Record Nr. UNISALENTO991004265223007536 Autore Hairer, Ernst **Titolo** Solving ordinary differential equations / E. Hairer, G. Wanner Berlin [etc.]: Springer, c1993-1996 Pubbl/distr/stampa **ISBN** 9783642051630 (v. 1) 9783642052200 (v. 2) Edizione [2nd revised ed.] Descrizione fisica 2 v.: ill.; 24 cm Collana Springer series in computational mathematics, 0179-3632; 8/14 Classificazione **LC QA372** AMS 34A50 AMS 34-XX Altri autori (Persone) Wanner, Gerhard Norsett, Syvert Paul Disciplina 515.352 Soggetti Initial value problems Differential equations - Numerical solutions Ordinary differential equations Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Includes bibliography and index Nota di contenuto 1: Nonstiff problems / E. Haier, S.P. Norsett, G. Wanner. - 2000. - xv, 528 p. 2: Stiff and differential-algebraic problems. - 2010. - xv, 614 p. This book deals with methods for solving nonstiff ordinary differential Sommario/riassunto equations. The first chapter describes the historical development of the classical theory, and the second chapter includes a modern treatment of Runge-Kutta and extrapolation methods. Chapter three begins with the classical theory of multistep methods, and concludes with the theory of general linear methods. The reader will benefit from many illustrations, a historical and didactic approach, and computer

programs which help him/her learn to solve all kinds of ordinary differential equations. This new edition has been rewritten and new

material has been included.