

# Special Issue

## Heavy Ion Collisions

### Message from the Guest Editor

The main goal of heavy ion collisions is to study the physics of strongly interacting matter at the highest energy densities that have been reached so far in the laboratory. In such a condition, an extreme phase of matter—called the quark-gluon plasma—is formed. Our universe is thought to have been in such a primordial state for the first few millionths of a second after the Big Bang. The properties of such a phase are key issues for quantum chromodynamics, the understanding of confinement–deconfinement, and chiral phase transitions. In contrast to the expectations that the QGP would have properties similar to the almost ideal, weakly coupled gas of quarks and gluons, the experimental results from the Relativistic Heavy Ion Collider (RHIC) have shown that a hot, strongly interacting, nearly perfect, and almost opaque liquid was produced in central Au–Au collisions at the greatest RHIC energy. For further information, please visit [mdpi.com/si/23157](https://mdpi.com/si/23157).

### Guest Editor

Prof. Dr. Maria Vasileiou

Department of Physics, University of Athens, Zografou Campus, GR-15784 Athens, Greece

### Deadline for manuscript submissions

closed (30 June 2020)



## Universe

an Open Access Journal  
by MDPI

Impact Factor 2.6  
CiteScore 5.2



[mdpi.com/si/23157](https://mdpi.com/si/23157)

*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)