
$M_0 = 5000000$

χ^2_0

Accept

$M_1 = 6000000$

$\chi^2_1 < \chi^2_0$

$\frac{\text{Log}(L_1)}{\text{Log}(L_0)} > 1$

Accept

$M_2 = 100000000$

$\chi^2_2 > \chi^2_1$

$\frac{\text{Log}(L_2)}{\text{Log}(L_1)} < \text{random}[0,1]$

Reject

Markov Chain = [M_0 , M_1 , M_1 , ...]