

Special Issue

Supercomputing and Mathematics

Message from the Guest Editors

Supercomputing is the science of efficiently solving extremely complex and computing intensive applications. This Special Issue gives an opportunity to researchers and developers from academia and industry involved in the areas of high performance and supercomputing systems, and where mathematics contributes in a significant way, to communicate their ideas and advances in this rapidly changing interdisciplinary field. We invite you to submit papers in the research areas, including, but not limited to, the following topics:

- Supercomputing applications
- Mathematical complex models solving
- Parallel algorithms for simulation
- Big data processing merging with supercomputing
- Machine learning and machine intelligence
- Optimization models and systems
- Models for performance evaluation and performance estimation
- Numerical solutions to complex systems
- Any other topic that combines the use of mathematics with the supercomputing

Guest Editors

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Deadline for manuscript submissions

closed (31 May 2020)



Mathematics

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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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manuscripts are peer-reviewed and a first decision is provided to authors approximately 17.3 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the second half of 2025).