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.

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Deadline for manuscript submissions

closed (20 September 2024)

Aerospace

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CiteScore 4.0

mdpi.com/si/168964

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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.

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