Título: Nonlinear Dispersive Equations. Existence And Stability Of Solitary And Periodic

Autor: Angulo Pava Jaime

Precio: $998.00

Editorial:

Año: 2009

Tema:

Edición: 1ª

Sinopsis

ISBN: 9780821848975

This book provides a self-contained presentation of classical and new methods for studying wave phenomena that are related to the existence and stability of solitary and periodic travelling wave solutions for nonlinear dispersive evolution equations. Simplicity, concrete examples, and applications are emphasized throughout in order to make the material easily accessible. The list of classical nonlinear dispersive equations studied includes Korteweg-de Vries, Benjamin-Ono, and Schrödinger equations. Many special Jacobian elliptic functions play a role in these examples.

The author brings the reader to the forefront of knowledge about some aspects of the theory and motivates future developments in this fascinating and rapidly growing field. The book can be used as an instructive study guide as well as a reference by students and mature scientists interested in nonlinear wave phenomena.