

# Special Issue

## Mathematical Methods in Image Processing and Computer Vision

### Message from the Guest Editors

The image processing and computer vision tasks mainly contain image classification, detection, denoising, retrieval or segmentation. These successes largely attribute to the application of various mathematical methods (e.g., optimization, analysis, statistics, geometry, and algebra). They provide solid theoretical support for performance improvement in specific domains, which in turn have inspired the advancement of mathematical methods to a certain degree.

Mathematical models have played a critical role in modeling problems, designing algorithms and analyzing performance for image processing and computer vision tasks. How to further apply mathematical methods into image processing and computer vision is an essential problem worth studying. This Special Issue aims to bring together researchers investigating mathematical methods to solve diverse problems of image processing and computer vision tasks. Both state-of-the-art works, as well as literature reviews, are welcome for submission. Papers addressing interesting real-world computer vision applications are especially encouraged.

---

### Guest Editors

Prof. Dr. Yazhou Yao

School of Computer Science and Engineering, Nanjing University of Science and Technology, Nanjing 210094, China

Dr. Xiaoshui Huang

Faculty of Medicine and Health, The University of Sydney, Sydney, NSW 2006, Australia

---

### Deadline for manuscript submissions

closed (31 October 2023)



## Mathematics

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.2  
CiteScore 4.6



[mdpi.com/si/104500](https://mdpi.com/si/104500)

*Mathematics*  
Editorial Office  
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 2.2**  
**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).