

# Special Issue

## Footprints of Fundamental Symmetries in Cosmology

### Message from the Guest Editors

We are delighted to announce the launch of a Special Issue on "Footprints of Fundamental Symmetries in Cosmology". In recent decades, significant advancements in observational cosmology have ushered in the era of precision cosmology, enabling increasingly accurate measurements of our universe's properties across various cosmic scales and epochs. Thanks to these advancements, cosmology has become a promising and compelling field for testing and studying fundamental symmetries and interactions in nature. This Special Issue aims to explore the interplay between cosmology, gravity, and elementary particle physics. We invite researchers from the fields of cosmology, particle physics, gravitational physics, and astroparticle physics to contribute innovative works. These contributions should highlight the role of cosmology in understanding the fundamental principles governing our universe, as well as underscoring the potential use of cosmological observations in testing new physics beyond the standard models of cosmology, particle physics, and general relativity.

---

### Guest Editors

Dr. William Giarè

School of Mathematics and Statistics, University of Sheffield,  
Hounsfield Road, Sheffield S3 7RH, UK

Dr. Eleonora Di Valentino

School of Mathematics and Statistics, University of Sheffield,  
Hounsfield Road, Sheffield S3 7RH, UK

---

### Deadline for manuscript submissions

closed (30 June 2025)



## Symmetry

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.2  
CiteScore 5.3



[mdpi.com/si/207546](https://mdpi.com/si/207546)

*Symmetry*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[symmetry@mdpi.com](mailto: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  
ICREA, 08010 Barcelona and 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)