

# 10<sup>th</sup> Advanced Satellite Multimedia Conference 16<sup>th</sup> Signal Processing for Space Communications Workshop 2020 September 7<sup>th</sup> – 10<sup>th</sup>, Graz (Austria) CALL FOR PAPERS

The 10<sup>th</sup> Advanced Satellite Multimedia Systems Conference and the 16<sup>th</sup> 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.

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.
- **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:**  
**20 March 2020**

**Acceptance notice:**  
**1 May 2020**

**Final manuscript due:**  
**15 June 2020**

For further information, please visit <https://www.asmsconference.org> or contact [tomaso.decola@dlr.de](mailto:tomaso.decola@dlr.de)



## Conference Venue:

The joint event will be held at the Hotel "Das Weitzer", located in the very city centre of Graz, the capital of Styria and the second-largest city in Austria. Graz has a long academic tradition as seat of six universities. Its historic centre is one of the best-preserved in Central Europe.

Co-organized by:



Organization Support:

