

Special Issue

New Trends in Numerics and Dynamics of Artificial Neural Networks: Theory and Applications

Message from the Guest Editors

In this Special Issue, we aim at fostering the synergy between these two fields, by encouraging the analysis and design of numerical methods for, in, and from machine learning algorithms. We welcome contributions that highlight satisfactory learning results as soundly based on numerical foundations, as well as ground-breaking numerical methods that provide the basis for efficient practical algorithms, at least at the proof-of-concept stage. The scope of the issue is deliberately broad, including but not limited to numerical techniques from linear algebra, dynamical systems, kernel methods, optimization, spectral methods, and stochastic formulations, as well as algorithms within neural networks, support vector machines, recurrent networks, and clustering methods.

Guest Editors

Prof. Dr. Miguel Atencia

Escuela de Ingenierías Industriales, Universidad de Málaga, 29071 Málaga, Spain

Prof. Dr. Daniela Danciu

Department of Automatic Control and Electronics, University of Craiova, A.I. Cuza, No. 13, RO-200585 Craiova, Romania

Deadline for manuscript submissions

closed (31 December 2023)



Mathematics

an Open Access Journal
by MDPI

Impact Factor 2.2
CiteScore 4.6



mdpi.com/si/56529

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

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





Mathematics

an Open Access Journal
by MDPI

Impact Factor 2.2
CiteScore 4.6



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



About the Journal

Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

Editor-in-Chief

Prof. Dr. Francisco Chiclana

School of Computer Science and Informatics, De Montfort University,
The Gateway, Leicester LE1 9BH, UK

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), RePEc, and other databases.

Journal Rank:

JCR - Q1 (Mathematics) / CiteScore - Q1 (General Mathematics)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 18.4 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the first half of 2025).