

### **On-line (pre-)selection Requisites for:**

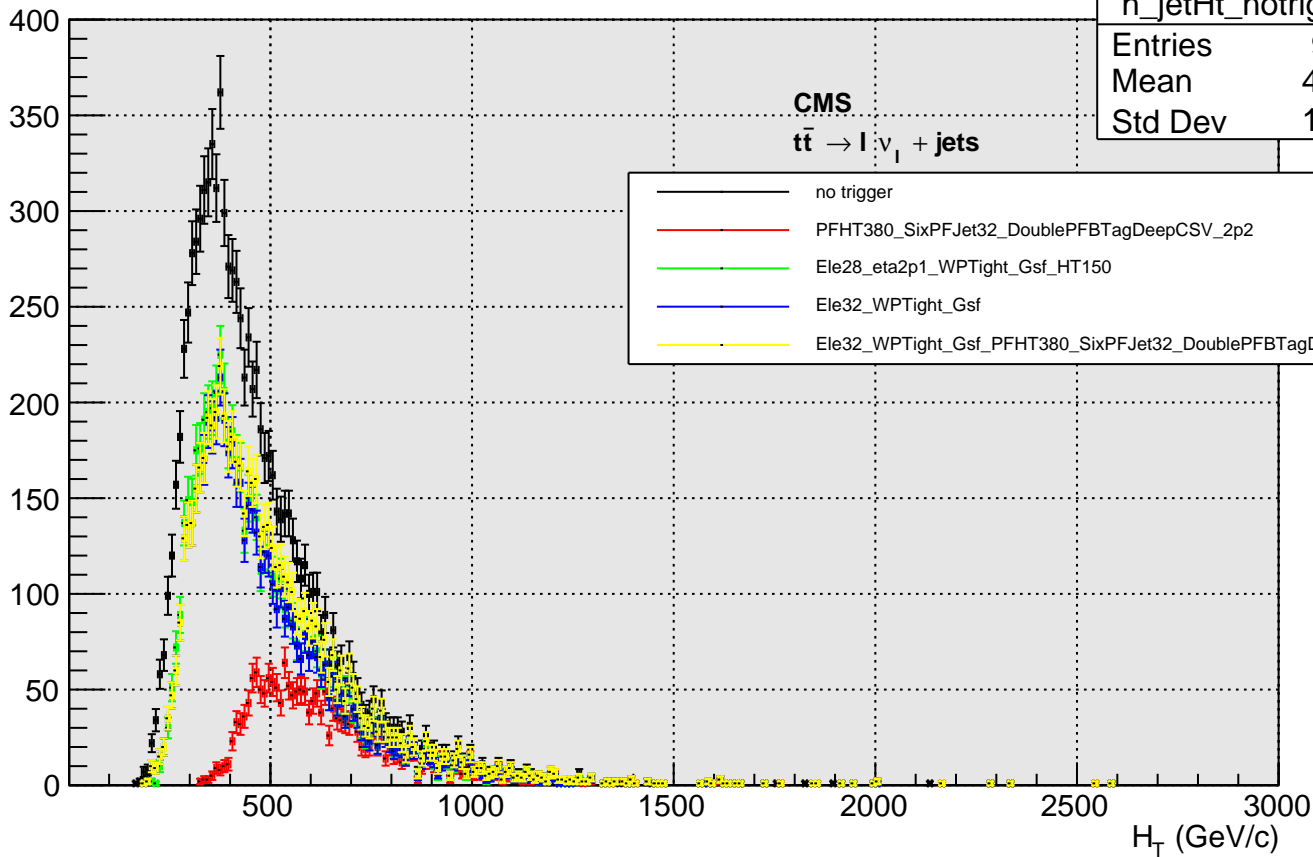
- **Jets:** number  $> 5$
- **Muons plus Electrons:** number  $> 0$

**Event Limit:** None (see last page)

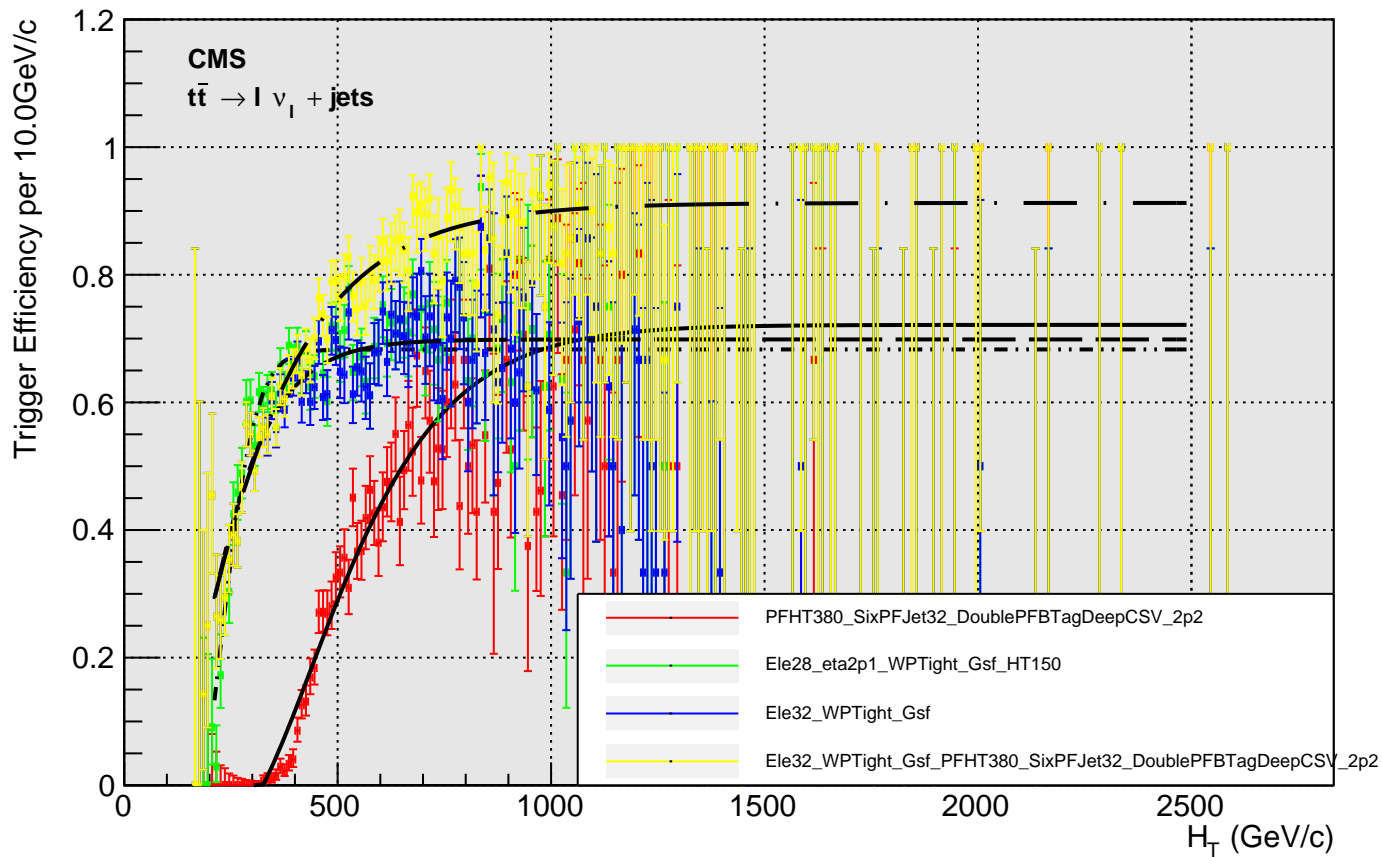
### **Off-line (post-)selection Requisites for:**

- **Jets:**  $\text{jetId} > 2$  ,  $p_T > 20$  and  $|\eta| < 2.4$  (for at least 6 jets)  
 $\text{btagDeepFlavB} > 0.7489$  (for at least one jet)
- **Electrons:** has tightId,  $|\eta| < 2.4$  and  $\text{miniPFRelIso\_all} < 0.10$  (for at least 1)

