

IEEE International Workshop on Reconfigurable Intelligent Surfaces for future wireless communications

June 14–18, 2021
Montreal, Canada



General Co-chairs

Alessio Zappone

(University of Cassino and
Southern Lazio)

Marco Di Renzo

(CNRS & CentraleSupélec)

Wei Xu

(Southeast University)

Chau Yuen

(Singapore University of
Technology and Design)

Mark Flanagan

(University College Dublin,
Ireland)

Daniel Benevides da Costa,

(Federal University of Ceará,
Brazil)

Main contact

alessio.zappone@unicas.it

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/program/workshops>

Scope

With 5G networks being rolled out this year, new and more stringent performance requirements are expected of beyond 5G wireless networks, which will have to provide very high data-rates, as well as heterogeneous services, such as sensing, localization, and low-latency ultra-reliable communications. In order to achieve these challenging goals, a promising approach lies in integrating reconfigurable intelligent surfaces (RISs), also known as intelligent reflecting surfaces (IRSs), into the architecture of future wireless communication networks. RISs are thin layers of meta-materials which can be designed to have specific electromagnetic properties. RISs can be used to coat environmental objects, thus enabling to customize the propagation properties of the communication environment. This potentially yields a huge increase of the degrees of freedom that can be exploited for system performance optimization, provided the challenges related to the incorporation of RIS into wireless networks can be overcome. This workshop is expected to bring together academic and industrial researchers in an effort to identify and discuss the major technical challenges and recent breakthroughs related to RIS. Two keynotes by foremost experts on RIS will be offered during the workshop, and one panel will showcase a demonstrator of the RIS technology

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We seek original completed and unpublished work not currently under review by any other journal/magazine/conference.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:

- Fundamental theory for RIS-based communications
- Transceiver optimization for RIS-based communications
- Resource Allocation for RIS-based communications
- Channel measurement and modeling for RIS-based communications
- Artificial intelligence for RIS-based communications
- Prototypes and test-beds for RIS-based communications
- Security in RIS-based communications
- Software-defined design and implementation for RIS-based communications
- Indoor/outdoor localization for RIS-based communications
- Distributed deployment and network planning of RIS-based communications
- Integration of RIS with state-of-the-art wireless technologies

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>