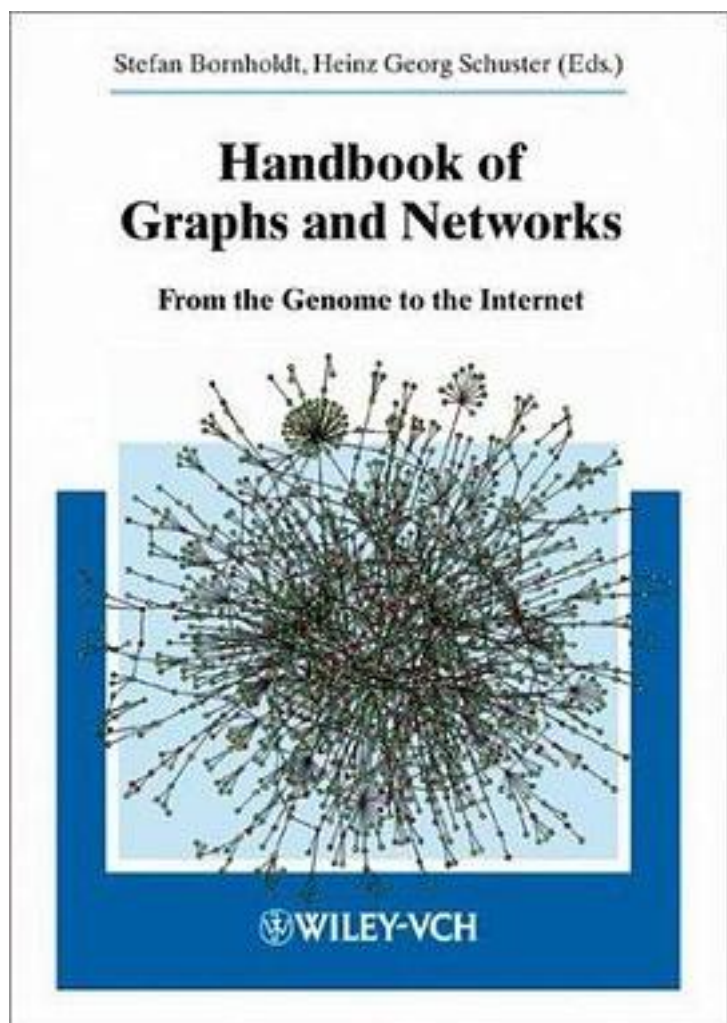# Handbook of Graphs and Networks

[Handbook of Graphs and Networks_下载链接1_](#)

著者:Bornholdt, Stefan (EDT)/ Schuster, Heinz Georg (EDT)

出版者:Wiley-VCH

出版时间:2003-01-01

装帧:Hardcover

isbn:9783527403363

This book defines the field of complex interacting networks in its infancy and presents

the dynamics of networks and their structure as a key concept across disciplines. The contributions present common underlying principles of network dynamics and their theoretical description and are of interest to specialists as well as to the non-specialized reader looking for an introduction to this new exciting field. Theoretical concepts include modeling networks as dynamical systems with numerical methods and new graph theoretical approaches, but also focus on networks that change their topology as in morphogenesis and self-organization. The authors offer concepts to model network structures and dynamics, focussing on approaches applicable across disciplines. Authors: Lada A. Adamic, Uri Alon, Daniel ben-Avraham, Albert-Lsl Barabsi, Bla Bollobs, Reuven Cohen, Sergei N. Dorogovtsev, Barbara Drossel, Shlomo Havlin, Bernardo A. Huberman, Sanjay Jain, Wolfgang Kinzel, Alan Kirman, Sandeep Krishna, Rajan M. Lukose, Sergei Maslov, Alan J. McKane, Jose F. F. Mendes, Kai Nagel, Mark Newman, Romualdo Pastor-Satorras, Oliver M. Riordan, Kim Sneppen, Ricard V. Sol, Sorin Solomon, Ralf J. Sommer, Alessandro Vespignani, Grard Weisbuch Stefan Bornholdt is Professor of Theoretical Physics and heads the Statistical Physics Group of the Interdisciplinary Center for Bioinformatics at the University of Leipzig, Germany. After studies at the University of Hamburg and UC Santa Barbara he received his doctorate in 1992. He held research positions at the Universities of Heidelberg and Kiel and in a biotech startup, and was visiting scientist at the Santa Fe Institute and the ITP Santa Barbara. His research focuses on interdisciplinary applications of theoretical and computational physics methods to complex systems in biology and other fields. Heinz Georg Schuster is Professor of Theoretical Physics at the University of Kiel in Germany. In 1971 he attained his doctorate and in 1976 he was appointed Professor at the University of Frankfurt am Main in Germany. He was a visiting professor at the Weizmann-Institute of Science in Israel and at the California Institute of Technology in Pasadena, USA. He is author of several books, among others "Deterministic Chaos", which has been translated into five languages.

作者介绍:

目录:

[Handbook of Graphs and Networks_下载链接1_](#)

标签

network

complexity

网络

复杂网络

语言学

genome

algorithm

Complexity

评论

书评

非常全面，搞复杂网络的很值得一看。书的形式类似论文集，内容从比较数学化的分析到具体问题的应用都覆盖到了，而且写作的水平都很高。