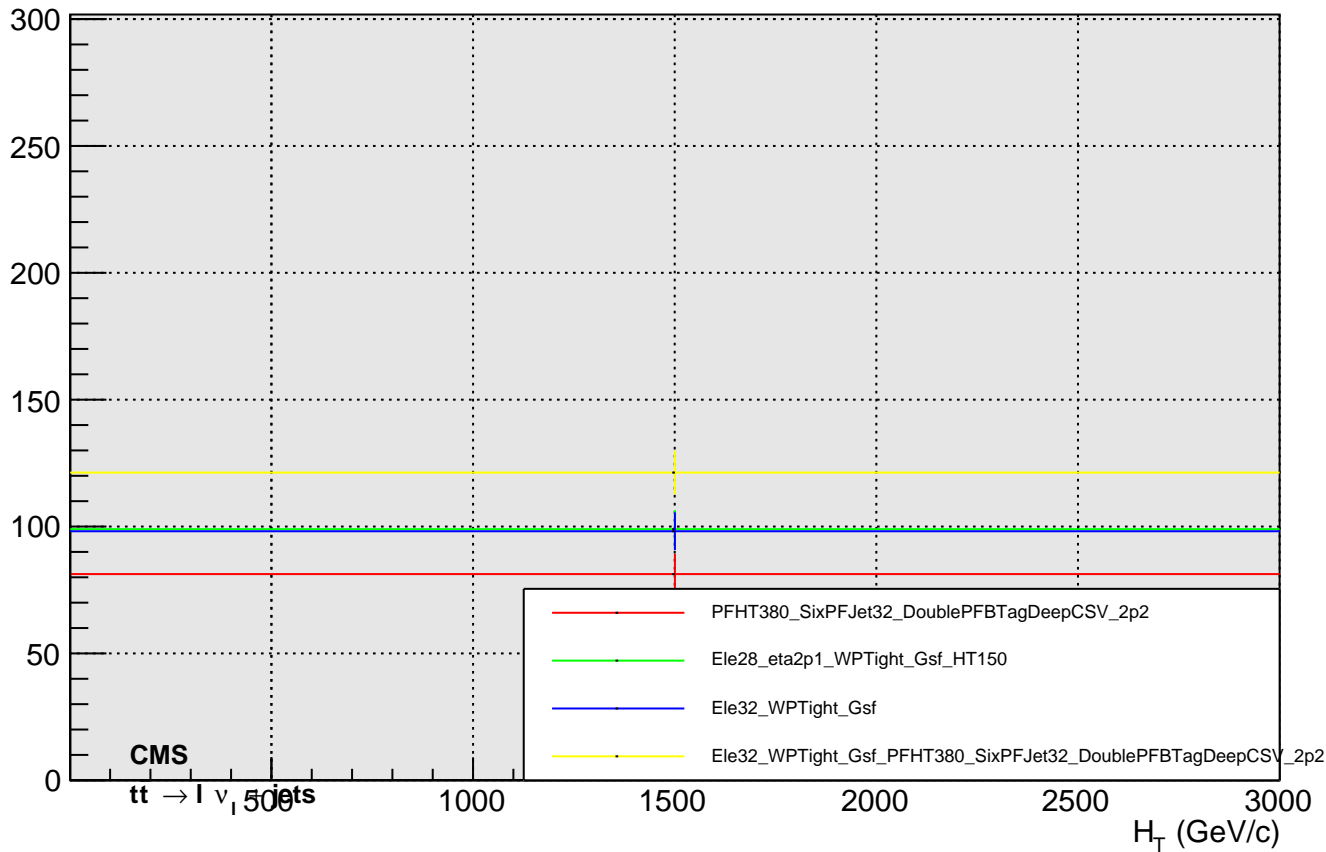
Number of Events per 10 GeV/c



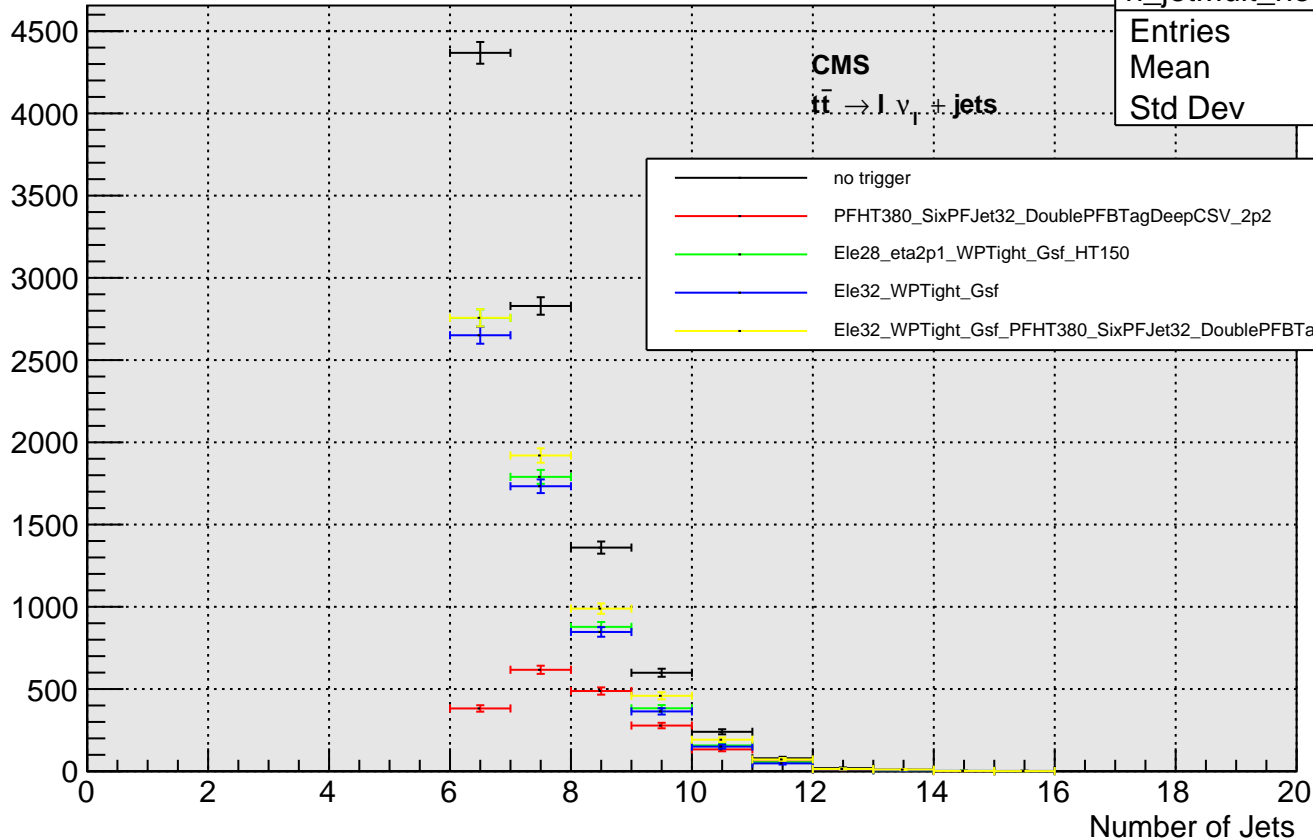
h_jetHt_notrigger	
Entries	9508
Mean	469.8
Std Dev	198.5



