



## Symmetry in Cosmic Ray Detections

Guest Editor:

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Deadline for manuscript submissions:

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### Message from the Guest Editor

Dear Colleagues,

The cosmic ray energy spectrum spans more than 10 decades and has a surprisingly (almost) constant power-law character. Understanding this fact and discovering the mechanisms generating the energy of the cosmic ray particles which constantly bombard Earth is one of the fundamental problems of modern physics. On the one hand, bigger and more sophisticated air shower arrays are being built and, on the other hand, there is a growing interest in the construction of small local detection stations which, apart from purely scientific purposes, have a great potential educational significance, satisfying young people's scientific curiosity and developing their interest in science, and particularly in physics.

This Special Issue will be dedicated to showing the specific similarities between the symmetry of experimental solutions from both edges of the cosmic ray energy spectrum. It can generate synergy effects; for example, the networking of local small shower arrays can be used to search for new physics in the highest energy region.





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## 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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