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Titolo	Tides in astronomy and astrophysics // Jean Souchay, Stephane Mathis, Tadashi Tokieda, editors
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Descrizione fisica	1 online resource (XII, 375 p. 138 illus., 60 illus. in color.)
Collana	Lecture notes in physics ; ; v. 861
Altri autori (Persone)	MathisStephane SouchayJean TokiedaTadashi <1968->
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Lingua di pubblicazione	Inglese
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Tides: A Tutorial -- Investigations of Tides From the Antiquity to Laplace -- Ocean Tides -- Precession and Nutation of the Earth -- Tidal Effects of Giant Planets on their Satellites -- Recent Developments in Planet Migration Theory -- Tides in Planetary Systems -- Stellar Tides -- Tides in Colliding Galaxies.
Sommario/riassunto	Based on the lecture notes of a school titled 'Tides in Astronomy and Astrophysics' that brought together students and researchers, this book focuses on the fundamental theories of tides at different scales of the universe — from tiny satellites to whole galaxies — and on the most recent developments. It also attempts to place the study of tides in a historical perspective. Starting with a general tutorial on tides, the theme of tides is approached in 9 chapters from many directions. They allow non-experts to pick up a physical intuition and a sense of orders of magnitude in the theory of tides. These carefully prepared lecture notes by leaders in the field include many illustrative figures and drawings. Some even offer a variety of simple back - of the - envelope problems.