6th Workshop on NOMA for 5G and Beyond

In conjunction with IEEE ICC 2020, Thursday, 11 June 2020, Dublin, Ireland

Workshop Organizers

General Chairs	Robert Schober (FAU, Germany) George K. Karagiannidis (AUTH, Greece) Octavia A. Dobre (Memorial Univ., Canada)
TPC Chairs	Mojtaba Vaezi (Villanova University, USA) Zhiguo Ding (Manchester University, UK)

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Hazer Inaltekin (Macquarie University, Australia)
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Tao Han (University of North Carolina at Charlotte, USA)
Wonjae Shin (Pusan University)
Xiang Cheng (Peking University, China)
Zhi Chen (UEST, China)
Mohammad Hossein Yassaee (IPM, Iran)

Important Dates

Full Paper Submission:	**January 20, 2020**
Acceptance Notification:	March 11, 2020
Camera-Ready Submission:	March 27, 2020
Workshop Date:	June 11, 2020

Call for Papers

Future radio access networks are expected to have the capability to support: 1) massive connectivity and dramatically higher capacity; 2) diverse sets of users and applications with radically different requirements in terms of delay, bandwidth, etc.; and 3) flexible and efficient use of all available resources, such as spectrum and time. The above requirements, especially the need for massive connectivity and diverging latency, challenge the current cellular networks in many ways, particularly the available multiple access (MA) methods. As a result, significant efforts have been recently made to design more spectrally and energy efficient MA schemes for future wireless networks. A common feature of these newly designed MA schemes is the avoidance of the use of conventional orthogonal schemes, such as time division multiple access (TDMA) and frequency division multiple access (FDMA). Instead, users are encouraged to share their bandwidth resources opportunistically according to their diverse channel conditions and their quality of service requirements. The superior spectral efficiency of these non-orthogonal multiple access (NOMA) schemes has been demonstrated by recent theoretical and experimental studies.

The **6th Workshop on NOMA for 5G and Beyond** will take place during IEEE ICC'20 in Dublin, Ireland, on June 11, 2020. The workshop will provide a forum for brainstorming on the emerging NOMA techniques for 5G cellular networks and beyond. We aim to bring together the leading researchers in the field, both from academia and industry, to share their recent findings and their views on what access methods best suit the diverse requirements of next-generation networks. Topics of interest include, but are not limited to:

- *Novel network architecture design for NOMA*
- *Emerging applications of NOMA in 5G, IoT, V2X, and UAV*
- *Resource allocation and optimization in NOMA networks*
- *Grant-free NOMA and NOMA random access*
- *Advanced channel coding and modulation schemes for NOMA*
- *Security provisioning in NOMA*
- *Coexistence of NOMA and OFDMA*
- *Multiple antenna signal processing techniques for NOMA*
- *Pilot design and channel estimation for NOMA*
- *NOMA assisted wireless caching and mobile edge computing*
- *Machine learning and deep learning for NOMA*
- *NOMA in wireless powered communications*
- *Orthogonal time frequency space (OTFS)-NOMA*
- *MIMO and intelligent reflecting surface (IRS)-assisted NOMA*
- *NOMA in visible light and underwater communications*

The workshop features two keynotes given by world leading researchers in the field and a panel discussion including researchers from industry and academia. Submitted papers should follow the IEEE ICC paper submission guidelines. Papers should be submitted for review through EDAS.