Trigger Efficiency per 10.0 GeV/c



Number of Events per Number of Jets



h\_jetMult\_notrigger

Entries 9508

Mean 6.938

Std Dev 1.15

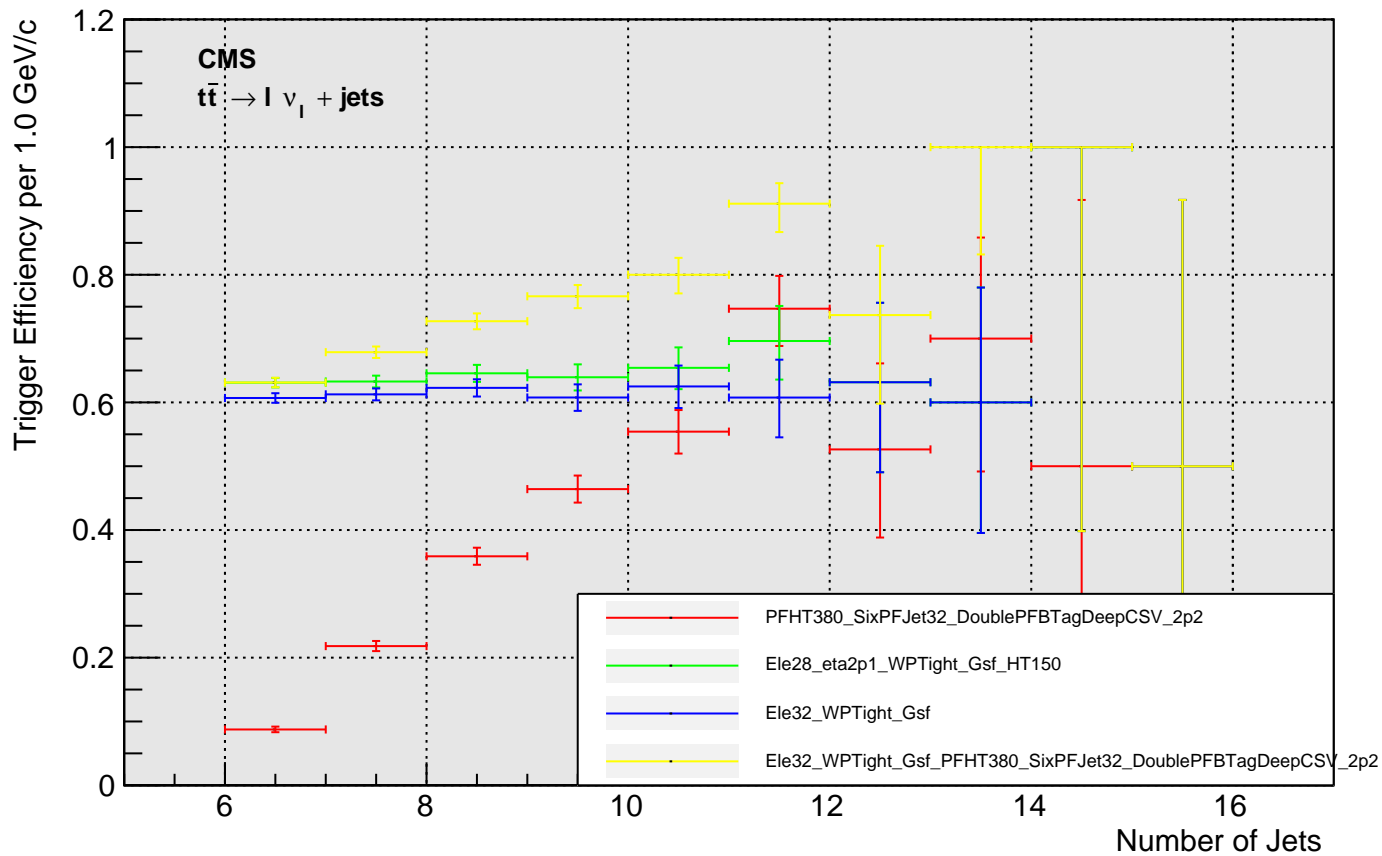
no trigger

PFHT380\_SixPFJet32\_DoublePFBTagDeepCSV\_2p2

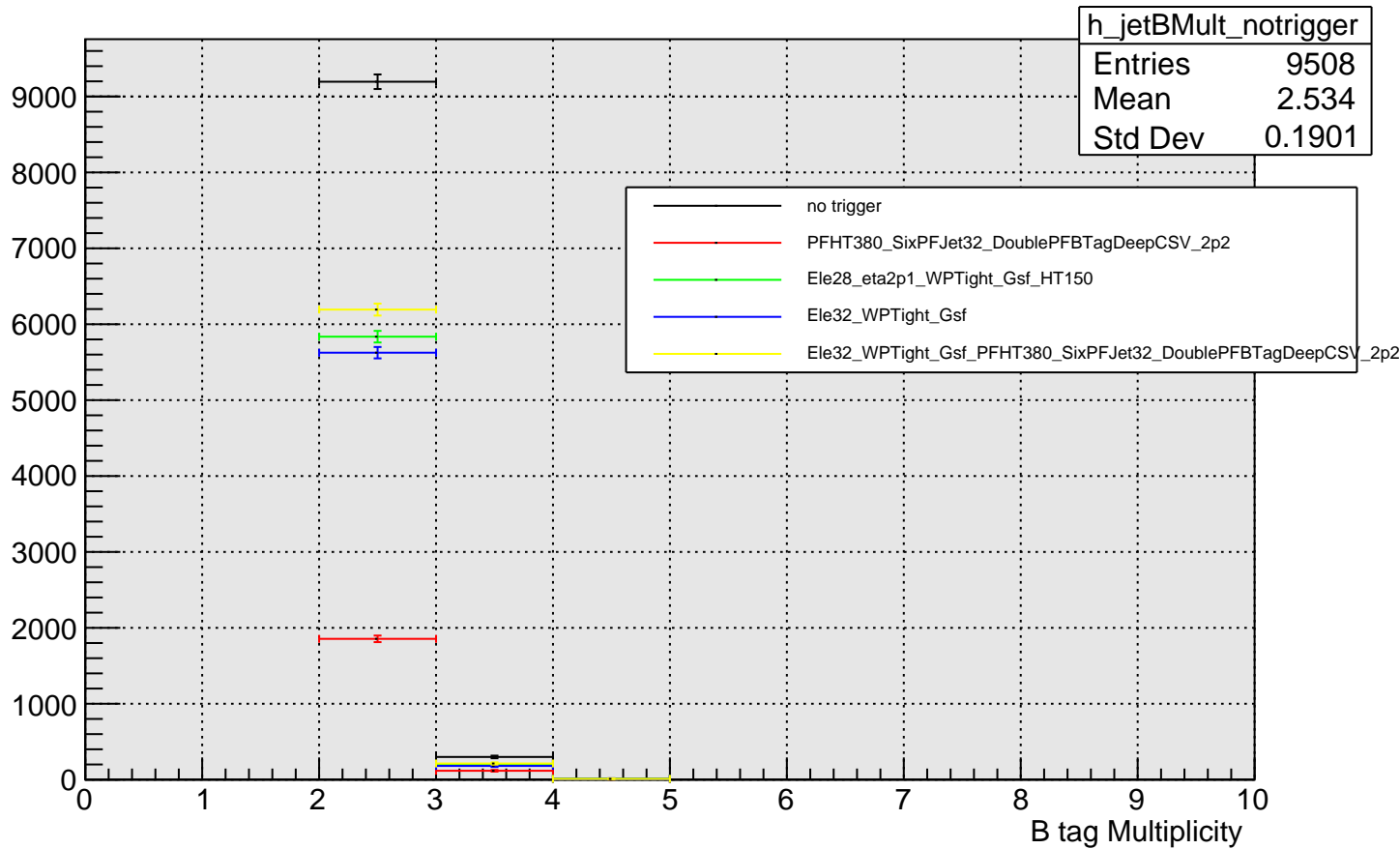
Ele28\_eta2p1\_WPTight\_Gsf\_HT150

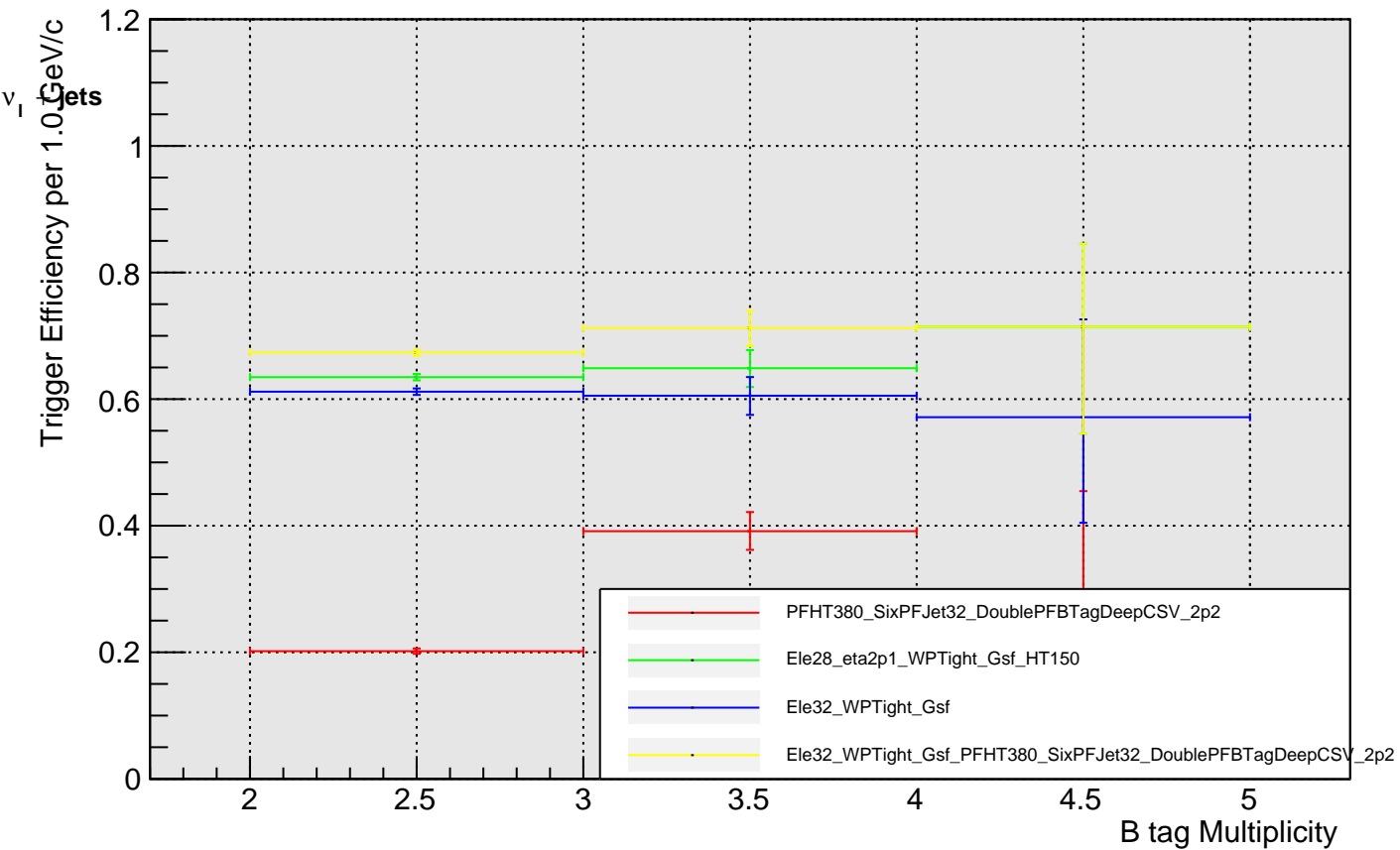
