



Essentials of Econophysics Modelling

By Frantisek Slanina

Download now

Read Online ➔

Essentials of Econophysics Modelling By Frantisek Slanina

This book is a course in methods and models rooted in physics and used in modelling economic and social phenomena. It covers the discipline of econophysics, which creates an interface between physics and economics. Besides the main theme, it touches on the theory of complex networks and simulations of social phenomena in general.

After a brief historical introduction, the book starts with a list of basic empirical data and proceeds to thorough investigation of mathematical and computer models. Many of the models are based on hypotheses of the behaviour of simplified agents. These comprise strategic thinking, imitation, herding, and the gem of econophysics, the so-called minority game. At the same time, many other models view the economic processes as interactions of inanimate particles. Here, the methods of physics are especially useful. Examples of systems modelled in such a way include books of stock-market orders, and redistribution of wealth among individuals. Network effects are investigated in the interaction of economic agents. The book also describes how to model phenomena like cooperation and emergence of consensus.

The book will be of benefit to graduate students and researchers in both Physics and Economics.

 [Download Essentials of Econophysics Modelling ...pdf](#)

 [Read Online Essentials of Econophysics Modelling ...pdf](#)

Essentials of Econophysics Modelling

By Frantisek Slanina

Essentials of Econophysics Modelling By Frantisek Slanina

This book is a course in methods and models rooted in physics and used in modelling economic and social phenomena. It covers the discipline of econophysics, which creates an interface between physics and economics. Besides the main theme, it touches on the theory of complex networks and simulations of social phenomena in general.

After a brief historical introduction, the book starts with a list of basic empirical data and proceeds to thorough investigation of mathematical and computer models. Many of the models are based on hypotheses of the behaviour of simplified agents. These comprise strategic thinking, imitation, herding, and the gem of econophysics, the so-called minority game. At the same time, many other models view the economic processes as interactions of inanimate particles. Here, the methods of physics are especially useful. Examples of systems modelled in such a way include books of stock-market orders, and redistribution of wealth among individuals. Network effects are investigated in the interaction of economic agents. The book also describes how to model phenomena like cooperation and emergence of consensus.

The book will be of benefit to graduate students and researchers in both Physics and Economics.

Essentials of Econophysics Modelling By Frantisek Slanina Bibliography

- Sales Rank: #1779701 in Books
- Published on: 2014-02-05
- Original language: English
- Number of items: 1
- Dimensions: 7.00" h x 1.10" w x 9.80" l, .0 pounds
- Binding: Hardcover
- 432 pages

 [Download Essentials of Econophysics Modelling ...pdf](#)

 [Read Online Essentials of Econophysics Modelling ...pdf](#)

Editorial Review

Review

"Frantisek Slanina's monumental monograph is the best up-to-date account of econophysics. The author offers a clear, yet deep and complex view of the subject; its conceptual and technical foundations, its past successes, and its future outlook. It is a must for anyone interested in understanding or participating in the momentous current development of new interdisciplinary methods for the study of economic phenomena."
-- Sorin Solomon, Racah Institute of Physics, Hebrew University of Jerusalem

"[*Essentials of Econophysics Modelling*] successfully follows a tutorial style and includes exercises and problems at varying levels... [I]t is certainly a welcome addition to an existing collection of research monographs and books." --*Physics Today*

About the Author

Frantisek Slanina, *Researcher, Institute of Physics, Academy of Sciences of the Czech Republic*

1995 PhD in Theoretical Physics

Stays: Universita "Tor Vergata", Rome, Italy

Employments: Center for Theoretical Study, Prague; Institute of Physics ASCR, Prague (current)

Users Review

From reader reviews:

David Hester:

This Essentials of Econophysics Modelling book is not ordinary book, you have after that it the world is in your hands. The benefit you receive by reading this book is definitely information inside this book incredible fresh, you will get details which is getting deeper an individual read a lot of information you will get. This specific Essentials of Econophysics Modelling without we know teach the one who examining it become critical in pondering and analyzing. Don't possibly be worry Essentials of Econophysics Modelling can bring whenever you are and not make your handbag space or bookshelves' become full because you can have it in the lovely laptop even telephone. This Essentials of Econophysics Modelling having great arrangement in word as well as layout, so you will not truly feel uninterested in reading.

Mary McCollum:

Here thing why this specific Essentials of Econophysics Modelling are different and trusted to be yours. First of all reading a book is good however it depends in the content of computer which is the content is as

yummy as food or not. Essentials of Econophysics Modelling giving you information deeper and in different ways, you can find any reserve out there but there is no reserve that similar with Essentials of Econophysics Modelling. It gives you thrill studying journey, its open up your eyes about the thing that happened in the world which is might be can be happened around you. You can bring everywhere like in park your car, café, or even in your way home by train. In case you are having difficulties in bringing the published book maybe the form of Essentials of Econophysics Modelling in e-book can be your alternate.

Anna Bailey:

This book untitled Essentials of Econophysics Modelling to be one of several books this best seller in this year, here is because when you read this guide you can get a lot of benefit onto it. You will easily to buy this book in the book retail outlet or you can order it by means of online. The publisher with this book sells the e-book too. It makes you quicker to read this book, as you can read this book in your Touch screen phone. So there is no reason for you to past this publication from your list.

Iva Simmon:

The e-book with title Essentials of Econophysics Modelling has lot of information that you can find out it. You can get a lot of profit after read this book. This specific book exist new expertise the information that exist in this reserve represented the condition of the world right now. That is important to yo7u to be aware of how the improvement of the world. This particular book will bring you in new era of the the positive effect. You can read the e-book on your own smart phone, so you can read it anywhere you want.

**Download and Read Online Essentials of Econophysics Modelling
By Frantisek Slanina #4ZCXHS75J2Q**

Read Essentials of Econophysics Modelling By Frantisek Slanina for online ebook

Essentials of Econophysics Modelling By Frantisek Slanina Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Essentials of Econophysics Modelling By Frantisek Slanina books to read online.

Online Essentials of Econophysics Modelling By Frantisek Slanina ebook PDF download

Essentials of Econophysics Modelling By Frantisek Slanina Doc

Essentials of Econophysics Modelling By Frantisek Slanina Mobipocket

Essentials of Econophysics Modelling By Frantisek Slanina EPub

4ZCXHS75J2Q: Essentials of Econophysics Modelling By Frantisek Slanina