## $TChiChipmSlepStau: pp \rightarrow \widetilde{\chi}_{2}^{0} \ \widetilde{\chi}_{1}^{\pm}, \ \widetilde{\chi}_{2}^{0} \ \widetilde{\chi}_{1}^{\pm} \ \rightarrow l \ \widetilde{l} \ v \ \widetilde{\tau}, \ \widetilde{l} \rightarrow l \ \widetilde{\chi}_{2}^{0}, \ \widetilde{\tau} \rightarrow \tau \ \widetilde{\chi}_{2}^{0}$ $m_{\tilde{\chi}_{3}^{0}}, m_{\tilde{\chi}_{1}^{\pm}} = x, m_{\tilde{t}}, m_{\tilde{l}} = 0.05 * x + 0.95 * y, m_{\tilde{s}_{0}^{0}} = y$ 350 exclusion (SModelS) 300 2.5 ±20% (SModelS) 250 k-factor = 1.2 $\sigma_{ m signal}/\sigma_{ m U}$ 200 1.5 150 100 0.5 50 200 700 300 400 500 600 $\mathcal{X}$

CMS-SUS-13-006 (upperLimit)

https://twiki.cern.ch/twiki/pub/CMSPublic/PhysicsResultsSUS13006/Fig14\_exclusion\_TChiSlepSnu\_2a\_0\_05.pdf

official plot: