

Special Issue

Discrete and Algebraic Mathematical Biology

Message from the Guest Editor

A number of biological problems have given birth to brand new subfields within pure mathematics, especially in computational algebra, discrete dynamical systems, and algebraic geometry. This Special Issue will welcome submissions from a wide variety of topics—everything from applied work to theoretical and pure mathematical topics that are off-shoots of biological problems. Examples of areas that this Special Issue can cover include but are not limited to the following:

- Boolean, logical, or agent-based models;
- Biochemical reaction networks;
- Discrete dynamical systems and cellular automata;
- Algebraic statistics;
- Neural codes;
- Genomics;
- Phylogenetics;
- Polytopes and optimization;
- Molecular structures;
- Protein and RNA folding;
- Analysis of Boolean functions;
- Dynamic processes over graphs;
- Topological data analysis;
- Problems from discrete mathematics and graph theory inspired by biology;
- Algebraic problems inspired by biology;
- Topological problems inspired by biology.

Guest Editor

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Deadline for manuscript submissions

closed (15 June 2022)



Mathematics

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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.

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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).