Ele32\_WPTight\_Gsf

Ele32\_WPTight\_Gsf\_PFHT380\_SixPFJet32\_DoublePFBTagDeepCSV\_2p2



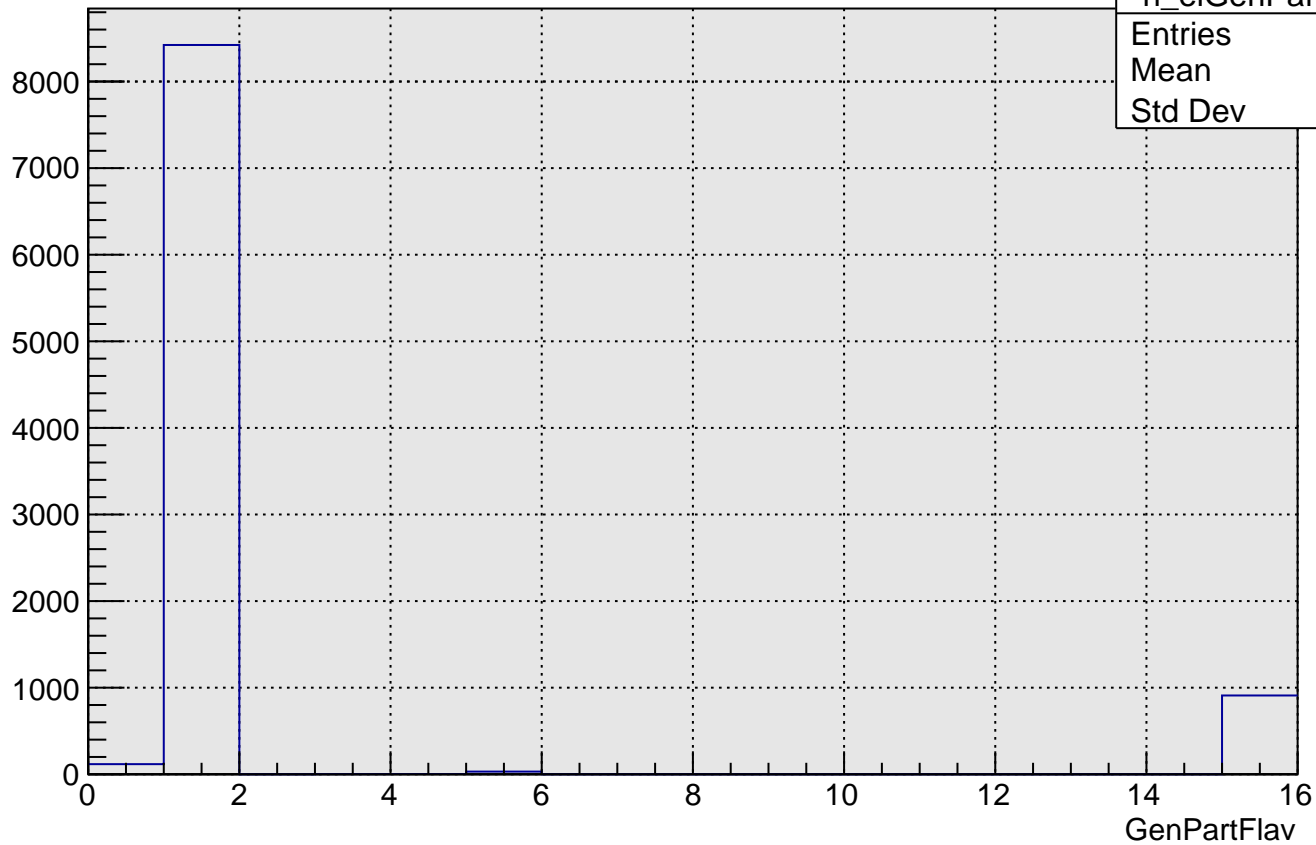
Number of Events per Number of Jets





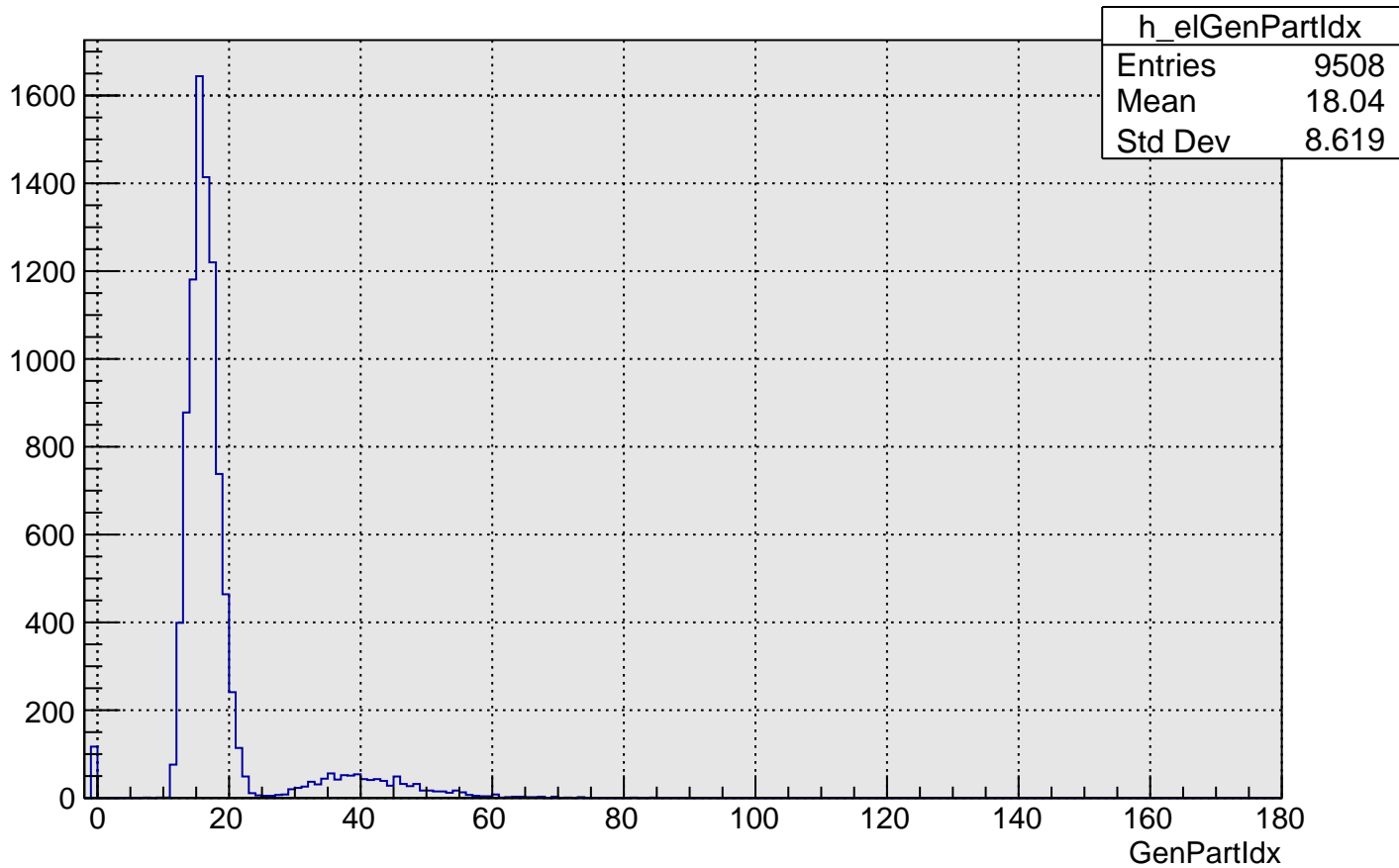


Number of events



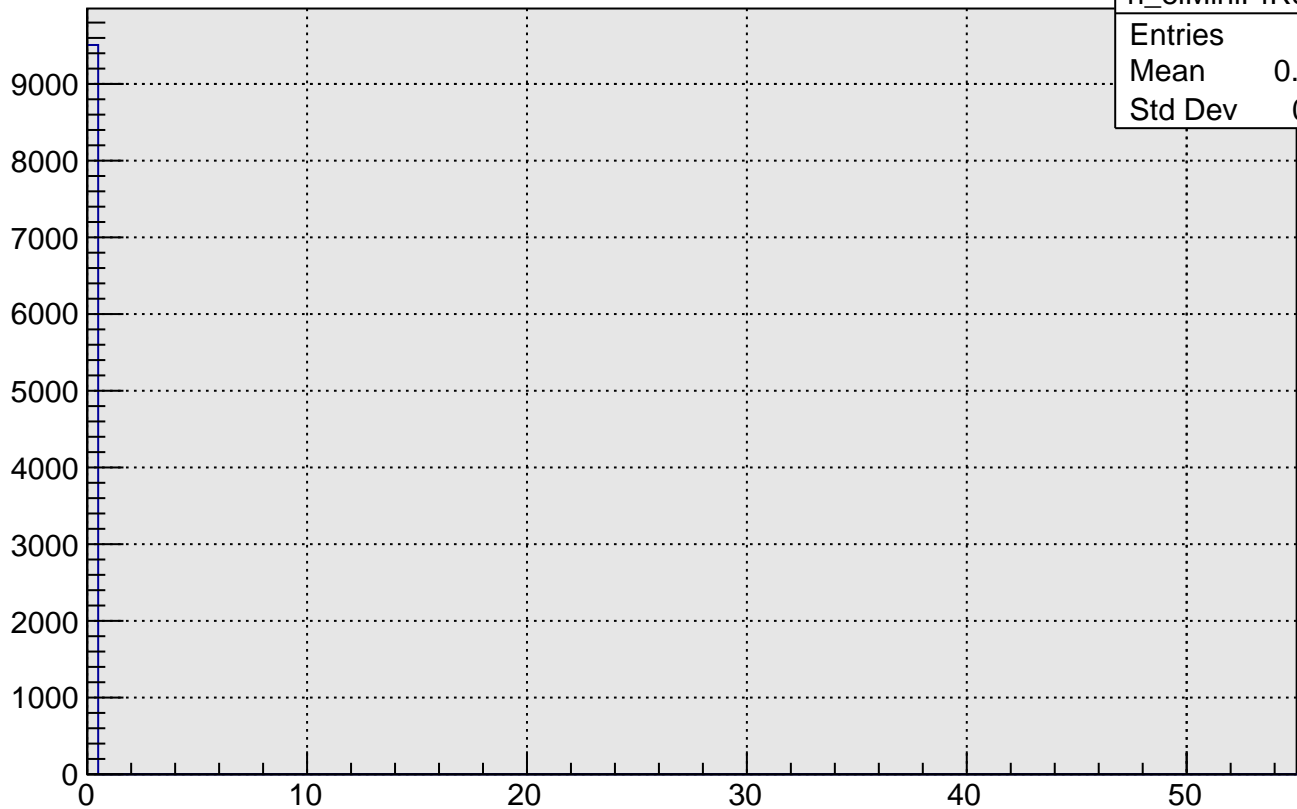
h_elGenPartFlav	
Entries	9508
Mean	2.345
Std Dev	4.131

