for $t = 1 \text{ to } T$ **do**

$\quad \theta^* \sim N(\theta^{(t-1)}, \tau)$

$\quad \alpha = \frac{\tilde{p}(\theta^*|D)}{\tilde{p}(\theta^{(t-1)}|D)}$

$\quad U \sim Ber(p = min(1, \alpha))$

$\quad$ **if** $U == 1$ **then**

$\quad\quad | \quad \theta^{(t)} \leftarrow \theta^*$

$\quad$ **else**

$\quad\quad | \quad \theta^{(t)} \leftarrow \theta^{(t-1)}$

$\quad$ **end**

end