

# Special Issue

## Recent Advances in Statistical Machine Learning

### Message from the Guest Editor

With the rapid growth of data-driven applications reliant on artificial intelligence (AI), statistical machine learning emerges as a pivotal force in tackling intricate challenges spanning natural language processing, computer vision, engineering, bioinformatics, healthcare, marketing, and beyond. This Special Issue endeavors to disseminate the latest discoveries and advancements at the confluence of statistics and machine learning. We welcome submissions encompassing both theoretical advancements and practical applications, including the crafting of probabilistic models, inference algorithms, and learning techniques. Topics of interest span a wide spectrum, ranging from supervised, unsupervised, semi-supervised learning, reinforcement learning, sparse learning, dimensionality reduction, interpretable machine learning, and the realms of deep learning and neural networks. Moreover, we encourage innovative applications of such methodologies aimed at resolving emerging challenges across diverse domains.

### Guest Editor

Dr. Michelle Xia

Department of Statistics and Actuarial Science, Northern Illinois University, Dekalb, IL, USA

### Deadline for manuscript submissions

30 September 2025



## Mathematics

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.3  
CiteScore 4.0



[mdpi.com/si/202699](https://mdpi.com/si/202699)

*Mathematics*  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[mathematics@mdpi.com](mailto:mathematics@mdpi.com)

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





# Mathematics

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.3  
CiteScore 4.0



[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 18.3 days after submission; acceptance to publication is undertaken in 1.9 days (median values for papers published in this journal in the second half of 2024).