

Special Issue

Iterative Methods for Solving Nonlinear Equations and Systems 2020

Message from the Guest Editors

Solving nonlinear equations (scalar or matrix equations) and nonlinear 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 their approach. This is an area of research with an exponential growth in the last years. The main theme of this Special Issue includes but is not limited to 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; the real or complex dynamics associated with them; and an analysis of their convergence whether local, semilocal, or global. **Key words:**

- nonlinear systems
- transcendent equations
- nonlinear matrix equations
- iterative methods
- convergence
- efficiency
- chaotic behavior
- complex or real dynamics
- numerical resolution of nonlinear models in biology
- chemistry
- aerospace
- communications
- other engineering areas

Guest Editors

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Deadline for manuscript submissions

closed (15 December 2020)



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About the Journal

Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

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