

Special Issue

Advanced Technology of Distributed Space Systems: Formation-Flying, Swarms, and Constellations

Message from the Guest Editors

Distributed Space Systems (DSS) refer to the use of formation-flying, swarms, and constellations to distribute the functionality of large spacecraft among several smaller, more cooperative, and less expensive spacecraft. DSS is crucial for a range of space missions, such as Earth monitoring, deep space exploration, satellite navigation and communication, in-orbit servicing, and more. Despite significant research over the past decade, there are still many challenges facing DSS. These include nonlinearity, collision avoidance, limited resources, time delay, routing scheme, constellation coverage optimization, and more. This Special Issue aims to present valuable contributions to advanced DSS technologies. We invite submissions related to various areas of interest, including novel distributed space system design and analysis, advanced modeling and control theory, multi-spacecraft coordinated perception and navigation, networking technology of satellite swarms, space-based joint sensing, communication, and computation, and LEO mega-constellation design and evaluation.

Guest Editors

Prof. Dr. Shijie Zhang

Dr. Yafei Zhao

Dr. Tao Nie

Dr. Xiangtian Zhao

Deadline for manuscript submissions

closed (20 September 2024)



Aerospace

an Open Access Journal
by MDPI

Impact Factor 2.1
CiteScore 3.4



mdpi.com/si/168964

Aerospace
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
aerospace@mdpi.com

[mdpi.com/journal/
aerospace](https://mdpi.com/journal/aerospace)





Aerospace

an Open Access Journal
by MDPI

Impact Factor 2.1
CiteScore 3.4



[mdpi.com/journal/
aerospace](https://mdpi.com/journal/aerospace)



About the Journal

Message from the Editor-in-Chief

You are welcome to contribute a research article or a comprehensive review for consideration and publication in *Aerospace* (ISSN 2226-4310), an on-line, open access journal.

Aerospace adheres to rigorous peer-review as well as editorial processes and publishes high quality manuscripts that address both the fundamentals and applications of aeronautics and astronautics. Our goal is to enable rapid dissemination of high impact works to the scientific community.

Editor-in-Chief

Prof. Dr. Konstantinos Kontis
School of Engineering, University of Glasgow, James Watt Building
South, University Avenue, Glasgow G12 8QQ, Scotland, UK

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), Inspec, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Aerospace) / CiteScore - Q2
(Aerospace Engineering)