# Special Issue

## Dynamics on Complex Networks: Theory, Modelling, and Applications

### Message from the Guest Editor

The study of dynamical processes on complex networks has become a cornerstone of contemporary mathematics, physics, biology, engineering, and the social sciences. Modern data streams now reveal not only the intricate wiring of real world systems but also the rich, often nonlinear, temporal patterns that unfold on—and reshape—these structures. This Special Issue invites contributions on the forefront of network science, focusing on the complex interplay between structure and dynamics in non-traditional networks. As the field moves beyond static, single-layer representations, understanding the behavior of systems on more realistic and intricate architecture has become paramount. We solicit original research and review articles that explore dynamics on temporal networks, multilayer networks, and higher-order networks (e.g., hypergraphs, simplicial complexes). A key focus is lies in controlling and optimizing of processes unfolding on these structures, from curbing epidemics to managing information diffusion. We encourage interdisciplinary contributions that bridge theory and real world applications, from neuroscience and epidemiology to critical infrastructure and social systems.

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### Deadline for manuscript submissions

30 June 2026

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# Mathematics

**an Open Access Journal by MDPI**

**Impact Factor 2.2
CiteScore 4.6**

# 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.

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