# Special Issue

# The 10th Anniversary of Universe: Standard Cosmological Models, and Modified Gravity and Cosmological Tensions

## Message from the Guest Editors

The Standard Cosmological Model, particularly the Lambda-CDM model, represents our current understanding of the Universe. While it aligns with most astronomical observations, it faces challenges such as the Hubble tension. Additionally, the early formation of galaxies and the nature of dark energy and dark matter pose further questions.

Modified theories of gravity extend the form of general relativity through various methods, leading to different field equations and thus to different cosmological implications. They play an essential role and contribute to modern cosmology, providing a foundation for the current understanding of physical phenomena of the Universe.

This Special Issue celebrates the 10th anniversary of the journal *Universe* by exploring both standard cosmological models and modified gravity theories, aiming to expand our knowledge of the cosmos.

#### **Guest Editors**

Prof. Dr. Panayiotis Stavrinos

Prof. Dr. Antonino Del Popolo

Prof. Dr. Hermano Velten

Prof. Dr. Tina Kahniashvili

Prof. Dr. Jean-Michel Alimi

Prof. Dr. Yi-Fu Cai

## Deadline for manuscript submissions

31 October 2025



# **Universe**

an Open Access Journal by MDPI

Impact Factor 2.6 CiteScore 5.2



mdpi.com/si/225122

Universe
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
universe@mdpi.com

mdpi.com/journal/ universe





# Universe

an Open Access Journal by MDPI

Impact Factor 2.6 CiteScore 5.2



# **About the Journal**

## Message from the Editor-in-Chief

The multidisciplinary journal *Universe* 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 Advisory and Editorial Boards, I extend my welcome to this 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, 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, CAPlus / SciFinder, Inspec, and other databases.

#### Journal Rank:

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

