

Special Issue

Combinatorial Optimization: Trends and Applications

Message from the Guest Editors

In this Special Issue, we invite the research community to submit their original contributions to the topic of the trends and applications of combinatorial optimization.

We welcome studies

investigating **exact** to **approximate approaches** for optimization from both the **theoretical and the applied** angle, regardless of the nature of the combinatorial problem (single-objective, multi-objective, dynamic, etc.). Authors are encouraged to submit their formal and technically sound manuscripts to cover (not exhaustively) the following aspects:

- Approximation algorithms;
- Branch-and-bound, branch-and-cut, and branch-and-price algorithms;
- Computational complexity;
- Computational geometry;
- Cutting plane algorithms;
- Exact and parameterized algorithms;
- Metaheuristics,
- Hyperheuristics;
- Machine learning-empowered searches;
- Meta-modeling;
- Surrogate modeling;
- Linear and nonlinear (mixed-)integer programming;
- Local search algorithms;
- Evolutionary algorithms, bio-inspired algorithms;
- Multi-objective optimization; Scheduling algorithms.
- Scheduling algorithms.

Guest Editors

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Deadline for manuscript submissions

closed (15 August 2024)



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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.

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Author Benefits

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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).