

# Special Issue

## Advances in Differential Dynamical Systems with Applications to Economics and Biology

### Message from the Guest Editors

Nowadays, in economics and biology, a delay between cause and effect is very often taken into consideration. Sometimes, it is more practical to add a distributed time delay. Moreover, fractional derivatives instead of integer order derivatives may reflect the memory and the inherited properties of different systems. In terms of realistic conditions, stochastic perturbation framed by a stochastic differential delay system is used to explain the ambiguity about the context in which the system operates. This Special Issue focuses on the dynamical analysis of mathematical models arising from economy and biology and innovative developments of mathematical techniques for their applications. Submissions that involve interdisciplinary collaborations are welcome, as are recent advances in both discrete and continuous techniques and significant applications. Numerical simulations can be used to emphasize the theoretical findings. Finally, an economic or biological interpretation of the obtained results is desired.

---

### Guest Editors

Prof. Dr. Mihaela Neamțu

Dr. Eva Kaslik

Dr. Anca Rădulescu

---

### Deadline for manuscript submissions

closed (31 March 2022)



# Mathematics

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.2  
CiteScore 4.6



[mdpi.com/si/79394](https://mdpi.com/si/79394)

*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).