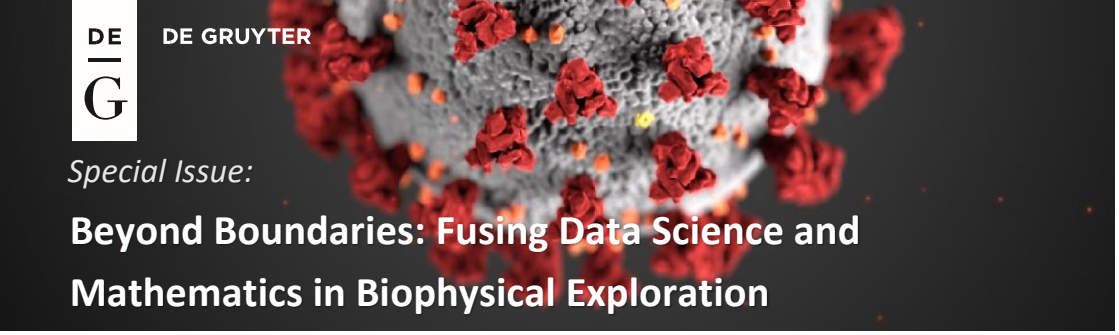

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Special Issue:

Beyond Boundaries: Fusing Data Science and Mathematics in Biophysical Exploration

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DESCRIPTION

This special issue, titled "***Beyond Boundaries: Fusing Data Science and Mathematics in Biophysical Exploration***," ventures into the interdisciplinary realm where data science, mathematics, and biophysics converge. In recent years, the explosion of data in the biological sciences, coupled with advances in mathematical theories and computational tools, has led to a paradigm shift in our approach to understanding life at a molecular level. At the core of this issue lies the integration of computational and applied mathematics and data analysis with biophysical studies. These mathematical frameworks offer profound insights into the complex, dynamic systems that underlie biological processes and structures, especially in the realm of proteins and biomolecules. By transcending traditional disciplinary boundaries, this special issue aims to not only present cutting-edge research but also to foster a dialogue among scientists from diverse fields. It is poised to inspire future research that further integrates data science and mathematics into biophysics, paving the way for groundbreaking discoveries and technological advancements in the broader scientific community.

The special issue focussed on the following research areas but not limited:

- Drug discovery, repurposing, protein-protein interaction networks
- Analysis of cell-type deconvolution, gene regulatory networks
- Virus evolution mechanism, mutations, natural selection
- Mutation impacts on vaccine breakthrough, antibody therapies
- Drug design, delivery and vaccine design
- Mathematical and machine learning modeling, scoring functions
- Molecular dynamics, molecular docking

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Authors who are interested in having their articles published in this special issue are encouraged to consider covering the article processing fee (**APC policy)**.

Prospective authors should submit their manuscript online at www.editorialmanager.com/mlbmb, and select the Article Type "Beyond Boundaries" as this special issue.

IMPORTANT DATES

Deadline of the Manuscripts Submission: June 1, 2024

First round of reviews: July 15, 2024

Expected Publication Date: October 1, 2024