SPECIAL ISSUE on Differential Equations and Numerical Analysis

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DESCRIPTION

Nonlinear differential equations and numerical analysis play a significant role in the modern theory of mathematics and physics. The topics focus on all related field of nonlinear ordinary differential equations and partial differential equations. Differential equations came into existence with the invention of calculus by Newton and Leibniz. The study of differential equations consists mainly of the study of their solutions (the set of functions that satisfy each equation), and of the properties of their solutions. Only the simplest differential equations are soluble by explicit formulas; however, many properties of solutions of a given differential equation may be determined without computing them exactly. Hence numerical analysis of nonlinear differential equations is a powerful method to solve it.

This special issue of *Demonstratio Mathematica (IF: 2.0)* covers all aspects of Differential Equations and Numerical Analysis. Submission topics may include, but are not limited to the following

- Bifurcation theory and limit cycles of ordinary differential equations
- Well-posedness theory of nonlinear partial differential equations
- Nonlinear stability theory for differential equations
- General theory of Geometric flows
- Numerical analysis for differential equations

Authors are requested to submit their full revised papers complying the general scope of the journal. The submitted papers will undergo the standard peer-review process before they can be accepted. Notification of acceptance will be communicated as we progress with the review process.

HOW TO SUBMIT

Before submission authors should carefully read the Instruction for Authors.

Manuscripts can be written in TeX, LaTeX (strongly recommended) - the journal's LATEX template. Please note that we do not accept papers in Plain TEX format. Text files can be also submitted as standard DOCUMENT (.DOC) which is acceptable if the submission in LATEX is not possible. **For an initial submission, the authors are strongly advised to upload their entire manuscript, including tables and figures, as a single PDF file.**

All submissions to the Special Issue must be made electronically via online submission system Editorial Manager:
All manuscripts will undergo the standard peer-review process (single blind, at least two independent reviewers). When entering your submission via online submission system please choose the option *"Special Issue on Differential Equations and Numerical Analysis*".

Submission of a manuscript implies that the work described has not been published before and it is not under consideration for publication anywhere else.

The deadline for submissions is October 10, 2024, but individual papers will be reviewed and published online on an ongoing basis.

Contributors to the Special Issue will benefit from:

- critical peer-review
- no space constraints
- quick online publication upon completing the publishing process (**continuous publication model**)
- content converting to xml
- better visibility due to **Open Access** – free, unrestricted and permanent access to all the content
- **liberal policies on copyrights** (authors retain copyrights) and on self-archiving (no embargo periods)
- promotion of published papers to readers and citers
- **long-term preservation** – content archiving with Portico

We are looking forward to your submission!

In case of any questions please contact **Editorial Office**
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