





an Open Access Journal by MDPI

The Benefits That Physics Derives from the Concept of Symmetry

Guest Editors:

Dr. Luigi Cimmino

Department of Physics, University of Naples Federico II, 80126 Napoli, Italy

Dr. Carlos L. Benavides-Riveros

Max Planck Institute for the Physics of Complex Systems, Nöthnitzer Strasse 38, 01187 Dresden, Germany

Deadline for manuscript submissions:

31 March 2025

Message from the Guest Editors

Dear Colleagues,

In physics, symmetry is synonymous with conservation law. This term refers to one or more quantities that remain unchanged during the evolution of a system and is applied to every area of Physics to denote fixed points in a discovery. For this reason, the search for symmetries in Physics represents a crucial point in the understanding of established theories, and their breaking sometimes involves a clue to the search for new theories. Other times, what we want to measure is precisely the asymmetries as variations due to changes affecting physical systems. From micro to macro, in theory or experimentally, this intimate relationship between Physics and symmetry represents the very soul of nature, and in this Special Issue, we will treat it from different points of view.











an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Sergei Odintsov

1. Institució Catalana de Recerca i Estudis Avançats (ICREA), Passeig Luis Companys, 23, 08010 Barcelona, Spain 2. Institute of Space Sciences (ICE-CSIC), C. Can Magrans s/n, 08193 Barcelona, Spain

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.

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)

Contact Us