1. Record Nr. UNINA9910814560303321

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Titolo	Monte Carlo methods in mechanics of fluid and gas / / O.M. Belotserkovskii, Y.I. Khlopkov
Pubbl/distr/stampa	Hackensack, N.J., : World Scientific, c2010
ISBN	1-282-76136-6 9786612761362 981-4282-36-7
Edizione	[1st ed.]
Descrizione fisica	1 online resource (280 p.)
Altri autori (Persone)	KhlopkovIU. I (IUrii Ivanovich)
Disciplina	533.20151
Soggetti	Rarefied gas dynamics - Mathematics Monte Carlo method
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Preface; Contents; 0. Introduction; 1. The Main Equations and Approaches to Solutions of the Problems in Rarefied Gas Dynamics; 2. Development of the Numerical Methods of Solution of the Linear Kinetic Equations; 3. Methods of Solution of the Nonlinear Problems in Rarefied Gas Dynamics; 4. Modeling of the Flow of Continuous Media; 5. Solution of the Navier-Stokes Equations (Petrov133-139); 6. Studies of theWeakly Perturbed Flows of Rarefied Gas; 7. Study of the Flows About Different Bodies in Transitional Regime 8. Determination of the Aerodynamical Characteristics of the Returnable Space Systems (RSS)9. The Flow About Blunted Bodies with the Addition of Heat (see Vorovich, Moiseev); 10. The General Models of Description of the Turbulent Flows; 11. Studies of the Turbulent Flow of Fluid and Gas; 12. The Possible Directions of Development of the Methods of Statistical Study; Conclusions; References
Sommario/riassunto	This book is devoted to analysis of Monte Carlo methods developed in rarefied gas dynamics. Presented is the short history of the development of such methods, described are their main properties, their advantages and deficiencies. It is shown that the contemporary stage in the progress of computational methods cannot be regarded without a complex approach to the preparation of algorithms taking

into account all the peculiarities of the problem under consideration, that is, of the physical nature of a process, the mathematical model and the theoretical aspects of computational mathematics and s