Special Issue

Optical Satellite Communications for Quantum Networking

Message from the Guest Editors

This Special Issue welcomes articles addressing, among others, the design and development path of a practical quantum satellite infrastructure. Theoretical design studies, numerical, and experimental papers are within the scope of the Special Issue, but review articles will also be considered. We expect to cover a variety of topics, including the following:

- Design and feasibility studies on satellite-to-ground wireless FSO links;
- Channel modeling for satellite QKD systems;
- Quantum communications in a turbulent medium;
- DV- and CV-QKD protocols integration in long-haul satellite links;
- Space-to-ground entanglement distribution systems;
- Next-generation satellite quantum payloads; quantum repeaters in space;
- Novel adaptive optics techniques for robust wireless quantum links;
- Design and architectures of large-scale satellite networks;
- Novel designs of optical ground stations, detection concepts, and portable OGS;
- Technologies and networks for inter-satellite QKD links;
- Synergies and co-design of terrestrial and satellite links;
- Technologies for inter-satellite QKD links;
- Earth monitoring and sensing applications via quantum space technologies.

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Deadline for manuscript submissions

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About the Journal

Message from the Editor-in-Chief

You are invited to contribute a research article or a comprehensive review for consideration and publication in *Photonics* (ISSN 2304-6732). *Photonics* is an online open access journal covering both the fundamental and applications of optics and photonics. *Photonics* strives to provide an avenue to allow authors to disseminate their scientific findings—both theoretical/ simulations and experimental works—in highly accessible peer-reviewed journal publications. The manuscript in *Photonics* will be handled with quick turnaround production processing time. We welcome authors to submit their manuscripts for publications in *Photonics*. Our goal in *Photonics* is to enable fast dissemination of high impact works to the scientific community.

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