

10th Advanced Satellite Multimedia Conference 16th Signal Processing for Space Communications Workshop

2020 October 20th – 21st
CALL FOR PAPERS

The 10th Advanced Satellite Multimedia Systems Conference and the 16th Signal Processing for Space Communications Workshop are jointly organised by the DLR Institute for Communications and Navigation, the European Space Agency and the University of Bologna in cooperation with JOANNEUM RESEARCH and the Graz University of Technology. The leitmotiv of the event will be the role of satellite communications within 5G and the ongoing New Space developments. The conference is IEEE sponsored and technically endorsed by ComSoc.

Building upon the renowned tradition of the two events, this joint conference is an outstanding opportunity for industry and research institutions to get the latest updates and to exchange information about recent advances and emerging technologies for mobile, broadband and broadcast satellite communication systems.

Building on the success of the past edition, also the 2020 conference foresees two separate tracks:

- **Track A** with stronger focus on theoretical advances with relatively low TRL and requiring full paper submission. Accepted papers will be published on IEEEExplore.
- **Track B** addressing mainly industrial developments with higher level of technological maturity based on extended abstract submission.

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Topics of interest include:

Theory, Techniques, and Technologies

- Adaptive antennas
- Artificial Intelligence and Machine Learning for SatCom
- Coding, modulation and synchronization
- Multiple Access techniques
- MIMO, multi-user detection & diversity techniques
- Fading mitigation techniques
- Advanced Interference and Inter-Modulation Management
- SDR based ground equipment and payload design
- Propagation measurements and channel models
- Network slicing and radio resource management
- Advanced on board processing techniques
- Optical free space analogue and digital communications
- MEC schemes for integrated 5G-satellite networks
- SDN/NFV concepts for integrated 5G-satellite networks

Systems and Applications

- Very High Throughput Satellites
- Integrated 5G and beyond satellite networks
- Massive M2M/IoT over satellite
- Nano and pico satellites technologies
- Antennas and user-terminal technologies
- Next generation mobile, broadband and broadcast satellite systems
- Mega Constellations, Very Low Earth Orbit systems and High Altitude Pseudo-Satellites
- Satellite-based solutions for safety critical communications (aeronautical, maritime, railways)
- User requirements, business and market analysis of SatCom systems
- Standardization and regulatory issues
- Satellite demonstrations and trials
- High Speed point-to-point professional links (Backhauling, Trunking, DSNG, ...)

Important dates

Full Paper (Track A) or Extended Abstract (Track B) submission via EDAS using IEEE Format: 15-May 15 June 2020

Acceptance notice: **31 July 2020**

Final manuscript due: **15 September 2020**

THE CONFERENCE WILL BE HELD AS *VIRTUAL EVENT*

For further information, please visit <https://www.asmsconference.org>

or contact

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An On-Site Conference might take place in Graz in Fall 2021

Technically endorsed by:

Co-organized by:

