

ATLAS+CMS Preliminary LHCtopWG

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

Nov 2016

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

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

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

ATLAS, dilepton $e\mu$

PLB 761 (2016) 136

$L_{int} = 3.2$ fb $^{-1}$

ATLAS, dilepton $ee/\mu\mu$ *

ATLAS-CONF-2015-049

$L_{int} = 85$ pb $^{-1}$

ATLAS, $l+jets$ *

ATLAS-CONF-2015-049

$L_{int} = 85$ pb $^{-1}$

CMS, dilepton $e\mu$

PRL 116 (2016) 052002

$L_{int} = 43$ pb $^{-1}$, 50 ns

CMS, dilepton $e\mu$ *

CMS-PAS-TOP-16-005

$L_{int} = 2.2$ fb $^{-1}$, 25 ns

CMS, $l+jets$ *

CMS-PAS TOP-16-006

$L_{int} = 2.3$ fb $^{-1}$

CMS, all-jets *

CMS-PAS TOP-16-013

$L_{int} = 2.53$ fb $^{-1}$

* Preliminary

Effect of LHC beam energy uncertainty: 12 pb (not included in the figure)

NNPDF3.0 JHEP 04 (2015) 040

MMHT14 EPJC 75 (2015) 5

CT14 PRD 93 (2016) 033006

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

