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	Titolo	Local Minimization, Variational Evolution and -Convergence [[electronic resource] /] / 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.