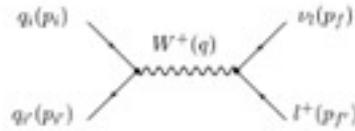


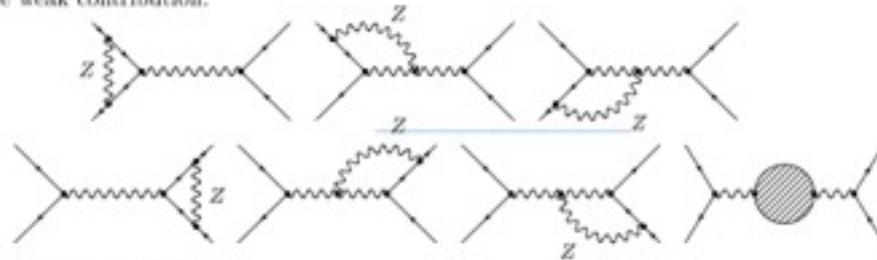


Electro-weak Corrections

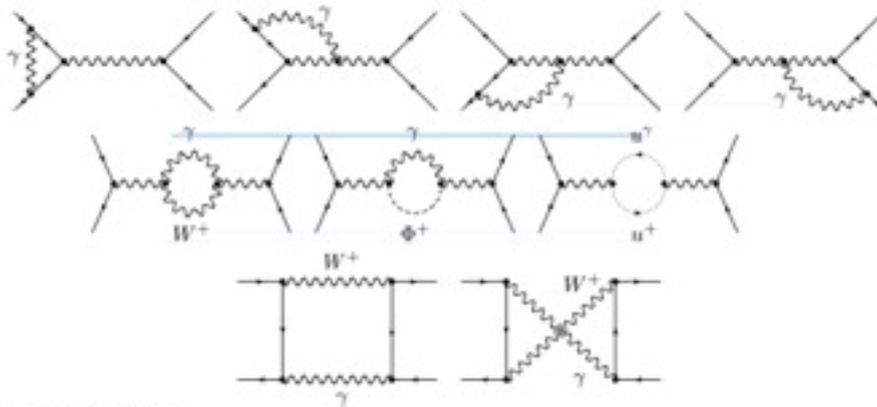
Born-diagram:



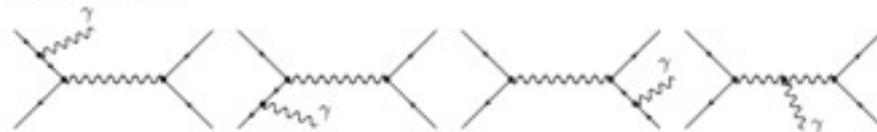
pure weak contribution:



virtual γ contribution:



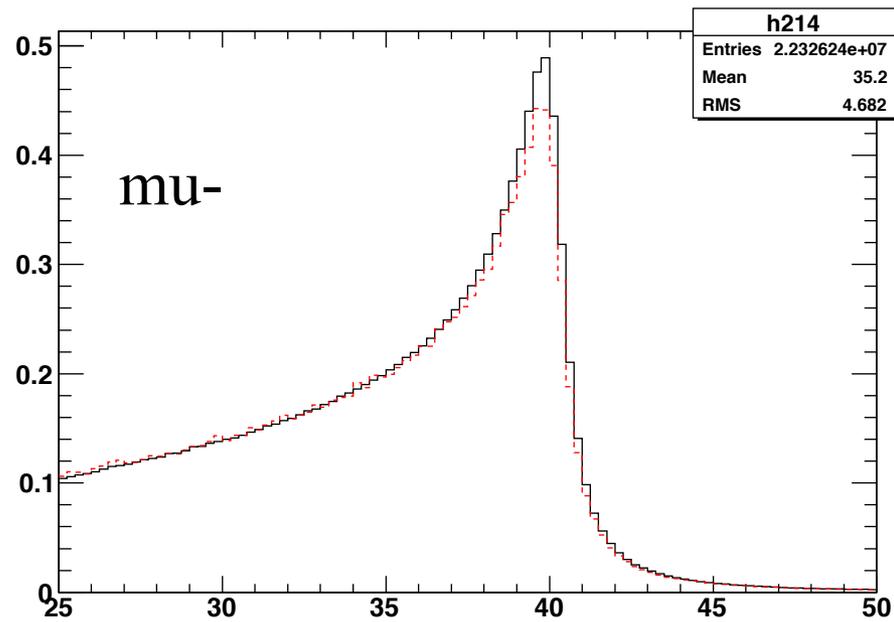
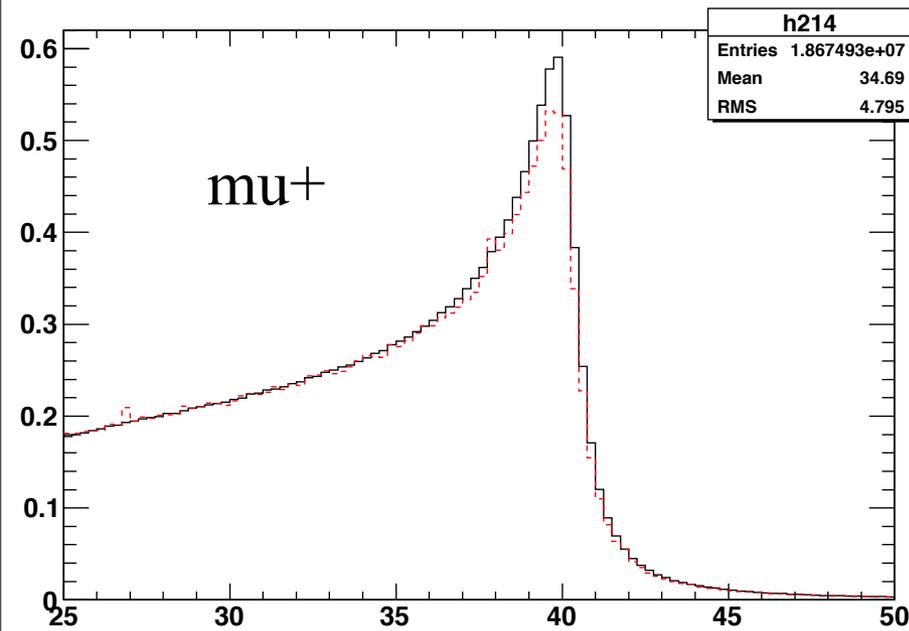
real γ contribution:





