



## Actuarial Mathematics and Data Analytics

Guest Editors:

**Dr. Wenjun Jiang**

Department of Mathematics and  
Statistics, University of Calgary,  
Calgary, Canada

**Dr. Yiyang Zhang**

Department of Mathematics,  
Southern University of Science  
and Technology, Shenzhen,  
China

Deadline for manuscript  
submissions:

**closed (30 April 2024)**

### Message from the Guest Editors

The advances in actuarial data analytics have been witnessed in the past decade. The rapid developing artificial intelligence and machine learning technologies provide innovative insights on building actuarial descriptive/predictive models and addressing a variety of actuarial decision-making problems. Emerging machine-learning methodologies can be found in the fields of both life and non-life insurance, such as mortality rate forecasting, health care claims modelling, loss reserving, insurance fraud detection, and index insurance design. These methodologies and skills also enable actuarial researchers to investigate more the interdisciplinary areas, such as pandemic risk, cyber risk, climate risk and agriculture insurance, and help them to develop related risk hedging tools.

The main aim of this Special Issue is to provide a platform for the discussion of quite recent achievements in actuarial data analytics and the related challenges. We welcome original research articles that explore either theoretical or applied aspects of data analytics in actuarial science, which include but not limited to the above-mentioned topics.





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 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.

## 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

---

*Mathematics* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/mathematics](http://mdpi.com/journal/mathematics)  
[mathematics@mdpi.com](mailto:mathematics@mdpi.com)  
[X@MathematicsMDPI](https://twitter.com/MathematicsMDPI)