

Interdisciplinary Applied Mathematics

Volume 30

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Problems in engineering, computational science, and the physical and biological sciences are using increasingly sophisticated mathematical techniques. Thus, the bridge between the mathematical sciences and other disciplines is heavily traveled. The correspondingly increased dialog between the disciplines has led to the establishment of the series: *Interdisciplinary Applied Mathematics*.

The purpose of this series is to meet the current and future needs for the interaction between various science and technology areas on the one hand and mathematics on the other. This is done, firstly, by encouraging the ways that that mathematics may be applied in traditional areas, as well as point towards new and innovative areas of applications; and, secondly, by encouraging other scientific disciplines to engage in a dialog with mathematicians outlining their problems to both access new methods and suggest innovative developments within mathematics itself.

The series will consist of monographs and high-level texts from researchers working on the interplay between mathematics and other fields of science and technology.

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Cover illustration: *Left panel: Stochastic description of the kinetics of a population of particles, Fig 9.15. Middle panel: Dissolution in topologically restricted media, Fig. 6.8B (reprinted with permission from Springer). Right panel: A pseudophase space for a chaotic model of cortisol kinetics, Fig.11.11.*

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