



an Open Access Journal by MDPI

# **Quantum Optics and Symmetry**

Guest Editors:

#### Dr. Hongbo Zhang

Department of Engineering Technology, Middle Tennessee State University, 1301 E Main St., Murfreesboro, TN 37132, USA

#### Prof. Dr. Aimin Yan

College of Mathematics and Science, Shanghai Normal University, Shanghai 200234, China

Deadline for manuscript submissions: **31 December 2024** 

#### Message from the Guest Editors

Dear Colleagues,

Quantum optics studies individual quanta of light. In this Special Issue, we call for research in the areas of quantum mechanics including entanglement and teleportation, quantum memory, and quantum information processing. Quantum imaging and quantum neural networks for learning-based image recognition are also of interest in this special issue. Quantum optical encryption, quantum nano-optics, and quantum optical information processing are particularly welcomed.

Quantum symmetry is also a topic of interest in this Special Issue, as well as group theory and symmetry of quantum electrodynamics. New insights connecting symmetry and quantum mechanics are especially welcomed.

Dr. Hongbo Zhang Prof. Dr. Aimin Yan *Guest Editors* 



mdpi.com/si/159499







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