

1. Record Nr.	UNINA9910300151203321
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Titolo	Local Minimization, Variational Evolution and -Convergence // by Andrea Braides
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2014
ISBN	3-319-01982-1
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (XI, 174 p. 42 illus.)
Collana	Lecture Notes in Mathematics, , 0075-8434 ; ; 2094
Disciplina	515.64
Soggetti	Applied mathematics Engineering mathematics Partial differential equations Calculus of variations Approximation theory Mathematical analysis Analysis (Mathematics) Functional analysis Applications of Mathematics Partial Differential Equations Calculus of Variations and Optimal Control; Optimization Approximations and Expansions Analysis Functional Analysis
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	Introduction -- Global minimization -- Parameterized motion driven by global minimization -- Local minimization as a selection criterion -- Convergence of local minimizers -- Small-scale stability -- Minimizing movements -- Minimizing movements along a sequence of functionals -- Geometric minimizing movements -- Different time scales -- Stability theorems -- Index.
Sommario/riassunto	This book addresses new questions related to the asymptotic description of converging energies from the standpoint of local

minimization and variational evolution. It explores the links between Gamma-limits, quasistatic evolution, gradient flows and stable points, raising new questions and proposing new techniques. These include the definition of effective energies that maintain the pattern of local minima, the introduction of notions of convergence of energies compatible with stable points, the computation of homogenized motions at critical time-scales through the definition of minimizing movement along a sequence of energies, the use of scaled energies to study long-term behavior or backward motion for variational evolutions. The notions explored in the book are linked to existing findings for gradient flows, energetic solutions and local minimizers, for which some generalizations are also proposed.
