



an Open Access Journal by MDPI

# Symmetry and Symmetry Breaking in Quantum Mechanics II

Guest Editor:

### Prof. Dr. Mohamed Azzouz

Aerospace Engineering School, International University of Rabat, Campus de l'UIR, Parc Technopolis, Rocade de Rabat-Salé, 11100-Sala Al Jadida -Maroc

Deadline for manuscript submissions: closed (15 October 2019)

### Message from the Guest Editor

Dear Colleagues,

There is no doubt that symmetry plays one of the most important roles in physics. Symmetry breaking is also a very interesting and essential phenomenon in both condensed matter physics and high-energy physics. The recently-discovered Higgs boson is the most famous consequence of symmetry breaking. Things got even more interesting lately with the proposal of hidden order that could arise from some sort of hidden symmetry breaking, as proposed for the explanation of the pseudogap state of the high-*Tc* cuprate materials. Additionally, the role of symmetry in topological phases of matter has recently gained a tremendous importance with the discovery of topological insulators for example. This Special Issue welcomes manuscripts from all areas of quantum physics where symmetry and/or symmetry breaking occur.

Prof. Dr. Mohamed Azzouz *Guest Editor* 









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