Numerical Analysis and Matrix Computations: Theory and Applications

Guest Editor:

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Deadline for manuscript submissions:
15 January 2025

Message from the Guest Editor

Matrix computations are used in almost all sciences and engineering including disciplines such as quantum information, mathematical biology, seismology, data science, dynamical systems, control theory, signal and image processing, geometrical modeling, network theory, and many others. The Special Issue is devoted to numerical analysis and matrix computations. Topics include but are not limited to:

1. Perturbation analysis of matrix problems;
2. Ill-conditioned matrix problems and their regularization;
3. Matrices depending on parameters;
4. Eigenvalue and eigenspaces sensitivity;
5. Computations related to matrix pencils and matrix polynomials;
6. Eigenvalue computations;
7. Jordan and Schur algorithms in matrix computations;
8. Numerical solution of matrix equations and linear matrix inequalities;
9. Computing matrix functions;
10. Numerical matrix methods for solving difference and differential equations;
11. Software for matrix computations;
12. Numerical computations in engineering problems, etc.

Special Issue

Editor-in-Chief

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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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