

Special Issue

Symmetry/Asymmetry in Neural Networks

Message from the Guest Editors

In the rapidly evolving field of Artificial Intelligence, the concepts of symmetry and asymmetry in neural networks have garnered significant attention. These concepts play a crucial role in the design, function, and performance of various types of neural networks, including static neural networks (SNNs), recurrent neural networks (RNNs), and deep learning architectures. Symmetry in neural networks often relates to the architecture's ability to respond identically to identical inputs, regardless of their orientation or position, enhancing the network's generalization capabilities. Conversely, introducing asymmetry, whether in data representations, network architectures, or learning algorithms, can lead to a more specialized and efficient processing of complex and variable data sets.

Guest Editors

Dr. Yufeng Tian

College of Automation, Chongqing University, Chongqing, China

Dr. Zhenghong Jin

The School of Mechanical and Aerospace Engineering, Nanyang Technological University, Singapore

Deadline for manuscript submissions

31 July 2026



Symmetry

an Open Access Journal
by MDPI

Impact Factor 2.2
CiteScore 5.3



mdpi.com/si/192799

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

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





Symmetry

an Open Access Journal
by MDPI

Impact Factor 2.2
CiteScore 5.3



[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)