# **Special Issue**

# Advances in Functional Analysis and Banach Space

### Message from the Guest Editors

Functional analysis is a branch of mathematics and a fundamental theory of modern mathematics. An important branch of functional analysis is Banach theory, which studies the geometric structure of Banach spaces (including convexity theory, norm differentiability theory, geometric constants, etc.), as well as the application of Banach space geometry in convex optimization theory, approximation theory, fixed point theory, etc. Banach theory is also the foundation of operator theory. Banach spaces have good geometric properties that ensure good operator properties, such as in the wide application of Banach space geometry theory in operator-generalized inverse theory. Banach space theory is widely used to solve ordinary differential equations and partial differential equations, providing a mathematical framework for quantum mechanics. Mathematical physics, mechanical engineering, and control engineering are some sciences that can benefit from Banach space theory. This Special Issue welcomes original and unpublished mathematical papers on the latest developments with high standards and significant implications.

### **Guest Editors**

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### Message from the Editor-in-Chief

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.

### Editor-in-Chief

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