

## Special Issue

# Computational Methods in Interdisciplinary Applications of Nonlinear Dynamics

### Message from the Guest Editor

Nonlinear dynamics takes its origins from physics and applied mathematics. In the last few decades, this interdisciplinary field of interest for many engineers, physicists, and mathematicians has spawned useful applications in almost all branches of science and technology. Looking for the closest example, well-developed asymptotic methods are among the principal methods of nonlinear analyses. Nevertheless, many theoretical and also real-world physical systems comply with interdisciplinary mathematical and numerical methods that have to be taken into account in the modeling, analysis, identification, and control of nonlinear dynamical systems, representing challenges in mathematical and computational applications. In this Special Issue, the aim is to offer state-of-the-art current computational methods and their interdisciplinary applications oriented to solving problems in nonlinear dynamics.

---

### Guest Editor

Prof. Dr. Paweł Olejnik

Department of Automation, Biomechanics and Mechatronics, Lodz University of Technology, 1/15 Stefanowski Street, 90-924 Lodz, Poland

---

### Deadline for manuscript submissions

closed (31 December 2019)



## Mathematical and Computational Applications

---

an Open Access Journal  
by MDPI

---

Impact Factor 1.9  
Indexed in Scopus



[mdpi.com/si/13414](https://mdpi.com/si/13414)

*Mathematical and  
Computational Applications*  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[mca@mdpi.com](mailto:mca@mdpi.com)

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

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





# Mathematical and Computational Applications

an Open Access Journal  
by MDPI

Impact Factor 1.9  
Indexed in Scopus



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



## About the Journal

### Message from the Editorial Board

---

#### Editors-in-Chief

Prof. Dr. Oliver Schütze

Depto de Computacion, CINVESTAV, Mexico City 07360, Mexico

Prof. Dr. Gianluigi Rozza

SISSA mathLab, International School for Advanced Studies, Office A-435, Via Bonomea 265, 34136 Trieste, Italy

---

#### Author Benefits

##### High Visibility:

indexed within Scopus, ESCI (Web of Science), Inspec, and other databases.

##### Journal Rank:

JCR - Q2 (Mathematics, Interdisciplinary Applications)

##### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 28.8 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the first half of 2024).