



# **Call for Papers**

## **Selected Areas in Communications Symposium**

### **Satellite and Space Communications Track**

#### **Track chair**

Daniele Tarchi, University of Bologna, Italy daniele.tarchi@unibo.it

### **Scope and Topics of Interest**

The recent advances in satellite communication technology have enabled an unprecedented increase of services that can distributed according to an anywhere-anytime paradigm. In this regard, the appearance of new standards, such as 5G, and the simultaneous integration with terrestrial infrastructure have introduced new technical challenges to be faced by the research community. In particular, the integration of satellite with 5G networks has further motivated the study of new networking and communication paradigms, and attracted significant interest from both academia and industry.

The Satellite and Space Communications track solicits original and unpublished work not currently under review by any other conference or journal. The focus of this track is on exploring and discussing new technical breakthroughs and applications focusing on all aspects of satellite and space communications.

To ensure complete coverage of the advances in this field, the SSC Track of the SAC Symposium solicits original contributions in, but not limited to, the following topical areas:

- Satellite and space communications and networking
- Near-Earth satellite communications
- Interplanetary communications
- Nano-satellites communications
- Satellite-terrestrial integrated networks
- Cognitive satellite networks
- MIMO satellite communications
- Antennas for satellite communications
- Channel models for satellite communications

- Coding, modulation and synchronization schemes for satellite communications
- Signal detection and estimation for satellite communications
- Statistical and adaptive signal processing for satellite systems
- Transport protocol performance over satellite
- Security, privacy, and trust in satellite networks
- Radio resource management in satellite networks
- Software-defined networking (SDN) and Network function virtualization (NFV) in satellite systems
- Delay Tolerant Networking for satellite networks
- QoS and performance for satellite networks
- On-board switching and processing technologies
- Interference and fade mitigation techniques over satellite channels
- Mega-constellations design
- M2M over satellite applications
- New standard in navigation systems: Galileo, GPS, SBAS (EGNOS, WAAS...), GBAS.
- Emerging standards: DVB-Sx, DVB-SH, DVB-RCS2, IP over Satellite
- Satellite-based disaster recovery
- Satellite-based remote e-Health
- Satellite-based solutions for aeronautical applications
- Satellite communications for maritime applications (e.g., AIS)
- Next-generation channel coding for deep-space communications
- Telemetry/telecommand space protocol evolutions
- Architecture and key techniques for space information networks
- Space optical wireless communications
- Internet of remote things

#### **Submission Guidelines**

The IEEE ICC 2020 website (icc2020.ieee-icc.org) provides full instructions on manuscript format and how to submit a manuscript. You will select the desired symposium/track when submitting your manuscript.