

# Special Issue

## Evolutionary Games, Propagation Processes and Control in Complex Systems

### Message from the Guest Editors

Multi-agent systems are ubiquitous in many biological, economic social and engineering applications, including transportation, medicine, the internet and social networks. As the complexity and heterogeneity of the system grow, a new paradigm for analysis and design of large-scale complex systems is needed today to address critical design issues. Game theory, particularly, evolutionary and dynamic games, is a well understood tool to model and design pairwise interactions in complex systems. It provides a systematic methodology to understand systems from the beginning and enables a theoretic foundation to find scalable and feasible solutions for modern systems of multi-agent iterations. This issue is devoted to the application and the development of evolutionary games and control methods for complex systems. It aims to bring together researchers who aim to develop theoretic frameworks for strategic decision making in complex systems, including evolutionary games, control theory, complex networks, and learning. The nature of this issue is multi-disciplinary. The application domains of the session include economics, biology, computer networks, and public health.

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### Guest Editors

Dr. Elena Gubar

Dr. Denis Fedyanin

Prof. Dr. Krzysztof J. Szajowski

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### Deadline for manuscript submissions

closed (31 December 2023)



## Mathematics

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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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### Editor-in-Chief

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