Z to ee sample
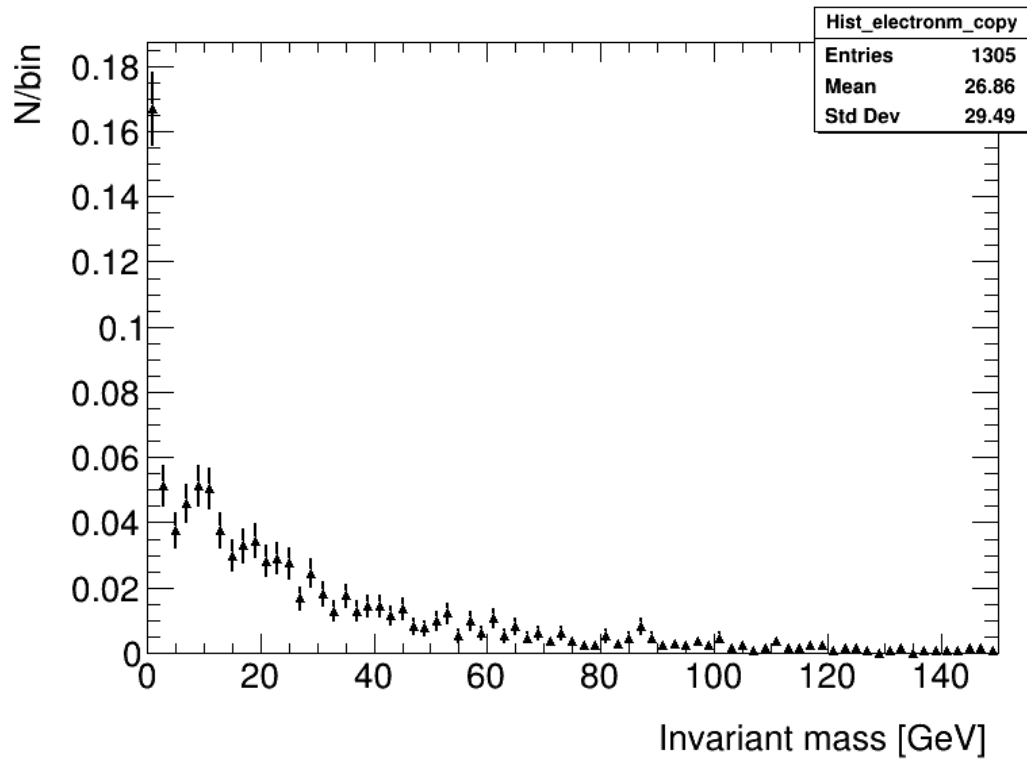