Trilepton Analysis: The $WH \rightarrow WWW \rightarrow l\nu l\nu l\nu$ Signal

2nd Look at Signal Comparison, and a 1st Look at Backgrounds

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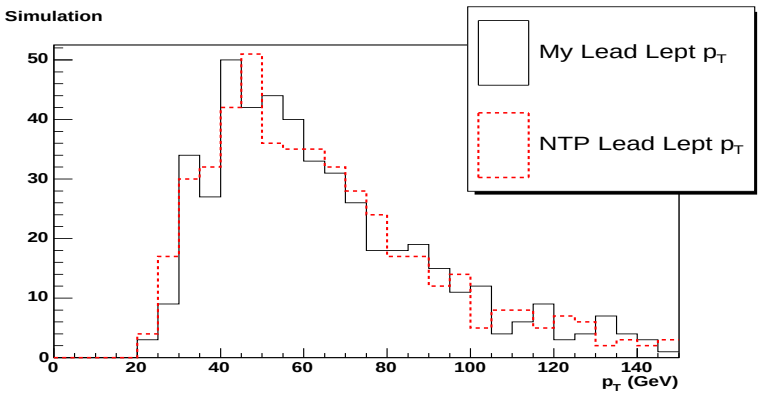
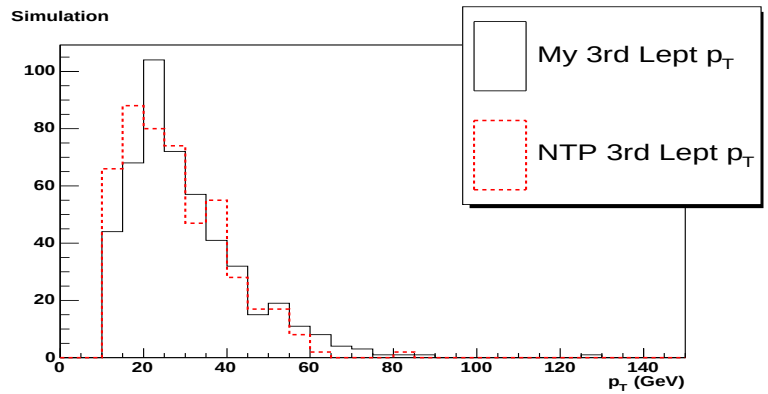
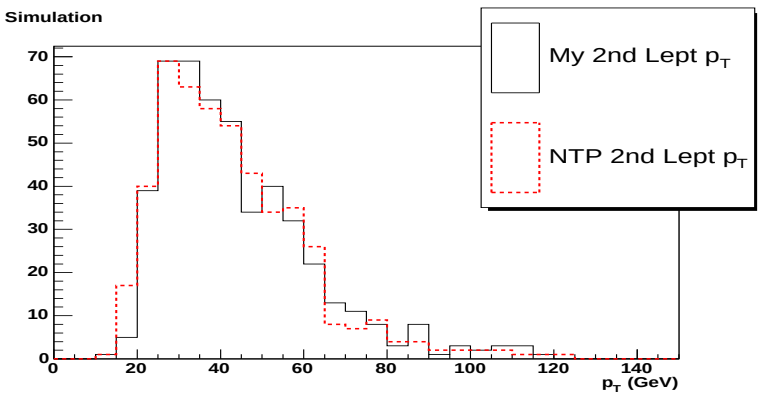
Summary

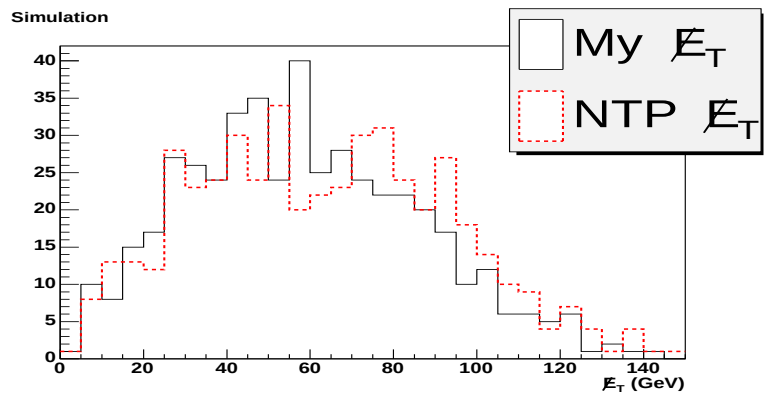
Comparing my ntuple and ntp_15

p_T, MET shapes appear similar...









