

# Special Issue

## Pension Mathematics—New Development for the Near Future

### Message from the Guest Editors

Many institutions are calling for public and private pension systems to be restructured. The OECD and the World Bank, among others, are advocating a remodeling of these systems. Classic solutions have not worked.

Today, there is a threat of economic, demographic, and financial risks that threaten the sustainability of these systems. New problems such as longevity and ageing populations, economic deflation, negative returns, and the consequences of the COVID-19 pandemic make it necessary to manage and develop innovative pension models that are able to cope with these new social challenges. This Special Issue of *Mathematics* is dedicated to high-quality articles that advance the state of the art with innovative theoretical, practical, and policy developments in modelling risks affecting public and private pension systems. Articles related to, but not limited to, the following topics are welcome:

- Sustainable design of both public and vested DB and DC retirement plans.
- Labor and social risks in the funded phase.
- Rate of return in the construction of the pension payout phase.
- Longevity and low-interest-rate risks in the pension payout period.
- etc.

### Guest Editors

Prof. Dr. Joseba Iñaki De la Peña Esteban

Dr. Asier Garayeta

Prof. Dr. María del Carmen Valls Martínez

### Deadline for manuscript submissions

closed (30 June 2022)



# Mathematics

an Open Access Journal  
by MDPI

Impact Factor 2.2  
CiteScore 4.6



[mdpi.com/si/84067](https://mdpi.com/si/84067)

*Mathematics*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[mathematics@mdpi.com](mailto:mathematics@mdpi.com)

[mdpi.com/journal/  
mathematics](https://mdpi.com/journal/mathematics)





# Mathematics

---

an Open Access Journal  
by MDPI

---

**Impact Factor 2.2**  
**CiteScore 4.6**



[mdpi.com/journal/  
mathematics](https://mdpi.com/journal/mathematics)



## 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.

---

### Editor-in-Chief

Prof. Dr. Francisco Chiclana

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

---

### Author Benefits

#### High Visibility:

indexed within Scopus, SCIE (Web of Science), RePEc, and other databases.

#### Journal Rank:

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

#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 18.4 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the first half of 2025).