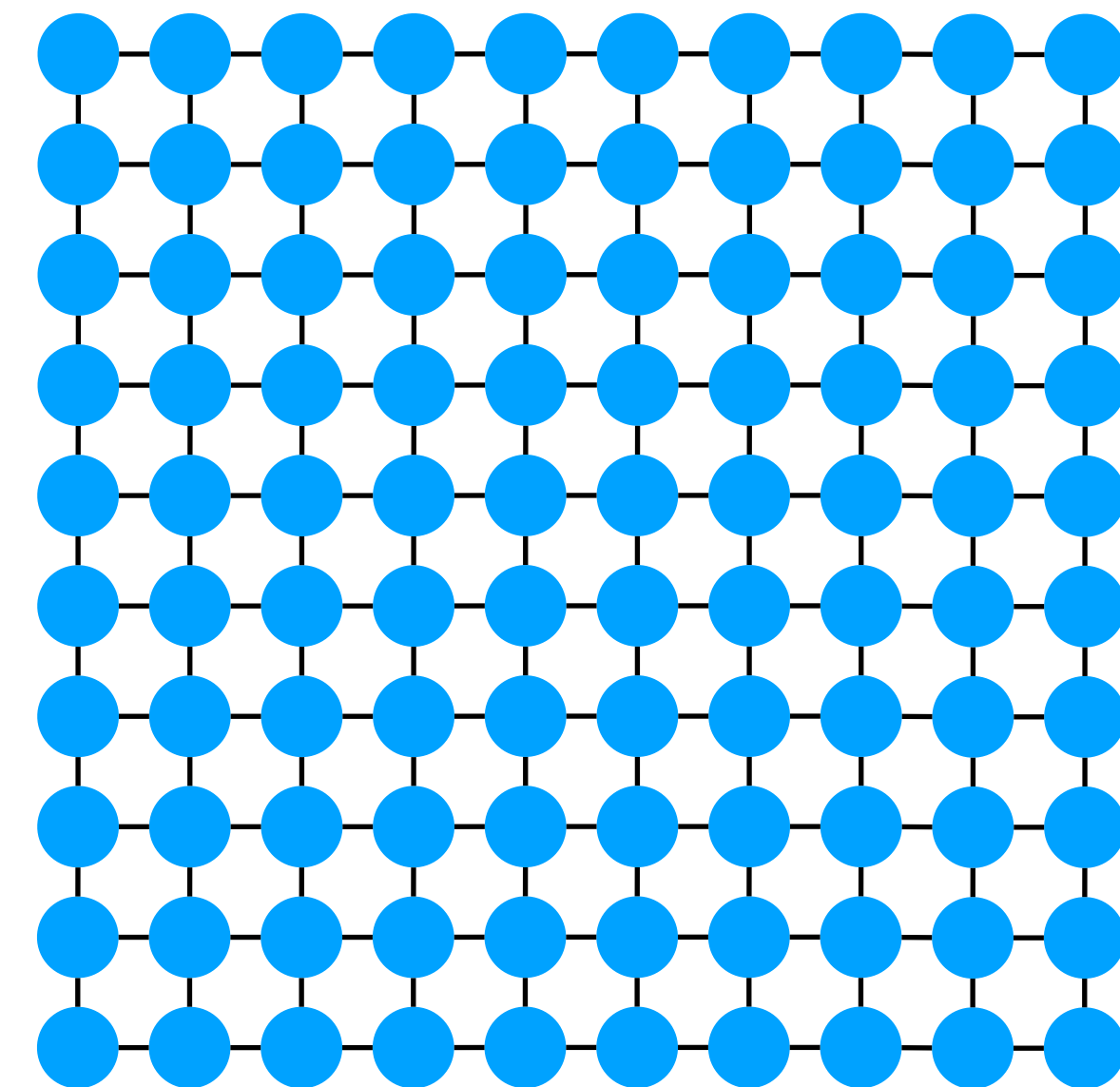


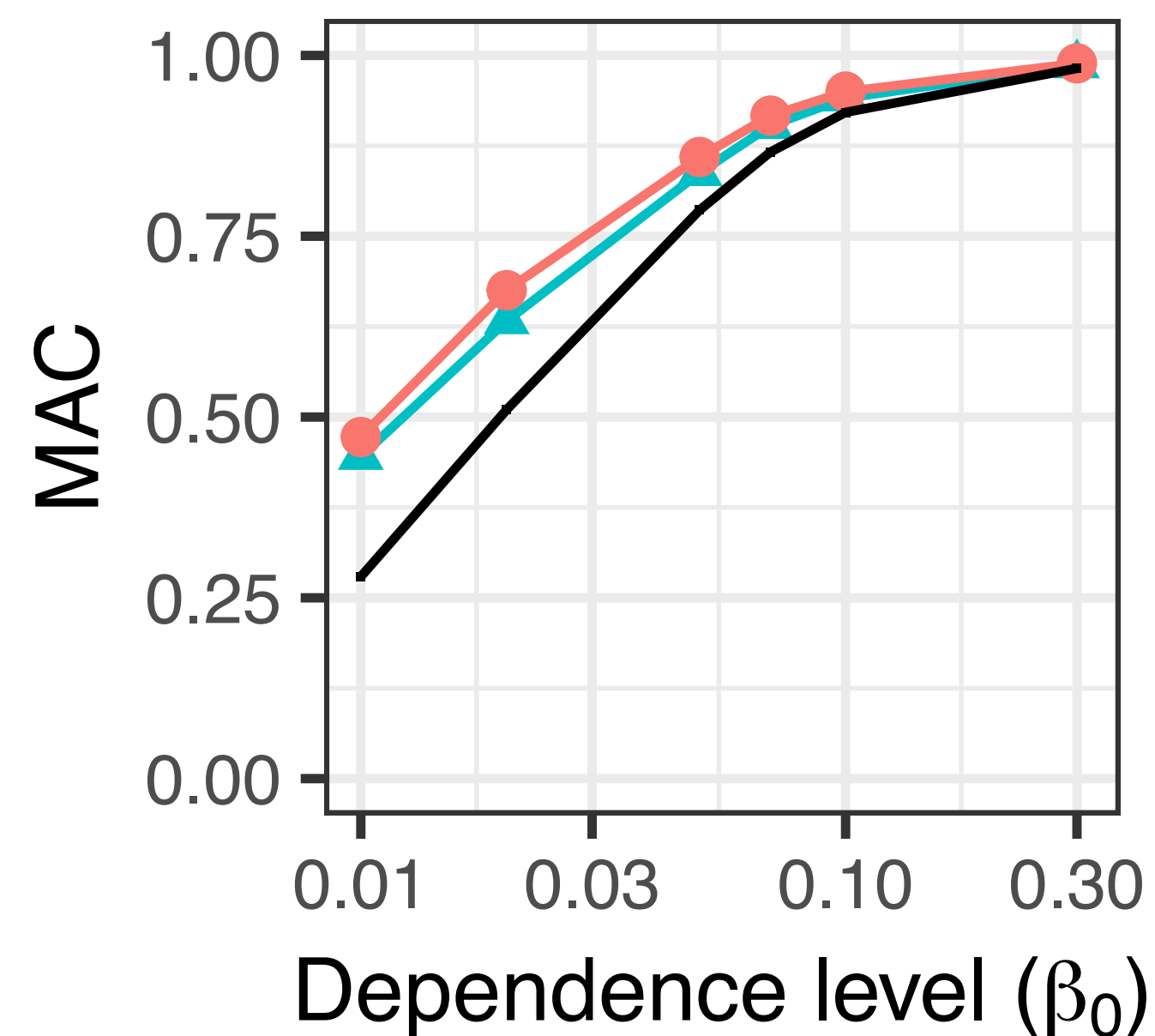
Simulation:
Gibbs measure on a grid

$$\mathbb{P}(X = x) = \frac{1}{Z(\beta_0)} \exp \left(-\beta_0 \sum_{\substack{s, t \in \mathcal{F} \\ \|s - t\|_1 = 1}} (x_s - x_t)^2 \right), \mathcal{F} \text{ is a } 10 \times 10 \text{ grid}$$

