



Advances in Approximation Theory and Numerical Functional Analysis

Guest Editor:

Prof. Dr. Gancho Tachev

Department of Mathematics,
University of Architecture Civil
Engineering and Geodesy, 1046
Sofia, Bulgaria

Deadline for manuscript
submissions:

31 March 2025

Message from the Guest Editor

Dear Colleagues,

The purpose of this Special Issue is to present recent results in the fields of mathematical analysis, approximation theory, and numerical functional analysis, as well as to describe the numerical methods currently being used in important areas of applications of approximation theory.

Some classics of approximation theory include quantitative direct and inverse estimates for approximation by positive linear operators (p.l.o.), Voronovskaja-type theorems, weighted approximation, linking-type operators, simultaneous approximation by some classical operators, best constants in classical and new polynomial inequalities and many others are the focus of this book. Different types of inequalities for algebraic and trigonometric polynomials like inequalities of Bernstein, Markov and best constants in various estimates are also attractive topics of approximation theory. Splines, including Schoenberg variation-diminishing spline operators and their numerous applications in numerical analysis, are also an interesting branch in approximation theory. Interpolation by these modern tools in one or more dimensions have been studied intensively in recent decades.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Francisco Chiclana
School of Computer Science and
Informatics, De Montfort
University, The Gateway,
Leicester LE1 9BH, UK

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), RePEc, and other databases.

Journal Rank: JCR - Q1 (Mathematics) / CiteScore - Q1 (General Mathematics)

Contact Us

Mathematics Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/mathematics
mathematics@mdpi.com
[X@MathematicsMDPI](https://x.com/MathematicsMDPI)