

Special Issue

Optimisation Algorithms and Their Applications

Message from the Guest Editors

Optimisation models and algorithms have been widely applied to various industries. This Special Issue will focus on recent theoretical and applied studies of optimisation problems, models, analysis, algorithms, and real-world implementations. Topics include—but are not limited to—the following:

- Planning and scheduling optimisation;
- Supply chain management and operations management;
- Construction algorithms based on dominance rules;
- Heuristic algorithms based on problem properties;
- Exact algorithms;
- Approximate algorithms with proofs of convergence degree and computational complexity;
- Classic metaheuristic algorithms;
- Hyper-heuristic algorithms;
- Mixed-integer programming models with relaxation methods;
- Intelligent multiagent system and simulation;
- Bilevel optimisation;
- Algorithmic game theory;
- Deep learning, reinforcement learning, and other machine learning algorithms;
- Approximation algorithms and randomized algorithms for combinatorial optimisation problems;
- Recent literature review of optimisation algorithms and their applications;
- Complex management systems with application-based aspects.

Guest Editors

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Prof. Dr. Felix T. S. Chan

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Deadline for manuscript submissions

closed (31 December 2023)



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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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manuscripts are peer-reviewed and a first decision is provided to authors approximately 17.1 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the first half of 2024).