

ATLAS+CMS Preliminary

September 2018

LHCtopWG

Data 2012, $\sqrt{s} = 8$ TeV, $m_t = 172.5$ GeV

⋮ NLO+NNLL (PRD82 (2010) 054018)

MSTW2008_{NNLO}

■ scale uncertainty

■ scale \oplus PDF uncertainty

total stat

$\sigma_{tW} \pm (\text{stat.}) \pm (\text{syst.}) \pm (\text{lumi.})$

ATLAS, $L_{\text{int}} = 20.3 \text{ fb}^{-1}$

JHEP01 (2016) 064



$23.0 \pm 1.3 \begin{matrix} +3.2 \\ -3.5 \end{matrix} \pm 1.1 \text{ pb}$

CMS, $L_{\text{int}} = 12.2 \text{ fb}^{-1}$

PRL 112 (2014) 231802



$23.4 \pm 2.0 \pm 4.6 \pm 0.7 \text{ pb}$

LHC combined (May 2016)

ATLAS-CONF-2016-023,

CMS-PAS-TOP-15-019



$23.1 \pm 1.1 \pm 3.3 \pm 0.8 \text{ pb}$

Effect of LHC beam energy uncertainty: 0.38 pb
(not included in the figure)

0 10 20 30 40 50 60 70
 $\sigma_{tW} [\text{pb}]$