IEEE ICC™

IEEE International Conference on Communications

IEEE ComSoc ◆IEEE

Roma Convention Center
May 28 - June 1, 2023

Sustainable Communications for Renaissance

The 2023 IEEE International Conference on Communications (ICC) will be

Call for Papers

Workshop on Mega-Constellations in the 6G Era (6GSatComNet 23)

SCOPE

There is rejuvenated interest in satellite communications & networking. Both the satellite and 3GPP industries aim at developing a seamlessly integrated one network. One main difference between the legacy satellite systems and the mega-constellations of the 6G era satellite system is the networking aspect with very high-speed inter-satellite links. For efficient operation, the network will have to be autonomous, intelligent, resilient, self-organizing & self-controlling to reduce the cost and risk of human intervention. Distributed decision making, fault recovery, resilience, and scalability are among the important features. These networks will rely on AI techniques at all levels: Ground operations, on-board operations, inter-satellite and satellite-to-ground links. The satellite mega-constellations in the 6G era will create unprecedented opportunities once the unprecedented challenges are addressed by the research community.

TOPICS OF INTEREST

We seek original completed and unpublished work not currently under review by any other journal/ magazine/conference.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

- Design and analysis of satellite mega-constellations
- Novel use-cases for satellite networks and integration with terrestrial networks
- HAPS (high altitude platform station) systems and HAPS constellations
- Integrated terrestrial-satellite networks, satellite – 5G/6G coexistence
- 3GPP 6G standardization with satellite communications as a native technology
- Wireless (free-space optical) communications for satellite networks, laser links
- Satellite networks for enhanced localization, navigation and precision positioning
- Mobility/handover management in satellite networks
- Quantum key distribution (QKD) in satellite networks
- Computation offloading through/from satellite networks
- Edge computing and caching in satellite networks
- Topology management and routing in satellite networks
- Random access techniques and dynamic spectrum sharing in satellite networks
- Multicasting techniques in satellite networks
- MIMO, massive MIMO, advanced antenna architectures, and dynamic beamforming
- Interference avoidance and mitigation in satellite networks
- Physical layer security in satellite communications
- Security, privacy and authentical in satellite networks
- Testbeds for satellite networks and experimental studies
- AI/ML for satellite networks
- Simulation platforms for satellite networks
- IoT and M2M applications in satellite networks
- Advanced physical layer technologies for satellite communication

PAPER SUBMISSION

All papers for Workshops should be submitted via EDAS.
Full instructions on how to submit papers are provided on the IEEE ICC 2023 website:
https://icc2023.ieee-icc.org/

IMPORTANT DATES

Paper Submission
11 October 2022

Tutorial Proposals
4 October 2022

Acceptance Notification
18 January 2023

Workshop Proposals
2 August 2022

Camera-Ready
15 February 2023

Technical Panel Proposals
13 December 2022

Submission procedures are available at icc2023.ieee-icc.org

TECHNICAL SYMPOSIA

- IoT & Sensor Networks
- Selected Areas in Communications

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IMPORTANT DATES

Paper Submission Deadline:
20 January 2023

Paper Acceptance Notification:
6 March 2023

Camera Ready and Registration for accepted papers:
15 March 2023

WEBPAGE LINK
icc2023.ieee-icc.org