Number of events



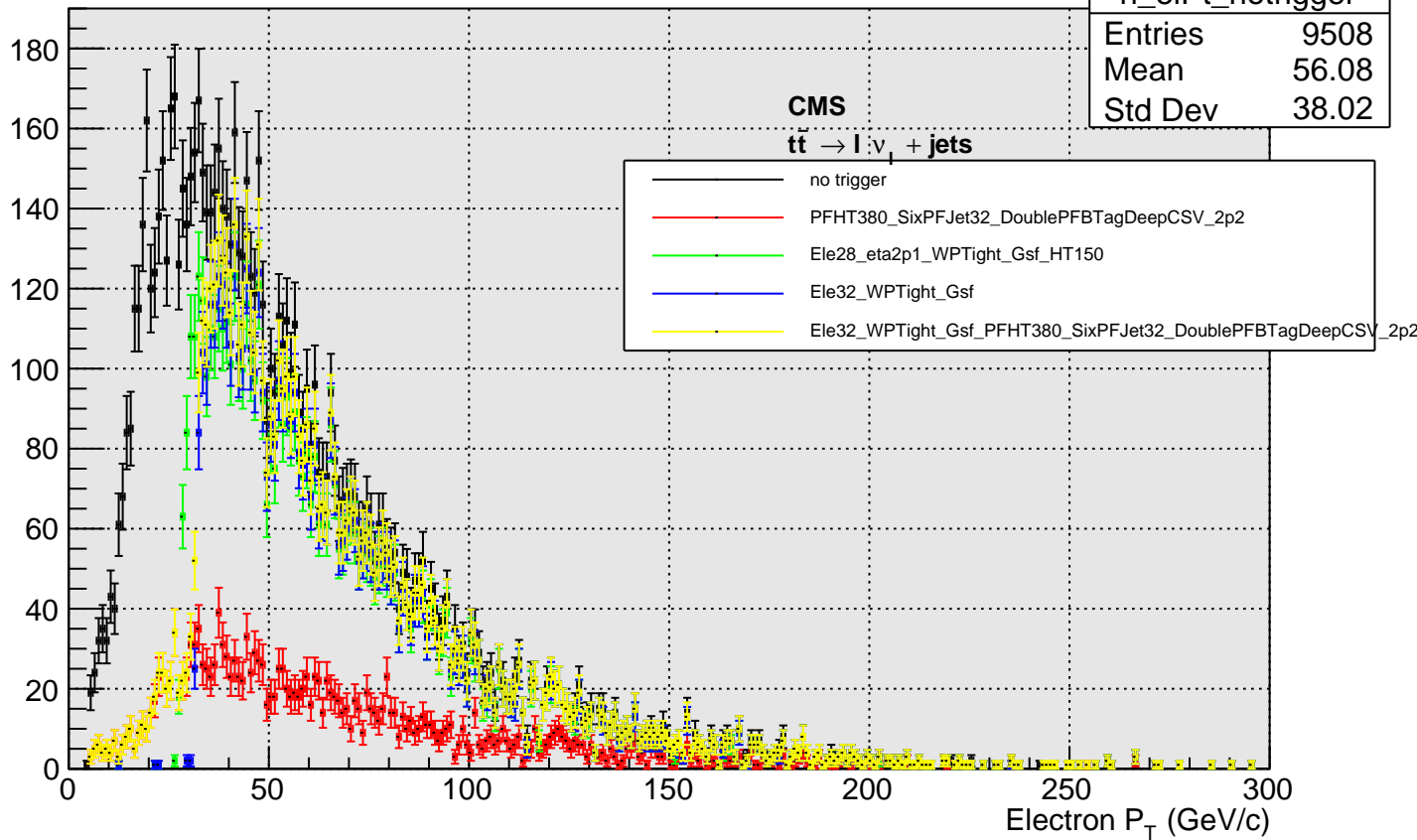
h_elMiniPfRellso_all	
Entries	9508
Mean	0.008866
Std Dev	0.01782

