






Biennial since 1998

CSNDSP

2020

Special Session on Satellite and Space Communications

Name and affiliation of organizers

<p>Wilfried Gappmair Graz University of Technology, Graz, Austria gappmair@tugraz.at</p>  <p>Prof. Gappmair's main interests and research activities are focused on communication theory, channel coding, digital modulation, parameter estimation, synchronization in digital receivers, as well as satellite and wireless optical communications in general. He is author and co-author of about 85 refereed journal and conference papers covering his fields of interest.</p>	<p>Ioannis Moscholios University of Peloponnese, Patras, Greece idm@uop.gr</p>  <p>Prof. Moscholios' research interests include teletraffic engineering in Next Generation networks, performance evaluation and optimization of telecom networks as well as network simulation. He has published more than 155 papers in international journals and conferences. He is also a co-author of the book "Efficient Multirate Teletraffic Loss Models beyond Erlang" (Wiley-IEEE Press, 2019).</p>	<p>Athanasios D. Panagopoulos National Technical University of Athens, Greece thpanag@ece.ntua.gr</p>  <p>Prof. Panagopoulos' research interests include radio communication systems design, RF and optical satellite communication networks, as well as propagation effects on multiple access systems and on communication protocols for the optimization of radio resources allocation. He has published more than 370 journal and conference papers. He is also author and co-author of 35 book chapters as well as editor of 2 books in his areas of interest.</p>
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Scope of the session

Particularly interesting are problems related to power and spectrum efficiency, flexibility and adaptability for different propagation conditions, broadband requirements and regulatory implications, mobile services, parameter estimation and synchronization at very low signal-to-noise ratios, fading and interference mitigation techniques, complexity and feasibility issues. However, as satellite and space solutions are becoming more complex and their functions more interrelated, also cross-layer protocol and standardization problems have to be taken into account for future systems.

Prospective authors are invited to submit original and unpublished work on the following research topics related to this Special Session:

- Propagation models and antenna technologies
- Novel modulation, synchronization and coding techniques
- Fading and interference mitigation methods
- Integrated 5G satellite networks
- Massive M2M/IoT over satellite
- Hybrid terrestrial and satellite networks
- Performance evaluation and QoS in satellite networks
- Extremely high frequency RF and optical satellite systems
- Software Radio Defined satellite receivers
- Artificial Intelligence in satellite networks