



Combinatorics and Computation in Commutative Algebra

Guest Editors:

Prof. Dr. Philippe Gimenez

Mathematics Research Institute
(IMUVA), University of Valladolid,
Facultad de Ciencias, Paseo
Belén, 7, 47011 Valladolid, Spain

Prof. Dr. Ignacio García Marco

Departamento de Matemáticas,
Estadística e I.O. Universidad de
La Laguna. C/ Astrofísico
Francisco Sánchez s/n, 38200 La
Laguna, Spain

**Prof. Dr. Eduardo Sáenz De
Cabezón**

Departamento de Matemáticas y
Computación, Universidad de La
Rioja, La Rioja, Spain

Deadline for manuscript
submissions:
closed (29 February 2024)

Message from the Guest Editors

Commutative algebra is a classical area of mathematics that studies algebraic structures over commutative rings. From its early stage, commutative algebra has also had deep interactions with other disciplines of mathematics such as algebraic geometry, number theory, representation theory, algebraic topology and, more recently, algebraic combinatorics, computational algebra, coding theory or cryptography.

Commutative algebra has, in particular, a strong interplay with combinatorics, from which it extracts and to which it transfers ideas, results, and techniques. On the other hand, algorithmic methods have acquired an important role in commutative algebra due to the development of techniques based on Gröbner bases, which have allowed the creation of powerful algorithms.

The aim of this Special Issue of *Mathematics* is to show recent trends on combinatorial and computational aspects of commutative algebra and its applications. We cordially invite you to present your recent contributions to this Special Issue.





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

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