Strong mixing with rate of convergence for operator semi-groups with non-sectorial generator

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Motivated by problems from Industrial Mathematics we further developed the concepts of hypocoercivity. The original concepts needed Poincaré inequalities and where made for finite dimensional and linear state spaces. In between we can treat as a state space manifolds or even infinite dimensional state spaces. The condition giving micro- and macroscopic coercivity we could relax from Poincaré to weak Poincaré inequalities. In this talk an overview and many examples are given.

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