

Special Issue

Fourier Analysis, Approximation Theory and Applications

Message from the Guest Editors

Fourier analysis took root in Europe more than two hundred years ago, and since then, it has given rise to several new concepts and theories in different areas of contemporary mathematics. The first steps in the development of the theory were related to the representation of an arbitrary function by a trigonometric series. The concept of the Lebesgue integral strongly encourages the further development of the theory, considering functions from the different classes of functions which can be represented by series which converge or are summable in different senses. With different types of applications, one can study series with respect to other types of orthogonal systems. To represent functions of various variables, multiple orthogonal series are considered. Fourier analysis has many scientific applications, particularly in boundary value problems, approximation theory, signal processing, digital image processing and others. In this Special Issue, we encourage submissions of up-to-date results related to classical approaches of Fourier analysis and its applications.

Guest Editors

Prof. Dr. Kazaros Kazarian

Department of Mathematics, Faculty of Sciences, C-XVII, Autonomous University of Madrid, 28049 Madrid, Spain

Prof. Dr. Mikhail Dyachenko

Moscow Center for Fundamental and Applied Mathematics, Moscow 119991, Russia; Lomonosov Moscow State University, Moscow 119992, Russia

Deadline for manuscript submissions

closed (23 January 2024)



Mathematics

an Open Access Journal
by MDPI

Impact Factor 2.2
CiteScore 4.6



mdpi.com/si/166249

Mathematics
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
mathematics@mdpi.com

[mdpi.com/journal/
mathematics](https://mdpi.com/journal/mathematics)





Mathematics

an Open Access Journal
by MDPI

Impact Factor 2.2
CiteScore 4.6



[mdpi.com/journal/
mathematics](https://mdpi.com/journal/mathematics)



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.

Editor-in-Chief

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

Author Benefits

High Visibility:

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

Journal Rank:

JCR - Q1 (Mathematics) / CiteScore - Q1 (General Mathematics)

Rapid Publication:

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).