

7<sup>th</sup> Colloquium on Satellite and Space Communications Co-located with the 13th IEEE/IET International Symposium on **COMMUNICATION SYSTEMS, NETWORKS & DIGITAL SIGNAL PROCESSING** (CSNDSP'22) 20-22 July 2022, Porto, Portugal

## **Colloquium Organizers**



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**VENUE: Congress Centre** 

## International Technical Program Committee

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Prof. Robert Wicks, Northumbria Univ., UK Prof. Eamon Scullion, Northumbria Univ., UK Dr. Jonathan Mar, Northumbria Univ., UK Prof. James Osborn, Durham Univ., UK Dr. Jurgen Schmoll, Durham Univ., UK

This Colloquium addresses problems related to power and spectrum efficiency, flexibility and adaptability to different propagation conditions, broadband requirements and regulatory implications, mobile services, parameter estimation and synchronization at very low SNR values, fading and interference mitigation techniques, complexity and feasibility issues, but also cross-layer protocol and standardization problems might be considered. Of particular interest are topics focusing on optical communications for satellite scenarios.

According to the above, the topics of primary interest include:

- Propagation models and antenna technologies •
- Novel modulation, synchronization and coding techniques
- Advanced fading and interference mitigation methods
- High throughput satellite networks •
- Integration of satellite systems and 5G networks •
- Extremely high frequency satellite links •
- Small satellite missions and technologies •
- Machine learning and artificial intelligence in satellite networks •
- Satellite-based quantum communication
- Optical solutions for satellite scenarios