# Special Issue

# Trends in Fixed Point Theory and Fractional Calculus

## Message from the Guest Editors

Fractional calculus and fixed point theory are the two interrelated disciplines of modern mathematics which have emerged as indispensable tools in the modeling of diverse processes in engineering and physical sciences. These techniques and tools are multidisciplinary in nature and have widespread applications in the study of physical systems. Differential equations, integral equations, wavelet analysis, optimization, and approximation theory are just a few examples that extensively utilize these two topics. The increased complexity in physical phenomena and engineering experiments continually seeks the advancement of these analytic tools in terms of fractional calculus and fixed point theory. Topics include but are not limited to:

- fractional calculus
- functional analysis
- fixed points
- nonlinear operator theory
- variational inequalities
- numerical analysis and algorithms
- functional equations and stability
- ordinary and partial differential equations
- integral equations
- calculus of variation
- wavelet analysis
- computational fluid dynamics

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## Deadline for manuscript submissions

closed (31 July 2025)

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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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