

Special Issue

Mathematical Modelling in Studying Spatial Aspects of Population Dynamics

Message from the Guest Editor

Classical theory of mathematical ecology began with population dynamics models that were built and validated on data collected from experiments performed with small laboratory microcosms. However, the understanding of the crucial role played by various spatial aspects in the functioning of population systems came quite soon, partly owing to the results obtained with the help of mathematical modelling. In turn, this understanding stimulated the development of new modelling approaches to the mathematical description of biophysical phenomena related to spatial factors..... The purpose of this Special Issue is to gather a collection of articles presenting recent research dealing with spatial phenomena in biological populations and communities, obtained with models based on various mathematical techniques: ODE and PDE systems, integro-differential equations, difference equations (mapping), individual-based models, box models, matrix models, Markov models, and others.

Guest Editor

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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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