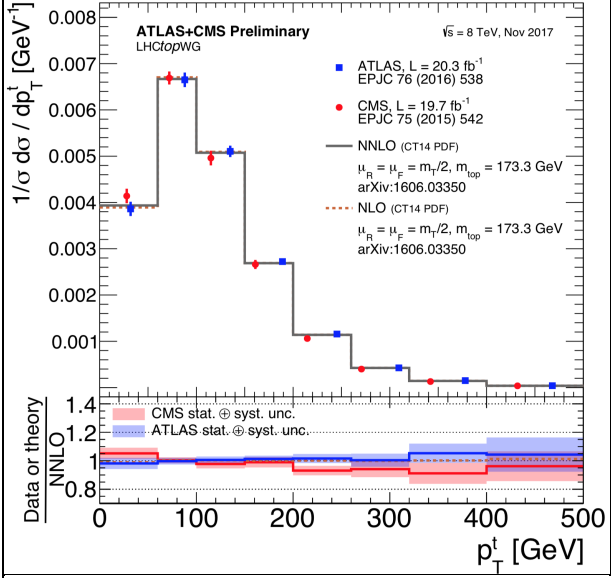
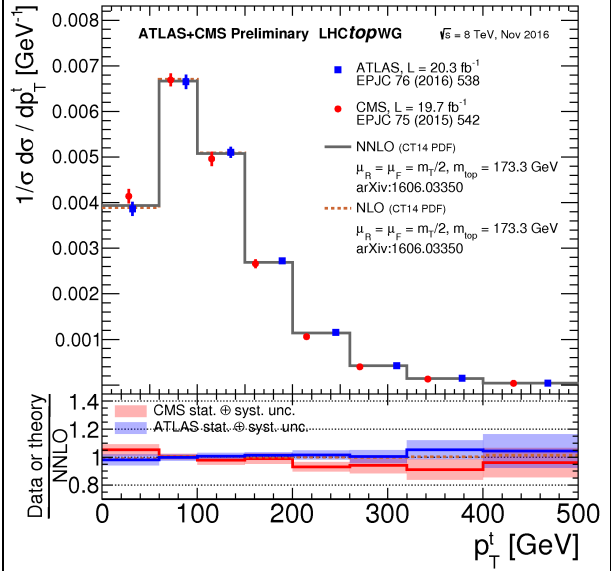


Table of Contents

History of LHCTopWG Summary Plots:.....	1
Top Pair Differential Distribution of Top p_T at 8 TeV NLO vs NNLO Summary.....	2

History of LHCTopWG Summary Plots:

Top Pair Differential Distribution of Top pT at 8 TeV NLO vs NNLO Summary

Figure	Description
<p data-bbox="236 365 767 394">Pair production differential cross sections</p>  <p data-bbox="193 465 810 1041"> $1/\sigma d\sigma / dp_T^t$ [GeV⁻¹] $\sqrt{s} = 8$ TeV, Nov 2017 ATLAS+CMS Preliminary LHCtopWG <ul style="list-style-type: none"> ■ ATLAS, L = 20.3 fb⁻¹ EPJC 76 (2016) 538 ● CMS, L = 19.7 fb⁻¹ EPJC 75 (2015) 542 — NNLO (CT14 PDF) $\mu_R = \mu_F = m_t/2, m_{top} = 173.3$ GeV arXiv:1606.03350 - - - NLO (CT14 PDF) $\mu_R = \mu_F = m_t/2, m_{top} = 173.3$ GeV arXiv:1606.03350 </p> <p data-bbox="193 862 810 1041"> Data or theory NNLO — CMS stat. ⊗ syst. unc. — ATLAS stat. ⊗ syst. unc. </p> <p data-bbox="193 996 810 1041">p_T^t [GeV]</p>	<p data-bbox="815 400 1498 952"> Full phase-space normalised differential $t\bar{t}$ cross-section as a function of the transverse momentum of the top quark. The CMS and ATLAS results are compared to the NLO and NNLO calculations from arXiv:1606.03350. The values for the top-quark mass (m_{top}), the renormalisation (μ_R) and factorisation (μ_F) scales, and the choice of the PDF set used in each calculation are provided. The variable m_T is defined as the square root of the sum of the squares of top-quark mass and the transverse momentum of the top quark. Both the CMS and ATLAS measurements are performed assuming a top-quark mass value of 172.5 GeV. The shaded bands show the total uncertainty on the data measurements in each bin. The lower panel shows the ratio of the data measurements and the NLO calculation to the NNLO calculation. </p> <p data-bbox="815 963 1498 1030"> PNG PDF </p> <p data-bbox="815 1064 1498 1099"> November 2017 </p>
 <p data-bbox="193 1149 810 1718"> $1/\sigma d\sigma / dp_T^t$ [GeV⁻¹] $\sqrt{s} = 8$ TeV, Nov 2016 ATLAS+CMS Preliminary LHCtopWG <ul style="list-style-type: none"> ■ ATLAS, L = 20.3 fb⁻¹ EPJC 76 (2016) 538 ● CMS, L = 19.7 fb⁻¹ EPJC 75 (2015) 542 — NNLO (CT14 PDF) $\mu_R = \mu_F = m_t/2, m_{top} = 173.3$ GeV arXiv:1606.03350 - - - NLO (CT14 PDF) $\mu_R = \mu_F = m_t/2, m_{top} = 173.3$ GeV arXiv:1606.03350 </p> <p data-bbox="193 1538 810 1718"> Data or theory NNLO — CMS stat. ⊗ syst. unc. — ATLAS stat. ⊗ syst. unc. </p> <p data-bbox="193 1673 810 1718">p_T^t [GeV]</p>	<p data-bbox="815 1128 1498 1680"> Full phase-space normalised differential $t\bar{t}$ cross-section as a function of the transverse momentum of the top quark. The CMS and ATLAS results are compared to the NLO and NNLO calculations from arXiv:1606.03350. The values for the top-quark mass (m_{top}), the renormalisation (μ_R) and factorisation (μ_F) scales, and the choice of the PDF set used in each calculation are provided. The variable m_T is defined as the square root of the sum of the squares of top-quark mass and the transverse momentum of the top quark. Both the CMS and ATLAS measurements are performed assuming a top-quark mass value of 172.5 GeV. The shaded bands show the total uncertainty on the data measurements in each bin. The lower panel shows the ratio of the data measurements and the NLO calculation to the NNLO calculation. </p> <p data-bbox="815 1691 1498 1758"> PNG PDF </p> <p data-bbox="815 1792 1498 1832"> November 2016 </p>

-- MartijnMulders - 2017-01-23

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