Combinatorics and Computation in Commutative Algebra

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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.

Special Issue

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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.

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