

Hadronic / inclusive

CMS

 $\sqrt{s} = 7 \text{ TeV}, L \leq 4.98 \text{ fb}^{-1}$

Leptonic

 $m_{\text{LSP}} = 0 \text{ GeV}$ $x = 0.25$
 $x = 0.5$
 $x = 0.75$ $m_{\text{mother}} - m_{\text{LSP}} = 200 \text{ GeV}$ $m_{\text{mother}} - m_{\text{LSP}} = 200 \text{ GeV}$ $x = 0.25$
 $x = 0.5$
 $x = 0.75$ $m_{\text{LSP}} = 0 \text{ GeV}$ T1: $\tilde{g} \rightarrow q\bar{q}\tilde{\chi}^0, \alpha_T$ T3lh: $\tilde{g} \rightarrow q\bar{q}(\tilde{\chi}_2^0 \rightarrow l^+ l^- \tilde{\chi}^0), \text{OS } e/\mu \text{ edge}$ T1: $\tilde{g} \rightarrow q\bar{q}\tilde{\chi}^0, \cancel{H}_T + \text{jets}$ T3lh: $\tilde{g} \rightarrow q\bar{q}(\tilde{\chi}_2^0 \rightarrow l^+ l^- \tilde{\chi}^0), \text{OS } e/\mu + \cancel{E}_T$ T1: $\tilde{g} \rightarrow q\bar{q}\tilde{\chi}^0, \text{razor}$ T3lh: $\tilde{g} \rightarrow q\bar{q}(\tilde{\chi}_2^0 \rightarrow l^+ l^- \tilde{\chi}^0), \text{OS } e/\mu \text{ ANN}$ T1: $\tilde{g} \rightarrow q\bar{q}\tilde{\chi}^0, M_{T2}$ T5lnu: $\tilde{g} \rightarrow q\bar{q}(\tilde{\chi}^\pm \rightarrow l^\pm \nu \tilde{\chi}^0), \text{SS } e/\mu$ T1tttt: $\tilde{g} \rightarrow t\bar{t}\tilde{\chi}^0, \alpha_T$ T1tttt: $\tilde{g} \rightarrow t\bar{t}\tilde{\chi}^0, \text{SS } e/\mu + b$ T1tttt: $\tilde{g} \rightarrow t\bar{t}\tilde{\chi}^0, \cancel{E}_T + b$ T1tttt: $\tilde{g} \rightarrow t\bar{t}\tilde{\chi}^0, e/\mu \geq 2b + \cancel{E}_T$ T1tttt: $\tilde{g} \rightarrow t\bar{t}\tilde{\chi}^0, M_{T2}b$ T1tttt: $\tilde{g} \rightarrow t\bar{t}\tilde{\chi}^0, e/\mu \geq 3b, Y_{\text{MET}}$ T1tttt: $\tilde{g} \rightarrow t\bar{t}\tilde{\chi}^0, \text{razor}$ T1tttt: $\tilde{g} \rightarrow t\bar{t}\tilde{\chi}^0, \text{razor} + b$ T1bbbb: $\tilde{g} \rightarrow b\bar{b}\tilde{\chi}^0, \alpha_T$ T3w: $\tilde{g} \rightarrow q\bar{q}(\tilde{\chi}^\pm \rightarrow W\tilde{\chi}^0 | \tilde{\chi}^0), e/\mu \text{ LS}$ T1bbbb: $\tilde{g} \rightarrow b\bar{b}\tilde{\chi}^0, \cancel{E}_T + b$ T3w: $\tilde{g} \rightarrow q\bar{q}(\tilde{\chi}^\pm \rightarrow W\tilde{\chi}^0 | \tilde{\chi}^0), e/\mu \text{ LP}$ T1bbbb: $\tilde{g} \rightarrow b\bar{b}\tilde{\chi}^0, M_{T2}b$ T3w: $\tilde{g} \rightarrow q\bar{q}(\tilde{\chi}^\pm \rightarrow W\tilde{\chi}^0 | \tilde{\chi}^0), e/\mu \text{ ANN}$ T1bbbb: $\tilde{g} \rightarrow b\bar{b}\tilde{\chi}^0, \text{razor} + b$ T5zz: $\tilde{g} \rightarrow q\bar{q}(\tilde{\chi}_2^0 \rightarrow Z\tilde{\chi}^0), \cancel{H}_T + \text{jets}$ T5zz: $\tilde{g} \rightarrow q\bar{q}(\tilde{\chi}_2^0 \rightarrow Z\tilde{\chi}^0), Z + \cancel{E}_T$ T5zz: $\tilde{g} \rightarrow q\bar{q}(\tilde{\chi}_2^0 \rightarrow Z\tilde{\chi}^0), M_{T2}$ T5zz: $\tilde{g} \rightarrow q\bar{q}(\tilde{\chi}_2^0 \rightarrow Z\tilde{\chi}^0), \text{JZB}$ T5zz: $\tilde{g} \rightarrow q\bar{q}(\tilde{\chi}_2^0 \rightarrow Z\tilde{\chi}^0), M_{T2}b$ T5zz: $\tilde{g} \rightarrow q\bar{q}(\tilde{\chi}_2^0 \rightarrow Z\tilde{\chi}^0), \text{multilepton } (\geq 3)$ T2: $\tilde{q} \rightarrow q\tilde{\chi}^0, \alpha_T$ TChiSlepSlep: $\tilde{\chi}_2^0 \tilde{\chi}^\pm \rightarrow ll\nu\tilde{\chi}^0 \tilde{\chi}^0, \text{multilepton } (\geq 3)$ T2: $\tilde{q} \rightarrow q\tilde{\chi}^0, \cancel{H}_T + \text{jets}$ TChiSlepSlep: $\tilde{\chi}_2^0 \tilde{\chi}^\pm \rightarrow ll\nu\tilde{\chi}^0 \tilde{\chi}^0, \text{comb. leptons}$ T2: $\tilde{q} \rightarrow q\tilde{\chi}^0, \text{razor}$ T2bb: $\tilde{b} \rightarrow b\tilde{\chi}^0, \alpha_T$ TChiwz: $\tilde{\chi}^\pm \tilde{\chi}_2^0 \rightarrow WZ\tilde{\chi}^0 \tilde{\chi}^0, \text{comb. leptons}$ T2bb: $\tilde{b} \rightarrow b\tilde{\chi}^0, \text{razor} + b$ T6ttww: $\tilde{b} \rightarrow tW\tilde{\chi}^0, \text{SS } e/\mu + b$ T2tt: $\tilde{t} \rightarrow t\tilde{\chi}^0, \alpha_T$ T5wg: $\tilde{g} \rightarrow q\bar{q}(\tilde{\chi}_2^0 \rightarrow \gamma\tilde{\chi}^0 | \tilde{\chi}^\pm \rightarrow W\tilde{\chi}^0), \gamma jj + \cancel{E}_T$ T2tt: $\tilde{t} \rightarrow t\tilde{\chi}^0, \text{razor}$ T5gg: $\tilde{g} \rightarrow q\bar{q}(\tilde{\chi}_2^0 \rightarrow \gamma\tilde{\chi}^0), \gamma j + \cancel{E}_T$ T2tt: $\tilde{t} \rightarrow t\tilde{\chi}^0, \text{razor} + b$ T5gg: $\tilde{g} \rightarrow q\bar{q}(\tilde{\chi}_2^0 \rightarrow \gamma\tilde{\chi}^0), \gamma jj + \cancel{E}_T$

1000

800

600

400

200

0

200

400

600

800

1000

Mass scales [GeV]