

13000 GeV pp

Top (t-channel)

 p_T^l (CMS single top) $1/\sigma_{t+\bar{t}} \times d\sigma_{t+\bar{t}}/dp_T$ (1/GeV) 10^{-1} 10^{-2} 10^{-3} 

CMS



Pythia 8.212 default



Pythia 8.212 tune-4c



Pythia 8.212 tune-4cx

CMS_2019_I1744604

Rivet 3.1.10, $\geq 200k$ events

mcplots.cern.ch [arXiv:1306.3436]

Ratio to CMS

2

1

0.5

2

1

0.5

Particle-level lepton p_T (GeV)