Record Nr. UNINA9910782271503321 Autore Guo Boling Titolo Landau-Lifshitz equations [[electronic resource] /] / Boling Guo, Shijin Ding Pubbl/distr/stampa New Jersey, : World Scientific, c2008 **ISBN** 1-281-93002-4 9786611930028 981-277-876-4 Descrizione fisica 1 online resource (414 p.) Collana Frontiers of research with the Chinese Academy of Sciences; ; v. 1 Altri autori (Persone) DingShijin <1959-> Disciplina 518/.64 Soggetti Differential equations, Partial - Numerical solutions Maxwell equations - Numerical solutions Geometry Mathematical physics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references (p. 393-403). Nota di contenuto Spin waves and equations of ferromagnetic spin chain -- Integrability of Heisenberg chain -- One-dimensional Landau-Lifshitz equations --Landau-Lifshitz equations and harmonic maps -- Landau-Lifshitz-Maxwell equations -- Long time behavior of solutions to the system of ferromagnetic spin chain. Sommario/riassunto This is a comprehensive introduction to Landau-Lifshitz equations and Landau-Lifshitz-Maxwell equations, beginning with the work by Yulin Zhou and Boling Guo in the early 1980's and including most of the work done by this Chinese group led by Zhou and Guo since. The book focuses on aspects such as the existence of weak solutions in multi dimensions, existence and uniqueness of smooth solutions in one dimension, relations with harmonic map heat flows, partial regularity and long time behaviors. The book is a valuable reference book for

those who are interested in partial differential equations