

## Special Issue

# Advances in Numerical Analysis and Scientific Computing

### Message from the Guest Editor

In the last several years, the role of numerical analysis and scientific computing has been dramatically increased, especially for the solution of real-world problems, and for the creation of digital twins of complex real-world objects. This Special Issue will present recent research results in numerical analysis and scientific computing. Papers on the production, analysis, and computational performance of new and original methods in all areas of numerical analysis and scientific computing are welcome. More specifically, we welcome papers on topics including but not limited to the following:

- Scientific computing and algorithms in applications in the sciences;
- Mathematical modeling (including, but not limited to, mathematical modeling of engineering and environmental manufacturing processes, industrial systems, heat transfer, fluid mechanics, CFD, and transport phenomena);
- Numerical problems in dynamical systems, numerical analysis of ODEs, PDEs, and systems;
- Mathematical methods with application in many artificial intelligence implementations;
- Neural networks in numerical analysis and scientific computing.

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### Guest Editor

Dr. Qingguo Hong

Department of Mathematics, Pennsylvania State University, University Park, PA, USA

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### Deadline for manuscript submissions

closed (31 December 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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