



BERGISCHE
UNIVERSITÄT
WUPPERTAL

Vortrag im Mathematischen Kolloquium am 16. Januar 2018:

Prof. Dr. Martin Grothaus:

Weak Poincaré inequalities for convergence rate of degenerate diffusion processes

For a contraction C_0 -semigroup on a separable Hilbert space, the decay rate is estimated by using the weak Poincaré inequalities for the symmetric and anti-symmetric part of the generator. As applications, non-exponential convergence rate is characterized for a class of degenerate diffusion processes, so that the study of hypocoercivity is extended. Concrete examples are presented.