

Diagram illustrating a transition from state $|\psi(t)\rangle$ to state $|\psi_1(t+dt)\rangle$ with probability $dN(t)$.

$$|\psi_1(t+dt)\rangle = \frac{J_1 \psi(t)}{\sqrt{\langle J^\dagger J \rangle(t)}}$$

Diagram illustrating a transition from state $|\psi(t)\rangle$ to state $|\psi(t+dt)\rangle$ with probability $1-dN(t)$.

$$|\psi(t+dt)\rangle = \left(1 - dt\left(\frac{1}{2}\hat{H} + \frac{1}{2}\hat{J}^\dagger \hat{J} - \frac{1}{2}\langle \hat{J}^\dagger \hat{J} \rangle(t)\right)\right) |\psi(t)\rangle$$