Special Issue

Mathematical and Statistical Modeling in Complex Diseases

Message from the Guest Editors

This special issue aims to showcase the critical role of mathematical and statistical modeling in advancing our understanding and treatment of complex diseases, including but not limited to dementia, cancer, cardiovascular disorders, and infectious diseases. These modeling frameworks support clinical decision-making, enable the design of optimized therapeutic strategies, and provide deep insights into disease mechanisms. We welcome both methodological advances and applied research utilizing real-world clinical or biological data.

- Mathematical Modeling in Disease Research
- Statistical Modeling in Clinical Studies
- Interdisciplinary Collaboration and Future Directions

By bringing together diverse perspectives and methodologies, this special issue aims to foster advances that are both scientifically rigorous and clinically meaningful. We look forward to contributions that push the boundaries of what modeling can achieve in the realm of complex disease research.

Guest Editors

Dr. Shantia Yarahmadian

Department of Mathematics and Statistics, Mississippi State University, Starkville, MS 39762, USA

Prof. Dr. Seth F. Oppenheimer

College of Science and Mathematics, Augusta University, Augusta, GA 30912, USA

Deadline for manuscript submissions

30 April 2026



Mathematics

an Open Access Journal by MDPI

Impact Factor 2.2 CiteScore 4.6



mdpi.com/si/244941

Mathematics
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
mathematics@mdpi.com

mdpi.com/journal/ mathematics





Mathematics

an Open Access Journal by MDPI

Impact Factor 2.2 CiteScore 4.6



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).

