





an Open Access Journal by MDPI

# **Mathematical Models and Applications in Finance**

Guest Editors:

### **Dr. Rand Low**

1. Associate Professor, Bond Business School, Bond University, Robina, QLD 4226, Australia 2. Honorary Senior Fellow, UQ

2. Honorary Senior Fellow, UQ Business School, University of Queensland, St Lucia, QLD, Australia

### Prof. Dr. Yasuaki Watanabe

Department of Business and Marketing Strategy Professor, Kindai University, Higashiosaka, Osaka 577-8502, Japan

Deadline for manuscript submissions:

30 November 2024

# **Message from the Guest Editors**

In financial research, mathematical modelling allows for the establishment of a functional relationship between multiple variables, thereby being an effective method with which to analyse and solve problems in financial economics Mathematical models underpin understanding of many problems in financial economics, from Markowitz's (1952) mean-variance optimisation, which underpins modern portfolio theory (MPT), to the Black-Scholes-Merton model for option pricing and the Black-Litterman model. incorporates investors' views of expected returns in MPT. Advancements in the fields of statistical and machine learning have led towards uses in the areas of credit risk and asset pricing. In this context, we are seeking to publish high-quality research on fund management, risk management (i.e., credit, market, and operational), portfolio optimisation, asset pricing, option pricing, volatility spillovers, and any other topics related to mathematical finance. We pay particular attention to the importance of the use of big data and AI/ML techniques in financial economics. We encourage the submission of quantitative research works.











an Open Access Journal by MDPI

### **Editor-in-Chief**

### Prof. Dr. Francisco Chiclana

School of Computer Science and Informatics, De Montfort University, The Gateway, Leicester LE1 9BH, UK

# Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The iournal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering sociology. particularly those that and 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.

### **Author Benefits**

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), RePEc, and other databases.

**Journal Rank:** JCR - Q1 (Mathematics) / CiteScore - Q1 (General Mathematics)

### **Contact Us**