Number of Events

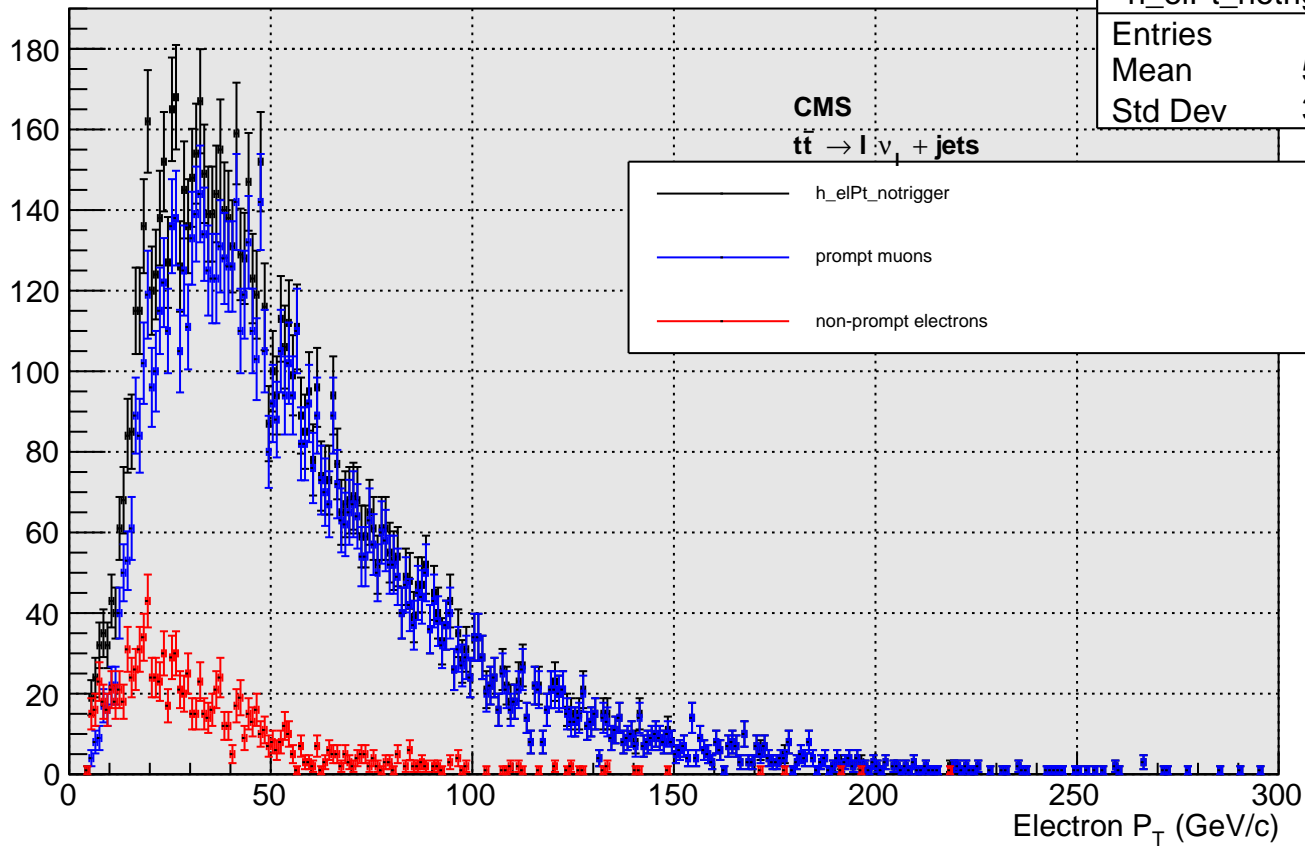


elMiniPfRellso\_all

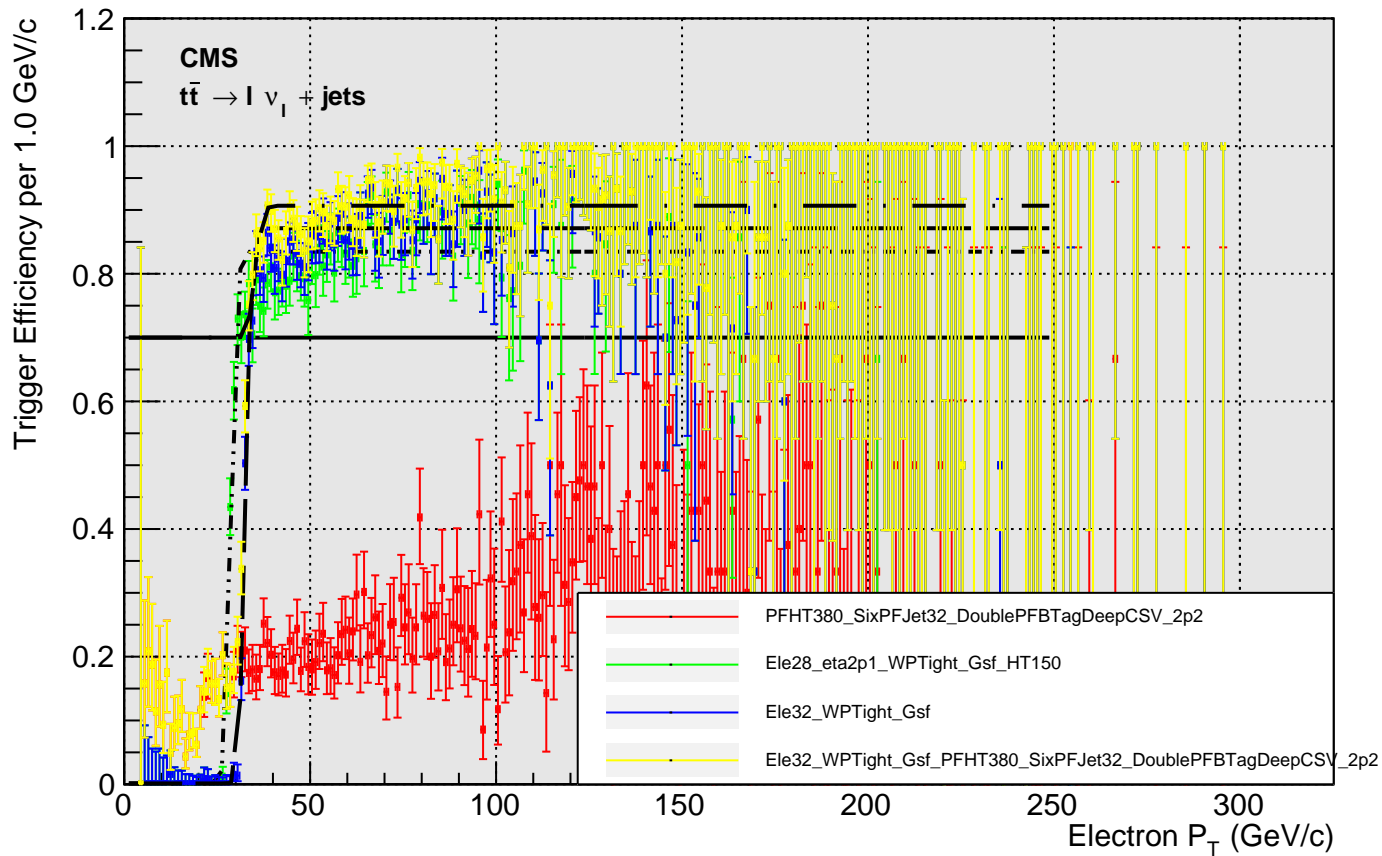
Number of Events per 1 GeV/c

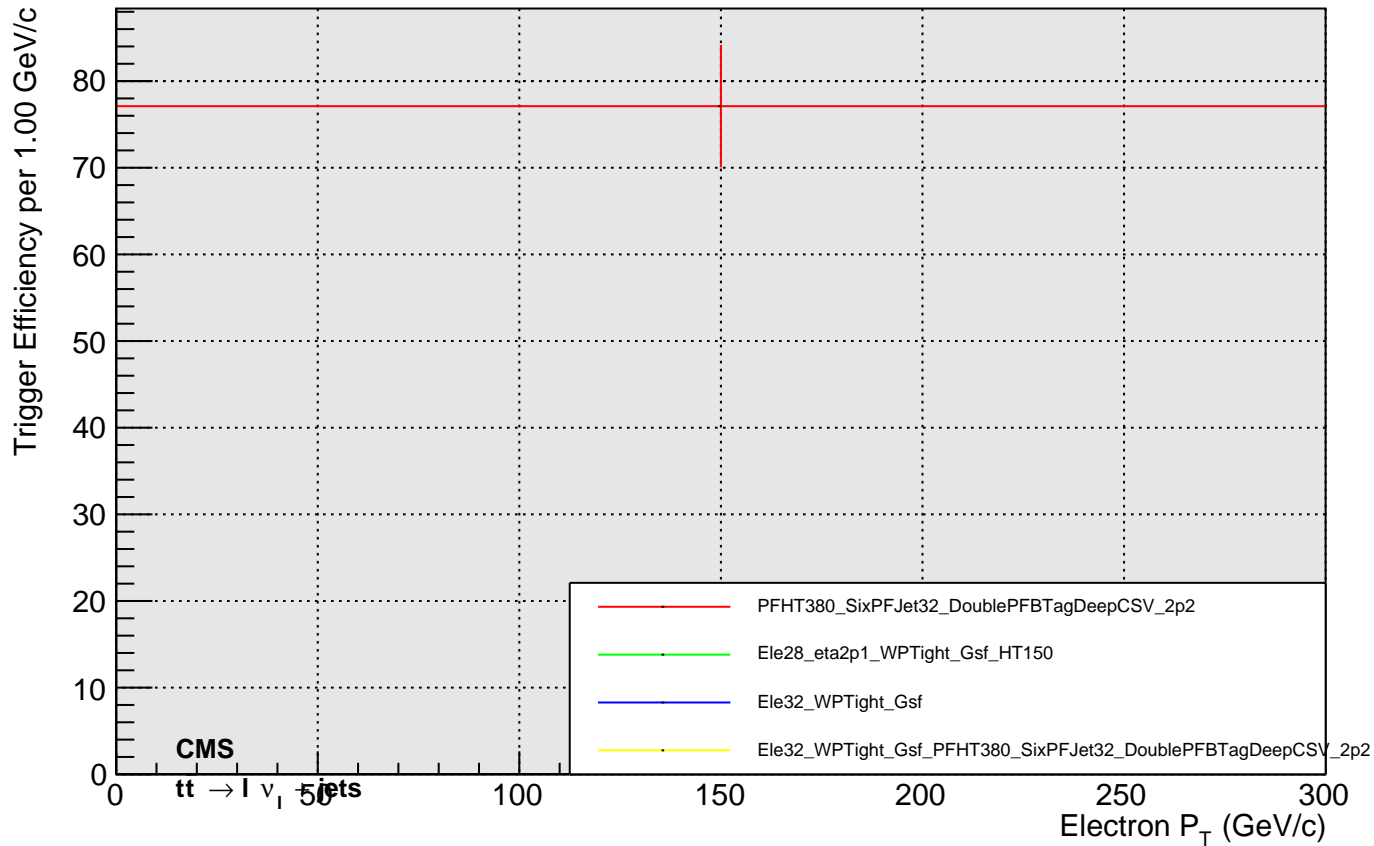


Number of Events per 1 GeV/c

