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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
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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.