

Numerical methods for nonlinear integral equations

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Nonlinear integral equations have a wide applicability across various fields, including applied mathematics, mathematical physics, engineering, and biological sciences. In these contexts various models of integral equations such as Fredholm-Hammerstein, Urysohn and Volterra type are involved.

On the other hand several models are mathematically represented in terms of boundary value problems having nonlinear boundary conditions and these equations can be reformulated as nonlinear integral equations. For all these reasons, the numerical methods for solving nonlinear integral equations became a popular research topic recently.

The aim of the mini symposium is to bring together experts in the numerical handling of nonlinear integral equations for sharing experience, tools and new results.

Speakers

- Magda Rebelo, Department of Mathematics, NOVA FCT, Universidade NOVA de Lisboa, Portugal `msjr@fct.unl.pt`
- Sanda Micula, Department of Mathematics and Computer Science, Babes-Bolyai University, Cluj, Romania, `sanda.micula@ubbcluj.ro`
- Valeria Sagaria, Department of Engineering, University of Basilicata, Italy, `valeria.sagaria@unibas.it`
- Anna Lucia Laguardia, Department of Basic and Applied Sciences, University of Basilicata, `annalucia.laguardia@unibas.it`

References

- [1] M. A. Krasnosel'skii, Topological Methods in the Theory of Nonlinear Integral Equations, Macmillan, New York, 1964.