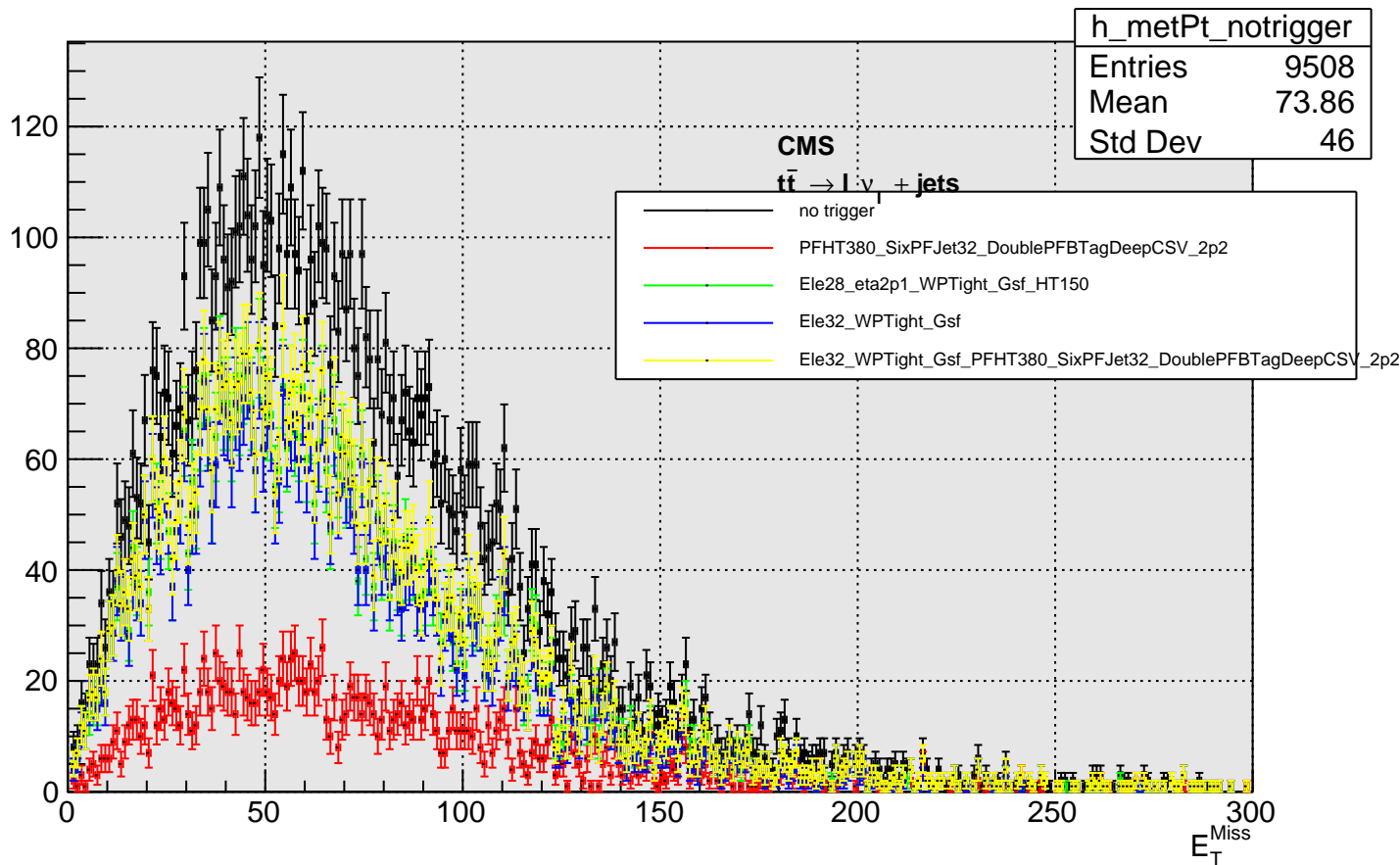


h_elPt_notrigger	
Entries	9508
Mean	56.08
Std Dev	38.02

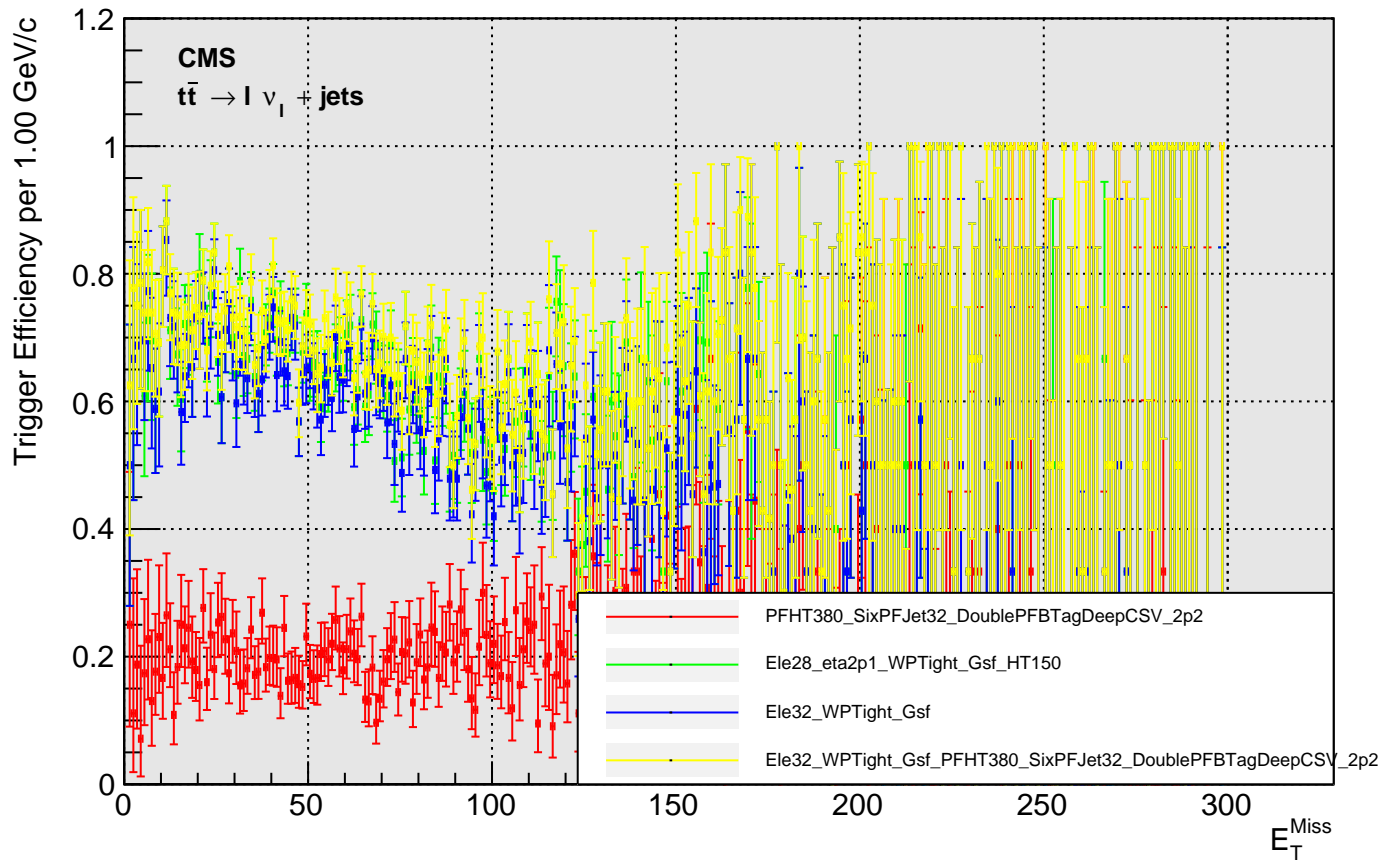




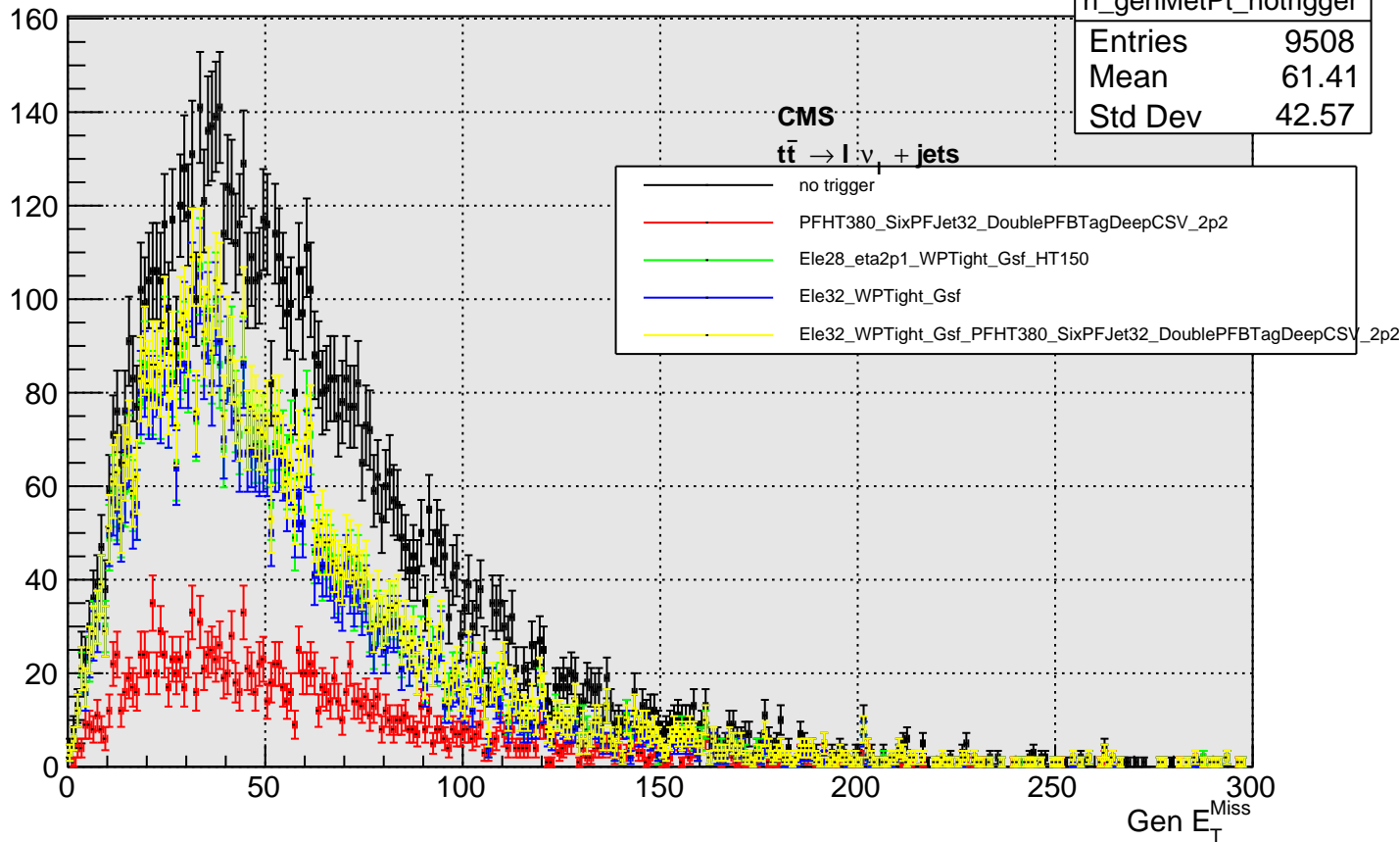
Number of Events per 1 GeV/c

