Special Issue

New Advances in Bioinformatics and Mathematical Modelling

Message from the Guest Editors

"New Advances in Bioinformatics and Mathematical Modelling" is a Special Issue of the peer-reviewed open access journal *Mathematics*. This Special Issue aims to disseminate scientific achievements and innovations in Bioinformatics, including:

- Genomic bioinformatics:
 - Identification of candidate genes and single nucleotide polymorphisms;
 - Processing of large arrays of images and signals in order to sequence and annotate genomes and their observed mutations;
 - Processing of large arrays of images and signals to analyze the expression and regulation of genes and proteins;
 - Comparing, analyzing, and interpreting genetic and genomic data;
 - Simulation and modeling of DNA, RNA, proteins, and biomolecular interactions;
 - Predicting functions of genes and proteins.
- Computational biology:
 - Development of new mathematical formulas and statistical measures for evaluating relationships in large data sets;
 - Modeling of biological systems and functions;
 - Generation of models based on accumulated data from experiments;
 - Analyzing and interpreting biological data;
 - In silico analyses and experiments;
 - Modeling chemical reactions in the cell.

Guest Editors

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Deadline for manuscript submissions

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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.

Editor-in-Chief

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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).