

## Special Issue

# Symmetry in Optimal Control and Applications

### Message from the Guest Editors

Optimal control theory is a fundamental area of mathematics that has profound implications across numerous disciplines, including engineering, economics, biology, and more. By providing a framework for determining control strategies that optimize a given performance criterion, optimal control has become an essential tool for solving complex real-world problems. The aim of this Special Issue is to attract leading researchers in these areas in order to include new high-quality results involving their symmetry properties, both from a theoretical and an applied point of view. All articles related to optimal control theory are invited to be submitted for this Special Issue. The topics of interest for this Special Issue include but are not limited to the following: Uncertain optimal control and application; Adaptive and robust control strategies; Control of distributed and networked systems; Applications of optimal control in robotics and autonomous systems; Optimal control in biological and medical systems; Fractional systems and its applications; Financial models and economic systems; Energy management and optimization; Computational methods for solving optimization problems;

---

### Guest Editors

Dr. Xin Chen

Dr. Liu He

Dr. Bo Li

---

### Deadline for manuscript submissions

30 September 2025



## Symmetry

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.2  
CiteScore 5.4



[mdpi.com/si/215581](https://mdpi.com/si/215581)

*Symmetry*  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[symmetry@mdpi.com](mailto:symmetry@mdpi.com)

[mdpi.com/journal/  
symmetry](https://mdpi.com/journal/symmetry)





# Symmetry

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.2  
CiteScore 5.4



[mdpi.com/journal/  
symmetry](https://mdpi.com/journal/symmetry)



## 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.

---

### Editor-in-Chief

Prof. Dr. Sergei Odintsov  
ICREA, 08010 Barcelona and Institute of Space Sciences (IEEC-CSIC),  
C. Can Magrans s/n, 08193 Barcelona, Spain

---

### Author Benefits

#### Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

#### High Visibility:

indexed within SCIE (Web of Science), Scopus, CAPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

#### Journal Rank:

JCR - Q2 (Multidisciplinary Sciences) / CiteScore - Q1  
(General Mathematics)