

# Special Issue

## Quantum Mechanics: Concepts, Symmetries, and Recent Developments

### Message from the Guest Editor

Quantum Mechanics has been a gigantic breakthrough for physics since its introduction more than a century ago. It has led to many discoveries at the microscopic level, initiated new pathways to unsuspected properties of matter, and produced new amazing usable applications. This Special Issue of *Symmetry* is devoted to recent advances in theoretical developments in Quantum Mechanics. It is part of the global effort to provide a continuous supply of information to the research community. Original contributions, under various forms and presentations, are welcomed, especially when covering the following topics:

- Supersymmetry
- Superintegrability
- Phase space formulation
- Entanglement
- Measurement theory
- Symmetry group invariance
- Representation theory
- Anyons
- Deformation quantization

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### Guest Editor

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### Deadline for manuscript submissions

closed (30 June 2024)



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## About the Journal

### 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.

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### Editor-in-Chief

Prof. Dr. Sergei Odintsov

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