



Spectroscopy, Metrology and Quantum Technology for Space Science and Astrophysics

Guest Editors:

Dr. Stefano Lettieri

Dr. Luigi Santamaria Amato

Dr. Gabriele Rosi

Dr. Romina Rega

Deadline for manuscript
submissions:

closed (28 February 2021)

Message from the Guest Editors

Dear Colleagues,

Advances in laser technology (laser miniaturization, optical frequency combs, quantum cascade lasers, interband cascade lasers, etc.) have renewed some applications that were previously based on different technologies (e.g., optical telecommunication has replaced radio communication, optical interferometry has replaced radio interferometry, and optical clocks have replaced microwave clocks).

This Special Issue will focus on state-of-the-art research in space-related optics, spectroscopy, and photonics.

Both original research papers and review articles describing state-of-the-art innovations in this research field are welcome.

Potential topics include, but are not limited to:

- optics-based inertial sensors;
- optochemical gas sensors;
- cold atom interferometer-based gradiometry;
- atmospheric and planetary gas spectroscopy;
- adaptive optics for telescopes;
- time and frequency metrology;
- optical fiber-based ground segments;
- satellite laser ranging;
- quantum key distribution; and
- infrared heterodyne interferometry for astronomical aperture synthesis.

