

Special Issue

Symmetry in Power System Dynamics and Control

Message from the Guest Editors

The rapid advancement of modern power systems, driven by the increasing integration of renewable energy resources into the main grid, highlights the critical role of power converters in ensuring system reliability, enhancing efficiency, and enabling flexible power generation and distribution. Power converters are pivotal for integrating renewable energy systems such as wind, solar, and energy storage into the grid. To achieve the seamless integration of distributed generators, effective power sharing, and robust system dynamics control, the concepts of symmetry and asymmetry are fundamental to the design, operation, and stability of modern power systems. Given the complex nature of modern power systems, advanced control strategies are essential to improving key characteristics, including low-voltage capacity and operational adaptability under symmetric and asymmetric conditions, which align with the mandates of modern grid codes. This Special Issue explores advanced control, intelligent control, and faulty diagnosis techniques for modern power systems and microgrids, with a specific focus on the role of symmetry and asymmetry in their design, operation, and control...

Guest Editors

Prof. Dr. Larbi Djilali

TecNM Chihuahua, División de Estudios de Posgrado e Investigación,
Chihuahua 31310, México

Dr. Moussa Boukhniher

Université de Lorraine, Lcoms, F-57000 Metz, France

Dr. Abraham Efraim Rodríguez-Mata

TecNM Chihuahua, División de Estudios de Posgrado e Investigación,
Chihuahua, México

Deadline for manuscript submissions

31 December 2025



Symmetry

an Open Access Journal
by MDPI

Impact Factor 2.2
CiteScore 5.3



mdpi.com/si/226043

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

1. ICREA, 08010 Barcelona, Spain

2. 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)