

# Special Issue

## Advances in Artificial Intelligence and Metaheuristics Methods for Planning and Scheduling

### Message from the Guest Editors

This Special Issue will focus on recent theoretical and computational studies of the application of metaheuristics and nature-inspired optimization techniques to planning and scheduling in real-world problems. Topics include but are not limited to:

- Intelligent optimization for production planning and scheduling.
- Evolutionary computation and metaheuristics: theory and foundations.
- Hybrid optimization techniques (swarm intelligence, evolutionary algorithms).
- Computation using neural networks and fuzzy systems.
- Dynamic production scheduling.
- Metaheuristic parametrization and self-parametrization techniques.
- Machine learning for planning and scheduling optimization.
- AI for planning and scheduling.
- Multi-criteria approach in planning and scheduling.
- Applications in industry, transportation, services, and others.
- Use case applications in Industry 4.0, transportation, health systems, and telecommunication (5G).

Advances in artificial intelligence and metaheuristics methods and their hybrids for planning and scheduling are particularly welcome in this Special Issue.

---

### Guest Editors

Dr. Ana M. Madureira

Dr. Joao Ferreira

Prof. Dr. André Santos

---

### Deadline for manuscript submissions

closed (30 August 2024)



## Mathematics

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.2  
CiteScore 4.6



[mdpi.com/si/84194](https://mdpi.com/si/84194)

*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).