35.9 fb⁻¹ (13 TeV) **CMS** Preliminary $\mathsf{m}_{\widetilde{\chi}_{1}^{0}}[\mathsf{GeV}]$ 2500 $pp \rightarrow \tilde{q} \tilde{q} NLO+NLL exclusion$ **Expected** Observed $\begin{array}{c} \begin{array}{c} & \\ \\ \end{array} \end{array} pp \rightarrow \widetilde{q} \hspace{0.1cm} \widetilde{q}, \hspace{0.1cm} \widetilde{q} \rightarrow q \hspace{0.1cm} \widetilde{\chi}^0_1 \hspace{0.1cm} (\widetilde{q}_L + \widetilde{q}_R, \hspace{0.1cm} \widetilde{u}, \hspace{0.1cm} \widetilde{d}, \hspace{0.1cm} \widetilde{s}, \hspace{0.1cm} \widetilde{c}) \\ \\ \begin{array}{c} \\ \end{array} \end{array} pp \rightarrow \widetilde{q} \hspace{0.1cm} \widetilde{q}, \hspace{0.1cm} \widetilde{q} \rightarrow q \hspace{0.1cm} \widetilde{\chi}^0_1 \hspace{0.1cm} \text{(one light \widetilde{q})} \end{array}$ 2000 pp $\rightarrow \tilde{b}_1 \tilde{b}_1, \tilde{b}_1 \rightarrow b \tilde{\chi}_1^0$ _ ₫ pp \rightarrow \widetilde{t}_1 , \widetilde{t}_1 , \widetilde{t}_1 ightharpoonup pp ightharpoonup ightharpoonup 1, ightharpoonup 1, ightharpoonup 2, ightharpoonup 3, ightharpoonup 2, ightharpoonup 3, ightharpoonup 3, ightharpoonup 3, ightharpoonup 3, ightharpoonup 3, ightharpoonup 4, ightharpoonup 5, ightharpoonup 6, ightharpoonup 6, ightharpoonup 6, ightharpoonup 7, ightha1500 $\Delta m_1 \equiv m_{\tilde{t}} - m_{\chi_1^0} = m_W$ $\Delta m_2 \equiv m_{\tilde{t}} - m_{\chi_a^0} = m_t$ 1000 500 Δm_2 Δm_1 200 400 600 800 1000 1200 1400 m_ã [GeV]