Available Signals/Backgrounds in the Diboson Ntuple

Everything presently available in the Diboson Ntuple (ntp_v15):

- Data
- VBF110 - VBF200
- WH110 - WH200
- ZH110 - ZH200
- ggH110 - ggH200
- WW
- WWNLO
- WZ
- WZ
- ZZ
- Weg, Wmg, Wtg
- Zee, Zmm, Ztt
- $t\bar{t}$

Lead Lepton p_T

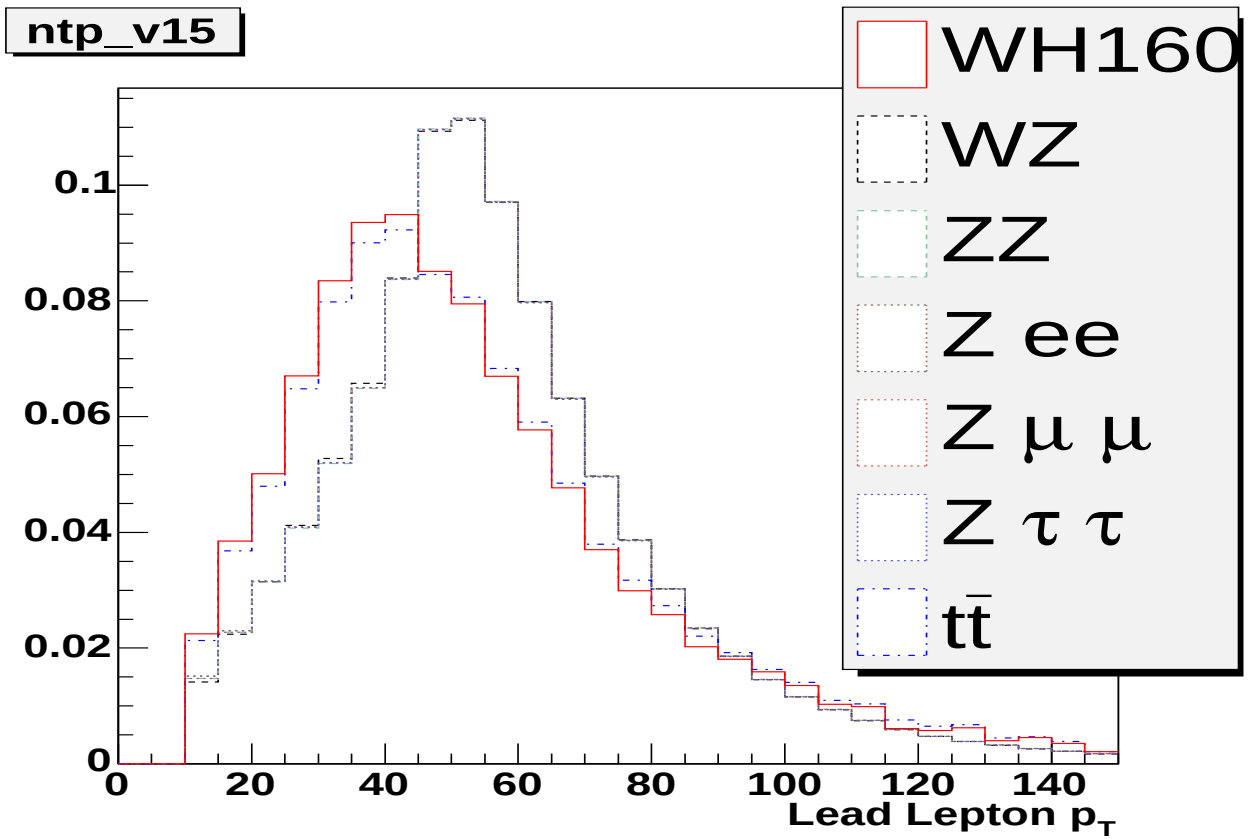


Figure: Lead Lept p_T (All Renormalized to one.)

