

# Special Issue

## Studies in Neutron Stars

### Message from the Guest Editors

Neutron stars (NSs) are the only objects whose emission encompasses all the available multi-messenger tracers: electromagnetic waves, cosmic rays, neutrinos, and gravitational waves (GW). They are the only laboratories where we can study the most extreme phases of matter: not only can we probe extremes of gravity and electromagnetism, but also, strong and weak interaction can be studied in regimes that we cannot hope to explore on Earth. The study of these objects transcends the traditional astrophysical approach and requires a multidisciplinary effort that spans from particle and nuclear physics to astrophysics, from experiment to theory, from gravitational waves to the electromagnetic spectrum. The purpose of this Special Issue is to collect new original contributions as well as reviews in the broad field of NS studies. We welcome contributions exploring all aspects of NSs, from theories to observations, [...]. For further reading, please follow the link to the [Special Issue Website](#).

### Guest Editors

Dr. Ana Gabriela Grunfeld

1. Department of Theoretical Physics, CNEA, Buenos Aires 1429, Argentina
2. CONICET, Godoy Cruz 2290, Ciudad Autónoma de Buenos Aires C1425FQB, Argentina

Prof. Dr. David Blaschke

1. Institute of Theoretical Physics, University of Wrocław, 50-204 Wrocław, Poland
2. Center for Advanced Systems Understanding (CASUS), D-02826 Görlitz, Germany
3. Helmholtz-Zentrum Dresden-Rossendorf (HZDR), D-01328 Dresden, Germany

### Deadline for manuscript submissions

closed (31 March 2024)



## Universe

an Open Access Journal  
by MDPI

Impact Factor 2.5  
CiteScore 4.3



[mdpi.com/si/167368](https://mdpi.com/si/167368)

*Universe*

MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[universe@mdpi.com](mailto:universe@mdpi.com)

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





# Universe

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 4.3



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



## About the Journal

### Message from the Editor-in-Chief

The multidisciplinary *Universe* journal is aiming to follow and, hopefully, to lead to the largest extent as possible the ever-self renovating threads which weave mathematical theories with our understanding of the magnificent natural world. On behalf of all the distinguished members of the editorial board, I extend my welcome to this new journal and look forward to hearing from the interested contributors and learning about their valuable research.

---

### Editor-in-Chief

Prof. Dr. Lorenzo Iorio

Ministero dell'Istruzione e del Merito, Viale Unità di Italia 68, 70125 Bari, BA, Italy

---

### Author Benefits

#### Open Access:

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

#### High Visibility:

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

#### Journal Rank:

JCR - Q2 (Astronomy and Astrophysics) / CiteScore - Q2 (General Physics and Astronomy)