Special Issue

Mathematical Foundations for Physical Sciences

Message from the Guest Editors

The fundamental mathematics of physics encompasses the core mathematical concepts and methods essential for understanding and advancing theoretical physics. Mathematical physics lies at the intersection of these disciplines. It applies mathematical structures and techniques to solve physical problems and develop coherent theoretical models of the natural world. Key mathematical tools in this context include vector spaces, matrix algebra, differential and integral equations, complex variables, infinite series, and integral transforms. These methods are indispensable for both theoretical exploration and practical application in physics and engineering. In summary, the fundamentals of mathematics and physics are an interdisciplinary domain that equips researchers with the conceptual and technical means to explore, understand, and model the physical universe.

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Axioms is dedicated to the foundations (structure and axiomatic basis, in particular) of mathematical theories, not only from a crisp or strictly classical sense, but also from a fuzzy and generalized sense. This includes the more innovative current scientific trends, devoted to discover and solve new challenging problems. The prime goal of *Axioms* is to publish first-class, original research articles under an open access policy with minimal fees for the authors. We would be pleased to welcome you as one of our authors.

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