symmetry

an Open Access Journal by MDPI

IMPACT FACTOR 2.2

CITESCORE 5.4

Modern Application of Symmetry Principles to High Energy Physics

Guest Editor:

Prof. Dr. Vitalii A. Okorokov
Department of Physics, National Research Nuclear University MEPhI (NRNU MEPhI), 115409 Moscow, Russia

Deadline for manuscript submissions:
closed (30 July 2021)

Message from the Guest Editor

Dear Colleagues,

The notion of symmetry is one of the most fundamental and important conceptions in the fundamental science in general and, especially, in the modern high energy physics. At present it is definitely confirmed that the symmetry is the essential part of the observational structure of nature. Experimental and theoretical studies show that the change of behavior of some symmetries at extreme external conditions open the wide room for qualitatively new phenomena. For instance, the restoration of the chiral symmetry of strong interactions at finite temperature is one of the main topics of the world physics program with heavy ion beams. The symmetry has a very deep relation with phase transition in high energy physics for both the strong interaction and the electroweak sector. The investigation of higher symmetries is promising tool for unification of the fundamental interactions and search for the physics beyond of the Standard Model.....

Prof. Dr. Vitalii A. Okorokov
Guest Editor

symmetry

an Open Access Journal by MDPI

IMPACT FACTOR 2.2

CITESCORE 5.4

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)

Contact Us

Symmetry Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

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