



Iterative Methods for Solving Nonlinear Equations and Systems 2020

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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

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Message from the Editor-in-Chief

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