

CMS Preliminary, $\sigma_{t\bar{t}}$ summary, $\sqrt{s} = 8$ TeV

April 2015

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

JHEP 02 (2014) 024 (L=5.3/fb)



$239 \pm 2 \pm 11 \pm 6$ pb

(val. \pm stat. \pm syst. \pm lumi.)

CMS prel. e/μ +jets

TOP-12-006 (L=2.8/fb)



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

(val. \pm stat. \pm syst. \pm lumi.)

CMS $e/\mu + \tau_h$

PLB 739 (2014) 23 (L=19.6/fb)



$257 \pm 3 \pm 24 \pm 7$ pb

(val. \pm stat. \pm syst. \pm lumi.)

— NNLO+NNLL (top++ 2.0), PDF4LHC, $m_{\text{top}} = 172.5$ GeV

Czakon et al., PRL 110 (2013) 252004, arXiv:1112.5675 (2013)



scale uncertainty



scale \oplus PDF \oplus α_s uncertainty

0

100

200

300

400

$\sigma(t\bar{t})$ (pb)