

IEEE Global Communications Conference

4-8 December 2022 – Rio de Janeiro, Brazil

Accelerating the Digital Transformation through Smart Communications



CALL FOR PAPERS AND PROPOSALS

Selected Areas in Communications Satellite and Space Communications

Track Chair

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Scope and Motivation

The recent advances of satellite communication technology have witnessed an unprecedented increase of services possibly distributed according to anywhere-anytime paradigm. To this regard, the appearance of new standards, such as 5G, B5G and 6G, and the simultaneous integration with terrestrial infrastructure has introduced new technical challenges to be faced by the scientific community. In particular, the integration of satellite with future aerial or terrestrial networks has further motivated the study of new communication, networking and computation paradigms, and attracted significant interest from both academic and industrial communities.

The Satellite and Space Communications track solicits original and unpublished work not currently under review by any other conference or journal.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.

Topics of Interest

The Satellite and Space Communications Symposium seeks original contributions in the following topical areas, plus others that are not explicitly listed but are closely related:

- Satellite and space communications and networking
- Near-Earth satellite communications
- Antennas for Satellite Communications
- MIMO satellite communications
- Hybrid satellite/terrestrial networks
- Coding, modulation and synchronization schemes for satellite communications
- Channel models for satellite communications
- Transport protocol performance over satellite
- Security, privacy, and trust in satellite networks

- Radio resource management in satellite networks
- Emerging standards: DVB-Sx, DVB-SH, DVB-RCS2, IP over Satellite
- Cognitive satellite networks
- 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
- Satellite and space communications and networking
- Near-Earth satellite communications
- Antennas for Satellite Communications
- MIMO satellite communications
- Hybrid satellite/terrestrial networks
- Coding, modulation and synchronization schemes for satellite communications
- Nano-satellites communications
- Mega-constellations design
- M2M over satellite applications
- New standard in navigation systems: Galileo, GPS, SBAS (EGNOS, WAAS...), GBAS.
- Signal detection and estimation for satellite communications
- Statistical and adaptive signal processing for satellite systems
- Satellite communications for maritime applications (e.g., AIS)
- Satellite-based disaster recovery
- Satellite-based remote e-Health
- Satellite-based solutions for aeronautical applications
- Interplanetary communications
- Next-generation channel coding for deep-space communications
- Telemetry/telecommand space protocol evolutions
- Internet of Remote Things
- Satellite communications with 5G, B5G, or 6G

Important Dates

Paper Submission: 15 April 2022

Notification: 25 July 2022

Camera Ready and Registration: 1 September 2022

How to Submit a Paper

All papers for technical symposia should be submitted via EDAS. Full instructions on how to submit papers are provided on the IEEE Globecom 2022 website: <https://globecom2022.ieee-globecom.org/>