

# Special Issue

## Modeling and Simulation Analysis of Blockchain System

### Message from the Guest Editors

The development of blockchain applications and systems usually involves interactions between different systems and components. Due to the complexity of blockchain applications and systems, it has become increasingly important to apply formal methods in their development. This will help in achieving consistency and correctness of the static and dynamic properties that define the developed software artefact.

Formal methods for modelling and simulating blockchain systems may include Set theories, Game theories, Algebraic equations, Differential equations, Formalized pseudocode algorithms, Petri nets, etc. Applying any of these methods in software development demonstrates rigour and improves the verifiability of a software artefact.

This Special Issue seeks to collect articles that apply any of the listed (not limited to) above formal approaches in the development of blockchain applications. In addition, there is a special consideration for authors that applied formal methods in requirement analyses of blockchain systems and applications.

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### Guest Editors

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### Deadline for manuscript submissions

closed (30 June 2024)



## Mathematics

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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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### Editor-in-Chief

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#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 17.3 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the second half of 2025).