

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.



Reviews

It is really an awesome pdf that I actually have actually study. It really is basic but excitement from the 50 % of the publication. I am delighted to inform you that here is the greatest book i have read through within my individual existence and can be he finest publication for actually.

Undoubtedly, this is the best work by any author. It is really simplified but shocks within the 50 % in the publication. Its been written in an extremely straightforward way and is particularly just following i finished reading this publication by which basically altered me, modify the way in my opinion.

-- Vivianne Dietrich