

ATLAS+CMS Preliminary

LHC^{top}WG

$\sigma_{t\bar{t}}$ summary, $\sqrt{s} = 13$ TeV September 2021

..... NNLO+NNLL PRL 110 (2013) 252004
 $m_{\text{top}} = 172.5 \text{ GeV}$, $\alpha_s(M_Z) = 0.118 \pm 0.001$

■ scale uncertainty

■ scale \oplus PDF \oplus α_s uncertainty

total stat

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

ATLAS, dilepton $e\mu$

EPJC 80 (2020) 528, $L_{\text{int}} = 36.1 \text{ fb}^{-1}$

$826 \pm 4 \pm 12 \pm 16 \text{ pb}$

ATLAS, $l+jets$

PLB 810 (2020) 135797, $L_{\text{int}} = 139 \text{ fb}^{-1}$

$830 \pm 0.4 \pm 36 \pm 14 \text{ pb}$

CMS, dilepton $e\mu$

PRL 116 (2016) 052002, $L_{\text{int}} = 43 \text{ pb}^{-1}$, 50 ns

$746 \pm 58 \pm 53 \pm 36 \text{ pb}$

CMS, dilepton $e\mu$

EPJC 79 (2019) 368, $L_{\text{int}} = 35.9 \text{ fb}^{-1}$, 25 ns

$803 \pm 2 \pm 25 \pm 20 \text{ pb}$

CMS, dilepton $\tau+e/\mu$

JHEP 02 (2020) 191, $L_{\text{int}} = 35.9 \text{ fb}^{-1}$, 25 ns

$781 \pm 7 \pm 62 \pm 20 \text{ pb}$

CMS, $l+jets$

JHEP 09 (2017) 051, $L_{\text{int}} = 2.2 \text{ fb}^{-1}$, 25 ns

$888 \pm 2 \pm 26 \pm 20 \text{ pb}$

CMS, all-jets *

CMS-PAS TOP-16-013, $L_{\text{int}} = 2.53 \text{ fb}^{-1}$, 25 ns

$834 \pm 25 \pm 118 \pm 23 \text{ pb}$

CMS, $l+jets$

arXiv:2108.02803, $L_{\text{int}} = 137 \text{ fb}^{-1}$, 25 ns

$791 \pm 1 \pm 21 \pm 14 \text{ pb}$

NNPDF3.0 JHEP 04 (2015) 040

MMHT14 EPJC 75 (2015) 5

CT14 PRD 93 (2016) 033006

ABM12 PRD 89 (2015) 054028
 $[\alpha_s(m_Z) = 0.113]$

* Preliminary

