1. Record Nr. UNINA9910792479603321

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Titolo	Advanced Mathematical Methods for Scientists and Engineers I [[electronic resource]] : Asymptotic Methods and Perturbation Theory / / by Carl M. Bender, Steven A. Orszag
Pubbl/distr/stampa	New York, NY : , : Springer New York : , : Imprint : Springer, , 1999
ISBN	1-4757-3069-1
Edizione	[1st ed. 1999.]
Descrizione fisica	1 online resource (XIV, 593 p.)
Classificazione	34E05 34A45 41A60
Disciplina	515
Soggetti	Mathematical analysis Analysis (Mathematics) Applied mathematics Engineering mathematics Physics Analysis Mathematical and Computational Engineering Mathematical Methods in Physics Numerical and Computational Physics, Simulation
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	I Fundamentals -- 1 Ordinary Differential Equations -- 2 Difference Equations -- II Local Analysis -- 3 Approximate Solution of Linear Differential Equations -- 4 Approximate Solution of Nonlinear Differential Equations -- 5 Approximate Solution of Difference Equations -- 6 Asymptotic Expansion of Integrals -- III Perturbation Methods -- 7 Perturbation Series -- 8 Summation of Series -- IV Global Analysis -- 9 Boundary Layer Theory -- 10 WKB Theory -- 11 Multiple-Scale Analysis.
Sommario/riassunto	The triumphant vindication of bold theories-are these not the pride and justification of our life's work? -Sherlock Holmes, The Valley of Fear Sir Arthur Conan Doyle The main purpose of our book is to present and

explain mathematical methods for obtaining approximate analytical solutions to differential and difference equations that cannot be solved exactly. Our objective is to help young and also establiShed scientists and engineers to build the skills necessary to analyze equations that they encounter in their work. Our presentation is aimed at developing the insights and techniques that are most useful for attacking new problems. We do not emphasize special methods and tricks which work only for the classical transcendental functions; we do not dwell on equations whose exact solutions are known. The mathematical methods discussed in this book are known collectively as- asymptotic and perturbative analysis. These are the most useful and powerful methods for finding approximate solutions to equations, but they are difficult to justify rigorously. Thus, we concentrate on the most fruitful aspect of applied analysis; namely, obtaining the answer. We stress care but not rigor. To explain our approach, we compare our goals with those of a freshman calculus course. A beginning calculus course is considered successful if the students have learned how to solve problems using calculus.