Record Nr. UNINA9910450720103321 Asymptotic methods in nonlinear wave phenomena [[electronic Titolo resource] ]: in honor of the 65th birthday of Antonio Greco, Palermo. Italy, 5-7 June 2006 / / editors, T. Ruggeri, M. Sammartino Singapore;; Hackensack, NJ,: World Scientific, c2007 Pubbl/distr/stampa **ISBN** 1-281-12194-0 9786611121945 981-270-890-1 Descrizione fisica 1 online resource (228 p.) Altri autori (Persone) RuggeriTommaso SammartinoMarco GrecoAntonio M Disciplina 515.3/5 Soggetti Nonlinear wave equations Differential equations, Partial - Asymptotic theory Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali "It is an outgrowth from a conference on 'Asymptotic Methods in Nonlinear Wave Phenomena' which was held in his honor in Mondello (Palermo) 5-7 June 2006."--Preface. Includes bibliographical references. Nota di bibliografia Nota di contenuto Preface; Conference Committees; CONTENTS; The Semiconductor Steady Boltzmann Equation: A Variational Formulation with an Application to Mobility A.M. Anile, G. Ali, G. Mascali; Generating Multi State Cellular Automata by using Chua's "Universal Neuron" E. Bilotta, G. Di Blasi, S. Giambd, P. Pantano; Isocline Curves and Variational Scalar Field G. Boillat, A. Muracchini; Fokker-Planck Asymptotics and the Ricci

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## Sommario/riassunto

This book brings together several contributions from leading experts in the field of nonlinear wave propagation. This field, which during the last three decades has seen important breakthroughs from the theoretical point of view, has recently acquired increased relevance due to advances in the technology of fluids e.g. at microscale or nanoscale and the recognition of crucial applications to the understanding of biological phenomena. Nonlinear wave theory requires the use of disparate approaches, including formal and rigorous asymptotic methods, Lie group theory, energy methods, numerical anal