

IEEE International Workshop on Rate-Splitting (Multiple Access) for 6G

June 14–18, 2021
Montreal, Canada



Scope

This workshop is dedicated to the theory and applications of general and powerful transmission frameworks based on Rate-Splitting Multiple Access (RSMA). RSMA consists in decoding part of the interference and in treating the remaining part of the interference as noise. This enables RSMA to softly bridge and therefore reconcile the two extreme strategies of fully decode interference and treat interference as noise and provide room for spectral efficiency, energy efficiency and QoS enhancements in a wide range of network loads and user deployments, robustness against imperfect Channel State Information at the Transmitter (CSIT), as well as feedback overhead and complexity reduction. This International Workshop on Rate-Splitting Multiple Access for Beyond 5G will take place during IEEE ICC 2021 in Montreal, Canada. The workshop will provide a forum for sharing new ideas, hearing recent developments and brainstorming on emerging RSMA for 5G and beyond networks. We aim to bring together leading researchers in the field, both from academia and industry, to share their recent findings and views on how RSMA can tackle numerous challenges of future generation networks.

Topics

We seek original completed and unpublished work not currently under review by any other journal/magazine/conference. Topics of interest include, but are not limited to:

- RSMA to achieve the fundamental limits of wireless networks
- RSMA for multi-user/multi-cell multi-antenna networks
- RSMA-based robust interference management
- RSMA in MU-MIMO, CoMP, Massive MIMO, millimetre wave MIMO, relay, cognitive radio, coded caching, physical layer security, cooperative communications
- RSMA to generalize SDMA and NOMA
- Physical layer design of RSMA-based network
- Coding and Modulation for RSMA
- Cross-layer design, optimization and performance analysis of RSMA
- Implementation and standardization of RSMA
- RSMA applications in massive MTC, massive IoT, V2X, cellular, UAV and satellite networks, etc.

General Co-chairs

Prof. Bruno Clerckx

(Imperial College London, UK)

Prof. Mérouane Debbah

(Huawei Technologies France Co. Ltd., France)

Prof. Daniel B. da Costa

(Federal University of Ceará, Brazil)

Dr. Peiyong Zhu

(Huawei Technologies Canada Co. Ltd., Canada)

Dr. Yijie (Lina) Mao

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Main contact

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Important Dates

- ❖ Paper submission deadline:
January 20, 2021
- ❖ Notification of acceptance: February 20, 2021
- ❖ Camera-ready papers: March 1, 2021

Submission link

<https://edas.info/N27513>

Webpage link

<https://icc2021.ieee-icc.org/workshop/ws-12-workshop-rate-splitting-multiple-access-6g>

Paper Submission

The workshop accepts only novel, previously unpublished papers. The page length limit for all initial submissions for review is SIX (6) printed pages (10-point font) and must be written in English. All final submissions of accepted papers must be written in English with a maximum paper length of six (6) printed pages (10-point font) including figures. No more than one (1) additional printed page (10-point font) may be included in final submissions and the extra page (the 7th page) will incur an over length page charge of USD100. For more information, please see IEEE ICC 2021 official website: <https://icc2021.ieee-icc.org/authors>