

13000 GeV pp

 $t\bar{t}$ $m(t\bar{t})$ (ATLAS semileptonic $t\bar{t}$)

- ATLAS
- - ■ Pythia 6.426 default
- - ☆ Pythia 6.426 pro-q2o

 $1 / \sigma d^2\sigma / d m^{t\bar{t}} d H_T^{t\bar{t}} [1/\text{GeV}^2]$ 10^{-8} 10^{-7} 10^{-6} Rivet 3.1.10, $\geq 400k$ events

mcplots.cern.ch [arXiv:1306.3436]

ATLAS_2019_I1750330

Ratio to ATLAS

2

1

0.5

2

1

0.5

1000

2000

3000

 $m^{t\bar{t}} [\text{GeV}], H_T^{t\bar{t}} \text{ in } [780, 2500] [\text{GeV}]$