Special Issue

Numerical Methods for Solving Nonlinear Equations and Systems: Convergence and Stability

Message from the Guest Editors

Solving nonlinear equations and systems is a non-trivial task that involves many areas of science and technology. Usually it is not affordable in a direct way and iterative algorithms play a fundamental role in solving nonlinear equations and systems. This is an area of research that has experienced exponential growth in the last years. The main theme of this Special Issue is the design, analysis of convergence and stability and application to practical problems of new iterative schemes for solving nonlinear problems. This includes methods with and without memory, with derivatives or derivative-free, and the real or complex dynamics associated with them and an analysis of their convergence that can be local, semilocal or global. High quality submissions on related topics are also welcome.

Keywords

- Nonlinear problems
- Iterative methods
- Convergence
- Efficiency
- Chaotic behavior
- Complex or real dynamics

Guest Editors

Prof. Dr. Juan Ramón Torregrosa Sánchez

Prof. Dr. Alicia Cordero

Dr. Ramandeep Behl

Dr. Fiza Zafar

Deadline for manuscript submissions

closed (30 October 2019)

Axioms

an Open Access Journal by MDPI

Impact Factor 1.6

mdpi.com/si/19608

Axioms
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
axioms@mdpi.com

mdpi.com/journal/axioms

Axioms

an Open Access Journal by MDPI

Impact Factor 1.6

mdpi.com/journal/axioms

MDPI

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.

Editor-in-Chief

Prof. Dr. Humberto Bustince
Department of Statistics, Computer Science and Mathematics, Public University of Navarra, 31006 Pamplona, Spain

Author Benefits

Open Access

— free for readers, with article processing charges (APC) paid by authors or their institutions.

High visibility:

indexed within SCIE (Web of Science), dblp, and other databases.

Journal Rank:

JCR - Q2 (Mathematics, Applied)