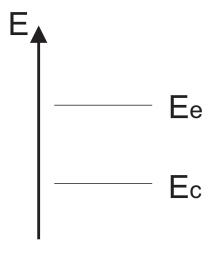
$N \equiv number of sites$

 $N_c \equiv$ number of covered sites

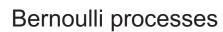
 $N_e \equiv$ number of empty sites

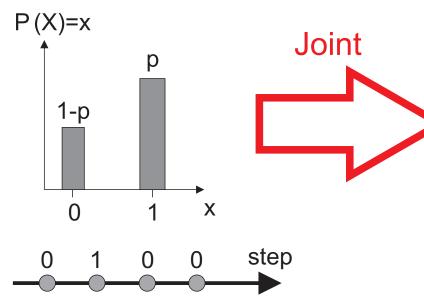
Metropolis probabilities

$$P(\sigma_i \to \sigma_j) = \begin{cases} 1 & \Delta E \leq 0 \\ e^{-\frac{\Delta E}{k_B T}} & \Delta E > 0 \end{cases}$$



$$\Delta E = E_e - E_c$$







Markov chain

