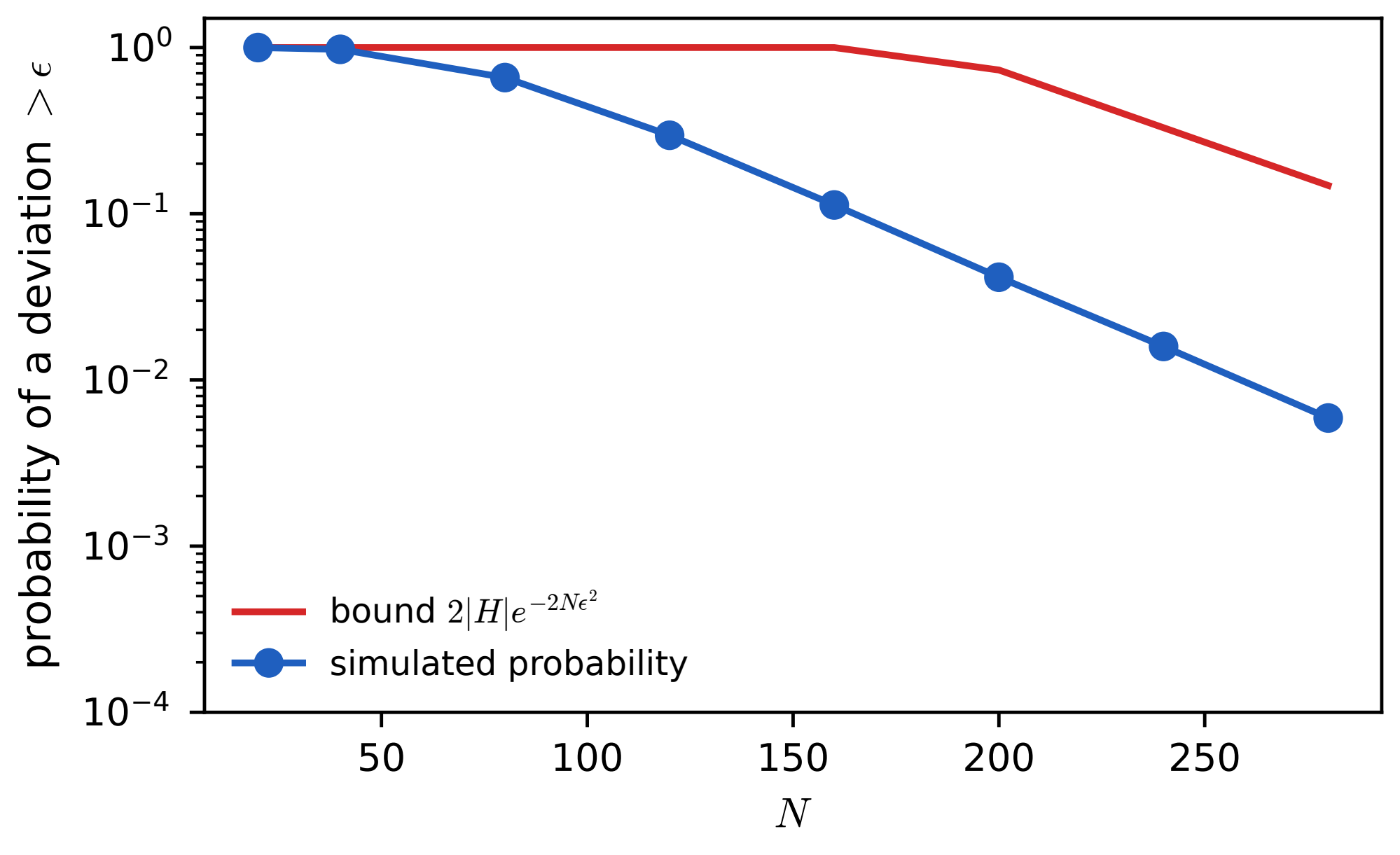

probability of a deviation $> \epsilon$
10^0
10^{-1}
10^{-2}
10^{-3}
10^{-4}
50
100
150
200
250
N
bound $2|H|e^{-2N\epsilon^2}$
simulated probability