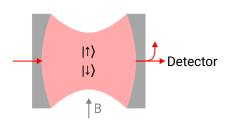
Noise Analysis Optomechanical Cavity

Leon Oleschko 26.01.2025

> Modeling Quantum Hardware: open dynamics and control Universität Konstanz

Rabi Oscillations Setup



$$H = g (a^{\dagger}a)(\sigma^{+}\sigma^{-})$$

$$+ g_{s} (\sigma^{+} + \sigma^{-})$$

$$- i\beta(a^{\dagger} - a)$$

$$J = \kappa a$$

$$C = \sqrt{\kappa \eta} a$$

Coupling
Magnetic
Optic
Dissipation
Measurement

Time evolution

