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

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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 quivers 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.











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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 iournal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering sociology. particularly those that and 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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