Special Issue

Physical Interaction of Floating-Base Robotics for Advancing Aerospace Technologies

Message from the Guest Editor

Physical interaction of floating-base systems is a key research topic that has been addressed in several technological domains, including aerial, underwater, legged, humanoids, and space robotics. To date, the efforts have been scattered and specifically focused on each of the individual domains. Although the working conditions are different, the dynamics of the robots and physical interaction requirements are very similar. These similarities and potential cross-domain synergies have not been investigated before. This Special Issue has the goal of bringing together (likely for the first time) researchers from these different fields, with the objective of identifying common research lines, issues, and barriers that can help advance the physical interaction capabilities of aerial and space technologies on Earth, in space, and on extra-terrestrial bodies. We seek new approaches and solutions that have been deployed individually in the four technological areas and that can be applied to solve current challenges in the aerospace sector.

Guest Editor

Dr. Matteo Fumagalli

Department of Electrical and Photonics Engineering, Technical University of Denmark, Anker Engelunds Vej 1, Bygning 101A, 2800 Kongens Lyngby, Denmark

Deadline for manuscript submissions

30 November 2025

Aerospace

an Open Access Journal by MDPI

Impact Factor 2.2
CiteScore 4.0

mdpi.com/si/224337

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

mdpi.com/journal/aerospace

Aerospace

an Open Access Journal by MDPI

Impact Factor 2.2
CiteScore 4.0

mdpi.com/journal/aerospace

MDPI

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, Ei Compendex, and other databases.

Journal Rank:

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