

## Special Issue

# Algebraic Combinatorics in Data Science and Optimisation

### Message from the Guest Editor

Nowadays, data science and optimization are attractive fields. There is no doubt that algebraic and combinatorial methods are extremely useful in this research field. Combinatorics, on the other hand, is a broad field, and algebraic combinatorics in particular has made tremendous progress over the past quarter century and continues to develop as a research field that organically links combinatorics and various branches of algebra. This Special Issue aims to capture the shades of algebraic combinatorics that emerge in data science and optimization research to provide new topics in algebraic combinatorics from the perspective of applied mathematics, and to give birth to a novel trend in algebraic combinatorics.

---

### Guest Editor

Prof. Dr. Takayuki Hibi

Department of Pure and Applied Mathematics, Graduate School of Information Science and Technology, Osaka University, 1-5 Yamadaoka, Suita 565-0871, Osaka, Japan

---

### Deadline for manuscript submissions

30 June 2026



## AppliedMath

---

an Open Access Journal  
by MDPI

---

Impact Factor 0.7  
CiteScore 1.1



[mdpi.com/si/211043](https://mdpi.com/si/211043)

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

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





# AppliedMath

---

an Open Access Journal  
by MDPI

---

Impact Factor 0.7  
CiteScore 1.1



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



## About the Journal

### Message from the Editor-in-Chief

Mathematics permeates all kinds of academic worlds and is a fountain flowing with innovative development. The journal *AppliedMath*, publishing high-quality refereed papers discussing various aspects of applied mathematics, is dedicated to promoting the integration of mathematics with applied disciplines to cultivate a profitable frontier of mathematics. The journal highlights articles devoted to the mathematical treatment of questions and phenomena arising in physics, chemistry, biology, medicine, pharmacy, engineering, information science, social sciences, and humanities. One of the missions of this journal is to serve scientists by quickly announcing the seeds of significant mathematical breakthroughs in science and technology.

---

### Editor-in-Chief

Prof. Dr. Takayuki Hibi

Department of Pure and Applied Mathematics, Graduate School of Information Science and Technology, Osaka University, 1-5 Yamadaoka, Suita 565-0871, Osaka, Japan

---

### Author Benefits

#### Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

#### High Visibility:

indexed within ESCI (Web of Science), Scopus, EBSCO, and other databases.

#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 20.6 days after submission; acceptance to publication is undertaken in 8.6 days (median values for papers published in this journal in the second half of 2025).