Special Issue

Significance of Mathematical Modelling and Control in Real-World Problems: New Developments and Applications

Message from the Guest Editors

Mathematical modeling and systems control arise in many research problems, ranging from physical and chemical processes to biomathematics and life science. Their theoretical description is closely connected with various areas of pure and applied mathematics including nonlinear modeling, integro-differential equations, nonlinear dynamics, pattern formation, non-Markovian processes, nonlinear and anomalous transport, time-delay equations and so on. The aim of this Special Issue is to collect original and high-quality contributions related to the mathematical theory of such processes and phenomena including the dynamical models, applied and computational algorithms, controller design and mathematical methods regarded as new and prominent for understanding the problems that arise in natural phenomena...

Guest Editors

Dr. Mehmet Yavuz

 Department of Mathematics and Computer Sciences, Necmettin Erbakan University, Meram Yeniyol, 42090 Meram, Konya, Turkey
Department of Mathematics, College of Engineering, Mathematics and Physical Sciences, University of Exeter, Cornwall TR10 9FE, UK

Dr. Ioannis Dassios

School of Electrical and Electronic Engineering, University College Dublin, D04 V1W8 Dublin, Ireland

Deadline for manuscript submissions

closed (31 December 2022)



Mathematical and Computational Applications

an Open Access Journal by MDPI

Impact Factor 2.1 CiteScore 0.5



mdpi.com/si/96167

Mathematical and Computational Applications Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 mca@mdpi.com

mdpi.com/journal/ mca





Mathematical and Computational Applications

an Open Access Journal by MDPI

Impact Factor 2.1 CiteScore 0.5



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 25.3 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 2025).

Recognition of Reviewers:

reviewers who provide timely, thorough peer-review reports receive vouchers entitling them to a discount on the APC of their next publication in any MDPI journal, in appreciation of the work done.

