Special Issue

Advances and Applications in Computational Neuroscience

Message from the Guest Editors

The process of creating mathematical or computational models of neural processes and brain function is known as computational neuroscience. These models capture different features of brain activity. By comparing predictions with experimental data, data analysis techniques help to validate and refine these models. Applying this knowledge to various fields will help us gain a better understanding of psychiatric disorders. Moreover, computational neuroscience is crucial for understanding learning and memory processes in biological and artificial intelligence systems. We invite scientists from this interdisciplinary field to submit novel research papers that integrate theoretical advances in computational neuroscience and advances in data analysis techniques.

Guest Editors

Prof. Dr. Fernando Montani
Instituto de Física de La Plata (IFLP), CONICET-UNLP, La Plata B1900, Buenos Aires, Argentina

Dr. Osvaldo Anibal Rosso
Instituto de Física, Universidade Federal de Alagoas, Maceió 57072-970, Alagoas, Brazil

Deadline for manuscript submissions

closed (31 March 2025)

Σ

Mathematics

mdpi.com/si/181175

mdpi.com/journal/
mathematics

MDPI

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).