

1. Record Nr.	UNISA996418271103316
Titolo	Monte Carlo and Quasi-Monte Carlo Methods [[electronic resource]] : MCQMC 2018, Rennes, France, July 1–6 // edited by Bruno Tuffin, Pierre L'Ecuyer
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2020
ISBN	3-030-43465-6
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (XI, 539 p. 92 illus., 65 illus. in color.)
Collana	Springer Proceedings in Mathematics & Statistics, , 2194-1009 ; ; 324
Disciplina	004.0151
Soggetti	Computer mathematics Statistics Computer simulation Applied mathematics Engineering mathematics Numerical analysis Computational Science and Engineering Statistical Theory and Methods Simulation and Modeling Applications of Mathematics Numerical Analysis
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Part I Invited Talks, H. Dong and M. K. Nakayama, A Tutorial on Quantile Estimation via Monte Carlo -- L. Herrmann and C. Schwab, Multilevel Quasi-Monte Carlo Uncertainty Quantification for Advection-Diffusion-Reaction -- B. L. Nelson, Selecting the Best Simulated System: Thinking Differently About an Old Problem -- F. Pillichshammer, Discrepancy of Digital Sequences: New Results on a Classical QMC Topic -- Part II Regular Talks, L. Bian, T. Cui, G. Sofronov and J. Keith, Network Structure Change Point Detection by Posterior Predictive Discrepancy -- M. Billaud-Friess, A. Macherey, A. Nouy and C. Prieur, Stochastic Methods for Solving High-Dimensional Partial Differential Equations -- N. Binder and A. Keller, Massively Parallel

Construction of Radix Tree Forests for the Efficient Sampling of Discrete or Piecewise Constant Probability Distributions -- Y. Ding, F. J. Hickernell, and L. A. J. Rugama, An Adaptive Algorithm Employing Continuous Linear Functionals -- A. Ebert, P. Kritzer and D. Nuyens, Constructing QMC Finite Element Methods for Elliptic PDEs with Random Coefficients by a Reduced CBC Construction -- R. El Haddad, J. El Maalouf, C. Lecot and P. L'Ecuyer, Sudoku Latin, Square Sampling for Markov Chain Simulation -- T. Hartung, K. Jansen, H. Leovey, and J. Volmer, Avoiding the Sign Problem in Lattice Field Theory -- R. Hofer, On Hybrid Point Sets Stemming from Halton-Type Hammersley Point Sets and Polynomial Lattice Point Sets -- M. Huber, Robust Estimation of the Mean with Bounded Relative Standard Deviation -- H. Hult, P. Nyquist and C. Ringqvist, Infinite Swapping Algorithm for Training Restricted Boltzmann Machines -- I. Iscoe and A. Kreinin, Sensitivity Ranks by Monte Carlo -- R. Kritzinger and F. Pillichshammer, Lower Bounds on the L_p Discrepancy of Digital NUT Sequences -- H. Leovey and W. Romisch, Randomized QMC Methods for Mixed-Integer Two-Stage Stochastic Programs with Application to Electricity Optimization -- A. F. Lopez-Lopera, F. Bachoc, N. Durrande, J. Rohmer, D. Idier and O. Roustant, Approximating Gaussian Process Emulators with Linear Inequality Constraints and Noisy Observations via MC and MCMC -- E. Løvbak, G. Samaey and S. Vandewalle, A Multilevel Monte Carlo Asymptotic-Preserving Particle Method for Kinetic Equations in the Diffusion Limit -- D. Mandel and G. Okten, Randomized Global Sensitivity Analysis and Model Robustness -- A. Petersson, Rapid Covariance-Based Sampling of Linear SPDE Approximations in the Multilevel Monte Carlo Method -- A. Stein and A. Barth, A Multilevel Monte Carlo Algorithm for Parabolic Advection-Diffusion Problems with Discontinuous Coefficients -- T. A. Stepanyuk, Estimates For Logarithmic and Riesz Energies Of Spherical t -Designs -- Y. Suzuki and D. Nuyens, Rank-1 Lattices and Higher-Order Exponential Splitting for the Time-Dependent Schrödinger Equation -- C. von Hallern and A. Roßler, An Analysis of the Milstein Scheme for SPDEs without a Commutative Noise Condition -- Fei Xie, M. B. Giles, and Zhijian He, QMC Sampling from Empirical Datasets.

Sommario/riassunto

This book presents the refereed proceedings of the 13th International Conference on Monte Carlo and Quasi-Monte Carlo Methods in Scientific Computing that was held at the University of Rennes, France, and organized by Inria, in July 2018. These biennial conferences are major events for Monte Carlo and quasi-Monte Carlo researchers. The proceedings include articles based on invited lectures as well as carefully selected contributed papers on all theoretical aspects and applications of Monte Carlo and quasi-Monte Carlo methods. Offering information on the latest developments in these very active areas, this book is an excellent reference resource for theoreticians and practitioners interested in solving high-dimensional computational problems, arising, in particular, in finance, statistics and computer graphics.
