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Stochastic Control and Optimization in Mathematical Finance

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Deadline for manuscript submissions: 1 March 2025

Message from the Guest Editors

Stochastic control and optimization have become indispensable tools in modern financial modeling and decision making. The dynamic nature of financial markets. coupled with the presence of uncertainty and risk, requires sophisticated mathematical techniques for the effective management and optimization of financial resources. This Special Issue aims to explore the intricate interplay stochastic control theory, optimization between techniques, and their applications in mathematical finance. It aims to provide a platform for researchers and practitioners to present their latest findings, and methods and insights related to tackling complex financial problems through stochastic control and optimization frameworks. This Special Issue welcomes contributions that address theoretical developments, algorithmic innovations, and empirical studies in areas including, but not limited to, portfolio optimization, risk management, derivative pricing, and asset allocation under uncertainty.

Specialsue



mdpi.com/si/201593





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