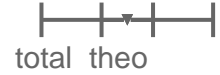


$$|f_{LV} V_{tb}| = \sqrt{\frac{\sigma_{meas}}{\sigma_{theo}}} \text{ from single top quark production}$$

σ_{theo} : NLO+NNLL MSTW2008nnlo
 PRD 83 (2011) 091503, PRD 82 (2010) 054018,
 PRD 81 (2010) 054028

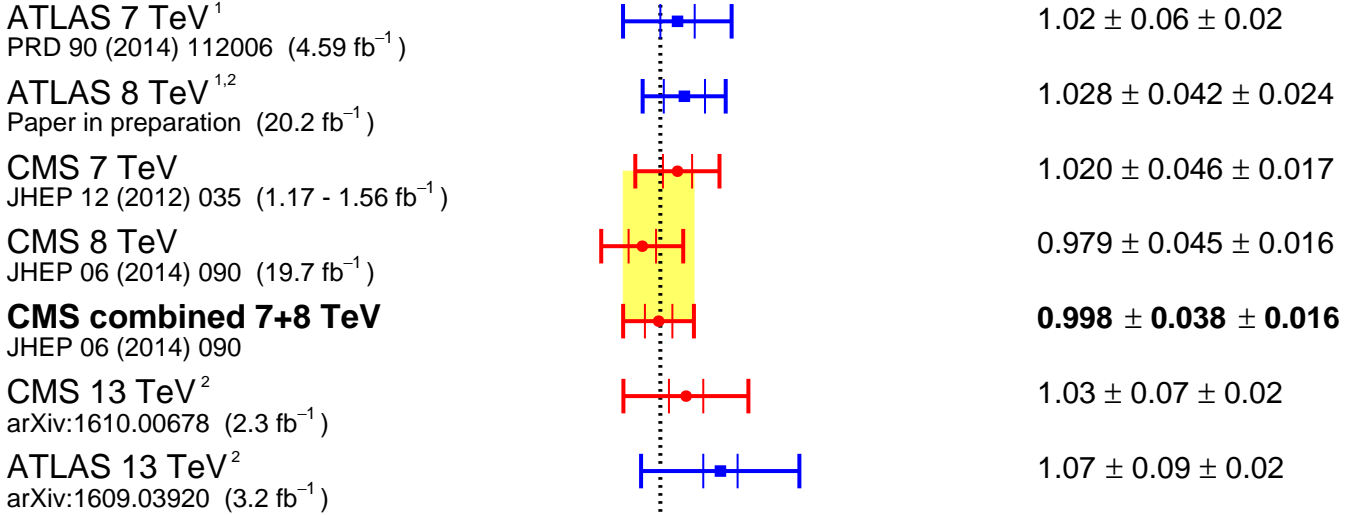
$\Delta\sigma_{theo}$: scale \oplus PDF

$m_{top} = 172.5 \text{ GeV}$

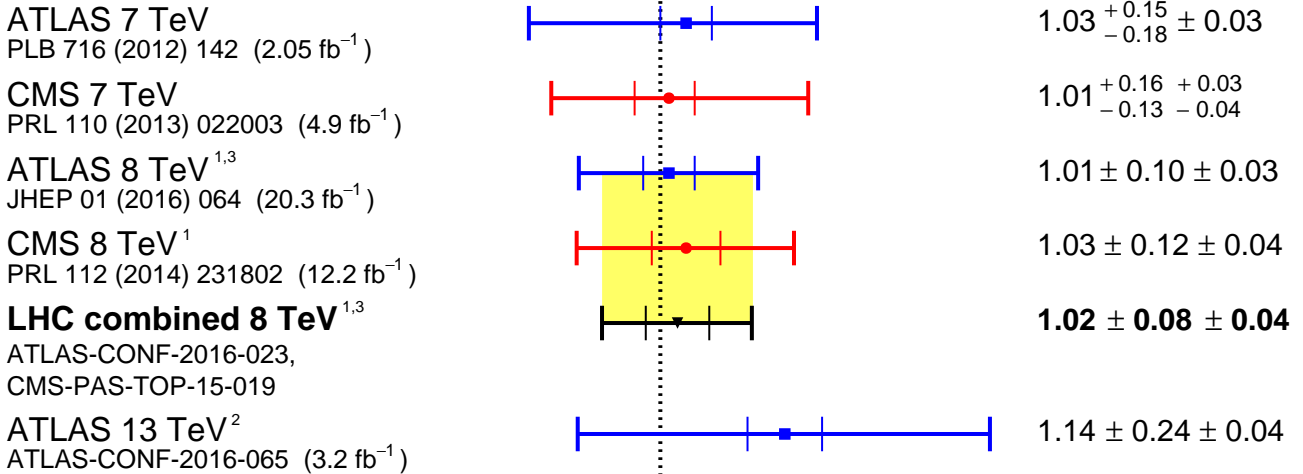


$|f_{LV} V_{tb}| \pm (\text{meas}) \pm (\text{theo})$

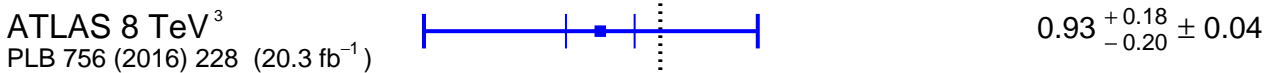
t-channel:



Wt:



s-channel:



¹ including top-quark mass uncertainty

² σ_{theo} : NLO PDF4LHC11

NPPS205 (2010) 10, CPC191 (2015) 74

³ including beam energy uncertainty

0.4 0.6 0.8 1 1.2 1.4 1.6 1.8

$|f_{LV} V_{tb}|$