

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

..... NNLO+NNLL (Top++ 2.0), PDF4LHC

**$m_{top} = 172.5$  GeV**

■ scale uncertainty

■ scale  $\oplus$  PDF  $\oplus$   $\alpha_S$  uncertainty

— stat. uncertainty

— total uncertainty

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

ATLAS, dilepton  $e\mu$

arXiv:1406.5375,  $L_{int} = 20.3 \text{ fb}^{-1}$



$242.4 \pm 1.7 \pm 5.5 \pm 7.5 \text{ pb}$

CMS, dilepton  $e\mu$

JHEP02 (2014) 024,  $L_{int} = 5.3 \text{ fb}^{-1}$



$239.0 \pm 2.6 \pm 11.9 \pm 6.2 \text{ pb}$

**LHC combined  $e\mu$  (Sep 2014)**

CMS-PAS TOP-14-016,  
ATLAS-CONF-2014-054,  
 $L_{int} = 5.3\text{-}20.3 \text{ fb}^{-1}$



$241.5 \pm 1.4 \pm 5.7 \pm 6.2 \text{ pb}$

Effect of LHC beam energy uncertainty: 4.2 pb  
(not included in the figure)

100 150 200 250 300 350 400

$\sigma_{t\bar{t}}$  [pb]