

ATLAS+CMS Preliminary TOPLHCWG

July 2014

Data 2012, $\sqrt{s} = 8$ TeV

..... NLO (MCFM), $m_{\text{top}} = 172.5$ GeV,
 PDF4LHC (MSTW2008, CT10, NNPDF2.3)
 ■ scale uncertainty
 ■ scale \oplus PDF \oplus α_s uncertainty

— stat. uncertainty
 — total uncertainty
 $\sigma_{t\text{-channel}} \pm(\text{stat}) \pm(\text{syst}) \pm(\text{lumi})$

ATLAS, $L_{\text{int}} = 5.0 \text{ fb}^{-1}$

ATLAS-CONF-2012-132

$95.1 \pm 2.4 \pm 17.6 \pm 3.6 \text{ pb}$

CMS, $L_{\text{int}} = 5.8 \text{ fb}^{-1}$

CMS-PAS-TOP-12-011

$80.1 \pm 5.7 \pm 11.0 \pm 4.0 \text{ pb}$

LHC combined (Sep 2013)

ATLAS-CONF-2013-098,
 CMS-PAS-TOP-12-002

$85 \pm 4 \pm 11 \pm 3 \text{ pb}$

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

ATLAS-CONF-14-007

$82.6 \pm 1.2 \pm 11.8 \pm 2.3 \text{ pb}$

CMS, $L_{\text{int}} = 19.7 \text{ fb}^{-1}$

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$83.6 \pm 2.3 \pm 7.1 \pm 2.2 \text{ pb}$

Effect of beam energy uncertainty: 1.2 pb



$\sigma_{t\text{-channel}} \text{ [pb]}$