

$t\bar{t}X_0$ and t-channel tX_0 at the LHC13

NLO inclusive cross section

gluon fusion @ SM rate ($\kappa_{Htt}=1$, $\kappa_{Att}=2/3$)

$$\mathcal{L} = -\frac{y_t}{\sqrt{2}} \bar{\psi}_t (c_\alpha \kappa_{Htt} + i s_\alpha \kappa_{Att} \gamma_5) \psi_t X_0$$

tX_0
 $t\bar{t}X_0$

σ_{NLO} [fb]

SM

$y_t = -y_{t,\text{SM}}$

MadGraph5_aMC@NLO

0° 30° 60° 90° 120° 150° 180°

α