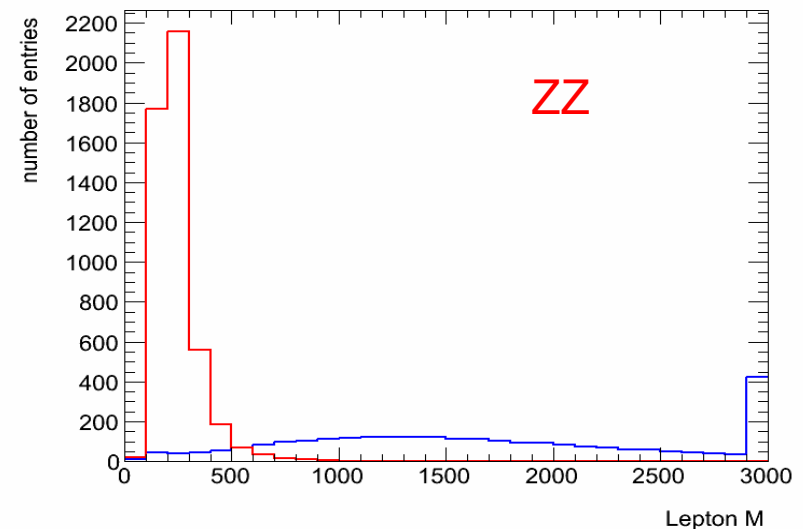
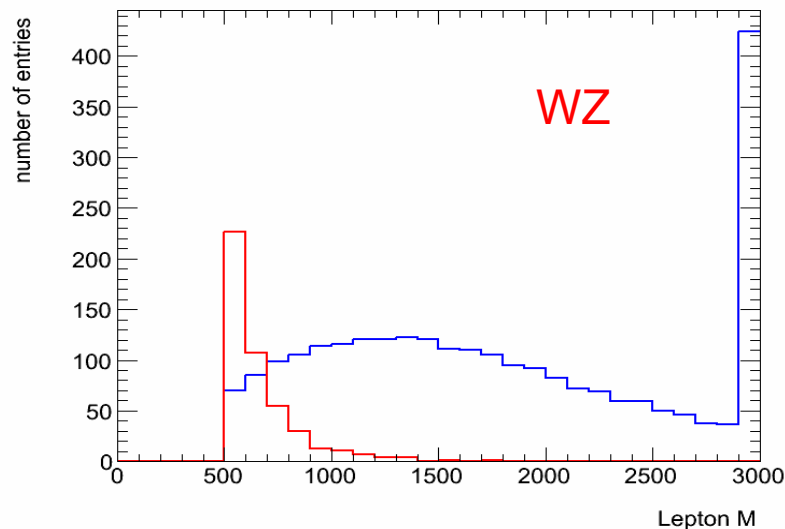
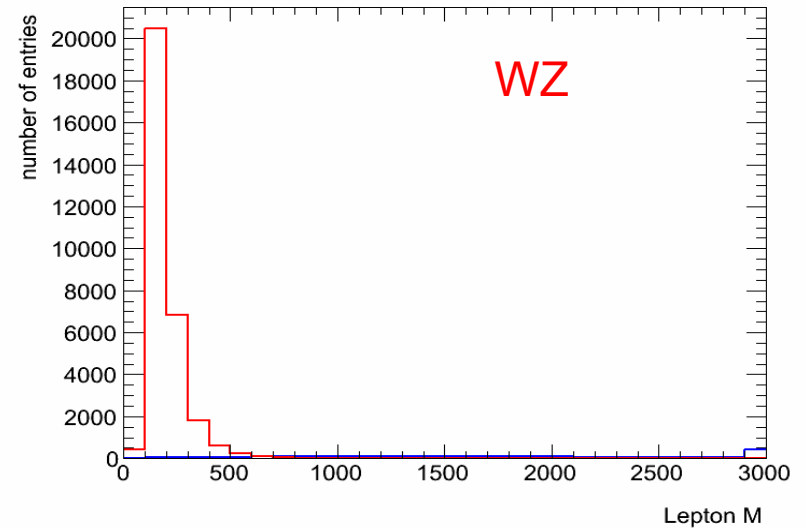

