

Announcement of a Special Issue

Advances in Space Research

SATELLITE CONSTELLATIONS AND FORMATION FLYING

Papers are invited for a special topic issue of *Advances in Space Research (ASR)* entitled "Satellite Constellations and Formation Flying".

Satellites constellations and formations are becoming a growing segment of the space market due to numerous possibilities to provide new, effective commercial and scientific services and applications. Satellite constellations offer a base for communication, monitoring, and navigation services, while satellite formations tie into the move towards disaggregated satellite design. The unique and novel characteristics of these satellite systems require solutions to new problems of classical spaceflight dynamics disciplines like orbital mechanics, attitude control, guidance and navigation, and trigger innovative ideas in the design and optimisation domains.

Authors are invited to submit papers on one or more of the following topics:

- Lessons Learnt from Past and Current Missions
- New Mission Concepts
- Mission Analysis and Design
- Deployment and Maintenance
- Guidance, Navigation, and Control
- Services and Operations
- Simulation and Optimisation
- Instrumentation and Sensors for Formation Flying
- Swarming
- AI and Autonomy
- Space Traffic Management
- Mega Constellations
- Federated Satellite Systems
- Space Environment and Sustainability

Papers on the results of national and international programmes and initiative related to current and future mega-constellations, New Space and the sustainability of the space environment are particularly welcome.

Papers must be submitted electronically through the EES/Elsevier Web system at <http://ees.elsevier.com/asr>. To ensure that all manuscripts are correctly identified for inclusion into the Special Issue, authors must select "**Special Issue: Sat Constellations and FF**", when they reach the "Article Type" step in the submission process.

Submitted papers must be written in English and should indicate full affiliation addresses for all authors. All manuscripts will be subject to a standard peer-review process, including at least two independent reviewers. There are no page limits, but the length of the paper should be appropriate to the scientific material being presented. Manuscripts should follow the general format used in ASR:

(http://www.elsevier.com/wps/find/journaldescription.cws_home/644/authorinstructions).

The deadline for submission is 31st of December 2019. Manuscripts will be accepted on a paper-by-paper basis and available on-line with a DOI shortly after acceptance.

Contributors to this issue will have an opportunity to purchase individual issues once the issue is finalized. All articles will be typeset at no cost to the author. Color figures are free for the electronic version of the manuscript; a fee will be charged to the authors for color figures for the print version.

Prof. Massimiliano Vasile (massimiliano.vasile@strath.ac.uk) is the Guest Editor for this Special Issue. Authors will be regularly informed on the progress of this Special Issue by email until its final publication. Questions can be directed to Prof. Massimiliano Vasile or to the Co-Editor for Special Issues, Dr. Peggy Ann Shea (sssrc@msn.com). The pre-submission questions regarding topics-of-interest can also be directed to stardust@strath.ac.uk.