

$pp \rightarrow \tilde{t}_2 \tilde{t}_2, \tilde{t}_2 \rightarrow \tilde{t}_1 (H/Z) \rightarrow t (H/Z) \tilde{\chi}_1^0$  Moriond 2019

$m_{\tilde{t}_1}$  [GeV]

**CMS** Preliminary

137 fb<sup>-1</sup> (13 TeV)

SUS-19-008,  $\geq 2$ -lep (same-sign):

—  $B(\tilde{t}_2 \rightarrow \tilde{t}_1 Z) = 100\%$

—  $B(\tilde{t}_2 \rightarrow \tilde{t}_1 Z) = 50\%$

—  $B(\tilde{t}_2 \rightarrow \tilde{t}_1 Z) = 0\%$

... Expected

— Observed

$m_{\tilde{t}_1} - m_{\tilde{\chi}_1^0} = 175$  GeV

$m_{\tilde{t}_1} = m_{\tilde{t}_2} + m_H$

200

300

400

500

600

700

800

900

300

400

500

600

700

800

900

1000

$m_{\tilde{t}_2}$  [GeV]