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Titolo	Introduction to Mechanics and Symmetry [[electronic resource]] : A Basic Exposition of Classical Mechanical Systems / / by Jerrold E. Marsden, Tudor S. Ratiu
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Sommario/riassunto	Symmetry has always played an important role in mechanics, from fundamental formulations of basic principles to concrete applications. The theme of the book is to develop the basic theory and applications of mechanics with an emphasis on the role of symmetry. In recent times, the interest in mechanics, and in symmetry techniques in particular, has accelerated because of developments in dynamical

systems, the use of geometric methods and new applications to integrable and chaotic systems, control systems, stability and bifurcation, and the study of specific rigid, fluid, plasma and elastic systems. Introduction to Mechanics and Symmetry lays the basic foundation for these topics and includes numerous specific applications, making it beneficial to physicists and engineers. This text has specific examples and applications showing how the theory works, and up-to-date techniques, all of which makes it accessible to a wide variety of readers, especially senior undergraduate and graduate students in mathematics, physics and engineering. For this second edition, the text has been rewritten and updated for clarity throughout, with a major revamping and expansion of the exercises. Internet supplements containing additional material are also available on-line.
