technologies in physical layer
- ULLRC (ultra-low latency and reliable communications)
- Efficient application of multi-numerology concept
- Grant-free random access
- FSO (free-space optical) communications
- Massive MIMO, hybrid/low-resolution transceivers, AAS
- Multiuser communications, network information theory
- Novel modulation and coding schemes, waveforms
- Faster-than-Nyquits (FTN) signaling; full-duplex
- Code-domain NOMA, power-domain NOMA, overloaded CDMA

Verticals and novel services
- C-V2X; drone-UEs
- Enhanced voice and video, telepresence, AR/VR
- Machine-to-machine (M2M), MTC, P2P, D2D communications

mm-wave and THz communications
- Channel characteristics and modeling, feasibility studies
- Initial access, beamforming, beam tracking, mobility solutions

Energy efficiency
- Energy consumption models
- Joint RF-baseband optimization, end-to-end energy optimization

Spectrum
- Aggregation of intra & inter-band carriers for both FDD and TDD
- Cognitive radio and dynamic spectrum access

Prototype and test-bed for 5G+ technologies