Fractional Diffusion, Multistability and Control in Complex Systems

Guest Editor:

Prof. Dr. Mingshu Peng
School of Science, Beijing Jiaotong University, No 3. Shangyuancun, Haidian District, Beijing 100044, China

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Message from the Guest Editor

There is a significant amount of research exploring reaction–diffusion models related to biological pattern formation. The practical use of reaction–diffusion models has increased remarkably in recent decades. The mechanochemical theory of biological pattern and form has played an important role in furthering our understanding of biology. Models and their biological predictions have become a stimulant for guiding critical experiments that can result in significant discoveries. This, naturally, should be the aim of any mathematical biology modeling. Spatial patterns are very complex in nature, and can play a significant role on the stability, as well as spatio-temporal behavior, of the population dynamical system because of the interactions between the species and the natural environment.

This Special Issue aims to focus on fractional diffusion, multistability and control in complex systems. Related topics, such as general mathematics analysis, Turing instability, bifurcation theory, complexity, control theory, mathematical modelling, numerical and computational methods, etc., will be considered for publication.

Prof. Dr. Mingshu Peng
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