

CMS

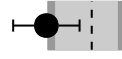
$\sqrt{s} = 13.6$ TeV
 NNLO+NNLL PRL 110 (2013) 252004
 $m_t = 172.5$ GeV, $\alpha_s(M_Z) = 0.118 \pm 0.001$

Scale uncertainty
 Scale \oplus PDF \oplus α_s uncertainty

● Combination
 ▼ Lepton+jets
 ▲ Dilepton
 ■ All jets

$\sqrt{s} = 13.6$ TeV

CMS, ee, $\mu\mu$, $e\mu$, l+jets, $L_{\text{int}} = 1.2 \text{ fb}^{-1}$ [JHEP 08 (2023) 204]



$\sigma_{t\bar{t}} \pm \text{tot. uncert}$

882 ± 30.5 pb

$\sqrt{s} = 13$ TeV

CMS, l+jets, $L_{\text{int}} = 137 \text{ fb}^{-1}$ [PRD 104 (2021) 092013]



791 ± 25.0 pb

CMS, all jets *, $L_{\text{int}} = 2.53 \text{ fb}^{-1}$ [CMS-PAS-TOP-16-013]



$834^{+123.0}_{-109.0}$ pb

CMS, l+jets, $L_{\text{int}} = 2.2 \text{ fb}^{-1}$ [JHEP 09 (2017) 051]



$888^{+33.0}_{-34.0}$ pb

CMS, l+jets *, $L_{\text{int}} = 42 \text{ pb}^{-1}$, 50 ns [CMS-PAS-TOP-15-005]



836 ± 133.0 pb

CMS, $\tau e/\mu$, $L_{\text{int}} = 35.9 \text{ fb}^{-1}$ [JHEP 02 (2020) 191]



781 ± 66.0 pb

CMS, $e\mu$, $L_{\text{int}} = 35.9 \text{ fb}^{-1}$ [EPJC 79 (2019) 368]



803 ± 32.0 pb

$\sqrt{s} = 8$ TeV

LHC combined $e\mu$ (May 2022), $L_{\text{int}} = 20 \text{ fb}^{-1}$ [JHEP 07 (2023) 213]



243.3 ± 6.0 pb

CMS, all jets, $L_{\text{int}} = 18.4 \text{ fb}^{-1}$ [EPJC 76 (2016) 128]



275.6 ± 39.0 pb

CMS, $e\mu$, $L_{\text{int}} = 19.7 \text{ fb}^{-1}$ [JHEP 08 (2016) 029]



$244.9^{+9.1}_{-8.6}$ pb

CMS, ee, $\mu\mu$, $e\mu$, $L_{\text{int}} = 5.3 \text{ fb}^{-1}$ [JHEP 02 (2014) 024]



239.0 ± 13.1 pb

CMS, $\tau_{\text{had}}+l$, $L_{\text{int}} = 19.6 \text{ fb}^{-1}$ [PLB 739 (2014) 23]



257 ± 25.0 pb

CMS, l+jets, $L_{\text{int}} = 19.6 \text{ fb}^{-1}$ [EPJC 77 (2017) 15]



228.5 ± 15.4 pb

$\sqrt{s} = 7$ TeV

LHC combined (May 2022), $L_{\text{int}} = 5 \text{ fb}^{-1}$ [JHEP 07 (2023) 213]



178.5 ± 4.7 pb

CMS, all jets, $L_{\text{int}} = 3.5 \text{ fb}^{-1}$ [JHEP 05 (2013) 065]



139 ± 28.0 pb

CMS, $\tau_{\text{had}}+\text{jets}$, $L_{\text{int}} = 3.9 \text{ fb}^{-1}$ [EPJC 73 (2013) 2386]



152 ± 34.0 pb

CMS, $\tau_{\text{had}}+l$, $L_{\text{int}} = 2.2 \text{ fb}^{-1}$ [PRD 85 (2012) 112007]



143 ± 26.0 pb

CMS, $e\mu$, $L_{\text{int}} = 5.0 \text{ fb}^{-1}$ [JHEP 08 (2016) 029]



$173.6^{+6.3}_{-5.9}$ pb

CMS, l+jets, $L_{\text{int}} = 5.0 \text{ fb}^{-1}$ [EPJC 77 (2017) 15]



161.7 ± 13.9 pb

$\sqrt{s} = 5.02$ TeV

CMS combined, $L_{\text{int}} = 27.4\text{-}302 \text{ pb}^{-1}$ [JHEP 04 (2022) 144]



63.0 ± 5.1 pb

CMS, $e\mu$, $L_{\text{int}} = 302 \text{ pb}^{-1}$ [JHEP 04 (2022) 144]



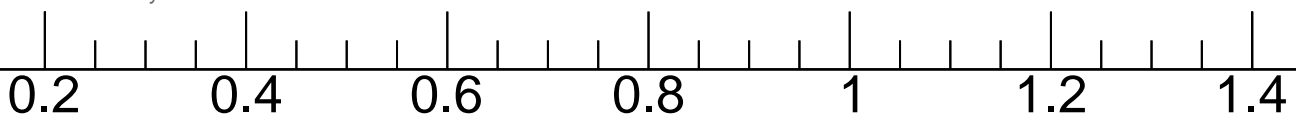
60.7 ± 5.8 pb

CMS, l+jets, $L_{\text{int}} = 27.4 \text{ pb}^{-1}$ [JHEP 03 (2018) 115]



68.9 ± 9.1 pb

* Preliminary



$\sigma_{t\bar{t}} / \sigma_{t\bar{t}}^{\text{SM}}$