# Special Issue

# New Advances in Algebra, Ring Theory and Homological Algebra, 2nd Edition

## Message from the Guest Editors

There are many branches of algebra whose contributions solve problems posed by the scientific challenges arising from the advancement of technology. Two of them also stand out for their popularity in society: cryptography and coding theory. Additionally, from a theoretical point of view, the momentum that some disciplines have had in the last 20 years is remarkable. Thus, homological algebra has been given a big push with the emergence of the different classes of Gorenstein modules, and especially in recent years, of the relative Gorenstein modules. Moreover, the emergence of Hopf Algebras has had a huge impact on many branches of mathematics and physics—and, of course, one cannot forget the very active branches of module theory and guivers representation theory, with immense applications at all times. Thus, we are pleased to present this Special Issue of *Mathematics* as a tool to share recent and interesting results in the branches of homological algebra, module theory, quivers representation theory, Hopf algebras, cryptography, and coding theory.

### **Guest Editors**

Prof. Dr. Juan Ramón García Rozas

Prof. Dr. Luis Oyonarte Alcalá

Prof. Dr. Driss Bennis

### Deadline for manuscript submissions

closed (30 November 2024)



# **Mathematics**

an Open Access Journal by MDPI

Impact Factor 2.2 CiteScore 4.6



mdpi.com/si/147222

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).

