Special Issue

Symmetry and Nonlinear Control: Theory and Applications

Message from the Guest Editor

Symmetry plays a fundamental role in nonlinear control systems, profoundly influencing both theoretical analysis and practical design. Its impact spans model simplification, controller synthesis, stability analysis, and real-world applications across various engineering domains. The integration of symmetry with nonlinear control has driven significant advancements in robotics, distributed energy networks, and biological coordination systems. This Special Issue aims to bridge symmetry principles with nonlinear control methodologies, advancing both theoretical frameworks and practical solutions. Submissions must employ advanced nonlinear control techniques and align with the journal's scope. We welcome original research and reviews advancing symmetry-aware nonlinear control through theoretical breakthroughs, novel methodologies, or empirical case studies.

Guest Editor

Dr. Panpan Yang
School of Electronics and Control Engineering, Chang'an University, Xi'an, China

Deadline for manuscript submissions

26 August 2026

Symmetry

an Open Access Journal by MDPI

Impact Factor 2.2
CiteScore 5.2

mdpi.com/si/253474

Symmetry
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
symmetry@mdpi.com

mdpi.com/journal/symmetry

Symmetry

an Open Access Journal by MDPI

Impact Factor 2.2
CiteScore 5.2

mdpi.com/journal/symmetry

MDPI

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)