Special Issue

Stochastic Dynamics in Computational and Mathematical Biology

Message from the Guest Editors

The Stochastic Dynamics in Computational and Mathematical Biology Special Issue of *Mathematics* aims to frame the issues raised in well-stirred approximation and data modeling and address them with improved stochastic approaches. This Special Issue combines new analytical and/or numerical mathematical methods and modeling algorithms alongside implementations of well-accepted, standard modeling technologies in emerging biological and applied science areas: immuno-science, infectious diseases, oncology, pharmacology and toxicology. Stochastic simulations have always been challenging over computational costs, hence algorithmic improvements should definitely be welcome along the way, and today it is very efficient in all aspects: temporal, spatio-temporal, and agent-based simulations. In biology and applied biological sciences, utilization of stochastic dynamics is highly emerging at an industrial scale. We seek papers that bring any of these aforesaid aspects, pushing the circle a little wider.

Guest Editors

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Deadline for manuscript submissions

closed (30 April 2024)

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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).