

Special Issue

Mathematical and Computational Models of Cognition

Message from the Guest Editor

One of the ultimate goals of Cognitive Science is to discover the mathematical laws and computational processes that govern human behavior and the human mind, and to achieve this with the systematicity and rigor found in the physical sciences. Indeed, the development of such models is crucial for rigorous theory development, measurement, and testing in Cognitive Science and Psychology. This Special Issue has two aims. The first is to assemble papers that propose, apply, test mathematical and computational models of any of the following cognitive capacities: perception, similarity assessment, attention, memory, concept learning, categorization, language, problem solving, reasoning, and decision-making. The second aim is to inform and motivate mathematicians from many fields of mathematics to engage in cognitive modeling. From so doing, new mathematical approaches to long-standing problems may emerge and more accurate and tenable models may be discovered. Contributions may involve any style of mathematical and computational modeling, whether deterministic or probabilistic, providing that the approach is accompanied by a plausible cognitive mechanism and adequate theory development.

Guest Editor

Dr. Ronaldo Vigo

Consortium for the Advancement of Cognitive Science, Psychology Department, College of Arts and Sciences, Ohio University, Athens, OH 45701, USA

Deadline for manuscript submissions

closed (1 December 2024)



Mathematics

an Open Access Journal
by MDPI

Impact Factor 2.2
CiteScore 4.6



mdpi.com/si/81284

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).