Special Issue

Applications Based on Symmetry/Asymmetry in Fluid Mechanics

Message from the Guest Editor

Symmetry is found everywhere, including many fluid processes. This symmetry can be either on the space–time level or on the time level. The applications of symmetry in fluid mechanics are usually interdisciplinary, such as mechanical, aerospace, chemical, and process engineering. Therefore, their exploration is crucial for many real-life applications. This Special Issue focuses on the following topics, but is not limited to them: the importance of symmetry in a variety of fluid flows, heat transfer and its applications, including heat exchangers, thermal storage, heat pipes, etc. We welcome submissions from researchers regarding advances in fluid mechanics, as well as from researchers exploring interdisciplinary linkages between fluid mechanics and other fields and beyond.

Guest Editor

Prof. Dr. Xi Chen

Institute of Fluids, Beihang University, Beijing, China

Deadline for manuscript submissions

closed (30 June 2025)

Symmetry

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)