

Call for Papers

Special Issue *IFORS 2026 Journal of Dynamic and Games, AIMS*

IFORS 2026 Vienna, Austria

OR Dynamics and Games in Finance and Economy

Deadline for Submissions: November 30, 2026

1. AIMS AND SCOPE

Game theory is a mathematical art of modelling and decision making developed to solve problems involving conflicts or cooperation, competition and co-competition between largely rational parties. The theory primarily concerns the search for the optimal rational choices or decision in various scenarios. Modern game theory was introduced in the 1920s in the works of John von Neumann. John von Neumann, Oskar Morgenstern, and John Nash contributed significantly to the development of game theory. The theory has a wide range of applications in various fields, including economics, political science, finance, biology, psychology, neuroscience and more. In recent decades, the game theory community paid particular attention to games which involve uncertainty of various formats, also through the presence of human factors.

It was quite natural that finance and related economic fields, including actuarial science, asset-liability management, and pension fund systems, began to benefit from modern game theory, its research dynamism and vibrancy, not least at the interface between game theory and computer science, for example in algorithmic game theory.

The *Journal of Dynamics and Games (JDG)*, host of this special issue, is a scholarly journal for pure and applied mathematics, and *Operational Research (OR)*, publishing high-quality, peer-reviewed, and explanatory articles from all research areas of its editors. The focus of *JDG* is the interface between dynamical systems and game theory. It is dedicated to the development and dissemination of mathematical and *OR* ideas and techniques arising from the analysis and modeling of systems in which players (agents, traders, inventors, producers, consumers, competitors, markets, animals, plants, ecosystems, communication systems, market uncertainty, environment, world views, etc.) interact dynamically, and ideally in optimal ways, over time.

We invite contributions that address mathematical questions about such systems or provide a rigorous mathematical analysis of models, preceding optimal decision-making, where tools from dynamics and games prove useful in *OR*, and vice versa. Areas covered, related to finance and economics, include dynamic games, stochastic games, differential games, evolutionary games, repeated games, learning and evolutionary models, mean-field models, fairness, voting, auctions, matching, allocation games, and other research areas of tuned cooperative and non-cooperative game theories, preferably where uncertain dynamics are involved, as well as related applications in social sciences, biological sciences, medicine, brain and heart research, life sciences, physical and chemical sciences, and computer science.

The objective of this special issue is to explore latest development of mathematical and *OR* ideas and techniques in modeling, and simulation related with Game Theory, applied in the areas of finance and economics, in which aspects of biology, neuroscience and beyond, can be involved as well. Papers in newly evolving related topics are especially welcomed. We invite experts, researchers and scholars worldwide to submit high-quality innovative research articles, emerging and paradigmatic science papers on potential topics as listed below.

This Special Issue is endorsed at the occasion of the conference *IFORS 2026 Vienna* (<https://www.ifors2026.at/home/>).

2. TOPICS COVERED

All research areas of *IFORS 2026* are welcome! Topics include, but are not limited to:

<p>Games in economics</p> <ul style="list-style-type: none"> o Games in micro-economics o Games in macro-economics o Prey-predator models in economics o Games on information spread in economics o Games under interval/ellipsoidal uncertainty o Games in regulatory systems o Games under grey or fuzzy uncertainty o Stochastic and differential games o Economic games and risk management 	<p>Games in finance</p> <ul style="list-style-type: none"> o Games in financial and commodity markets o Games on wealth processes o Games on price processes o Games on consumption processes o Games on portfolio processes o Games on volatility processes o Games in insurance and pension funds o Stochastic optimal control and games o Financial games under regime switching
<p>Games in finance and economics with aspects of biology, neuroscience and medicine</p> <ul style="list-style-type: none"> o Game theory in gene-environment and eco-finance networks under uncertainty o Game theory in regulatory systems under uncertainty o Game theory in and with neuroscience o Game theory in healthcare o Game theory in environmental sciences, astronomy and cosmology o Game theory in hybrid systems and Turing machine models o Game theory and optimal control under stochasticity, memory and regime switching 	
<p>Algorithmic Game Theory in finance and economics</p> <ul style="list-style-type: none"> o Auctions and pricing o Behavioral economics and behavioral modeling o Computational advertising o Computational aspects of equilibria o Computational social choice o Econometrics, Machine learning and Data science o Information design, including contest and contract design o Market design, Matching markets, Mechanism design o Learning in games and markets, Network games 	

3. SUBMISSION GUIDELINES

Please follow the journal style and the guidelines of JDG and AIMS.

All authors should submit their paper to the following specific address:

https://ef.msp.org/submit/aims_jdg&cr=SecondedQuarterSuitableRestoring.

4. IMPORTANT DATES

30 November 2026	Submission deadline	
January 2027	Notification of the first round review)
April 2027	Revised submission due)
July 2027	Final notice of acceptance/reject)

5. GUEST EDITORS

Prof. Dr. Alberto Pinto, University of Porto, Portugal; E-mail: aapinto1@gmail.com

Prof. Dr. Yukun Cheng, Jiangnan University, China; E-mail: ykcheng@amss.ac.cn

Prof. Dr. Gerhard-Wilhelm Weber, Poznan University of Technology, Poland
Email: gerhard_wilhelm.weber@put.poznan.pl