

## Special Issue

# Collectivity in High-Energy Proton-Proton and Heavy-Ion Collisions

### Message from the Guest Editors

Collectivity plays an important role in all branches of physics, including high-energy physics. Many collective phenomena, such as collective flow, strangeness enhancement, charmonium suppression, jet quenching and others, have been observed so far in high-energy heavy-ion as well as proton–proton collisions. At high-energy heavy-ion collisions, the ordinary nuclear (hadronic) matter gets squeezed and “melts” into the state of Quark–gluon plasma (QGP) at high enough energy density and temperature. To extract the parameters and properties of collectivity, it is extremely important and useful to analyze the transverse momentum as well as (pseudo)rapidity distributions of particles produced in high-energy collisions, using efficient phenomenological models based on laws of statistical physics, thermodynamics, and hydrodynamics. In this Special Issue, we aim to collect original articles and review papers, related to the analysis of any kind of collectivity and collective properties, such as collective flow, strangeness and multistrangeness enhancement... For more information, please visit: [mdpi.com/si/101492](https://mdpi.com/si/101492).

### Guest Editors

Prof. Dr. Khusniddin Olimov

Prof. Dr. Fu-Hu Liu

Prof. Dr. Kosim Olimov

### Deadline for manuscript submissions

closed (31 December 2023)



## Universe

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.6  
CiteScore 5.2



[mdpi.com/si/101492](https://mdpi.com/si/101492)

*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)