



Special Issue on
Approximation Theory, Methods and Applications
Call for Papers

Approximation Theory, Methods and Applications is a mathematical discipline focused on finding approximate solutions to problems when exact answers are unobtainable or impractical. It involves developing, analyzing, and implementing algorithms and techniques to approximate functions, integrals, and solutions to equations with a controllable level of error. This field is crucial in numerical analysis, computer science, and applied mathematics, enabling the solving of complex problems in science, engineering, and economics by providing efficient and accurate approximation methods for various mathematical operations and processes.

In this special issue, we intend to invite front-line researchers and authors to submit original research and review articles on **Approximation Theory, Methods and Applications**. Potential topics include, but are not limited to:

- Interpolation and polynomial approximation
- Wavelet approximation
- Rational approximation
- Spline approximation
- Numerical methods for differential equations
- Fourier approximations and harmonic analysis
- Nonlinear approximation
- Approximation theory by operators
- Sparse approximation
- Multivariate approximation
- Optimization and approximation algorithms
- Statistical learning and approximation
- Error analysis and estimation in approximation
- Quantum approximate optimization algorithm
- Approximation theory and algorithms for data analysis
- Approximation method for image processing
- Approximation in specific domains

Authors should read over the journal's [For Authors](#) carefully before submission. Prospective authors should submit an electronic copy of their complete manuscript through the journal's [Paper Submission System](#).



Please kindly notice that the “**Special Issue**” under your manuscript title is supposed to be specified and the research field “**Special Issue – *Approximation Theory, Methods and Applications***” should be chosen during your submission.

According to the following timetable:

Submission Deadline	December 23rd, 2024
Publication Date	February 2025

For publishing inquiries, please feel free to contact the Editorial Assistant at submission.entrance1@scirp.org

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