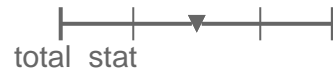


..... NNLO+NNLL PRL 110 (2013) 252004, PDF4LHC
 $m_{\text{top}} = 172.5$ GeV

■ scale uncertainty
 ■ scale \oplus PDF \oplus α_s uncertainty



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

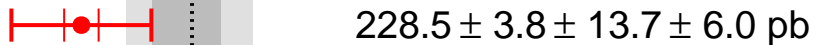
ATLAS, lepton+jets

PRD 91 (2015) 112013, $L_{\text{int}}=20.3 \text{ fb}^{-1}$



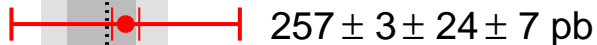
CMS, lepton+jets

arXiv:1602.09024, $L_{\text{int}}=19.6 \text{ fb}^{-1}$



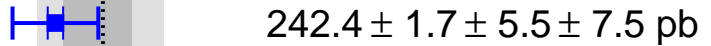
CMS, lepton+ τ_h

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



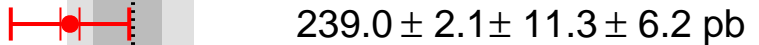
ATLAS, dilepton $e\mu$

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



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

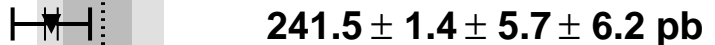
JHEP 02 (2014) 024, $L_{\text{int}}=5.3 \text{ fb}^{-1}$



LHC combined $e\mu$ (Sep 2014)

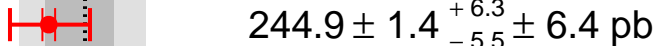
ATLAS-CONF-2014-054, CMS-PAS TOP-14-016,

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



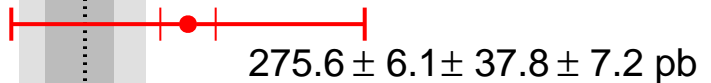
CMS, dilepton $e\mu$

arXiv:1603.02303, $L_{\text{int}}=19.7 \text{ fb}^{-1}$



CMS, all jets

arXiv:1509.06076, $L_{\text{int}}=18.4 \text{ fb}^{-1}$



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