2nd Lepton p_T

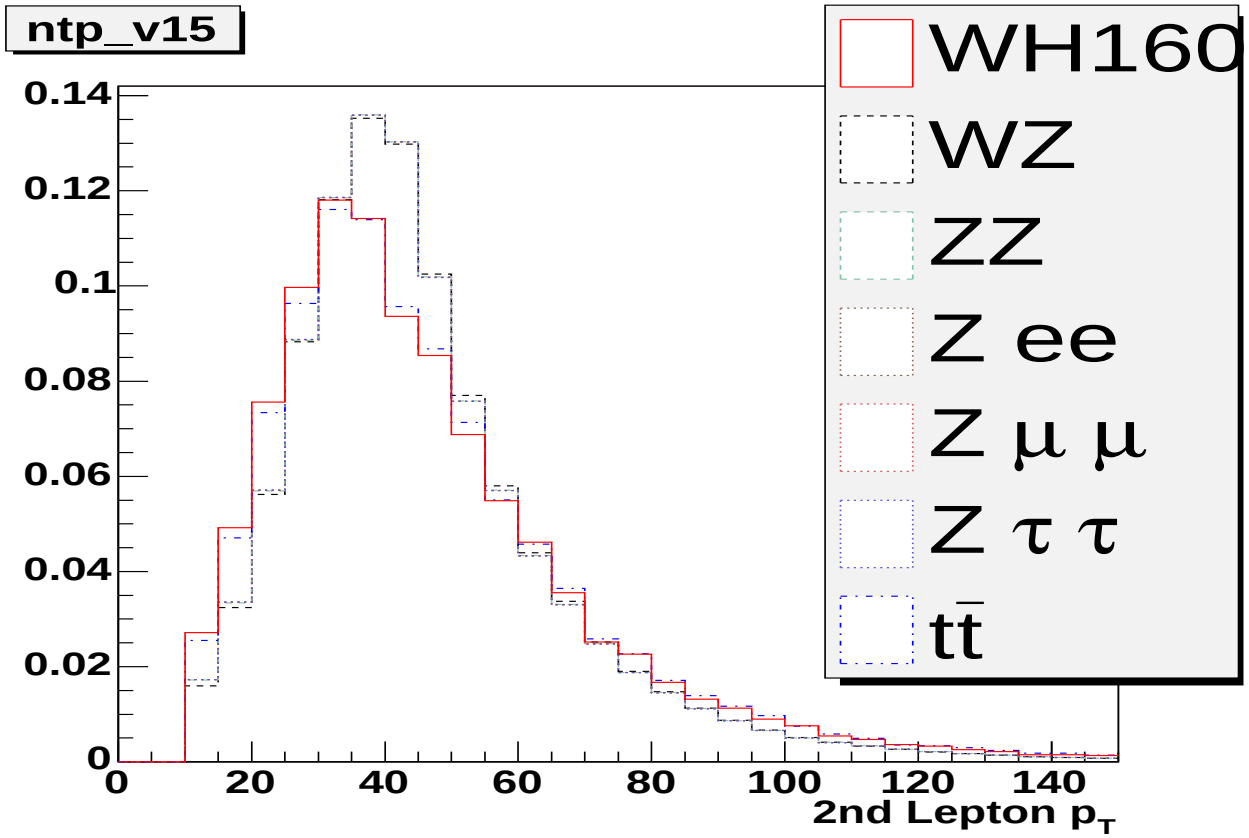


Figure: 2nd Lept p_T (All Renormalized to one.)

