



Mathematics of Epidemics on Networks

By Istvan Z. Kiss

Springer-Verlag GmbH Mai 2017, 2017. Buch. Condition: Neu. Neuware - This textbook provides an exciting new addition to the area of network science featuring a stronger and more methodical link of models to their mathematical origin and explains how these relate to each other with special focus on epidemic spread on networks. The content of the book is at the interface of graph theory, stochastic processes and dynamical systems. The authors set out to make a significant contribution to closing the gap between model development and the supporting mathematics. This is done by: Summarising and presenting the state-of-the-art in modeling epidemics on networks with results and readily usable models signposted throughout the book; Presenting different mathematical approaches to formulate exact and solvable models; Identifying the concrete links between approximate models and their rigorous mathematical representation; Presenting a model hierarchy and clearly highlighting the links between model assumptions and model complexity; Providing a reference source for advanced undergraduate students, as well as doctoral students, postdoctoral researchers and academic experts who are engaged in modeling stochastic processes on networks; Providing software that can solve differential equation models or directly simulate epidemics on networks. Replete with numerous diagrams, examples, instructive exercises, and online...



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Reviews

This written publication is fantastic. I am quite late in start reading this one, but better then never. You will not feel monotony at at any time of your respective time (that's what catalogues are for concerning should you ask me).

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The book is fantastic and great. It is rally exciting throgh looking at period of time. Your way of life period will likely be change when you full reading this publication.

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