



It's a Nonlinear World (Hardback)

By Richard H. Enns

Springer-Verlag New York Inc., United States, 2010. Hardback. Book Condition: New. 257 x 183 mm. Language: English . Brand New Book. Drawing examples from mathematics, physics, chemistry, biology, engineering, economics, medicine, politics, and sports, this book illustrates how nonlinear dynamics plays a vital role in our world. Examples cover a wide range from the spread and possible control of communicable diseases, to the lack of predictability in long-range weather forecasting, to competition between political groups and nations. After an introductory chapter that explores what it means to be nonlinear, the book covers the mathematical concepts such as limit cycles, fractals, chaos, bifurcations, and solitons, that will be applied throughout the book. Numerous computer simulations and exercises allow students to explore topics in greater depth using the Maple computer algebra system. The mathematical level of the text assumes prior exposure to ordinary differential equations and familiarity with the wave and diffusion equations. No prior knowledge of Maple is assumed. The book may be used at the undergraduate or graduate level to prepare science and engineering students for problems in the real world , or for self-study by practicing scientists and engineers.



READ ONLINE
[2.1 MB]

Reviews

A top quality publication along with the font used was intriguing to read. I really could comprehend everything using this written e ebook. Its been designed in an remarkably straightforward way and it is only after i finished reading through this publication by which basically altered me, modify the way i believe.

-- **Cathrine Larkin Sr.**

Very useful to all of group of people. I actually have read through and so i am certain that i will planning to study yet again once again down the road. I am just very easily can get a satisfaction of looking at a created book.

-- **Mark Bernier**