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Record Nr.	UNINA9910299464603321
Titolo	The sine-Gordon Model and its Applications : From Pendula and Josephson Junctions to Gravity and High-Energy Physics / / edited by Jesús Cuevas-Maraver, Panayotis G. Kevrekidis, Floyd Williams
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2014
ISBN	3-319-06722-2
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (271 p.)
Collana	Nonlinear Systems and Complexity, , 2195-9994 ; ; 10
Disciplina	531.113301515355
Soggetti	Mathematical physics Mechanics Astrophysics Nuclear physics Theoretical, Mathematical and Computational Physics Mathematical Physics Classical Mechanics Astrophysics and Astroparticles Particle and Nuclear Physics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	From the Contents: The sine-Gordon Model: General Background, Physical Motivations, Inverse Scattering, and Solitons -- Sine-Gordon Equation: From Discrete to Continuum -- Soliton Collisions -- The Traveling Kink Problem: Radiation Phenomena, Resonances, Pinning and How to Avoid It.
Sommario/riassunto	The sine-Gordon model is a ubiquitous model of Mathematical Physics with a wide range of applications extending from coupled torsion pendula and Josephson junction arrays to gravitational and high-energy physics models. The purpose of this book is to present a summary of recent developments in this field, incorporating both introductory background material, but also with a strong view towards modern applications, recent experiments, developments regarding the

existence, stability, dynamics and asymptotics of nonlinear waves that arise in the model. This book is of particular interest to a wide range of researchers in this field, but serves as an introductory text for young researchers and students interested in the topic. The book consists of well-selected thematic chapters on diverse mathematical and physical aspects of the equation carefully chosen and assigned.