

1. Record Nr.	UNINA9910452633503321
Autore	Kruger Tobias <1976->
Titolo	Discovering the ice ages [[electronic resource]] : international reception and consequences for a historical understanding of climate // by Tobias Kruger ; translated by Ann M. Hentschel
Pubbl/distr/stampa	Leiden, : Brill, 2013
ISBN	90-04-24170-1
Descrizione fisica	1 online resource (554 p.)
Collana	History of science and medicine library, , 1872-0684 ; ; v. 37
Altri autori (Persone)	HentschelAnn
Disciplina	551.7/92
Soggetti	Geology, Stratigraphic - Pleistocene Glacial epoch Geology - History Climatology - History Electronic books.
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 and indexes.
Nota di contenuto	Introduction -- How Erratic Blocks Caught the Eye of Science -- Glacier Advances and Icy Theories : 1810-1830 -- Glacier and Ice-Age Theories in the First Half of the 1830's -- The Grand Synthesis -- International Reception of Glacial Theory -- The Search for Causes of the Ice Ages -- Conclusions.
Sommario/riassunto	Tobias Krüger explores the discovery of the Ice Ages, how the idea was received, and what further research it stimulated. The approach used in Discovering the Ice Ages is uniquely sweeping. The contemporary debates on the subject are compared from an international perspective. Krüger retraces the arguments advanced from the middle of the 18th century to the threshold of the 20th century. The positions held by defenders of the glacial theory as well as those by its most important opponents are set within the context of the then current understanding of geology. In an interdisciplinary overview Krüger then focuses on the impetus gained from early ice-age research. The most prominent examples worth mentioning are the discovery of trace gases and the greenhouse effect.

2. Record Nr.	UNINA9910971661203321
Autore	Dunn William L (William Lee), <1944->
Titolo	Exploring Monte Carlo methods // William L. Dunn, J. Kenneth Shultis
Pubbl/distr/stampa	Amsterdam ; ; Boston, : Elsevier, c2012
ISBN	9786613173836 9781283173834 1283173832 9780080930619 0080930611
Edizione	[1st ed.]
Descrizione fisica	1 online resource (401 p.)
Altri autori (Persone)	ShultisJ. Kenneth
Disciplina	518/.282
Soggetti	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 and index.
Nota di contenuto	Front Cover; Exploring Monte Carlo Methods; Copyright; Dedication; Table of Contents; Preface; Chapter 1. Introduction; 1.1 What Is Monte Carlo?; 1.2 A Brief History of Monte Carlo; 1.3 Monte Carlo as Quadrature; 1.4 Monte Carlo as Simulation; 1.5 Preview of Things to Come; 1.6 Summary; Bibliography; Problems; Chapter 2. The Basis of Monte Carlo; 2.1 Single Continuous Random Variables; 2.2 Discrete Random Variables; 2.3 Multiple Random Variables; 2.4 The Law of Large Numbers; 2.5 The Central Limit Theorem; 2.6 Monte Carlo Quadrature; 2.7 Monte Carlo Simulation; 2.8 Summary; Bibliography ProblemsChapter 3. Pseudorandom Number Generators; 3.1 Linear Congruential Generators; 3.2 Structure of the Generated Random Numbers; 3.3 Characteristics of Good Random Number Generators; 3.4 Tests for Congruential Generators; 3.5 Practical Multiplicative Congruential Generators; 3.6 Shuffling a Generator's Output; 3.7 Skipping Ahead; 3.8 Combining Generators; 3.9 Other Random Number Generators; 3.10 Summary; Bibliography; Problems; Chapter 4. Sampling, Scoring, and Precision; 4.1 Sampling; 4.2 Scoring; 4.3 Accuracy and Precision; 4.4 Summary; Bibliography; Problems Chapter 5. Variance Reduction Techniques5.1 Use of Transformations; 5.2 Importance Sampling; 5.3 Systematic Sampling; 5.4 Stratified

Sampling; 5.5 Correlated Sampling; 5.6 Partition of the Integration Volume; 5.7 Reduction of Dimensionality; 5.8 Russian Roulette and Splitting; 5.9 Combinations of Different Variance Reduction Techniques; 5.10 Biased Estimators; 5.11 Improved Monte Carlo Integration Schemes; 5.12 Summary; Bibliography; Problems; Chapter 6. Markov Chain Monte Carlo; 6.1 Markov Chains to the Rescue; 6.2 Brief Review of Probability Concepts; 6.3 Bayes Theorem 6.4 Inference and Decision Applications 6.5 Summary; Bibliography; Problems; Chapter 7. Inverse Monte Carlo; 7.1 Formulation of the Inverse Problem; 7.2 Inverse Monte Carlo by Iteration; 7.3 Symbolic Monte Carlo; 7.4 Inverse Monte Carlo by Simulation; 7.5 General Applications of IMC; 7.6 Summary; Bibliography; Problems; Chapter 8. Linear Operator Equations; 8.1 Linear Algebraic Equations; 8.2 Linear Integral Equations; 8.3 Linear Differential Equations; 8.4 Eigenvalue Problems; 8.5 Summary; Bibliography; Problems; Chapter 9. The Fundamentals of Neutral Particle Transport 9.1 Description of the Radiation Field 9.2 Radiation Interactions with the Medium; 9.3 Transport Equation; 9.4 Adjoint Transport Equation; 9.5 Summary; Bibliography; Problems; Chapter 10. Monte Carlo Simulation of Neutral Particle Transport; 10.1 Basic Approach for Monte Carlo Transport Simulations; 10.2 Geometry; 10.3 Sources; 10.4 Path-Length Estimation; 10.5 Purely Absorbing Media; 10.6 Type of Collision; 10.7 Time Dependence; 10.8 Particle Weights; 10.9 Scoring and Tallies; 10.10 An Example of One-Speed Particle Transport; 10.11 Monte Carlo Based on the Integral Transport Equation 10.12 Variance Reduction and Nonanalog Methods

Sommario/riassunto

Exploring Monte Carlo Methods is a basic text that describes the numerical methods that have come to be known as "Monte Carlo." The book treats the subject generically through the first eight chapters and, thus, should be of use to anyone who wants to learn to use Monte Carlo. The next two chapters focus on applications in nuclear engineering, which are illustrative of uses in other fields. Five appendices are included, which provide useful information on probability distributions, general-purpose Monte Carlo codes for radiation transport, and other matters. The famous "Buffon's needle p