3rd Lepton p_T

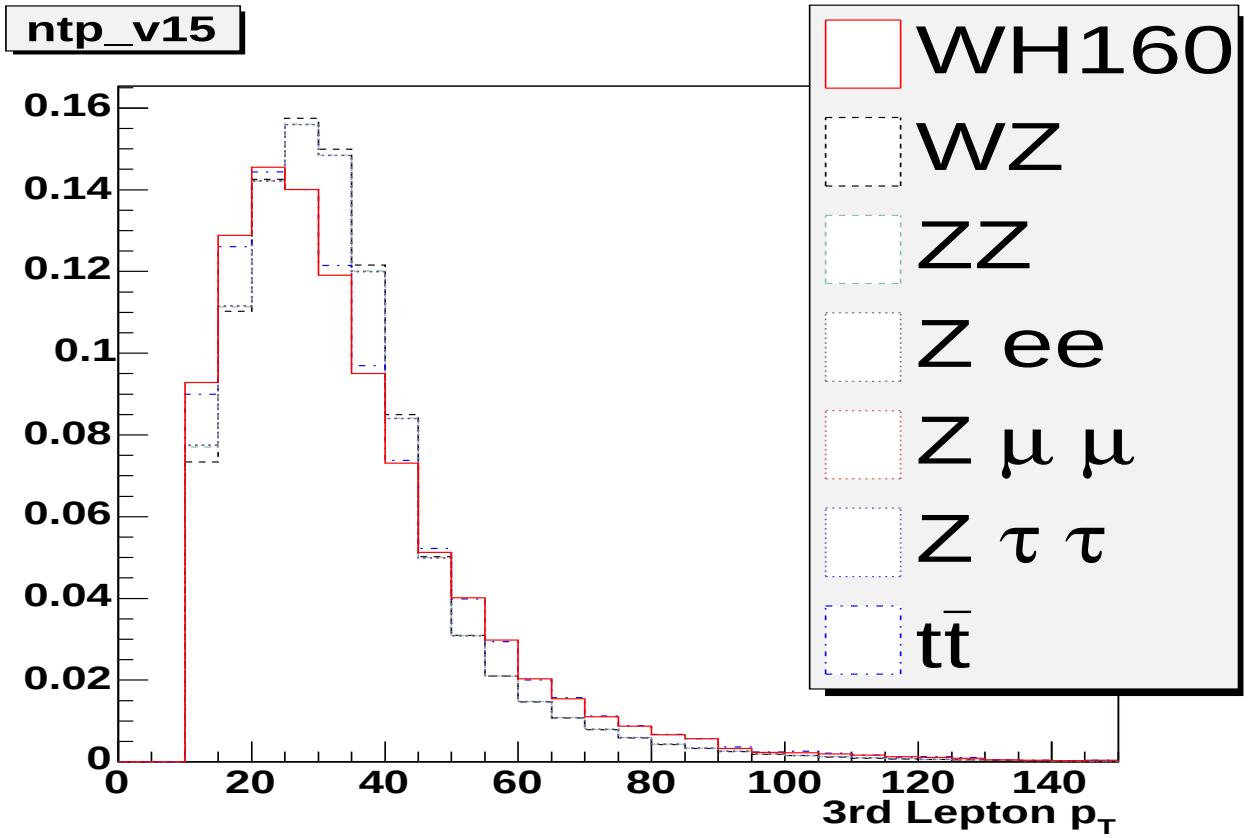


Figure: 3rd Lept p_T (All Renormalized to one.)

