Advances in the Mathematics of Ecological Modelling

Guest Editors:

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Deadline for manuscript submissions:
closed (30 April 2024)

Message from the Guest Editors

Current practices of ecological modelling often motivate new mathematical problems to be posed, and many excellent mathematical topics have roots in ecological problems.

We initiate this Special Issue aiming to sample the current state-of-the-art in the mathematics of ecological modelling. Manuscripts are welcome that are devoted to the following topics (but not limited to these):
Population and community dynamics;
Biodiversity assessment;
Inference from ecological data;
Interacting agents system;
Matrix population models;
Migrations and stability in metapopulations;
Stability and bifurcations in multispecies systems;
Stability vs complexity in randomly structured communities;
Vegetation successions;
Environmental stochasticity;
Biogeochemical cycles in ecosystems;
Species distribution models;
Pattern formation;
Spatial patterns and processes;
Uncertainties in model calibration;
Rational-/integer-valued formalisms.

Special Issue

Editor-in-Chief

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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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