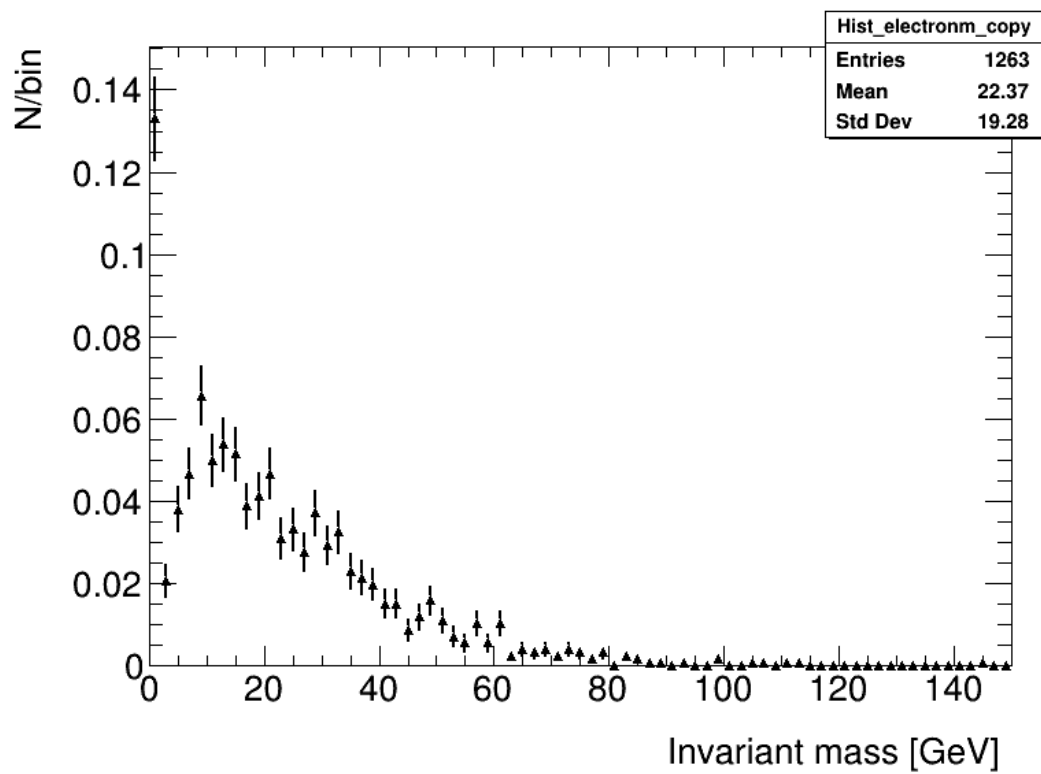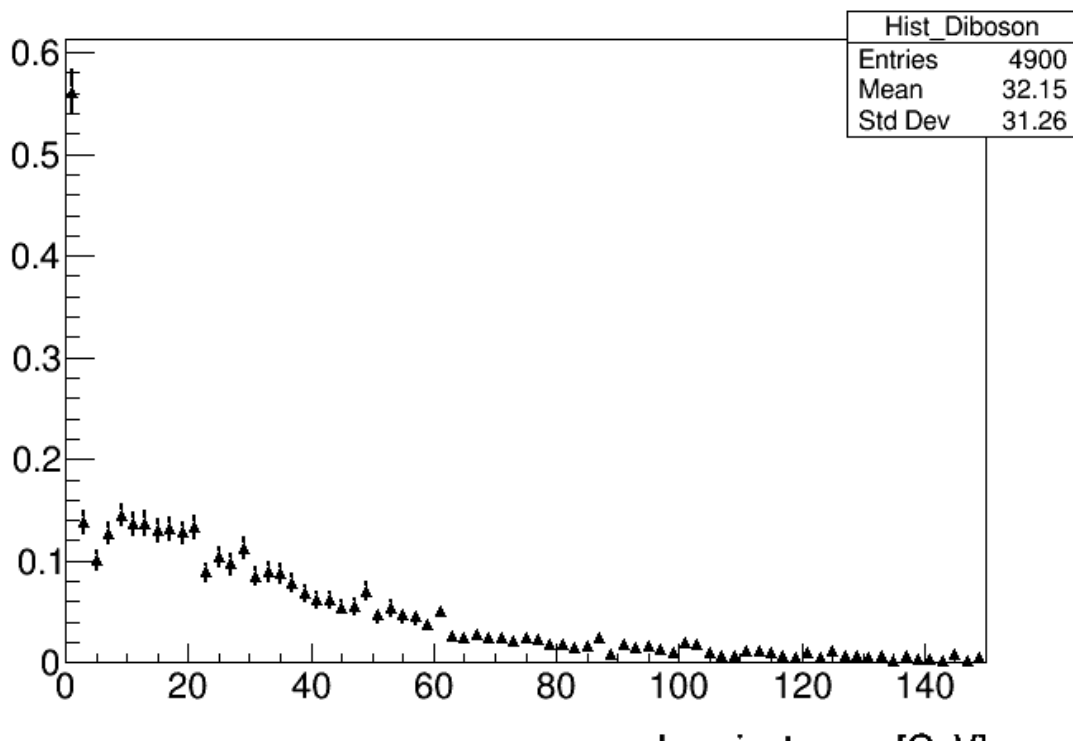

Diboson

Top
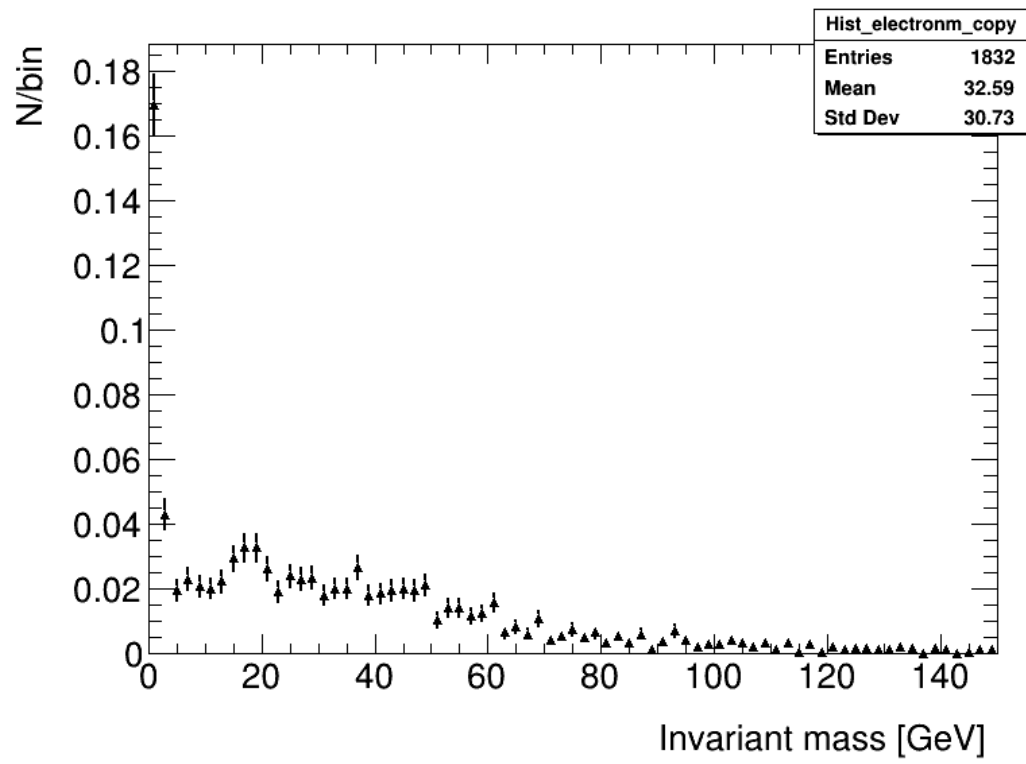
Ttbar
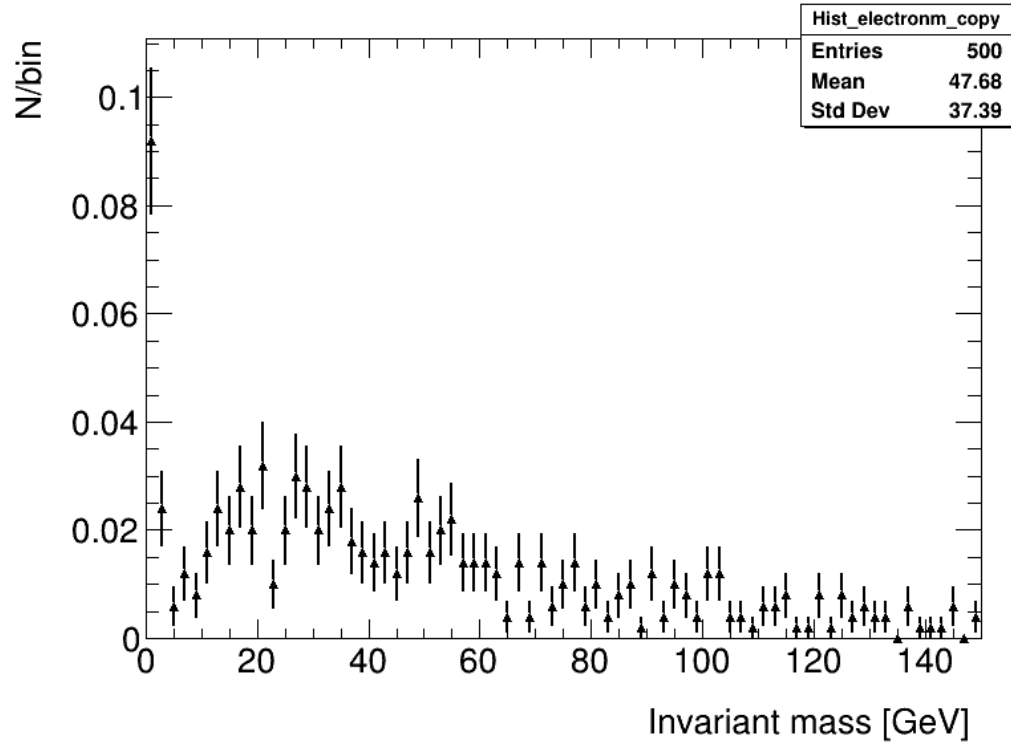