

Prof. Dr. A. Eberle

Seminar Stochastic Analysis WS 07/08

A - Stochastic Dynamics on \mathbb{R}^n

A1 The Gibbs sampler - Barbara Keller

A2 Harris recurrence and drift conditions - Stefan Lehner

A3 CLT for Markov chains - Anja Hesse

A4 Diffusion approximation and optimal scaling of MCMC - Lena Bundil

A5 Estimating the volume of convex bodies I - Harald Grohganz

A6 Estimating the volume of convex bodies II - Markus Burkow

B - Random fields and their dynamics

B1 The Ising model - Jinhua Tang

B2 Gibbs sampler / Glauber dynamics on the Ising model - Lena Wollschläger

B3 Gaussian fields on a lattice - Tobias Polley

B4 The Gaussian free field

C - Log-Sobolev inequalities and interacting particle systems

C1 Gaussian LSI and hypercontractivity - Hanna Sdunzik

C2 Bakry-Emery criterion

C3 Euler approximation of SDE - Linda Schilling

C4 McKean-Vlasov Limit and propagation of chaos - Carola Gerwig

C5 Sequential Monte Carlo Methods - Maximilian Wessel

C6 CLT for interacting particle systems