Librería Bonilla y Asociados





Título: Strange Attractors For Periodically Forced Parabolic Equations

Autor: Kening Lu	Precio: \$1078.35
Editorial:	Año: 2013
Tema:	Edición: 1ª
Sinopsis	ISBN: 9780821884843

The authors prove that in systems undergoing Hopf bifurcations, the effects of periodic forcing can be amplified by the shearing in the system to create sustained chaotic behavior. Specifically, strange attractors with SRB measures are shown to exist. The analysis is carried out for infinite dimensional systems, and the results are applicable to partial differential equations. Application of the general results to a concrete equation, namely the Brusselator, is given.

Table of Contents

Introduction Basic definitions and facts Statement of theorems Invariant manifolds Canonical form of equations around the limit cycle Preliminary estimates on solutions of the unforced equation Time-T Map of forced equation and derived 2 -D system Strange attractors with SRB measures Application: The Brusselator Appendix A. Proofs of Propositions 3.1-3.3 Appendix B. Proof of Proposition 7.5 Appendix C. Proofs of Proposition 8.1 and Lemma 8.2 Bibliography