

..... NNLO+NNLL (Top++ 2.0), PDF4LHC

$m_{\text{top}} = 172.5$ GeV

■ scale uncertainty

■ scale \oplus PDF \oplus α_s uncertainty

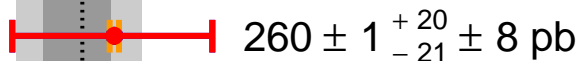
— stat. uncertainty

— total uncertainty

$\sigma_{t\bar{t}} \pm(\text{stat}) \pm(\text{syst}) \pm(\text{lumi})$

ATLAS, lepton+jets

arXiv:1504.04251, $L_{\text{int}}=20.3 \text{ fb}^{-1}$



$260 \pm 1^{+20}_{-21} \pm 8 \text{ pb}$

CMS prel., lepton+jets

CMS-PAS TOP-12-006, $L_{\text{int}}=2.8 \text{ fb}^{-1}$



$228 \pm 9^{+29}_{-26} \pm 10 \text{ pb}$

CMS, lepton+ τ_h

PLB 739 (2014) 23, $L_{\text{int}}=19.6 \text{ fb}^{-1}$



$257 \pm 3 \pm 24 \pm 7 \text{ pb}$

ATLAS, dilepton $e\mu$

EPJ C74 (2014) 3109, $L_{\text{int}}=20.3 \text{ fb}^{-1}$



$242.4 \pm 1.7 \pm 5.5 \pm 7.5 \text{ pb}$

CMS, dilepton ($ee, \mu\mu, e\mu$)

JHEP 02 (2014) 024, $L_{\text{int}}=5.3 \text{ fb}^{-1}$



$239.0 \pm 2.1 \pm 11.3 \pm 6.2 \text{ pb}$

LHC combined $e\mu$ (Sep 2014)

CMS-PAS TOP-14-016,

ATLAS-CONF-2014-053,

$L_{\text{int}}=5.3\text{-}20.3 \text{ fb}^{-1}$



$241.5 \pm 1.4 \pm 5.7 \pm 6.2 \text{ pb}$

Effect of LHC beam energy uncertainty: 4.2 pb
(not included in the figure)

100 150 200 250 300 350 400

$\sigma_{t\bar{t}}$ [pb]