

## Special Issue

# Financial Mathematics and Econophysics

### Message from the Guest Editors

We envision a collection of papers in financial mathematics and econophysics, including applications to high-frequency data. Over the past two decades, the complexity of international finance has grown enormously with the development of new markets and instruments for transferring risks. This growth in complexity has been accompanied by an expanded role for mathematical models to value derivative securities and to measure their risks. At the same time, the new discipline econophysics has advanced. This discipline studies the application of mathematical tools that are usually applied to physical models to the study of financial models. The statistical mechanics theory, such as regarding phase transitions and critical phenomena, has been applied by many authors in studying the speculative bubbles preceding a financial crash.

- financial mathematics
- econophysics
- quantitative finance
- machine Learning
- high-frequency data
- complex data sets

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### Guest Editors

Dr. Maria P. Beccar-Varela

Prof. Dr. Maria C. Mariani

Dr. Osei K. Tweneboah

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### Deadline for manuscript submissions

1 December 2025



## Axioms

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## About the Journal

### Message from the Editor-in-Chief

*Axioms* is dedicated to the foundations (structure and axiomatic basis, in particular) of mathematical theories, not only from a crisp or strictly classical sense, but also from a fuzzy and generalized sense. This includes the more innovative current scientific trends, devoted to discover and solve new challenging problems. The prime goal of *Axioms* is to publish first-class, original research articles under an open access policy with minimal fees for the authors. We would be pleased to welcome you as one of our authors.

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### Editor-in-Chief

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