Record Nr. UNINA9910784073003321 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 Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia "It is an outgrowth from a conference on 'Asymptotic Methods in Note generali Nonlinear Wave Phenomena' which was held in his honor in Mondello (Palermo) 5-7 June 2006."--Preface. Nota di bibliografia Includes bibliographical references. 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 Flow M. Carfora; Exact Solutions of a Reaction Diffusion Equation M. Carini, N. Manganaro Some Applications of Linear Response Theory to Media with Mechanical Relaxation Phenomena A. Ciancio, V. Ciancio, F. FarsaciReduction of

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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