$\tilde{t}_1 \, \tilde{t}_1$ production, $\tilde{t}_1 \to b \ell$ ATLAS Preliminary $Br(\tilde{t} \to b\tau)$ Stop mass = 400 GeV Stop mass = 500 GeV $\sqrt{s} = 8 \text{ TeV, } 20.3 \text{ fb}^{-1}$ 0.6 Observed limit ($\pm 1\sigma_{
m theory}^{
m SUSY}$) Expected limit ($\pm 1\sigma_{\mathrm{exp}}$) 0.4 0.4 All limits at 95% CL 0.2 0.2 0.0 0.0 0.2 8.0 0.2 0.4 0.6 8.0 1.0 0.4 0.6 1.0 Stop mass = 600 GeV Stop mass = 700 GeV Stop mass = 800 GeV 0.6 0.4 0.4 0.2 0.2 0.2 0.0 0.0 0.2 0.6 0.2 8.0 0.2 0.6 0.8 0.4 0.4 0.6 0.4 1.0 1.0 8.0 Stop mass = 900 GeV Stop mass = 1000 GeV Stop mass = 1100 GeV 0.8 0.8 8.0 0.6 0.6 0.6 0.4 0.2 0.2 0.2 0.0 0.0 $Br(\tilde{t} \rightarrow be)$ 0.8 0.8 0.2 0.4 0.6 0.2 0.4 0.6 1.0 0.6