

Special Issue

Observational and Theoretical Strategies to Inquire about the Physics and Symmetries of Standard and Exotic Compact Objects

Message from the Guest Editors

The actual breakthrough discoveries in high-energy astrophysics represented by the direct detection of gravitational waves and images of matter moving around a black hole led to significant developments in relativistic astrophysics. Indeed, new methodologies to investigate the physics and symmetries of standard (black holes and neutron stars) and exotic (wormholes, boson stars, etc.) compact objects have been and are still being proposed due to present and near-future sensitive data to be benchmarked with the outcomes from theoretical models. This Special Issue aims to gather original observational and theoretical strategies in relativistic astrophysics with the goal to increase our knowledge around the physics of standard and exotic compact objects. An important issue is also represented by the symmetries imposed on the mathematical solutions to describe the aforementioned astrophysical objects. We cordially invite researchers to contribute their original and high-quality research papers which will inspire advances in observational and theoretical relativistic astrophysics.

Guest Editors

Dr. Vittorio De Falco

Scuola Superiore Meridionale, Naples, Italy

Dr. Daniele Vernieri

Dipartimento di Fisica "Ettore Pancini", Università degli Studi di Napoli "Federico II", 80126 Napoli, Italy

Deadline for manuscript submissions

closed (31 August 2024)



Symmetry

an Open Access Journal
by MDPI

Impact Factor 2.2
CiteScore 5.3



mdpi.com/si/139315

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)