



Special Issue on Approximation Theory, Methods and Applications

Call for Papers

"Approximation Theory, Methods, and Applications" is an academic topic that focuses on the mathematical study of approximation methods and their applications in various fields. Researchers in this field explore techniques for representing complicated functions using simpler, more manageable functions, such as polynomials or trigonometric functions. They investigate the properties of different approximation methods, analyze their accuracy and convergence, and apply them to solve problems in areas such as numerical analysis, data fitting, signal processing, computer graphics, and scientific computing. The goal is to develop robust and efficient approximation methods that can be applied to real-world problems.

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:

- Function approximation
- Statistical approximation
- Nonlinear approximation
- Algebraic methods
- Fourier analysis
- Estimation theory
- Minimax approximation
- Multivariate approximation
- Interpolation and polynomial approximation
- Numerical methods for approximation
- Function spaces and function approximation
- Optimal recovery and approximation in finite dimensions
- Approximation theory in high-dimensional problems
- Statistical approximation and learning theory
- Approximation and computation
- Approximation methods in data analysis and machine learning
- Approximation methods in numerical partial differential equations
- Applications in image processing, computer vision, and signal processing
- Quantum approximate optimization algorithms
- Approximation methods in science and engineering



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	May 20th, 2024
Publication Date	July 2024

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

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