# **Special Issue**

# Advances in Network and Cloud Computing

## Message from the Guest Editor

Network and cloud computing are fundamental to modern digital infrastructure, enabling large-scale data processing, real-time communication, and intelligent integration. As these systems expand in complexity, rigorous mathematical analysis becomes essential for performance optimisation, cloud security, dynamic system modelling, and uncertainty analysis in distributed environments. Bridging mathematical theory and practical implementation is key to addressing current challenges. This Special Issue seeks high-impact research on integrated network-cloud advancements, uniting theoretical innovation with real-world deployment. We welcome original research and reviews in areas including:

- Mathematical modelling of cloud and network systems;
- Optimisation and control in distributed computing;
- Graph theory and combinatorics for network topology;
- Stochastic processes and uncertainty quantification;
- Game theory in resource allocation;
- Algebraic and topological methods in network design:
- PDEs and dynamical systems for traffic/data flow;
- Machine learning in network and cloud computing;
- Information theory and coding in distributed systems;
- Mathematically rigorous simulation techniques.

### **Guest Editor**

Prof. Dr. Rongheng Lin

School of Computer Science, Beijing University of Post and Telecommunication, Beijing, China

## Deadline for manuscript submissions

15 May 2026



# **Mathematics**

an Open Access Journal by MDPI

Impact Factor 2.2 CiteScore 4.6



mdpi.com/si/250039

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

mdpi.com/journal/mathematics





# **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.

#### 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).

