

# Special Issue

## ΛCDM Cosmology: Pros and Cons

### Message from the Guest Editors

The  $\Lambda$ CDM model, or Concordance Model, is a successful model, describing the Universe's large-scale structure formation and evolution, the state of the early Universe, and the abundance of the different forms of matter and energy. It is in agreement with a plethora of observations, and its predictive power has been already checked against old and new discoveries (e.g., lensing of the CMB, B-mode polarization, and the kinetic SZ effect). However, these successes do not allow for us to state that the model is correct. It merely implies that deviations from  $\Lambda$ CDM are too small compared with the current observational uncertainties to be inferred from cosmological data alone. [...] For more information, please visit [link](#).

### Guest Editors

Prof. Dr. Antonino Del Popolo

1. Department of Physics and Astronomy, University of Catania, 95100 Catania, Italy
2. INFN, Sezione di Catania, 95100 Catania, Italy

Prof. Dr. Morgan Le Delliou

1. Institute of Theoretical Physics, Physics Department, Lanzhou University, No. 222, South Tianshui Road, Lanzhou 730000, China
2. Instituto de Astrofísica e Ciências do Espaço, Universidade de Lisboa, Faculdade de Ciências, Ed. C8, Campo Grande, 1769-016 Lisboa, Portugal

### Deadline for manuscript submissions

closed (30 September 2019)



# Universe

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.6  
CiteScore 5.2



[mdpi.com/si/24121](https://mdpi.com/si/24121)

*Universe*  
Editorial Office  
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 2.6  
CiteScore 5.2



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



## 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)