

Themen für Bachelorarbeiten

Andreas Eberle 02/2014

A. Normalapproximationen und Konzentrationsungleichungen

Tanaka, Hiroshi

An inequality for a functional of probability distributions and its application to Kac's one-dimensional model of a Maxwellian gas.

Z. Wahrscheinlichkeitstheorie und Verw. Gebiete 27 (1973), 47–52.

Chatterjee <http://arxiv.org/abs/math.PR/0611213>

A new method of normal approximation

Chatterjee/Dey <http://arxiv.org/abs/0906.1034>

Applications of Stein's method for concentration inequalities

B. Nicht-asymptotische Abschätzungen für ergodische Mittel

Chung/Lam/Liu/Mitzenmacher: <http://arxiv.org/abs/1201.0559>

Chernoff-Hoeffding Bounds for Markov Chains: Generalized and Simplified

Joulin/Ollivier: <http://arxiv.org/abs/0904.1312>

Curvature, concentration and error estimates for Markov chain Monte Carlo

Latuszynski/Miasojedow/Niemiro: <http://arxiv.org/abs/1106.4739>

Nonasymptotic bounds on the estimation error of MCMC algorithms

C. Konvergenz ins Gleichgewicht beim Mean-Field-Ising-Modell

Levin/Luczak/Peres: <http://arxiv.org/abs/0712.0790>

Glauber dynamics for the mean-field Ising model: cut-off, critical power law, and metastability