

Figure 1. 1: Mean excitation $\langle n \rangle$ of the cotangent state as a function of the population of the second excited state $|\alpha|^2$. 2: Fluctuations in the mean excitations $\sigma = (\langle n^2 \rangle - \langle n \rangle^2)/\langle n \rangle$, showing sub-Poissonian statistics when $\sigma < 1$. Here, $N_u = 3$, $|\gamma|^2 = 0.25$.