EXPLICIT CONVERGENCE RATES FOR SUB-GEOMETRIC ERGODIC MARKOV PROCESSES UNDER SUBORDINATION

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Abstract: We are concerned with three types of convergence rates (sub-exponential, polynomial and logarithmic) of a subordinate Markov process to its invariant measure. It turns out that the classical continuous time subordination in the sense of Bochner can dramatically change the speed of convergence to equilibrium. Analogous results will also be presented for discrete time Markov chains under discrete time subordination in the sense of Bendikov and Saloff-Coste (Math. Nachr., 2012).