

ATLAS+CMS Preliminary

LHC top WG

m_{top} summary, $\sqrt{s} = 7\text{-}8$ TeV

Aug 2016

..... World Comb. Mar 2014, [7]

■ stat

■ total uncertainty

$$m_{\text{top}} = 173.34 \pm 0.76 \text{ (} 0.36 \pm 0.67 \text{) GeV}$$



$m_{\text{top}} \pm \text{total (stat} \pm \text{syst)}$

\sqrt{s} Ref.

ATLAS, l+jets (*)		$172.31 \pm 1.55 \text{ (} 0.75 \pm 1.35 \text{)}$	7 TeV [1]
ATLAS, dilepton (*)		$173.09 \pm 1.63 \text{ (} 0.64 \pm 1.50 \text{)}$	7 TeV [2]
CMS, l+jets		$173.49 \pm 1.06 \text{ (} 0.43 \pm 0.97 \text{)}$	7 TeV [3]
CMS, dilepton		$172.50 \pm 1.52 \text{ (} 0.43 \pm 1.46 \text{)}$	7 TeV [4]
CMS, all jets		$173.49 \pm 1.41 \text{ (} 0.69 \pm 1.23 \text{)}$	7 TeV [5]
LHC comb. (Sep 2013)		$173.29 \pm 0.95 \text{ (} 0.35 \pm 0.88 \text{)}$	7 TeV [6]
World comb. (Mar 2014)		$173.34 \pm 0.76 \text{ (} 0.36 \pm 0.67 \text{)}$	1.96-7 TeV [7]
ATLAS, l+jets		$172.33 \pm 1.27 \text{ (} 0.75 \pm 1.02 \text{)}$	7 TeV [8]
ATLAS, dilepton		$173.79 \pm 1.41 \text{ (} 0.54 \pm 1.30 \text{)}$	7 TeV [8]
ATLAS, all jets		$175.1 \pm 1.8 \text{ (} 1.4 \pm 1.2 \text{)}$	7 TeV [9]
ATLAS, single top		$172.2 \pm 2.1 \text{ (} 0.7 \pm 2.0 \text{)}$	8 TeV [10]
ATLAS, dilepton		$172.99 \pm 0.85 \text{ (} 0.41 \pm 0.74 \text{)}$	8 TeV [11]
ATLAS, all jets		$173.80 \pm 1.15 \text{ (} 0.55 \pm 1.01 \text{)}$	8 TeV [12]
ATLAS comb. (June 2016) l+jets, dil.		$172.84 \pm 0.70 \text{ (} 0.34 \pm 0.61 \text{)}$	7+8 TeV [11]
CMS, l+jets		$172.35 \pm 0.51 \text{ (} 0.16 \pm 0.48 \text{)}$	8 TeV [13]
CMS, dilepton		$172.82 \pm 1.23 \text{ (} 0.19 \pm 1.22 \text{)}$	8 TeV [13]
CMS, all jets		$172.32 \pm 0.64 \text{ (} 0.25 \pm 0.59 \text{)}$	8 TeV [13]
CMS, single top		$172.60 \pm 1.22 \text{ (} 0.77 \pm 0.95 \text{)}$	8 TeV [14]
CMS comb. (Sep 2015)		$172.44 \pm 0.48 \text{ (} 0.13 \pm 0.47 \text{)}$	7+8 TeV [13]

(*) Superseded by results shown below the line

[1] ATLAS-CONF-2013-046
 [2] ATLAS-CONF-2013-077
 [3] JHEP 12 (2012) 105
 [4] Eur.Phys.J.C72 (2012) 2202
 [5] Eur.Phys.J.C74 (2014) 2758

[6] ATLAS-CONF-2013-102
 [7] arXiv:1403.4427
 [8] Eur.Phys.J.C75 (2015) 330
 [9] Eur.Phys.J.C75 (2015) 158
 [10] ATLAS-CONF-2014-055

[11] arXiv:1606.02179
 [12] ATLAS-CONF-2016-064
 [13] Phys.Rev.D93 (2016) 072004
 [14] CMS-PAS-TOP-15-001

165

170

175

180

185

m_{top} [GeV]