

Special Issue

Neural Networks and Complex Dynamics in Computational Neuroscience

Message from the Guest Editors

We are pleased to announce this Special Issue of *Mathematics*. “Neural Networks and Complex Dynamics in Computational Neuroscience” is a broad topic; it can be studied from many different perspectives, focusing on mathematics, biology, or computation, as well as the fundamentals and applications. We welcome studies on ‘Neural and Complex Networks’ related (but not limited) to the following topics:

- Synchronization, coherence resonance, chimera states, and other dynamical features;
- Bifurcation theory, basins of attraction, stability analysis;
- Perturbation theory, external forces and noise;
- Artificial intelligence: analysis and applications.

Guest Editors

Dr. Fabiano Ferrari

Dr. Kelly Cristiane Iarosz

Prof. Dr. Gustavo Zampier Dos Santos Lima

Deadline for manuscript submissions

closed (20 June 2025)



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

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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

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Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 17.3 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the second half of 2025).