

13000 GeV pp

Top (t-channel)

 $p_T^W$  (CMS single top) $(d\sigma_t/dp_T)/(d\sigma_{t+\text{bar}_t})/(dp_T)$ 

■ CMS

—▲ Pythia 8.308 default

Rivet 3.1.10, 100k events

mcplots.cern.ch [arXiv:1306.3436]

CMS\_2019\_I1744604

Ratio to CMS

2

1

0.5

Particle-level W  $p_T$  (GeV)