

# Monte Carlo and Quasi-Monte Carlo Methods 2006

Alexander Keller • Stefan Heinrich  
Harald Niederreiter  
Editors

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Springer

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ISBN 978-3-540-74495-5

e-ISBN 978-3-540-74496-2

Library of Congress Control Number: 2007936240

Mathematics Subject Classification (2000): Primary: 11K45, 65-06, 65C05, 65C10

Secondary: 11K38, 65D18, 65D30, 65D32, 65R20, 91B28

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*Cover Design:* WMXDesign GmbH, Heidelberg

Printed on acid-free paper

9 8 7 6 5 4 3 2 1

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## Preface

This volume represents the refereed proceedings of the Seventh International Conference on Monte Carlo and Quasi-Monte Carlo Methods in Scientific Computing, which was held at Ulm University, Germany, from 14–18 August 2006. The program of this conference was arranged by an international committee consisting of Ivan Dimov (Bulgarian Academy of Sciences), Henri Faure (CNRS Marseille), Paul Glasserman (Columbia University), Stefan Heinrich (co-chair, University of Kaiserslautern), Fred Hickernell (Illinois Institute of Technology), Alexander Keller (co-chair, University of Ulm), Pierre L’Ecuyer (Université de Montréal), Michael Mascagni (The Florida State University), Peter Mathé (Weierstrass Institute for Applied Analysis and Stochastics), Harald Niederreiter (co-chair, National University of Singapore), Erich Novak (Friedrich-Schiller-Universität Jena), Art Owen (Stanford University), Klaus Ritter (TU Darmstadt), Ian Sloan (University of New South Wales), Denis Talay (INRIA Sophia Antipolis), and Henryk Woźniakowski (Columbia University).

The local arrangements were in the hands of the PhD students Sabrina Dammertz, Holger Dammertz, Matthias Raab, Carsten Wächter, the students Bernhard Finkbeiner, Leonhard Grünschloss, Daniela Hauser, Johannes Hanika, Christian Kempter, Manuel Kugelman, Sehera Nawaz, Daniel Seibert, and our secretary Claudia Wainczyk, all at the computer graphics group of Ulm University.

This conference continued the tradition of biennial MCQMC conferences which was begun at the University of Nevada in Las Vegas, Nevada, USA, in June 1994 and followed by conferences at the University of Salzburg, Austria, in July 1996, the Claremont Colleges in Claremont, California, USA, in June 1998, Hong Kong Baptist University in Hong Kong, China, in November 2000, the National University of Singapore, Republic of Singapore, in November 2002, and at the Palais des Congrès in Juan-les-Pins, France, in June 2004.

The proceedings of these previous conferences were all published by Springer-Verlag, under the titles *Monte Carlo and Quasi-Monte Carlo Methods in Scientific Computing* (H. Niederreiter and P.J.-S. Shiue, eds.), *Monte*

*Carlo and Quasi-Monte Carlo Methods 1996* (H. Niederreiter, P. Hellekalek, G. Larcher and P. Zinterhof, eds.), *Monte Carlo and Quasi-Monte Carlo Methods 1998* (H. Niederreiter and J. Spanier, eds.), *Monte Carlo and Quasi-Monte Carlo Methods 2000* (K.-T. Fang, F.J. Hickernell and H. Niederreiter, eds.), *Monte Carlo and Quasi-Monte Carlo Methods 2002* (H. Niederreiter, ed.), and *Monte Carlo and Quasi-Monte Carlo Methods 2004* (H. Niederreiter and D. Talay, eds.). The next MCQMC conference will be held in Montréal, Canada, in July 2008.

The program of the conference was rich and varied with over 120 talks being presented. Highlights were the invited plenary talks given by Ronald Cools (Katholieke Universiteit Leuven), Sergei Mikhailovitch Ermakov (Saint-Petersburg State University), Alan Genz (Washington State University), Frances Kuo (The University of New South Wales), Thomas Müller-Gronbach (Otto-von-Guericke-Universität Magdeburg), Harald Niederreiter (National University of Singapore), Gilles Pagès (Universités Paris VI et VII - CNRS), Karl Sabelfeld (Weierstraßinstitut für angewandte Analysis und Stochastik), and Peter Shirley (University of Utah) as well as the special sessions that were organized by designated chairpersons. The papers in this volume were carefully screened and cover both the theory and the applications of Monte Carlo and quasi-Monte Carlo methods.

We gratefully acknowledge generous financial support of the conference by the German Science Foundation (DFG) and the financial backup by the mental images GmbH, Berlin.

We also thank the anonymous reviewers for their reports and many others who contributed enormously to the excellent quality of the conference presentations and to the high standards for publication in these proceedings by careful review of the abstracts and manuscripts that were submitted.

Leonhard Grünschoß provided invaluable help with editing the proceedings. Finally, we want to express our gratitude to Springer-Verlag for publishing this volume.

Ulm,  
August 2007

*Alexander Keller*  
*Stefan Heinrich*  
*Harald Niederreiter*

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# Contents

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## Part I Invited Articles

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### A Belgian View on Lattice Rules

*Ronald Cools and Dirk Nuyens* ..... 3

### MCQMC Algorithms for Solving some Classes of Equations

*Sergej Ermakov* ..... 23

### MCQMC Methods for Multivariate Statistical Distributions

*Alan Genz* ..... 35

### Minimal Errors for Strong and Weak Approximation of Stochastic Differential Equations

*Thomas Müller-Gronbach and Klaus Ritter* ..... 53

### Nets, $(t, s)$ -Sequences, and Codes

*Harald Niederreiter* ..... 83

### Quadratic Optimal Functional Quantization of Stochastic Processes and Numerical Applications

*Gilles Pagès* ..... 101

### Random Field Simulation and Applications

*Karl Sabelfeld* ..... 143

### Monte Carlo and Quasi-Monte Carlo Methods for Computer Graphics

*Peter Shirley, Dave Edwards, and Solomon Boulos* ..... 167

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**Part II Contributed Articles**