More Operators for Tribosons: Backgrounds

Jenny Holzbauer and Mandy Rominsky
June 25, 2013

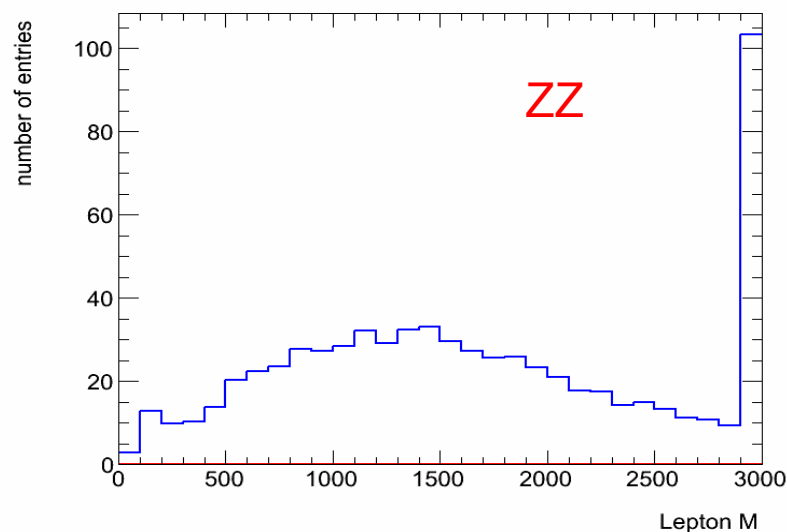
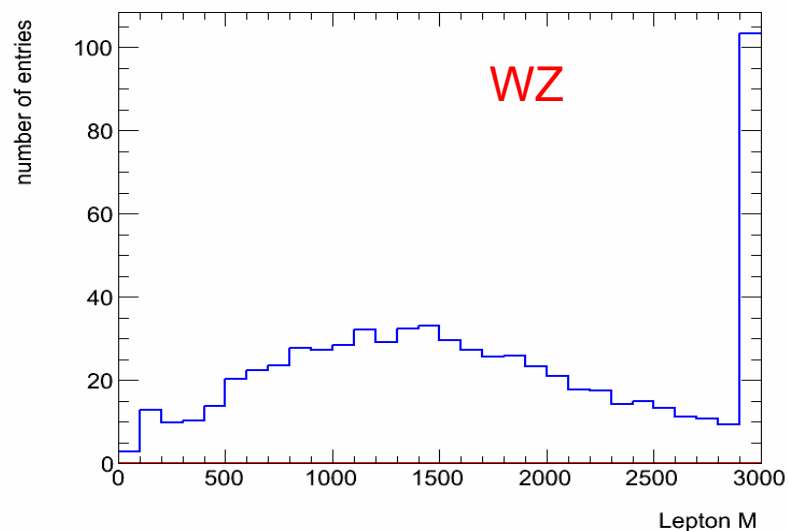
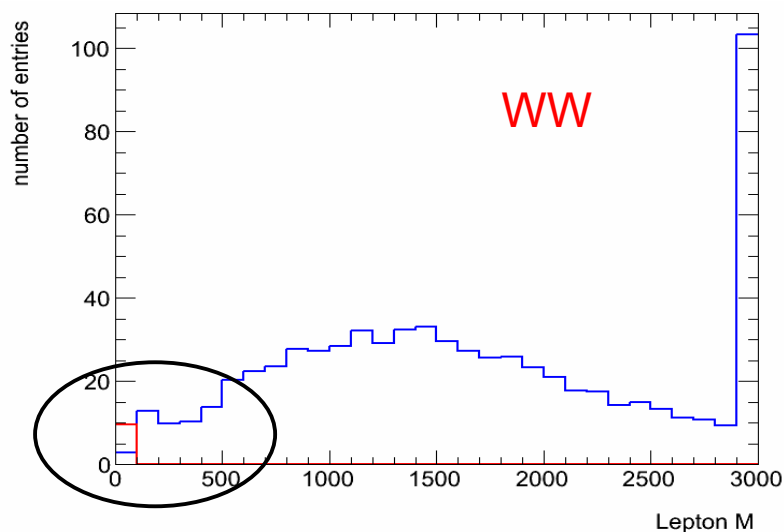
Backgrounds Before

- WWW sensitive to backgrounds like SM WWW, WZ and ZZ
- Plots have $n_{\text{lepton}} \geq 3$, red is SM diboson, blue is FT0 for WWW
- No pileup but with snowmass Delphes



Backgrounds After

- Not allowing two leptons with same flavor + opposite charge
- Plots have $n_{\text{lepton}} \geq 3$, red is SM diboson, blue is FT0 for WWW
- About x5 signal reduction, but ~all diboson bkgd removed



Back up

Cross-sections and Ratio wrt SM for 10^{-11} Couplings

Coupling	WWW	WWZ	WZZ	ZZZ
Sm Cross-section(pb)	0.000568000	0.000111800	0.000009634	0.000000972
sm/sm	1.00	1.00	1.00	1.00
fs0/sm	1.00	1.00	1.00	1.00
fs1/sm	1.00	1.00	1.00	1.00
fm0/sm	1.49	1.09	1.05	1.02
fm1/sm	1.18	1.02	1.04	1.03
fm2/sm	1.00	1.05	1.00	1.02
fm3/sm	1.00	1.01	1.00	1.01
ft0/sm	19.10	4.23	3.38	2.90
ft1/sm	15.88	2.23	2.83	2.90
ft2/sm	4.61	1.33	1.35	1.54
ft8/sm	1.00	1.00	1.00	1.31
ft9/sm	1.00	1.00	1.00	1.08