

Special Issue

Advances in High-Dimensional Data Analysis and Applications

Message from the Guest Editor

This Special Issue will feature a broad range of articles, including the following. Novel statistical techniques: introduction of new statistical models and inference methods tailored to handle high-dimensional datasets, ensuring robustness and accuracy in the face of data complexity. Machine learning algorithms: development and application of advanced machine learning algorithms that can efficiently manage and analyze high-dimensional data, uncovering hidden patterns and driving predictive analytics. Dimensionality reduction methods: innovative approaches to reduce the dimensionality of data while preserving essential information, facilitating more efficient data analysis and visualization. Computational techniques: exploration of novel computational methods and tools designed to process high-dimensional data more effectively, addressing issues related to computational cost and scalability. Practical applications: case studies and practical applications demonstrating the successful implementation of high-dimensional data analysis techniques in various domains, such as personalized medicine, biomarker identification, financial modeling, and image recognition.

Guest Editor

Dr. Ran Dai

Department of Biostatistics, University of Nebraska Medical Center,
Omaha, NE 68198, USA

Deadline for manuscript submissions

31 October 2025



Mathematics

an Open Access Journal
by MDPI

Impact Factor 2.2
CiteScore 4.6



mdpi.com/si/208991

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

[mdpi.com/journal/
mathematics](https://mdpi.com/journal/mathematics)





Mathematics

an Open Access Journal
by MDPI

Impact Factor 2.2
CiteScore 4.6



[mdpi.com/journal/
mathematics](https://mdpi.com/journal/mathematics)



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).