

Figure 1: Time evolution of the probability distribution $P(x, t)$ for the 1D Ising model. The plot shows the probability density as a function of position x (y-axis, 0 to 100) and time t (x-axis, 0 to 12 hours). The color scale ranges from 0 (dark blue) to 0.1 (dark red). The distribution starts as a sharp peak at $x=0$ and spreads over time, with a secondary peak appearing around $x=50$ after 4 hours.