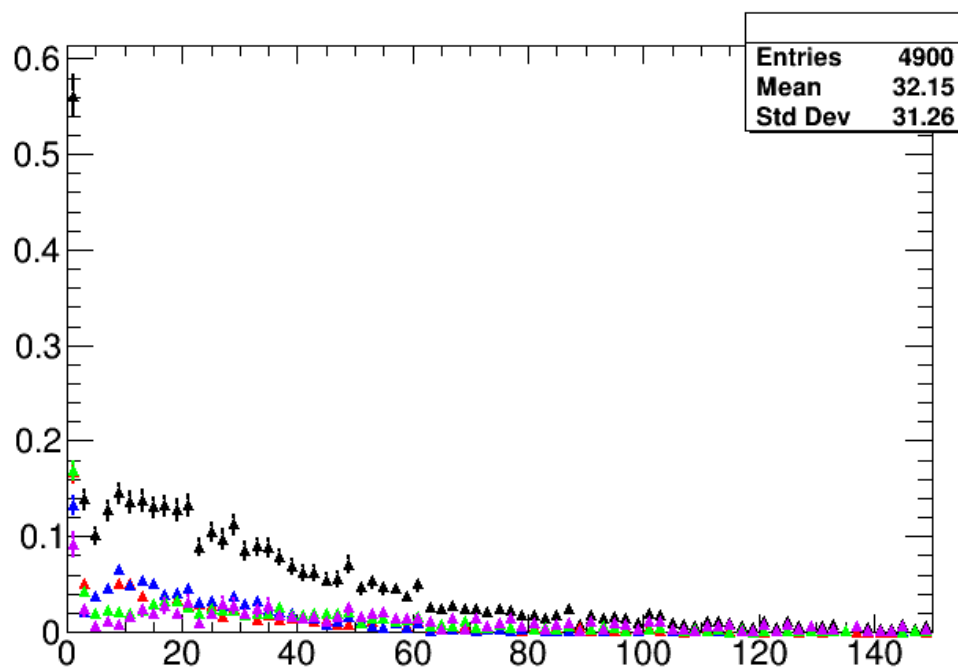
Z to tautau
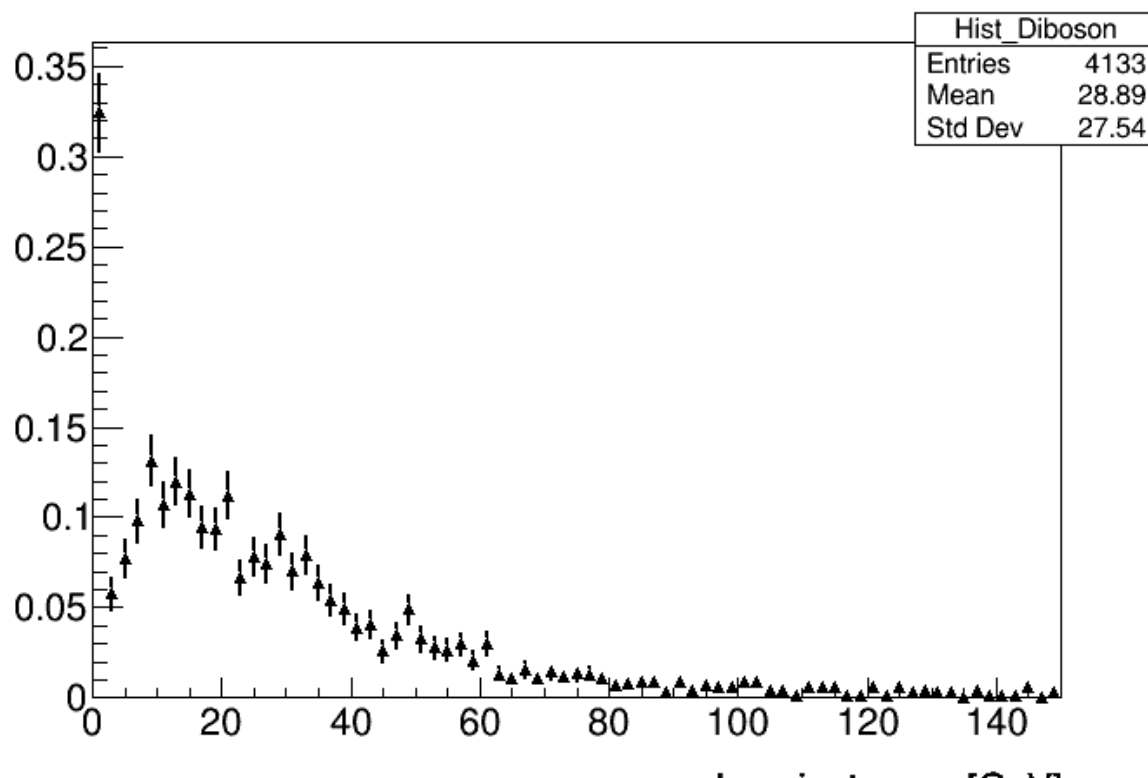

