Record Nr. UNINA9910810028103321 **Titolo** Methods in astrodynamics and celestial mechanics [[electronic resource] /] / edited by Raynor L. Duncombe, Victor G. Szebehely New York, : Academic Press. 1966 Pubbl/distr/stampa **ISBN** 1-60086-491-0 1-60086-272-1 Descrizione fisica 1 online resource (453 p.) Collana Progress in astronautics and aeronautics; ; v. 17 Altri autori (Persone) DuncombeRaynor L SzebehelyVictor G. <1921-> Disciplina 629.4II Soggetti Astrodynamics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Papers based mainly on the American Institute of Aeronautics and Note generali Astronautics and Institute of Navigation, Astrodynamics Specialist Conference. Nota di bibliografia Includes bibliographical references. ""Cover""; ""Title""; ""Copyright""; ""The AIAA Astrodynamics Committee Nota di contenuto 1965"": ""The Astrodynamics Specialist Conference Committee 1965"": ""Preface""; ""Contents""; ""I. Behavior of Bodies near Libration Points""; ""Theory and Application of Motion around Equilibrium Positions"": ""Limiting Orbits at the Equilateral Centers of Libration""; ""Motion in the Vicinity of Libration Points of a Generalized Restricted Three-Body Model""; ""Resonances Affecting Motion near the Earth-Moon Equilateral Libration Points"; ""Effect of Initial Configurations on Libration Point Motion"" ""Analytical Determination of Characteristic Exponents""""II. Asymptotic Representations of Space Vehicle Trajectories""; ""Generalized Method of Averaging and the von Zeipel Method""; ""Take-off from a Circular Orbit by a Small Thrust""; ""Matched Asymptotic Expansions, Patched Conics, and the Computation of Interplanetary Trajectories"; ""A Uniformly Valid Asymptotic Representation of Satellite Motion around the Smaller Primary in the Restricted Three-Body Problem""; ""Asymptotic Representations for Solutions to the Differential Equations of Satellite Theory"" ""III. Orbit Determination and Mission Analysis"""Error Equations of Inertial Navigation with Special Application to Orbital Determination

and Guidance""; ""Efficient and Accurate Orbit Prediction for Very Long Periods of Time""; ""Parameter Hunting Procedures""; ""Accuracy in the Determination of Lunar Transponder Location from Postarrival Tracking""; ""Interplanetary Maneuvers in Manned Helionautical Missions""; ""IV. Optimization in Astrodynamics""; ""A General Method for Selection and Optimization of Trajectories"" ""Application of a Finite-Difference Newton-Raphson Algorithm to Problems of Low-Thrust Trajectory Optimization"""Nonlinear Optimal Control Problems with Control Appearing Linearly""; ""Contributors To Volume 17""