CONVERGENCE TO EQUILIBRIUM OF MARKOV PROCESSES AND FUNCTIONAL INEQUALITIES VIA LYAPUNOV CONDITIONS

Arnaud GUILLIN *Université Blaise Pascal, France*,
E-mail: Arnaud.Guillin@math.univ-bpclermont.fr

Abstract: we will show here how a simple method, based on Lyapunov condition, allows to prove various type of inequalities (Poincare, logarithmic Sobolev, transportation,...). We will also see how these Lyapunov conditions via coupling method provide useful quantitative results on convergence to equilibrium! for Markov processes. than 1.