

Bibliography

In the first five years after this book was first published (1987–1992) Monte Carlo (MC) computer simulation methods have been developed further in many respects. In the following some pertinent publications which complement the material of the present textbook are listed, in order to provide for the reader a first guide to the recent literature. Of course, only a limited, somewhat subjective selection can be given here.

Reduction of Slowing Down (Cluster algorithms, multigrid MC, etc.)

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- Hasenbusch M., S. Meyer: Cluster update acceleration of interface roughening in the 3d Ising model. *Phys. Rev. Lett.* **66**, 530 (1991)
- Kandel D., E. Domany, A. Brandt: Simulations without critical slowing down: Ising and three state Potts models. *Phys. Rev. B* **40**, 330 (1989)
- Sokal A.D.: *Monte Carlo Methods in Statistical Mechanics: Foundations and New Algorithms* (Cours de Troisième Cycle en Suisse Romande, Lausanne 1989)
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- Wolff U.: Lattice field theory as percolation process. *Phys. Rev. Lett.* **60**, 1461 (1988)
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Hybrid Monte Carlo/Molecular Dynamics, Fourier Acceleration, etc.

- Batrounis G.G., G.R. Katz, A.S. Kornfeld, G.P. Lepage, B. Svetitsky, K.G. Wilson: Langevin simulations of lattices field theories. *Phys. Rev. D* **32**, 273 (1985)
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Histogram Analysis

- Deutsch H.P.: Optimized analysis of the critical behavior in polymer mixtures from MC simulations. *J. Stat. Phys.* **67**, 1039 (1992)
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Finite Size Scaling

- Binder K., J.S. Wang: Finite size effects at critical points with anisotropic correlations: Phenomenological scaling theory and MC simulations. *J. Stat. Phys.* **55**, 87 (1989)
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Applications

The recent applications of Monte Carlo methods are far too numerous to be listed here. Rather we refer the reader to recent and forthcoming comprehensive books:

- Binder K. (ed.): *The Monte Carlo Method in Condensed Matter Physics*, Topics Appl. Phys., Vol. 71 (Springer, Berlin, Heidelberg 1992)
- Landau D.P., K.K. Mon, H.-B. Schüttler: *Computer Simulation Studies in Condensed-Matter Physics IV*, Springer Proc. Phys., Vol. 72 (Springer, Berlin, Heidelberg 1992)
- Landau D.P., K.K. Mon, H.-B. Schüttler: *Computer Simulation Studies in Condensed-Matter Physics V*, Springer Proc. Phys., Vol. 75 (Springer, Berlin, Heidelberg 1993)