Missing E_T

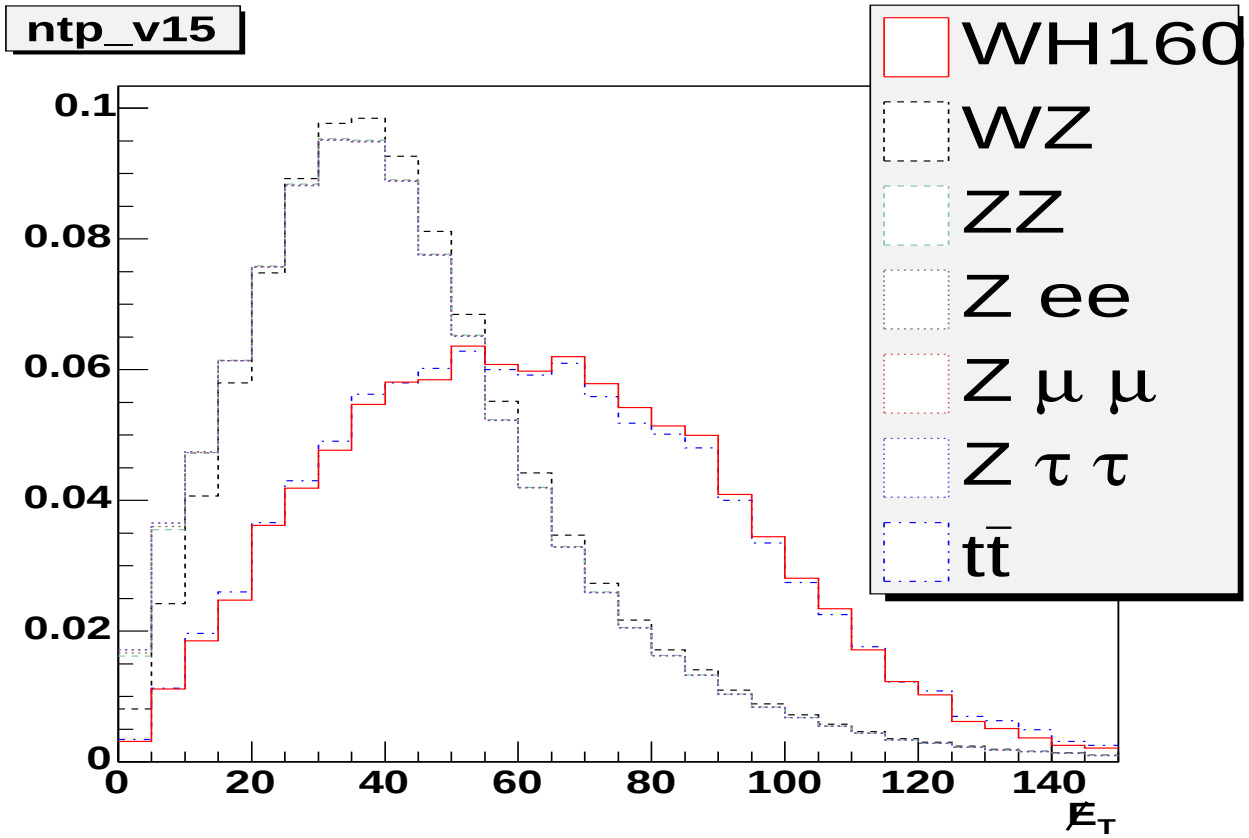


Figure: Missing E_T (All Renormalized to one.)

Dimass

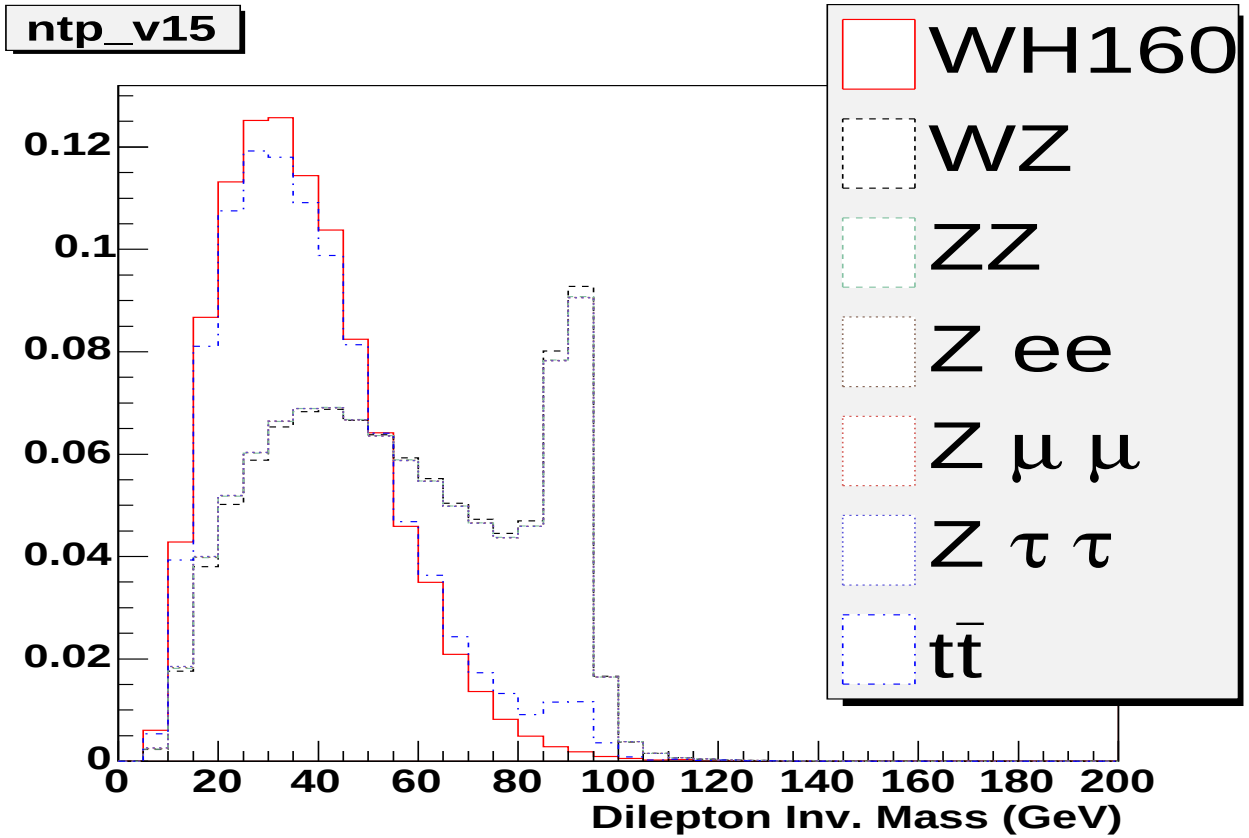


Figure: Dimass (All Renormalized to one.)

[TAna_dilepton:// *jpursley - for trileptons, returns minimum dilepton mass*] Why minimum?

Still working on...

- Weighted dimass stack, still verifying proper cross section values
- Other backgrounds, possibly not in `ntp_*` form yet
- $Z \rightarrow l\bar{l}$ backgrounds appear to be most significant, but where does the third lepton come from?
- Still looking at close leptons and their isolation values...