



an Open Access Journal by MDPI

# **Advances in Cosmological Models**

Guest Editor:

#### Dr. Ewa Czuchry

National Center for Nuclear Studies, Warszawa, Poland

Deadline for manuscript submissions: closed (31 August 2023)

#### Message from the Guest Editor

The cosmological model is called the  $\Lambda$ CDM model, which includes dark energy, dark matter, and baryonic matter. The detection of gravitational waves by the Laser Interferometer Gravitational-Wave Observatory (LIGO) and the Virgo Collaboration confirmed the existence of black holes and neutron stars. Observations of the large-scale structure of the universe provided information about the universe's growth and expansion history, the nature of dark matter and dark energy, and the initial conditions of the universe. New theories of gravity, such as modified gravity and scalar-tensor theories have the potential to provide an alternative explanation for the observed phenomena, such as the acceleration of the universe, without the need for dark energy. We would like to invite both original and review papers to this Special Issue that cover the influence of new measurement methods and detections, as well as the development of alternative theories on gravity and our understanding of the nature of the universe. The study of these and other related topics is the goal of this special issue, [...]

For further reading, please follow the link to the Special Issue Website.



mdpi.com/si/163682







an Open Access Journal by MDPI

### **Editor-in-Chief**

Prof. Dr. Lorenzo Iorio

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

#### 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.

## **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, CAPlus / SciFinder, Inspec, and other databases.

**Journal Rank:** JCR - Q2 (*Astronomy and Astrophysics*) / CiteScore - Q2 (*General Physics and Astronomy*)

### **Contact Us**

*Universe* Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/universe universe@mdpi.com X@Universe\_MDPI