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Titolo	The Principle of Least Action in Geometry and Dynamics / / by Karl Friedrich Siburg
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ISBN	3-540-40985-8
Edizione	[1st ed. 2004.]
Descrizione fisica	1 online resource (XII, 132 p.)
Collana	Lecture Notes in Mathematics, , 0075-8434 ; ; 1844
Classificazione	37J05 53D35 58E30
Disciplina	530
Soggetti	Dynamics Ergodic theory Geometry, Differential Global analysis (Mathematics) Manifolds (Mathematics) Dynamical Systems and Ergodic Theory Differential Geometry Global Analysis and Analysis on Manifolds
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Aubry-Mather Theory -- Mather-Mané Theory -- The Minimal Action and Convex Billiards -- The Minimal Action Near Fixed Points and Invariant Tori -- The Minimal Action and Hofer's Geometry -- The Minimal Action and Symplectic Geometry -- References -- Index.
Sommario/riassunto	New variational methods by Aubry, Mather, and Mane, discovered in the last twenty years, gave deep insight into the dynamics of convex Lagrangian systems. This book shows how this Principle of Least Action appears in a variety of settings (billiards, length spectrum, Hofer geometry, modern symplectic geometry). Thus, topics from modern dynamical systems and modern symplectic geometry are linked in a new and sometimes surprising way. The central object is Mather's minimal action functional. The level is for graduate students onwards,

but also for researchers in any of the subjects touched in the book.
