

BDA ③

* MCMC - Markov chain Monte Carlo

Class of algorithms for sampling from probability distributions based on constructing a Markov chain that has the desired distribution as its 'equilibrium distribution' [invariant measure].

The state of the chain after a large number of steps is then used as a sample for the desired distribution. The quality of the sample improves as a function of the number of steps.

* Markov chain mixing time.

a good chain will have rapid mixing - stationary distribution is reached quickly starting from an arbitrary position.