Special Issue

Statistical and Probabilistic Methods in the Game Theory

Message from the Guest Editor

The purpose of this Special Issue is to highlight the importance of combining probabilistic modeling methods in connection with game theory. The theme of this issue is devoted to game-theoretic modeling in a wide range of fields. Different optimality or rationality principles are presented. The problems of stable cooperation and myopic behavior in multi-agent systems will be investigated. Among others, the optimal location and allocation of the resource on the plane and related to its optimal routing in networking are considered. Game-theoretic models of systems related to the IT market, in particular, mobile operators, cloud, high-performance, and distributed computing, the Internet of things market will be discussed. A new formulation for differential games will be suggested. Studies of game-theoretic models with asymmetric participants and vector payments will be discussed, and concepts of solutions in dynamic games of this type will be proposed. Further research on an optimal stopping problem for point processes will be presented. Details of other models will be subject to contributed papers.

Guest Editor

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Deadline for manuscript submissions

closed (30 June 2021)



Mathematics

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Impact Factor 2.2 CiteScore 4.6



mdpi.com/si/44056

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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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