

# Special Issue

## Markov-Chain Modelling and Applications

### Message from the Guest Editors

This Special Issue aims to compile novel research papers in which the Markov chain is applied in numerous areas of knowledge. The relevant topics are:

- Markov processes in the calculation of probabilities.
- Application of the Markov chain in finance, economics, and actuarial science.
- Application of Markov processes in logistics, optimization, and operations management.
- Application of the Markov chain in study techniques in biology, human or veterinary medicine, genetics, epidemiology, or related medical sciences.
- Development of models and technological applications in computer security, internet and search criteria, big data, data mining, and artificial intelligence with Markov processes.
- Application of the Markov chain in Earth sciences such as geology, volcanology, seismology, meteorology, etc.
- Use of the Markov chain in physics, astronomy, or cosmology.
- Theoretical developments related to Markov processes and probability calculation.

Other interesting and related topics.

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### Guest Editors

Prof. Dr. José Álvarez-García

Dr. Oscar V. De la Torre-Torres

Prof. Dr. María de la Cruz del Río-Rama

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### Deadline for manuscript submissions

closed (28 February 2022)



## 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

Prof. Dr. Francisco Chiclana  
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#### High Visibility:

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#### Journal Rank:

JCR - Q1 (Mathematics) / CiteScore - Q1 (General Mathematics)

#### 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).