



an Open Access Journal by MDPI

# The Importance of Being Symmetrical

Guest Editors:

#### Prof. Dr. Ignazio Licata

 ISEM Institute for Scientific Methodology, Via Ugo La Malfa, 153, 90146 Palermo, Italy
School of Advanced International Studies on Applied Theoretical and Non Linear Methodologies of Physics, 70121 Bari, Italy

#### Prof. Dr. Roberto Passante

Dipartimento di Fisica e Chimica – E. Segrè, Università degli Studi di Palermo, Via Archirafi 36, I-90123 Palermo, Italy

Deadline for manuscript submissions: closed (30 April 2021)

### Message from the Guest Editors

This Special Issue is conceived both as a place to discuss about "Quantum Symmetries" in their philosophical and foundational aspects, and in the rich panorama of their applications.

- The role of symmetry in physics: historical and philosophical aspects
- Local and global symmetries
- Continuous and discrete symmetries
- Lorentz and de Sitter group
- Unitary group in QFT
- CPT symmetry in particles physics and cosmology
- PT symmetry, dissipative systems, and quantum computing
- Renormalization group
- Dynamical symmetries and chaotic behavior in physical systems









an Open Access Journal by MDPI

## **Editor-in-Chief**

#### Prof. Dr. Sergei D. Odintsov

 Institució Catalana de Recerca i Estudis Avançats (ICREA), Passeig Luis Companys, 23, 08010 Barcelona, Spain
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