

## Special Issue

# Cosmic Rays: From Fundamental Symmetry Tests to Civil Applications

### Message from the Guest Editors

Symmetry lies at the foundation of nature. It pervades every area of physics and has successfully acted as a guiding principle in postulating the existence of new particles and interactions in the last century. In this context, the discovery of the cosmic radiation has played a crucial role: it has made the experimental verification of many of the theory's predictions possible. Even today, despite the availability of high-energy particle colliders, cosmic rays still represent an invaluable probe to test fundamental principles in cosmology and particle physics, as well as to look for new physics. Examples include tests for violation of the Lorentz symmetry, and the related CPT symmetry, searches for dark matter candidates, and tests to probe fundamental interactions at ultra-high energies.

### Guest Editors

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### Deadline for manuscript submissions

closed (31 July 2022)



## Symmetry

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## About the Journal

### Message from the Editor-in-Chief

Symmetry is ultimately the most important concept in natural sciences. It is not surprising then that very basic and fundamental research achievements are related to symmetry. For instance, the Nobel Prize in Physics 1979 (Glashow, Salam, Weinberg) was received for a unified symmetry description of electromagnetic and weak interactions, while the Nobel Prize in Physics 2008 (Nambu, Kobayashi, Maskawa) was received for the discovery of the mechanism of spontaneous breaking of symmetry, including CP symmetry. Our journal is named *Symmetry* and it manifests its fundamental role in nature.

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### Editor-in-Chief

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