Special Issue

Complex System Dynamics and Mathematical Biology

Message from the Guest Editor

We are pleased to invite submissions for the Special Issue "Complex System Dynamics and Mathematical Biology" of *Mathematics* journal. It aims to highlight the synergy between complex systems theory and mathematical biology. Topics of interest include, but are not limited to:

 Mathematical Modeling of Biological Systems: Development and analysis of models that capture the dynamics of biological processes, like gene regulatory networks, cellular signaling pathways, metabolic networks, multi-cellular dynamics, and ecosystem interactions.

- **Dynamical Systems in Biology:** Exploration of nonlinear dynamics, chaos theory, and stability analysis in biological contexts.
- Network Theory and Biological Interactions: Application of network analysis or hypergraph theory to understand complex interdependencies in biological systems, including protein–protein interaction networks, metabolic pathways, and ecological networks.
- Computational Methods in Mathematical Biology: Advancements in computational techniques and algorithms that facilitate the simulation and analysis of complex biological systems as well as the integration of biological data.

Guest Editor

Dr. Song Feng Pacific Northwest National Laboratory, Richland, WA 99352, USA

Deadline for manuscript submissions

20 January 2026



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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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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).