

1. Record Nr.	UNISA996466135603316
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Titolo	Numerical Integration [[electronic resource]] : on Advanced Computer Systems // edited by Arnold R. Krommer, Christoph W. Ueberhuber
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 1994
ISBN	3-540-48781-6
Edizione	[1st ed. 1994.]
Descrizione fisica	1 online resource (XV, 349 p.)
Collana	Lecture Notes in Computer Science, , 0302-9743 ; ; 848
Disciplina	515/.624/0285
Soggetti	Computers Numerical analysis Algorithms Theory of Computation Numerical Analysis
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	Applications of numerical integration -- Fundamentals of numerical integration -- Integrals -- Univariate integration formulas -- Multivariate integration formulas -- Integration algorithms -- Load distribution -- Potential parallelism in integration algorithms -- Parallelization schemes for integration algorithms -- Practical parallelization of integration algorithms -- Parallel data management -- Assessment of numerical integration software -- Architecture adaptive integration algorithms.
Sommario/riassunto	This monograph is a comprehensive treatment of the theoretical and computational aspects of numerical integration. The authors give a unique overview of the topic by bringing into line many recent research results not yet presented coherently; the extensive bibliography lists 268 items. Particular emphasis is given to the potential parallelism of numerical integration problems and to utilizing it by means of dynamic load distribution techniques. The book discusses the basics and provides methodologies for producing efficient and reliable software for numerical integration on advanced computer systems. The book addresses researchers, graduate students, and computational

scientists.
