ATLAS-SUSY-2013-14 (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} \rightarrow \nu \, \, \widetilde{\chi}^{\scriptscriptstyle 0}_{\scriptscriptstyle 1}, \, \widetilde{\nu} \rightarrow \nu \, \, \widetilde{\chi}^{\scriptscriptstyle 0}_{\scriptscriptstyle 1}, \, \widetilde{\nu} \rightarrow \nu \, \, \widetilde{\chi}^{\scriptscriptstyle 0}_{\scriptscriptstyle 1}, \, \widetilde{\nu} \rightarrow \nu \, \, \widetilde{\chi}^{\scriptscriptstyle 0}_{\scriptscriptstyle 1}, \, \widetilde{\nu} \rightarrow \nu \, \, \widetilde{\chi}^{\scriptscriptstyle 0}_{\scriptscriptstyle 1}, \, \widetilde{\nu} \rightarrow \nu \, \, \widetilde{\chi}^{\scriptscriptstyle 0}_{\scriptscriptstyle 1}, \, \widetilde{\nu} \rightarrow \nu \, \, \widetilde{\chi}^{\scriptscriptstyle 0}_{\scriptscriptstyle 1}, \, \widetilde{\nu} \rightarrow \nu \, \, \widetilde{\chi}^{\scriptscriptstyle 0}_{\scriptscriptstyle 1}, \, \widetilde{\nu} \rightarrow \nu \, \, \widetilde{\chi}^{\scriptscriptstyle 0}_{\scriptscriptstyle 1}, \, \widetilde{\nu} \rightarrow \nu \, \, \widetilde{\chi}^{\scriptscriptstyle 0}_{\scriptscriptstyle 1}, \, \widetilde{\nu} \rightarrow \nu \, \, \widetilde{\chi}^{\scriptscriptstyle 0}_{\scriptscriptstyle 1}, \, \widetilde{\nu} \rightarrow \nu \, \, \widetilde{\chi}^{\scriptscriptstyle 0}_{\scriptscriptstyle 1}, \, \widetilde{\nu} \rightarrow \nu \, \, \widetilde{\chi}^{\scriptscriptstyle 0}_{\scriptscriptstyle 1}, \, \widetilde{\nu} \rightarrow \nu \, \, \widetilde{\chi}^{\scriptscriptstyle 0}_{\scriptscriptstyle 1}, \, \widetilde{\nu} \rightarrow \nu \, \, \widetilde{\chi}^{\scriptscriptstyle 0}_{\scriptscriptstyle 1}, \, \widetilde{\nu} \rightarrow \nu \, \, \widetilde{\chi}^{\scriptscriptstyle 0}_{\scriptscriptstyle 1}, \, \widetilde{\nu} \rightarrow \nu \, \, \widetilde{\chi}^{\scriptscriptstyle 0}_{\scriptscriptstyle 1}, \, \widetilde{\nu} \rightarrow \nu \, \, \widetilde{\chi}^{\scriptscriptstyle 0}_{\scriptscriptstyle 1}, \, \widetilde{\nu} \rightarrow \nu \, \, \widetilde{\chi}^{\scriptscriptstyle 0}_{\scriptscriptstyle 1}, \, \widetilde{\nu} \rightarrow \nu \, \, \widetilde{\chi}^{\scriptscriptstyle 0}_{\scriptscriptstyle 1}, \, \widetilde{\nu} \rightarrow \nu \, \, \widetilde{\chi}^{\scriptscriptstyle 0}_{\scriptscriptstyle 1}, \, \widetilde{\nu} \rightarrow \nu \, \, \widetilde{\chi}^{\scriptscriptstyle 0}_{\scriptscriptstyle 1}, \, \widetilde{\nu} \rightarrow \nu \, \, \widetilde{\chi}^{\scriptscriptstyle 0}_{\scriptscriptstyle 1}, \, \widetilde{\nu} \rightarrow \nu \, \, \widetilde{\chi}^{\scriptscriptstyle 0}_{\scriptscriptstyle 1}, \, \widetilde{\nu} \rightarrow \nu \, \, \widetilde{\chi}^{\scriptscriptstyle 0}_{\scriptscriptstyle 