---

<b>Random Walk Algorithm for Estimating the Derivatives of Solution to the Elliptic BVP</b> <i>Alexander Burmistrov</i> .....	181
<b>Free-Knot Spline Approximation of Fractional Brownian Motion</b> <i>Jakob Creutzig and Mikhail Lifshits</i> .....	195
<b>Simulation on Rank-1 Lattices</b> <i>Holger Dammertz, Alexander Keller, and Sabrina Dammertz</i> .....	205
<b>Image Synthesis by Rank-1 Lattices</b> <i>Sabrina Dammertz and Alexander Keller</i> .....	217
<b>Continuous Runge-Kutta Methods for Stratonovich Stochastic Differential Equations</b> <i>Kristian Debrabant and Andreas Rößler</i> .....	237
<b>Issues on Computer Search for Large Order Multiple Recursive Generators</b> <i>Lih-Yuan Deng</i> .....	251
<b>Design and Implementation of Efficient and Portable Multiple Recursive Generators with Few Zero Coefficients</b> <i>Lih-Yuan Deng, Huajiang Li, Jyh-Jen Horng Shiau, and Gwei-Hung Tsai</i> .....	263
<b>Approximation of Functions Using Digital Nets</b> <i>Josef Dick, Peter Kritzer, and Frances Y. Kuo</i> .....	275
<b>Construction of Low-Discrepancy Point Sets of Small Size by Bracketing Covers and Dependent Randomized Rounding</b> <i>Benjamin Doerr and Michael Gnewuch</i> .....	299
<b>A Coding Theoretic Approach to Building Nets with Well-Equidistributed Projections</b> <i>Yves Edel and Pierre L'Ecuycer</i> .....	313
<b>Improvements on Low Discrepancy One-Dimensional Sequences and Two-Dimensional Point Sets</b> <i>Henri Faure</i> .....	327
<b>Improved Multilevel Monte Carlo Convergence using the Milstein Scheme</b> <i>Mike Giles</i> .....	343

**Generalized Tractability for Linear Functionals***Michael Gnewuch and Henryk Woźniakowski* ..... 359**An Improved Implementation of Stochastic Particle Methods  
and Applications to Coagulation Equations***Flavius Guias* ..... 383 **$(t, m, s)$ -Nets and Maximized Minimum Distance***Leonhard Grünschloß, Johannes Hanika, Ronnie Schwede, and  
Alexander Keller* ..... 397**Quasi-Monte Carlo Simulation of Discrete-Time Markov  
Chains on Multidimensional State Spaces***Rami El Haddad, Christian Lécot, and Pierre L'Ecuyer* ..... 413**Computational Engine for a Virtual Tissue Simulator***Carole Hayakawa, Jerome Spanier, and Vasan Venugopalan* ..... 431**Randomized Approximation of Sobolev Embeddings***Stefan Heinrich* ..... 445**Tractability of Linear Multivariate Problems in the  
Average Case Setting***Fred Hickernell, Greg Wasilkowski, and Henryk Woźniakowski* ..... 461**Zinterhof Sequences in GRID-Based Numerical Integration***Heinz Hofbauer, Andreas Uhl, and Peter Zinterhof* ..... 495**A Pragmatic View on Numerical Integration  
of Unbounded Functions***Heinz Hofbauer, Andreas Uhl, and Peter Zinterhof* ..... 511**Assessment of Genetic Association using Haplotypes Inferred  
with Uncertainty via Markov Chain Monte Carlo***Raquel Iniesta and Victor Moreno* ..... 529**The Generalized Gibbs Sampler and the Neighborhood  
Sampler***Jonathan Keith, George Sofronov, and Dirk Kroese* ..... 537**The Weighted Dyadic Diaphony of Digital Sequences***Peter Kritzer and Friedrich Pillichshammer* ..... 549**A New Criterion for Finiteness of Weight Estimator Variance  
in Statistical Simulation***Ilya Medvedev and Gennadii Mikhailov* ..... 561



<b>Optimal Pointwise Approximation of a Linear Stochastic Heat Equation with Additive Space-Time White Noise</b> <i>Thomas Müller-Gronbach, Klaus Ritter, and Tim Wagner</i> . . . . .	577
<b>Unbiased Global Illumination with Participating Media</b> <i>Matthias Raab, Daniel Seibert, and Alexander Keller</i> . . . . .	591
<b>SIMD-Oriented Fast Mersenne Twister: a 128-bit Pseudorandom Number Generator</b> <i>Mutsuo Saito and Makoto Matsumoto</i> . . . . .	607
<b>A New Lower Bound on the <math>t</math>-Parameter of <math>(t, s)</math>-Sequences</b> <i>Rudolf Schürer</i> . . . . .	623
<b>Walk-on-Spheres Algorithm for Solving Boundary-Value Problems with Continuity Flux Conditions</b> <i>Nikolai Simonov</i> . . . . .	633
<b>Good Lattice Rules with a Composite Number of Points Based on the Product Weighted Star Discrepancy</b> <i>Vasile Sinescu and Stephen Joe</i> . . . . .	645
<b>Ergodic Simulations for Diffusion in Random Velocity Fields</b> <i>Nicolae Suciu, Călin Vamoş, and Karl Sabelfeld</i> . . . . .	659
<b>Efficient Simultaneous Simulation of Markov Chains</b> <i>Carsten Wächter and Alexander Keller</i> . . . . .	669
<hr/>	
<b>Part III Appendix</b>	
<b>Conference Participants</b> . . . . .	687
<b>Author Index</b> . . . . .	697