

# Using Markov Chain

- We want to sample from  $p(x)$
- Build a Markov chain that converge to  $p(x)$
- Start from any  $x^0$
- For  $k = 0, 1, \dots$

$$x^{k+1} \sim T(x^k \rightarrow x^{k+1})$$

- Eventually  $x^k$  will look like samples from  $p(x)$