

Special Issue

Mathematical Applications in Computer Graphics

Message from the Guest Editors

Mathematics serves as the foundation for many of the most significant advancements in computer graphics. From geometric modeling to rendering techniques, mathematical principles enable the development of sophisticated algorithms that drive the creation and manipulation of complex visual data. This Special Issue aims to bring together cutting-edge research that leverages mathematical methodologies to address challenges and innovate within the field of computer graphics. The convergence of mathematics and computer graphics has led to transformative progress in various applications, including virtual and augmented reality, digital arts, animation, and scientific visualization. However, many challenges remain, particularly in the efficient processing and rendering of complex data structures, real-time interaction, and accurate simulation of physical phenomena. This Special Issue seeks to highlight novel mathematical approaches that push the boundaries of what is possible in computer graphics. We invite prospective authors to submit original manuscripts that explore mathematical techniques and their applications in computer graphics.

Guest Editors

Dr. Xiaoqiang Zhu

School of Communication and Information Engineering, Shanghai University, Shanghai 200444, China

Prof. Dr. Lihua You

National Centre for Computer Animation, Bournemouth University, Bournemouth BH12 5BB, UK

Deadline for manuscript submissions

31 August 2025



Mathematics

an Open Access Journal
by MDPI

Impact Factor 2.2
CiteScore 4.6



mdpi.com/si/206884

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 18.4 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the first half of 2025).