

Announcement of Special Issue
Advances in Space Research

Advanced Methods for Geodesy, Metrology, Navigation and Fundamental Physics

Papers are invited for a special topical issue of *Advances in Space Research* (ASR) entitled “Advanced Methods for Geodesy, Metrology, Navigation and Fundamental Physics”.

In this Special Topical Issue, articles may be submitted on advanced methods applied to the precise measurement of the gravitational field on ground and in space. These include applications in gravimetry, gradiometry, reference systems realization, time standards, high-precision frequency comparisons, precise orbit determination, possible variation of fundamental ‘constants’, testing equivalence principle and theories of gravitation. These should illustrate the principles and state of the art of these novel techniques, like atom interferometry, optical clocks, relativistic geodesy with clocks or chronometric levelling, quantum optics, intersatellite links, interplanetary laser ranging, planetary gravimetry. Also welcome are articles on further applications, as well as contributions covering the theoretical description of these new methods, introducing novel theoretical concepts or new modelling schemes.

Papers must be submitted electronically to <https://www.editorialmanager.com/AISR>. To ensure that all manuscripts are correctly identified for inclusion into the special issue, authors must select “**Special Issue: Advanced Methods - GMNFP**” when they reach the "Article Type" step in the submission process. The general format for submission of papers can be found on the *ASR* Elsevier web site at <http://www.journals.elsevier.com/advances-in-space-research/>

Submitted papers must be written in English and should include full affiliation postal addresses for all authors. Only full-length papers will be considered for publication, subject to peer review by a minimum of two reviewers. There are no page limits although the length of the paper should be appropriate for the material being presented. While the deadline for submissions is **30 April 2023**, papers will be published electronically as soon as they are accepted. The printed issue will be assembled within a reasonable time with late papers being printed in regular issues of *ASR*. All articles will be typeset at no cost to the author; there is a charge for printing color figures; there is no charge for color figures on the electronic version.

Dr. Roberto Peron (roberto.peron@inaf.it) is the Guest Editor for this special issue. Questions can be directed to Dr. Peron or to the Co-Editor for Special Issues, Dr. Peggy Ann Shea (sssrc@msn.com).