

## Special Issue

# Interval and Fuzzy-Valued Functions: Generalized Differentiability and Applications

### Message from the Guest Editors

A partial list of topics:

- Interval and fuzzy-valued functions of a single and multiple variables;
- Generalized derivative and differentiability of fuzzy-valued functions;
- Comparison of different definitions and forms of generalized differentiability;
- Properties of interval-valued, set-valued and fuzzy-valued functions;
- Calculus and algebra for interval and fuzzy generalized derivative;
- Characterization of generalized differentiable functions;
- Generalized fuzzy differentiability on time scales and applications;
- Fractional differentiability of interval and fuzzy-valued functions and applications;
- Partial derivatives of interval and fuzzy-valued functions of multiple variables;
- Fuzzy differential equations: theory, numerical solution, algorithms, applications;
- Optimization with nonlinear fuzzy-valued objective functions;
- Global optimization with fuzzy-valued objective;
- Vector-valued optimization with interval and fuzzy objectives;
- Linear interval and fuzzy optimization: theory, algorithms, applications;

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### Guest Editors

Prof. Dr. Manuel Arana-Jimenez

Dr. Maria Letizia Guerra

Prof. Laerte Sorini

Prof. Dr. Luciano Stefanini

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### Deadline for manuscript submissions

closed (1 May 2022)



## Axioms

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## About the Journal

### 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.

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### Editor-in-Chief

Prof. Dr. Humberto Bustince

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