

# Special Issue

## Origin of the Universe

### Message from the Guest Editors

The birth of the universe out of the M-theory landscape remains an important question in modern cosmology. Questions such as “Why are the only three large spatial dimensions?”, “What drives inflation?”, and “Is there observable evidence of the birth of the universe out of the M-theory landscape?” are subjects of active debate. We invite colleagues to submit papers on the following topics:

- Trans-Planckian inflation
- Models of inflation
- Constraints on Inflation effective potentials
- Brane-world inflation
- Constraints on Inflation initial conditions
- Primordial gravitational waves
- Cosmic dark flow and large-scale structure
- Origin of the cold spot in the CMB
- Anomalies in the CMB from inflation and the M-theory landscape
- Supersymmetric Inflation
- Primordial nucleosynthesis constraints on the birth of the universe
- Constraints on time-varying fundamental constants
- Constraints on anisotropic cosmological models
- Why are there three large dimensions

Prof. Dr. Laura Mersini Houghton

---

### Guest Editors

Prof. Dr. Grant J. Mathews

Department of Physics, University of Notre Dame, Notre Dame, IN, USA

Prof. Dr. Laura Mersini-Houghton

Department of Physics, University of North Carolina, Chapel Hill, NC, USA

---

### Deadline for manuscript submissions

closed (30 August 2018)



## Universe

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.6  
CiteScore 5.2



[mdpi.com/si/13479](https://mdpi.com/si/13479)

*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)