

## Special Issue

# Track Detection of Resident Space Objects

### Message from the Guest Editor

As humanity's endeavours in space continue to expand and evolve, the space around our planet is becoming an increasingly vital and contested domain. The burgeoning population of Resident Space Objects (RSOs), including operational satellites, defunct satellites, rocket bodies, and debris, poses a considerable challenge to the safety and sustainability of space operations. This edition invites submissions on cutting-edge techniques and technologies focused on track detection of RSOs in Earth's orbit. With the escalation of space activities and the consequent growth in the number of RSOs, precise tracking is paramount for collision avoidance and mission safety. We encourage submissions that explore advancements in a wide spectrum of instruments, including phased array radars, optical telescopes, in-orbits systems, and others. We are particularly interested in studies on the incorporation of machine learning algorithms in data processing for faster and more reliable tracking of RSO trajectories. Through this Special Issue, we aim to foster a deeper understanding and stimulate further innovation in the field of RSO tracking.

### Guest Editor

Prof. Dr. Alessio Magro

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### Deadline for manuscript submissions

closed (31 January 2024)



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