

12th Advanced Satellite Multimedia Systems Conference 18th Signal Processing for Space Communications Workshop

26 – 28 February 2025
Sitges, near Barcelona (Spain)

The 12th Advanced Satellite Multimedia Systems Conference and the 18th Signal Processing for Space Communications Workshop are jointly organised by the DLR Institute for Communications and Navigation and the Centre Tecnològic de Telecomunicacions de Catalunya (CTTC), with the scientific support of the European Space Agency (ESA) and the University of Bologna.

The leitmotiv of the event will be the role of Non-Terrestrial Networks (NTN) within future 6G systems.

Following a consolidated tradition, this top-level event for the Satellite Communications community provides a very exciting program in terms of keynote speeches, tutorials and special sessions, addressing the most advanced research topics in satellite communications, together with great opportunities of networking with other colleagues and experts from both academia and industry.

Building on the success of the past editions, also the 2025 conference foresees two separate tracks:

- **Track A** with stronger focus on theoretical advances with relatively low TRL and requiring full paper submission (max 8 pages).
- **Track B** addressing mainly industrial developments with higher level of technological maturity based on extended abstract submission.

General Co-Chairs

Sandro Scalise, DLR

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Industrial Co-Chairs

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Alenia Space

Luca Lodigiani, Inmarsat

Gino Masini, Ericsson

Munira Jaffar, EchoStar

Topics of interest include:

- Adaptive antennas and MIMO
- Distributed beamforming for satellite swarms
- Advanced PHY/MAC techniques
- SDR-based ground and space components
- Flexible, intelligent and reconfigurable payloads for NTN
- Network slicing, orchestration and radio resource management
- SDN/NFV and network disaggregation
- Cloud continuum (e.g. orbital edge computing)
- Optical communications (intersatellite links, feeder links, space terminals, ground stations)
- (All)Optical transport networks
- Ultra-high throughput satellite systems
- Massive Internet of Space Things
- Mega-Constellations and vLEO/HAPS swarms
- Advanced multi-orbit / multi-frequency constellations
- 3D networks and enablers for the native unification of TN and NTN (e.g. TN-NTN seamless mobility)
- NTN sustainability
- Direct to device satellite connectivity
- Standardization and regulatory issues
- Satellite demonstrations and trials and Proof-of-Concepts
- Secure and resilient satellite connectivity
- Satellite-augmented vehicular communications
- Artificial Intelligence and Machine Learning applied to satellite communications
- Reconfigurable intelligent surfaces for satellite communications
- Quantum satellite communications



Important deadlines

[Submission via EDAS](#) using [IEEE Templates](#): **31 October 2024**

Acceptance notice: **15 December 2024**

Final manuscript due: **15 January 2025**

For further information, please visit
<https://www.asmsconference.org>
or contact ASMS@dlr.de



Conference Venue:

The joint event will be held at the Hotel [Sunway Playa Golf & Spa](#), located in front of the sea in the residential area of [Sitges](#). Located about 35 kilometres southwest of Barcelona between the Garraf Massif and the Mediterranean Sea, Sitges is renowned worldwide for its Film Festival and Carnival as well as known for its beaches, nightspots and historical sites.



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