Special Issue

Stochastic Programming: Theory, Methods, and Applications

Message from the Guest Editors

Stochastic programming and optimization is a widely adopted tool for decision-making problems under uncertainty and has seen advances in risk measures, distributionally robust optimization, and applications in energy and natural resources, economics and finance, statistics and machine learning. This Special Issue aims at the state of art in theory, methods, and applications of stochastic programming. Topics include but are not limited to:

- **Theoretical analyses of dynamic stochastic programming**, including structural analysis, stability analysis, asymptotic analysis, consistency, and rates of convergence;
- **Numerical algorithms for solving stochastic programming problems**, including issues such as scenario generation or reduction, sampling methods such as sample (average) approximation, stochastic gradient methods, and decomposition techniques;
- **Applications of dynamic stochastic programming for the modeling and solution of academic problems** such as multi-player game problems, machine learning, and practical problems such as financial planning, risk management, dynamic resource allocation, airline scheduling, and unit commitment in power systems.

Guest Editors

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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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