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New Perspectives in Applied Mathematics with Nonlinear Equations and Dynamical Systems

Guest Editor:

Prof. Dr. Iñigo Sarría

Escuela Superior de Ingeniería y Tecnología, Universidad Internacional de La Rioja, Avenida de la Paz 123, 26006 Logroño, La Rioja, Spain

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Message from the Guest Editor

Dear Colleagues,

The resolution of nonlinear equations poses a recurring challenge across various scientific domains. It is widely acknowledged that closed-form solutions for such equations are seldom attainable, necessitating the application of iterative techniques. Among these methods, Newton's method stands out as the most well-known, extensively studied, and frequently employed, owing to its favorable convergence properties and straightforward computational approach.

This Special Issue aims to showcase research developments in this discipline, particularly delving into the analysis of the dynamic behavior of nonlinear equations. Such investigations offer researchers new avenues for finding solutions to these equations or systems of equations. Manuscripts are encouraged in areas such as the following:

- Explorations of complex dynamics through parameter and dynamical planes;
- Multi-point iterative methods (with or without memory);
- Study of the dynamics of higher-order methods;
- Development of tools aiding researchers in studying dynamical behavior;

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• Optimal-order derivative-free iterative methods.

Prof. Dr. Iñigo Sarría Guest Editor





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Editor-in-Chief

Prof. Dr. Humberto Bustince

Department of Statistics, Computer Science and Mathematics, Public University of Navarra, 31006 Pamplona, Spain

Message from the Editor-in-Chief

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