



universe



an Open Access Journal by MDPI

Frontiers in Astroparticle Physics and Particle Cosmology

Guest Editors:

Dr. Paolo Maestro

1. Department of Physical
Sciences, Earth and
Environment, University of Siena,
53100 Siena, Italy
2. Istituto Nazionale di Fisica
Nucleare, Sezione di Pisa, 56127
Pisa, Italy

Dr. Andreas Trautner

Max Planck Institute for Nuclear
Physics, Heidelberg, Germany

Dr. Toby Opferkuch

Theoretical Physics Department,
CERN, 1211 Geneva, Switzerland

Deadline for manuscript
submissions:

closed (30 September 2021)

Message from the Guest Editors

Dear Colleagues,

The cosmos provides us with a continuous influx of cosmic rays ranging from the tiniest quanta of energy, such as the yet undetected cosmic background neutrinos, up to the most energetic single-particle events ever observed by humanity. In this rising age of gravitational wave observatories, neutrino telescopes, and exquisitely precise photon detectors, it is essential that we exploit this information through a truly interdisciplinary approach to multi-messenger astronomy. This entails an enormous spectrum of new opportunities across all frontiers, ranging from the exploration and characterization of cosmic sources, charting the decomposition, origin, and evolution of the universe all the way to the exploration of elementary particle properties themselves.

All of which live at scales out of the reach of any future Earth-based collider.



mdpi.com/si/79186

Special Issue



universe



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 & Astrophysics*) / CiteScore - Q2 (*General Physics and Astronomy*)

Contact Us

Universe Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/universe
universe@mdpi.com
[X@Universe_MDPI](https://twitter.com/Universe_MDPI)