

Selecting Lambda

Short-Time Behavior

The short-time behavior is largely controlled by λ

Determine a value for λ by considering a 2-state model:

$$\text{---} \overset{k}{\text{---}}$$

$$\hat{H} = k \left(\hat{a}_0^\dagger \hat{a}_1 + \hat{a}_1^\dagger \hat{a}_0 \right)$$

$$H_{\text{SC}} = 2k \sqrt{(n_0 - n_0^2 + \lambda)(n_1 - n_1^2 + \lambda)} \cos(q_0 - q_1)$$