symmetry

an Open Access Journal by MDPI

IMPACT FACTOR 2.7

CITESCORE 4.9

Symmetries in the Universe

Guest Editor:

Dr. Laura Rossetto
Radboud University

Deadline for manuscript submissions:
closed (31 August 2020)

Message from the Guest Editor

Dear Colleagues,

Astrophysics combines the study of the four fundamental interactions—nuclear strong and weak, electromagnetic, and gravitational. The Standard Model, confirmed with extraordinary precision by particle accelerator experiments, is not able to explain most of these astrophysical processes.

Different experiments agree in reporting that baryonic matter constitutes only 5% of the entire Universe. This raises the question of what the remaining components—dark matter and dark energy—are constituted of. Another fundamental mystery is why and how matter has won over antimatter, and attempts are being made to look for different behaviour between matter and antimatter. The processes behind the acceleration of cosmic rays to the highest energies are mostly obscure, but an inverse correlation between the size of cosmic-ray sources and the intensity of their magnetic fields has been highlighted for long time. The observed isotropy of Cosmic Microwave Background radiation poses fundamental questions about the expansion of the Universe in the earliest phases.

symmetry

IMPACT FACTOR 2.7

CITESCORE 4.9

an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Sergei D. Odintsov
1. Institució Catalana de Recerca i Estudis Avançats (ICREA), Passeig Luis Companys, 23, 08010 Barcelona, Spain
2. Institute of Space Sciences (ICE-CSIC), C. Can Magrans s/n, 08193 Barcelona, Spain

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.

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), CAPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.
Journal Rank: JCR - Q2 (*Multidisciplinary Sciences*) / CiteScore - Q1 (*General Mathematics*); Q1 (*Physics and Astronomy*); Q1 (*Computer Science*)

Contact Us

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

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

mdpi.com/journal/symmetry
symmetry@mdpi.com
𝕏@Symmetry_MDPI