Sum of the backgrounds

Black is the sum, blue is Ztautau, ttbar is violet, single top is green and diboson is red.

Entries	4900
Mean	32.15
Std Dev	31.26

Sum of the background with cross sections

Hist_Diboson	
Entries	4133
Mean	28.89
Std Dev	27.54

Sum of background with the different background components. Black is the sum, blue is Ztautau, ttbar is violet, single top is green, Drell-Yan is orange and diboson is red.
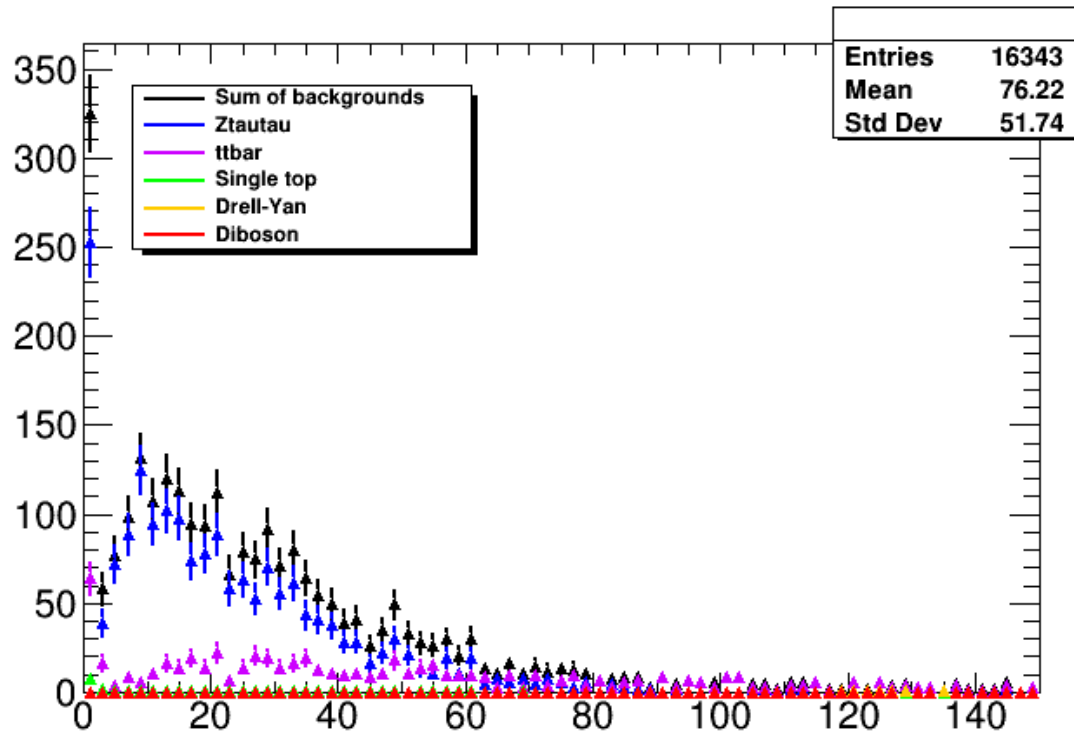
Significance = signal / sqrt(signal+background) signal is the number of entries in Z dis within 3 sigma of centre of peak and background is the non-Z dis in this region. Then look at cuts to see what happens. Cut ideas(selection): leading p_T and sum of p_T

Signal= 0.520525

Background= 2.70919e-05

Signi= 0.721452

Top plot:

Legend:
- Sum of backgrounds
- Diboson
- Ztautau
- Single top
- ttbar
- Drell-Yan

Entries	16343
Mean	76.22
Std Dev	51.74

Middle plot:

N/bin vs Invariant mass [GeV]

Legend:
- Sum of backgrounds
- Ztautau
- ttbar
- Single top
- Drell-Yan
- Diboson

Hist_Diboson	
Entries	16343
Mean	76.22
Std Dev	51.74

Bottom plot:

N/bin vs Invariant mass [GeV]

Legend:
- Sum of backgrounds
- Ztautau
- ttbar
- Single top
- Drell-Yan
- Diboson

Hist_Diboson	
Entries	16343
Mean	76.22
Std Dev	51.74