



## The 10th Anniversary of *Galaxies*: The Astrophysics of Neutron Stars

Guest Editors:

**Prof. Dr. Roberto Mignani**

**Dr. Massimiliano Razzano**

**Prof. Dr. Sergei B. Popov**

Deadline for manuscript  
submissions:

**closed (8 January 2024)**

### Message from the Guest Editors

In the last 20 years, important progress has been made in the study of NSs. An energy range was discovered using radio over 50 years ago; most NSs today are still detected as radio pulsars (~3000). Observations made using space and ground-based telescopes have consolidated the view of NSs as multi-wavelength emitters, from the sub mm to very-high-energy gamma rays. This harvest of data now paves the way for unprecedented studies of the emission from the NS magnetosphere. At the same time, radio/optical observations of pulsars in binary systems led to very accurate measurements of the NS masses, breaking the paradigm of the assumed value of 1.4 Msun and indicating that NSs as massive as ~2 Msun indeed exist, suggesting that pulsars in binary systems which might have undergone an accretion phase and spin-up from the companion star, hence dubbed ms-pulsars, span a different mass range wrt. Isolated NSs.

The aim of this Special Issue is to set the state of the art of neutron star astrophysics, with particular emphasis on the progress accomplished in the last 20 years, and to discuss future challenges in this field. Review articles and research articles are equally welcome.





## Editors-in-Chief

### Dr. Margo Aller

Department of Astronomy,  
University of Michigan, Ann  
Arbor, MI 48109-1042, USA

### Dr. Jose L. Gómez

Instituto de Astrofísica de  
Andalucía (IAA-CSIC), Glorieta de  
la Astronomía S/N, 18008  
Granada, Spain

## Message from the Editorial Board

*Galaxies* provides an advanced forum for studies related to astronomy, astrophysics, and cosmology, including all of their subfields. Different formats, such as specialized research articles, reviews, communications and technical notes are welcomed. Manuscripts containing original and creative research proposals and ideas are especially appreciated.

We encourage scientists to publish their astronomical observations and theoretical results in as much detail as possible. There is no restriction on the paper length and full experimental and methodological details, as applicable, should be provided. All papers will be peer reviewed promptly. On behalf of the distinguished members of the editorial board, I extend my welcome to all researchers working on these subjects to contribute to *Galaxies*.

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*Galaxies* Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
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