Lepton pT Spectrum

- ◆ lepton pT > 25 GeV, $|\eta| < 3.0$.
- ◆ CTEQ5.



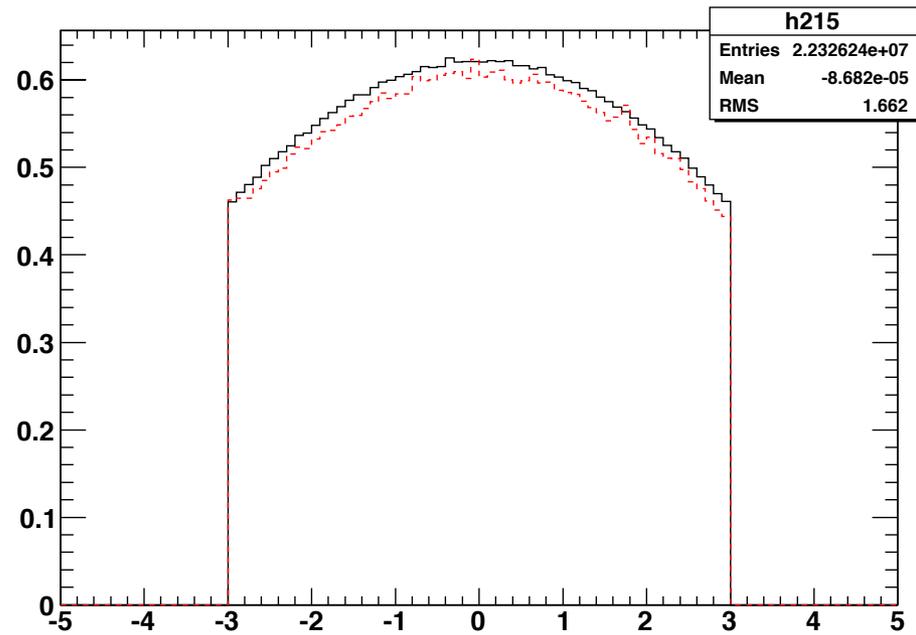
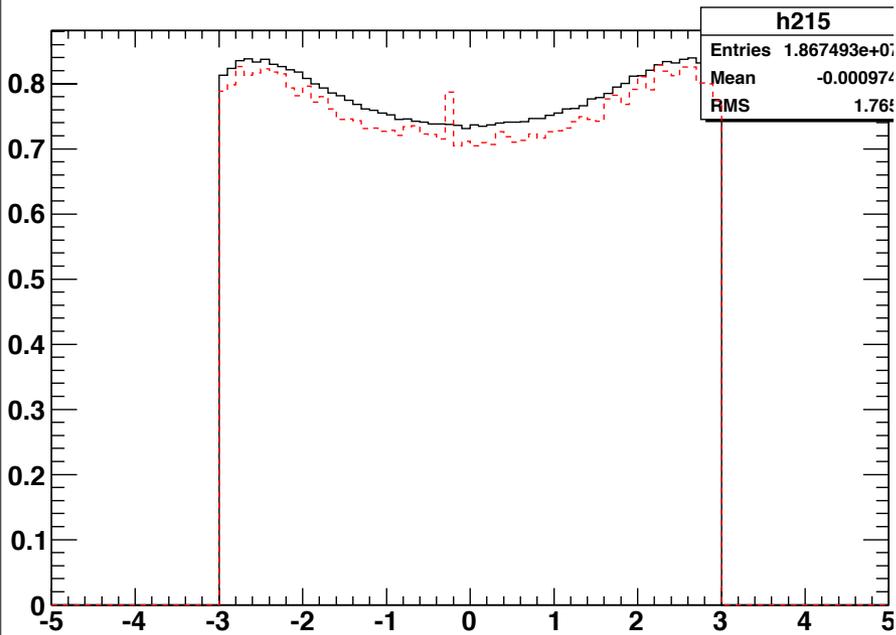
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Lepton Pseudorapidity Spectrum



