

Special Issue

Symmetry in Aerospace Sciences and Applications

Message from the Guest Editors

Symmetry is an intrinsic connection between mathematics and physics, serving as a cornerstone in developing mathematical principles and physical laws that allow modern aerospace sciences and technologies to thrive. This Special Issue intends to offer featured research on symmetry/asymmetry in aerospace sciences and applications. We invite contributions of theoretical, experimental, and numerical studies on all relevant topics, with emphasis on but not limited to newly proposed symmetry theories, findings of symmetry/asymmetry phenomena or patterns, novel applications of symmetry theories or concepts, technical innovations of symmetry/asymmetry devices, symmetry/asymmetry in numerics and modeling, symmetry and reduction, and symmetry breaking. Through this Special Issue, we aim to demonstrate how symmetry can advance our understanding of scientific problems and promote state-of-the-art technologies in aerospace research.

Guest Editors

Dr. Xi Xia

Associate Professor, Institute of Aerospace Propulsion, School of Mechanical Engineering, Shanghai Jiao Tong University, Shanghai 200240, China

Dr. Yi Gao

Associate Professor, School of Mechanical Engineering, Shanghai Jiao Tong University, 800 Dong Chuan Rd, Minhang, Shanghai 200240, China

Deadline for manuscript submissions

closed (28 February 2025)



Symmetry

an Open Access Journal
by MDPI

Impact Factor 2.2
CiteScore 5.3



mdpi.com/si/172312

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

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





Symmetry

an Open Access Journal
by MDPI

Impact Factor 2.2
CiteScore 5.3



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



About the Journal

Message from the Editor-in-Chief

Symmetry is ultimately the most important concept in natural sciences. It is not surprising then that very basic and fundamental research achievements are related to symmetry. For instance, the Nobel Prize in Physics 1979 (Glashow, Salam, Weinberg) was received for a unified symmetry description of electromagnetic and weak interactions, while the Nobel Prize in Physics 2008 (Nambu, Kobayashi, Maskawa) was received for the discovery of the mechanism of spontaneous breaking of symmetry, including CP symmetry. Our journal is named *Symmetry* and it manifests its fundamental role in nature.

Editor-in-Chief

Prof. Dr. Sergei Odintsov

1. ICREA, 08010 Barcelona, Spain

2. Institute of Space Sciences (IEEC-CSIC), C. Can Magrans s/n, 08193 Barcelona, Spain

Author Benefits

Open Access:

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

High Visibility:

indexed within SCIE (Web of Science), Scopus, CAPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank:

JCR - Q2 (Multidisciplinary Sciences) / CiteScore - Q1 (General Mathematics)