

A New Proof of Convergence of MCMC via the Ergodic Theorem

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- [AsmussenG11.pdf](#)

A key result underlying the theory of MCMC is that any η -irreducible Markov chain having a transition density with respect to η and possessing a stationary distribution is automatically positive Harris recurrent. This paper provides a short self-contained proof of this fact using the ergodic theorem in its standard form as the most advanced tool.
