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## Latest Trends in Noncommutative Algebra

Guest Editor:

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## Message from the Guest Editor

The origin of noncommutative algebra goes back to the mid 19<sup>th</sup> century when Hamilton discovered quaternions. Later, Wedderburn, Noether and Artin laid down the foundation of the theory of noncommutative rings. In the past few decades, many new topics have emerged on the interface of noncommutative algebra with algebraic geometry, operator algebra and physics, such as Hopf algebra, noncommutative Calabi–Yau algebra, quantum cluster algebra, and Leavitt path algebra. In the area of the study of modules over noncommutative rings, there have been a lot of advances in the past few decades, i.e., the theory of approximations of modules, generalizations of homological properties, and the theory of purity.

In this special volume, I would like to invite contributions that highlight recent developments in the area of noncommutative rings and modules over them. These may include tools and techniques that are categorical, combinatorial or homological. Contributions leaning toward applications in coding theory are welcome too.



