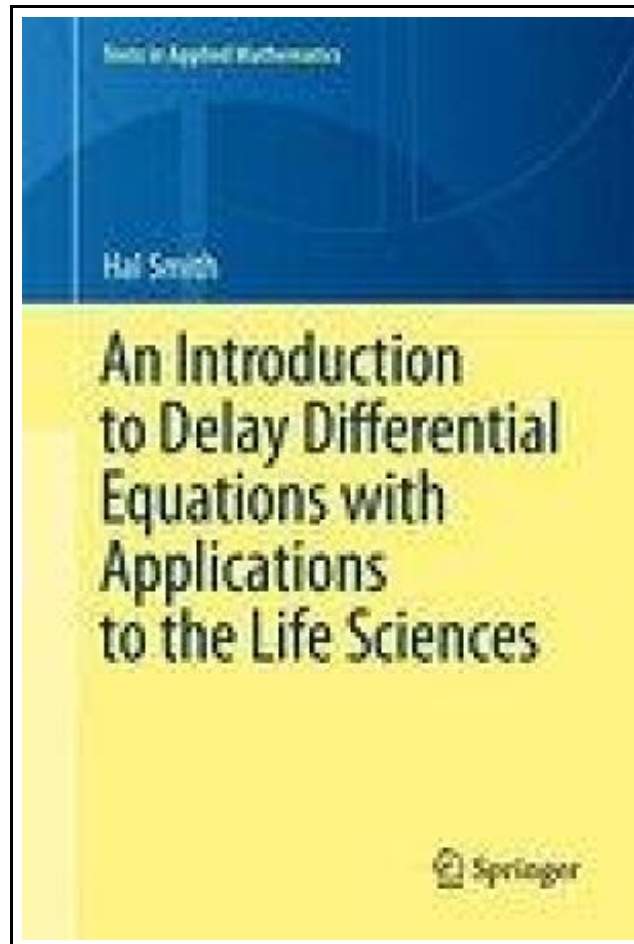


An Introduction to Delay Differential Equations with Applications to the Life Sciences



Filesize: 2.63 MB

Reviews

This publication is definitely not simple to begin on studying but really exciting to read. It is actually rally fascinating throug reading time. Your life span will be enhance when you complete looking at this publication.

(Laurence Littel)

AN INTRODUCTION TO DELAY DIFFERENTIAL EQUATIONS WITH APPLICATIONS TO THE LIFE SCIENCES

[DOWNLOAD PDF](#)

Springer Dez 2012, 2012. Taschenbuch. Book Condition: Neu. 235x155x10 mm. This item is printed on demand - Print on Demand Titel. Neuware - This book is intended to be an introduction to Delay Differential Equations for upper level undergraduates or beginning graduate mathematics students who have a good background in ordinary differential equations and would like to learn about the applications. It may also be of interest to applied mathematicians, computational scientists, and engineers. It focuses on key tools necessary to understand the applications literature involving delay equations and to construct and analyze mathematical models. Aside from standard well-posedness results for the initial value problem, it focuses on stability of equilibria via linearization and Lyapunov functions and on Hopf bifurcation. It contains a brief introduction to abstract dynamical systems focused on those generated by delay equations, introducing limit sets and their properties. Differential inequalities play a significant role in applications and are treated here, along with an introduction to monotone systems generated by delay equations. The book contains some quite recent results such as the Poincare-Bendixson theory for monotone cyclic feedback systems, obtained by Mallet-Paret and Sell. The linear chain trick for a special family of infinite delay equations is treated. The book is distinguished by the wealth of examples that are introduced and treated in detail. These include the delayed logistic equation, delayed chemostat model of microbial growth, inverted pendulum with delayed feedback control, a gene regulatory system, and an HIV transmission model. An entire chapter is devoted to the interesting dynamics exhibited by a chemostat model of bacteriophage parasitism of bacteria. The book has a large number of exercises and illustrations. Hal Smith is a Professor at the School of Mathematical and Statistical Sciences at Arizona State University. This book is intended to be an introduction to Delay...

[Read An Introduction to Delay Differential Equations with Applications to the Life Sciences Online](#)[Download PDF An Introduction to Delay Differential Equations with Applications to the Life Sciences](#)

Other PDFs



Index to the Classified Subject Catalogue of the Buffalo Library; The Whole System Being Adopted from the Classification and Subject Index of Mr. Melvil Dewey, with Some Modifications .

Rarebooksclub.com, United States, 2013. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book ***** Print on Demand *****.This historic book may have numerous typos and missing text. Purchasers can usually...

[Save Book »](#)



Children s Educational Book: Junior Leonardo Da Vinci: An Introduction to the Art, Science and Inventions of This Great Genius. Age 7 8 9 10 Year-Olds. [Us English]

Createspace, United States, 2013. Paperback. Book Condition: New. 254 x 178 mm. Language: English . Brand New Book ***** Print on Demand *****.ABOUT SMART READS for Kids . Love Art, Love Learning Welcome. Designed to...

[Save Book »](#)



Children s Educational Book Junior Leonardo Da Vinci : An Introduction to the Art, Science and Inventions of This Great Genius Age 7 8 9 10 Year-Olds. [British English]

Createspace, United States, 2013. Paperback. Book Condition: New. 248 x 170 mm. Language: English . Brand New Book ***** Print on Demand *****.ABOUT SMART READS for Kids . Love Art, Love Learning Welcome. Designed to...

[Save Book »](#)



DK Readers Day at Greenhill Farm Level 1 Beginning to Read

DK CHILDREN. Paperback. Book Condition: New. Paperback. 32 pages. Dimensions: 8.8in. x 5.7in. x 0.2in.This Level 1 book is appropriate for children who are just beginning to read. When the rooster crows, Greenhill Farm springs...

[Save Book »](#)



California Version of Who Am I in the Lives of Children? an Introduction to Early Childhood Education, Enhanced Pearson Etext with Loose-Leaf Version -- Access Card Package

Pearson, United States, 2015. Loose-leaf. Book Condition: New. 10th. 249 x 201 mm. Language: English . Brand New Book. NOTE: Used books, rentals, and purchases made outside of Pearson If purchasing or renting from companies...

[Save Book »](#)