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Nota di contenuto	Extrasolar Planets; Contents; Prolog; Preface; List of Contributors; 1 Planetary Masses and Orbital Parameters from Radial Velocity Measurements; 1.1 Exoplanet Detection; 1.2 Radial Velocity in Astrocentric Elements; 1.3 Orbital Fits from Radial Velocity Curves; 1.3.1 Primary Parameters; 1.3.2 Secondary Parameters; 1.3.3 N-Body Fits; 1.4 Coordinate Systems and Equations of Motion; 1.4.1 Barycentric Hamiltonian Equations; 1.4.2 Jacobi Hamiltonian Formalism; 1.4.3 Poincare Hamiltonian Formalism; 1.4.4 Generalized Orbital Elements and Delaunay Variables 1.4.5 Comparisons Between Coordinate Systems1.4.6 The Conservation of the Angular Momentum; 2 Terrestrial Planets in Extrasolar Planetary Systems; 2.1 Introduction; 2.2 The Methods of Investigation; 2.3 Basics of the Formation of Terrestrial Planets; 2.4 Stability Studies of Terrestrial Planets; 2.4.1 The G2 Systems and Gliese 777A; 2.4.2 Theoretical and Numerical Stability Investigation of the G4 and EPS HD108874; 2.5 A Global Approach: The Exocatalogue; 2.6 Terrestrial Planets in Multiplanetary Systems; 2.6.1 The Changing Story of

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Sommario/riassunto

This latest, up-to-date resource for research on extrasolar planets covers formation, dynamics, atmospheres and detection. After a look at the formation of giant planets, the book goes on to discuss the formation and dynamics of planets in resonances, planets in double stars, atmospheres and habitable zones, detection via spectra and transits, and the history and prospects of ESPs as well as satellite projects.Edited by a renowned expert in solar system dynamics with chapters written by the leading experts in the method described -- from the US and Europe -- this is an ideal textbook for g