CMS-PAS-SUS-16-024 (upperLimit)

 $\textit{TChiChipmStauL}: pp \, \rightarrow \, \widetilde{\chi}^{\scriptscriptstyle 0}_{\scriptscriptstyle 2} \, \widetilde{\chi}^{\scriptscriptstyle \pm}_{\scriptscriptstyle 1}, \, \widetilde{\chi}^{\scriptscriptstyle 0}_{\scriptscriptstyle 2} \, \widetilde{\chi}^{\scriptscriptstyle \pm}_{\scriptscriptstyle 1} \, \rightarrow \tau \, \widetilde{\tau} \, (\, \nu \, \widetilde{\nu} \,) \, \tau \, \widetilde{\nu} \, (\, \nu \, \widetilde{\tau} \,), \, \widetilde{\tau} \rightarrow \tau \, \widetilde{\chi}^{\scriptscriptstyle 0}_{\scriptscriptstyle 1}, \, \widetilde{\nu} \rightarrow \nu \, \widetilde{\chi}^{\scriptscriptstyle 0}_{\scriptscriptstyle 1}, \, \widetilde{\nu}^{\scriptscriptstyle 0}_{\scriptscriptstyle 1}, \, \widetilde{\nu}^{$ $m_{\tilde{\chi}_{1}^{\pm}}, m_{\tilde{\chi}_{2}^{0}} = x, m_{\tilde{v}}, m_{\tilde{\tau}} = 0.5 * x + 0.5 * y, m_{\tilde{v}^{0}} = y$ 0.9 220 ±20% (S SModelS 200 0.8 exclusion (official) 180 0.7 $\pm 1\sigma$ (official) 160 k-factor = 1.250.6 140 0.5> 120 0.4 100 80 0.3 60 0.2 40 0.1 20 350 150 250 450 200 300 400 χ upper limit