# **Special Issue**

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

## 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.

### **Guest Editors**

Prof. Dr. Roberto Mignani

INAF, Institute for Space Astrophysics, 20133 Milan, Italy

Dr. Massimiliano Razzano

Department of Physics, University of Pisa, 56127 Pisa, Italy

Prof. Dr. Sergei B. Popov

1. Sternberg Astronomical Institute, Lomonosov Moscow State University, Universitetsky pr. 13, Moscow 119234, Russia

2. Department of Physics, National Research University 'Higher School of Economics', Myasnitskaya str. 20, Moscow 101000, Russia

### Deadline for manuscript submissions

closed (8 January 2024)



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Galaxies
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
galaxies@mdpi.com

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## **About the Journal**

### 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*.

### **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

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