Special Issue

Recent Advances of Discrete Optimization and Scheduling

Message from the Guest Editors

The development of software products that enable effective planning and optimization of production processes is necessary to improve the quality of the industrial sector. This Special Issue is devoted to modern approaches to solving discrete optimization problems and scheduling problems. Special attention is paid to problems with practical applications. First of all, this concerns the tasks that were updated as a result of the pandemic crisis of 2020–2021: the tasks of managing medical institutions, the tasks of cargo transportation, the tasks of production planning, and so on. NP-hard problems are the most difficult since they require significant computational resources to find a solution in general cases. Various models are studied, and their effectiveness is compared based on the study of special (pseudo-)polynomial solvable cases of problems, the measure of (pseudo-)polynomial unsolvability, the radius of stability, and the efficiency of algorithms.

Guest Editors

Dr. Alexander A Lazarev

Prof. Dr. Frank Werner

Prof. Dr. Bertrand M.T. Lin

Deadline for manuscript submissions

closed (31 January 2024)

MDPI

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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