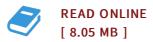THUMBNAIL NOT AVAILABLE

DOWNLOAD PDF

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

By Hal Smith

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...

READ ONLINE
[8.05 MB]

Reviews

I just started off reading this article pdf. Yes, it can be engage in, nonetheless an interesting and amazing literature. I am effortlessly can get a satisfaction of reading a written publication.
-- Peyton Renner IV

Undoubtedly, this is the finest job by any article writer. it had been writtern very perfectly and beneficial. Its been printed in an exceedingly simple way in fact it is only following i finished reading this ebook by which basically modified me, modify the way in my opinion.
-- Lane Dicki