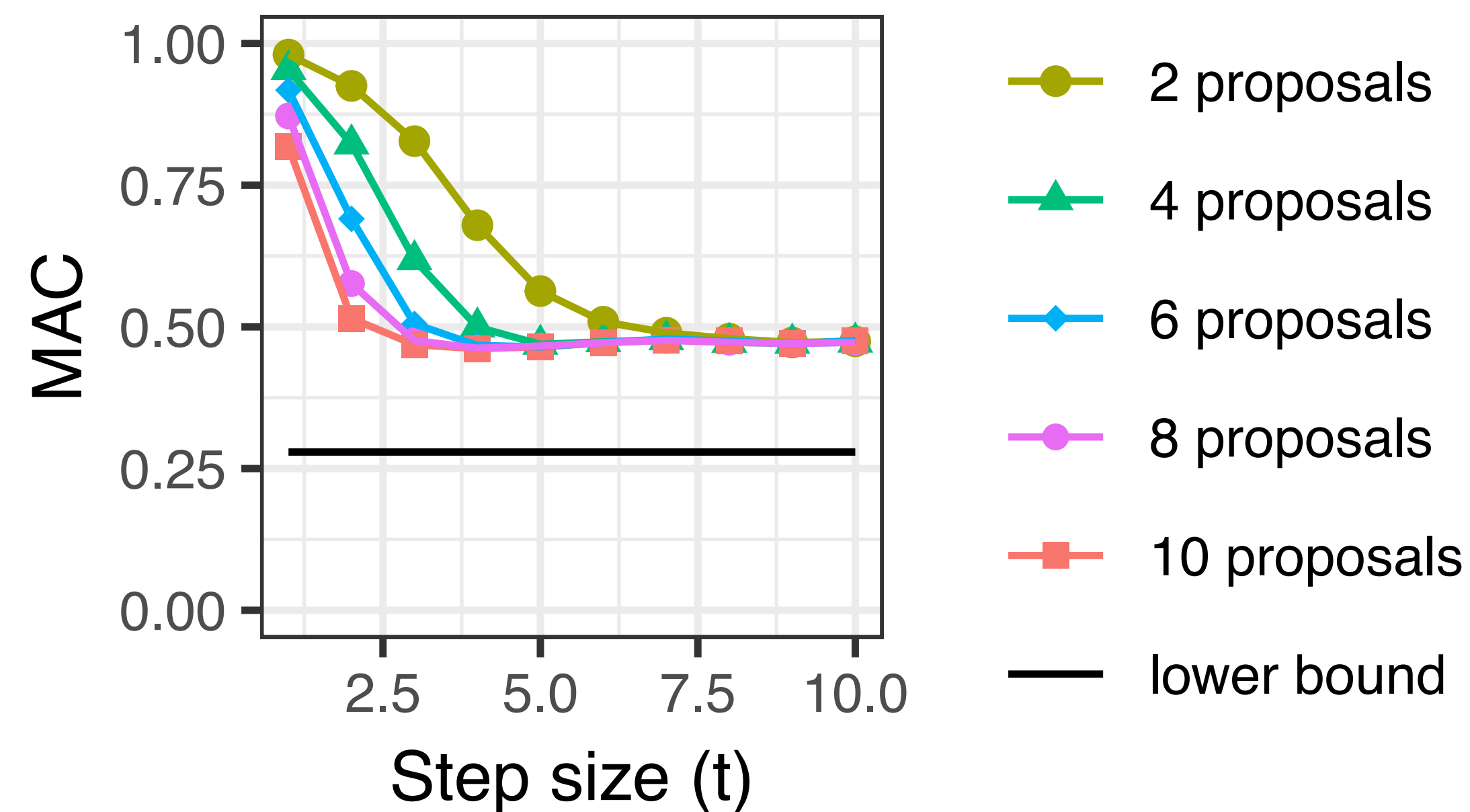
$X \in \{1, 2, \dots, 20\}^{10 \times 10}$



$\beta = 0.01$



—▲— best MTM
—●— best m=1 MTM
— lower bound



—●— 2 proposals
—▲— 4 proposals
—◆— 6 proposals
—●— 8 proposals
—■— 10 proposals
— lower bound

Simulation:
Potts model for protein contact prediction