1}, \, \widetilde{\nu} \rightarrow \nu \, \, \widetilde{\chi}^{\scriptscriptstyle 0}_{\scriptscriptstyle 1}, \, \widetilde{\nu} \rightarrow \nu \, \, \widetilde{\chi}^{\scriptscriptstyle 0}_{\scriptscriptstyle 1}, \, \widetilde{\nu} \rightarrow \nu \, \, \widetilde{\chi}^{\scriptscriptstyle 0}_{\scriptscriptstyle 1}, \, \widetilde{\nu} \rightarrow \nu \, \, \widetilde{\chi}^{\scriptscriptstyle 0}_{\scriptscriptstyle 1}, \, \widetilde{\nu} \rightarrow \nu \, \, \widetilde{\chi}^{\scriptscriptstyle 0}_{\scriptscriptstyle 1}, \, \widetilde{\nu} \rightarrow \nu \, \, \widetilde{\chi}^{\scriptscriptstyle 0}_{\scriptscriptstyle 1}, \, \widetilde{\nu} \rightarrow \nu \, \, \widetilde{\chi}^{\scriptscriptstyle 0}_{\scriptscriptstyle 1}, \, \widetilde{\nu} \rightarrow \nu \, \, \widetilde{\chi}^{\scriptscriptstyle 0}_{\scriptscriptstyle 1}, \, \widetilde{\nu} \rightarrow \nu \, \, \widetilde{\chi}^{\scriptscriptstyle 0}_{\scriptscriptstyle 1}, \, \widetilde{\nu} \rightarrow \nu \, \, \widetilde{\chi}^{\scriptscriptstyle 0}_{\scriptscriptstyle 1}, \, \widetilde{\nu} \rightarrow \nu \, \, \widetilde{\chi}^{\scriptscriptstyle 0}_{\scriptscriptstyle 1}, \, \widetilde{\nu} \rightarrow \nu \, \, \widetilde{\chi}^{\scriptscriptstyle 0}_{\scriptscriptstyle 1}, \, \widetilde{\nu} \rightarrow \nu \, \, \widetilde{\chi}^{\scriptscriptstyle 0}_{\scriptscriptstyle 1}, \, \widetilde{\nu} \rightarrow \nu \, \, \widetilde{\chi}^{\scriptscriptstyle 0}_{\scriptscriptstyle 1}, \, \widetilde{\nu} \rightarrow \nu \, \, \widetilde{\chi}^{\scriptscriptstyle 0}_{\scriptscriptstyle 1}, \, \widetilde{\nu} \rightarrow \nu \, \, \widetilde{\chi}^{\scriptscriptstyle 0}_{\scriptscriptstyle 1}, \, \widetilde{\nu} \rightarrow \nu \, \, \widetilde{\chi}^{\scriptscriptstyle 0}_{\scriptscriptstyle 1}, \, \widetilde{\nu} \rightarrow \nu \, \, \widetilde{\chi}^{\scriptscriptstyle 0}_{\scriptscriptstyle 1}, \, \widetilde{\nu} \rightarrow \nu \, \, \widetilde{\chi}^{\scriptscriptstyle 0}_{\scriptscriptstyle 1}, \, \widetilde{\nu} \rightarrow \nu \, \, \widetilde{\chi}^{\scriptscriptstyle 0}_{\scriptscriptstyle 1}, \, \widetilde{\nu}^{\scriptscriptstyle 0}_{\scriptscriptstyle 1}, \, \widetilde{\nu} \rightarrow \nu \, \, \widetilde{\chi}^{\scriptscriptstyle 0}_{\scriptscriptstyle 1}, \, \widetilde{\nu}^{\scriptscriptstyle 0}_{\scriptscriptstyle 1}, \, \widetilde{\nu}^{$ $m_{\tilde{\chi}_{1}^{\pm}}, m_{\tilde{\chi}_{2}^{0}} = x, m_{\tilde{v}}, m_{\tilde{\tau}} = 0.5 * x + 0.5 * y, m_{\tilde{v}^{0}} = y$ 160 ±20% (S 2.5 140 exclusion (SModelS) exclusion (official) 120 k-factor $oldsymbol{\sigma}_{ ext{signal}}/oldsymbol{\sigma}_{ ext{Ul}}$ 100 1.5 80 60 40 0.5 20 150 450 200 250 300 350 400

 χ

upper limit