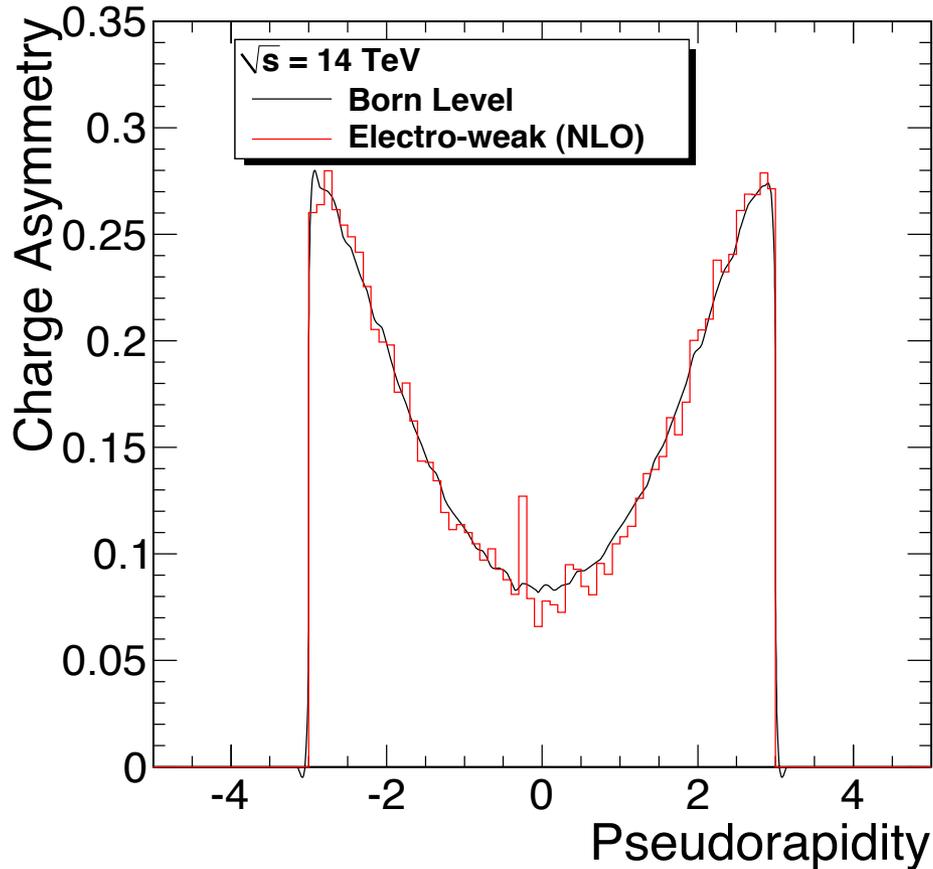
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Charge Asymmetry



	mu+	mu-	Asym
LO	4.69	3.39	1.38
NLO	4.57	3.30	1.38
FSR			

◆ Need check with a higher statistics run.



Summary

- ◆ Charge asymmetry: PDF error $\sim 4\%$, NNLL effect could be as significant as PDF error; scale variation is negligible.
- ◆ Need check NLO electro-weak effect with higher statistics MC run
- ◆ Charge ratio: PDF error $\sim 1.0-1.5\%$; NNLL, scale variation, electro-weak NLO is negligible.
- ◆ jobs are still running for NNLO comparison.
- ◆ Tools to make theoretical prediction are in hand. This was a quick walk-through.
- ◆ Work with Fan/Yeonsei/Jiyeon on isolation study.