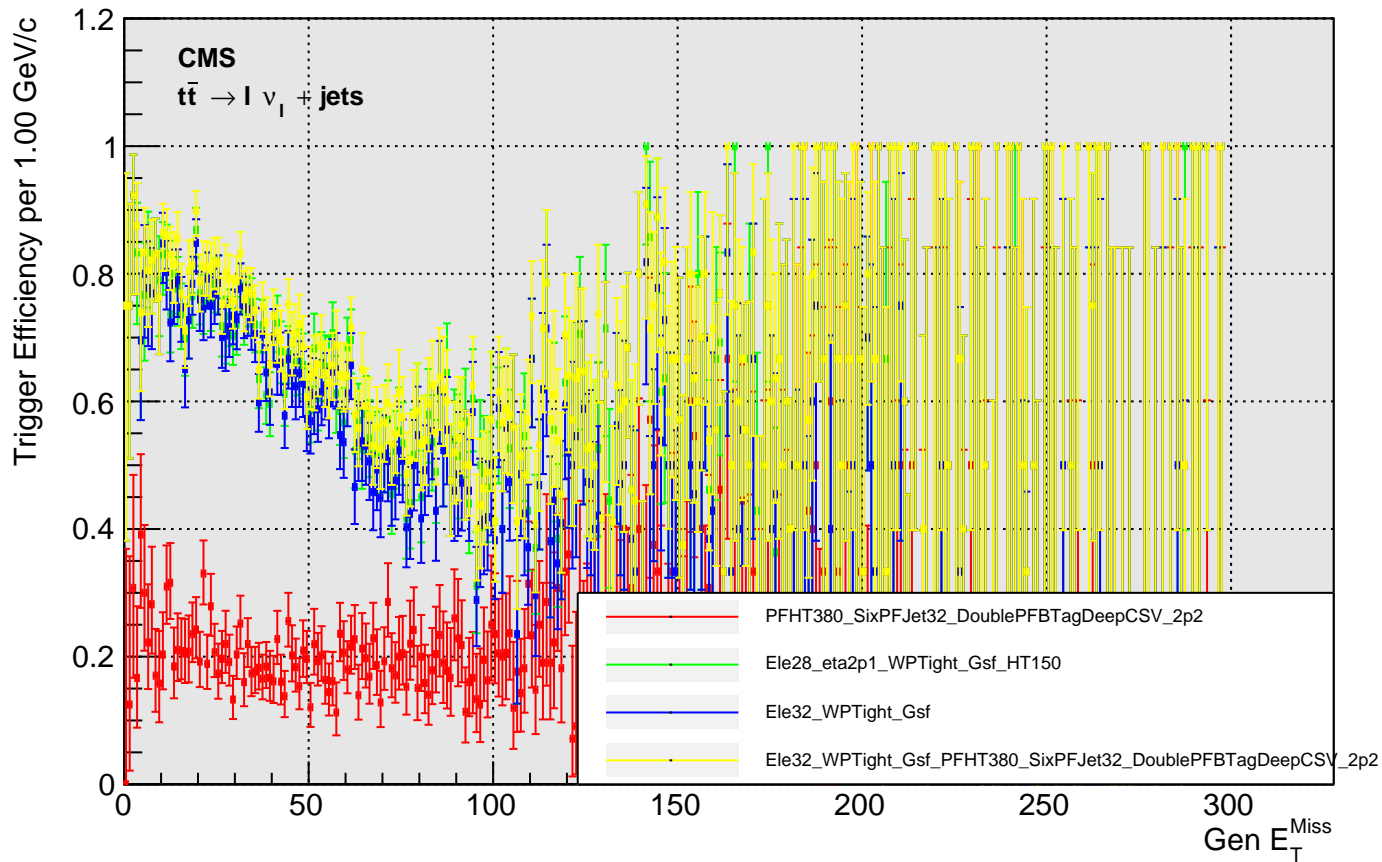




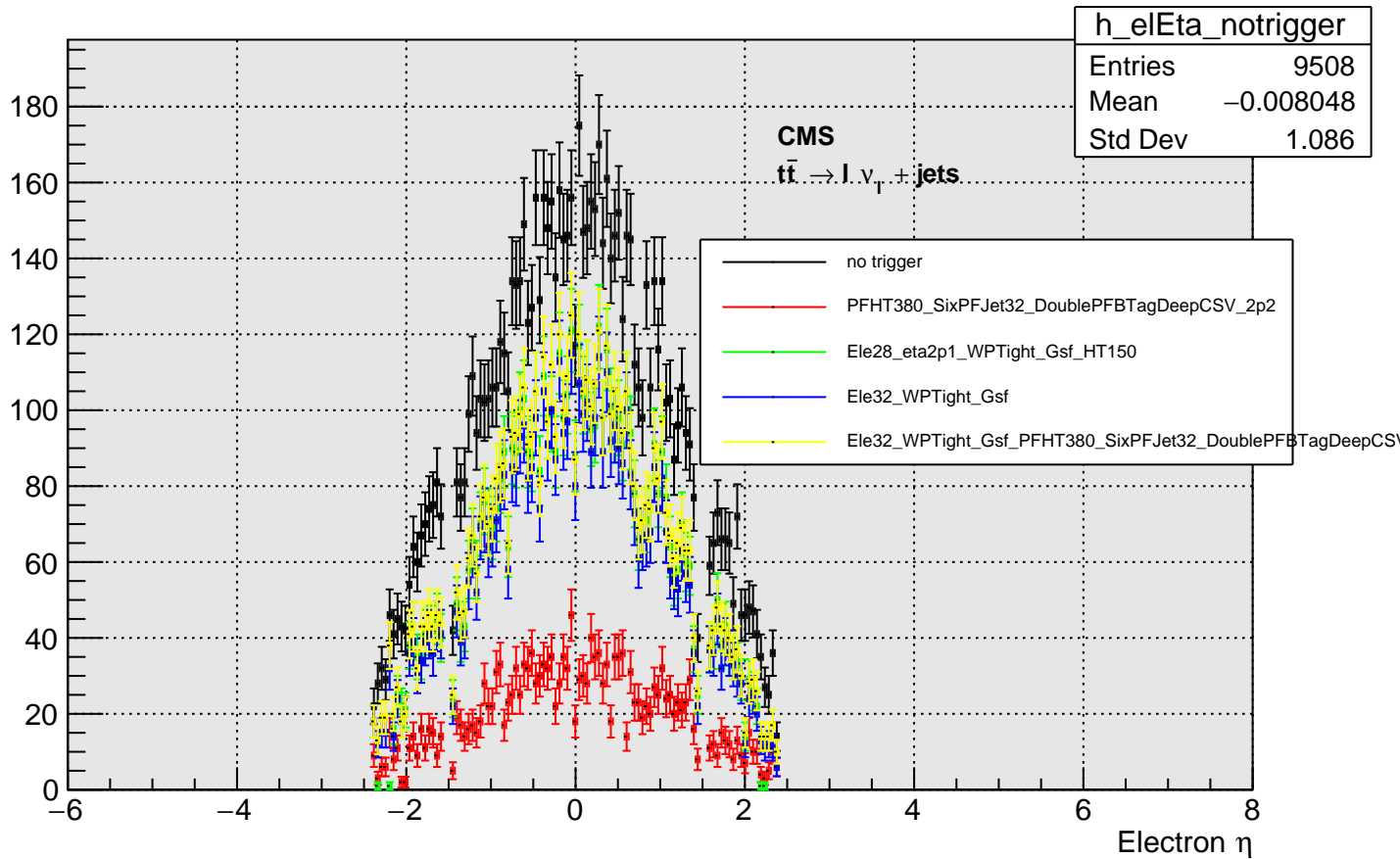


Number of Events per 1GeV/c



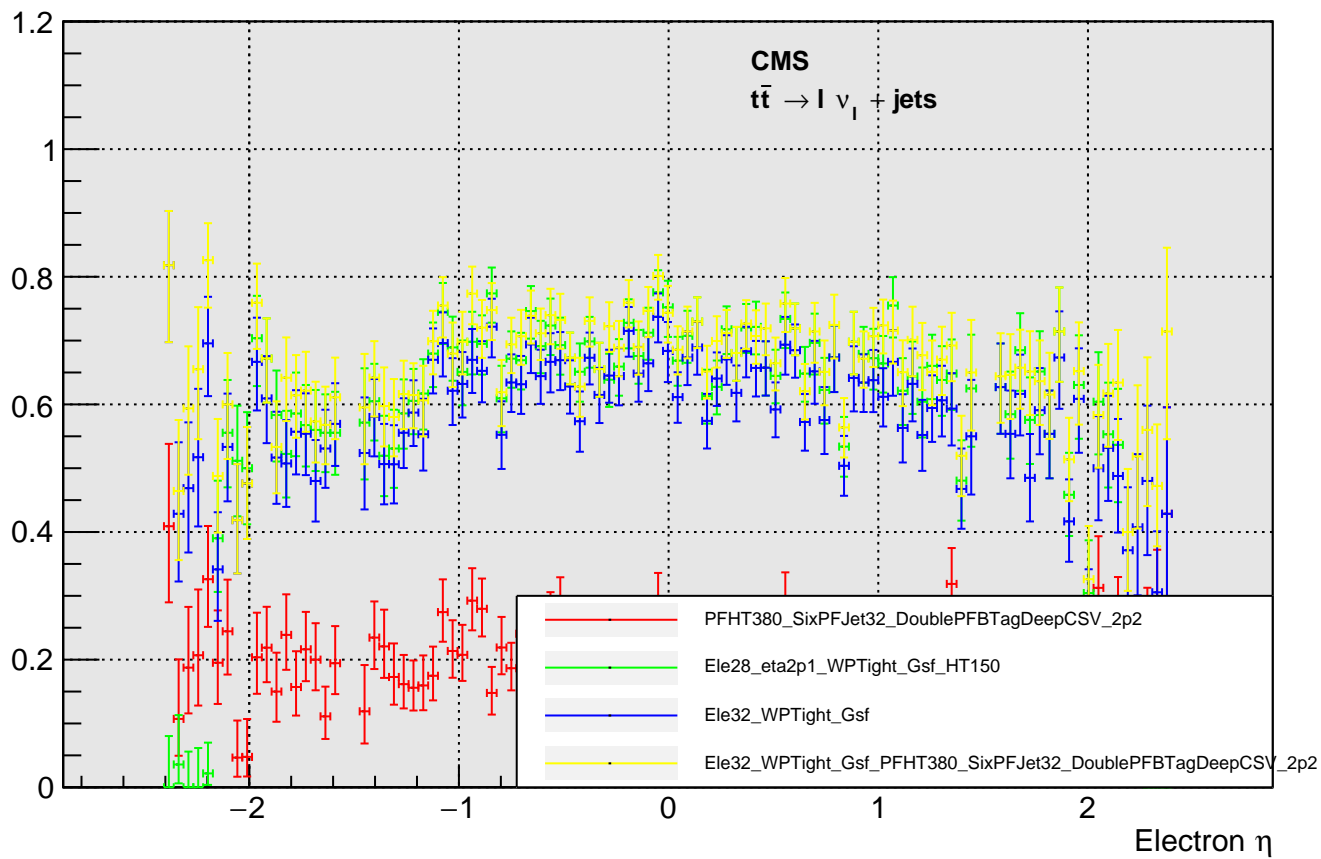


Number of Events per  $\delta\eta = 0.046$

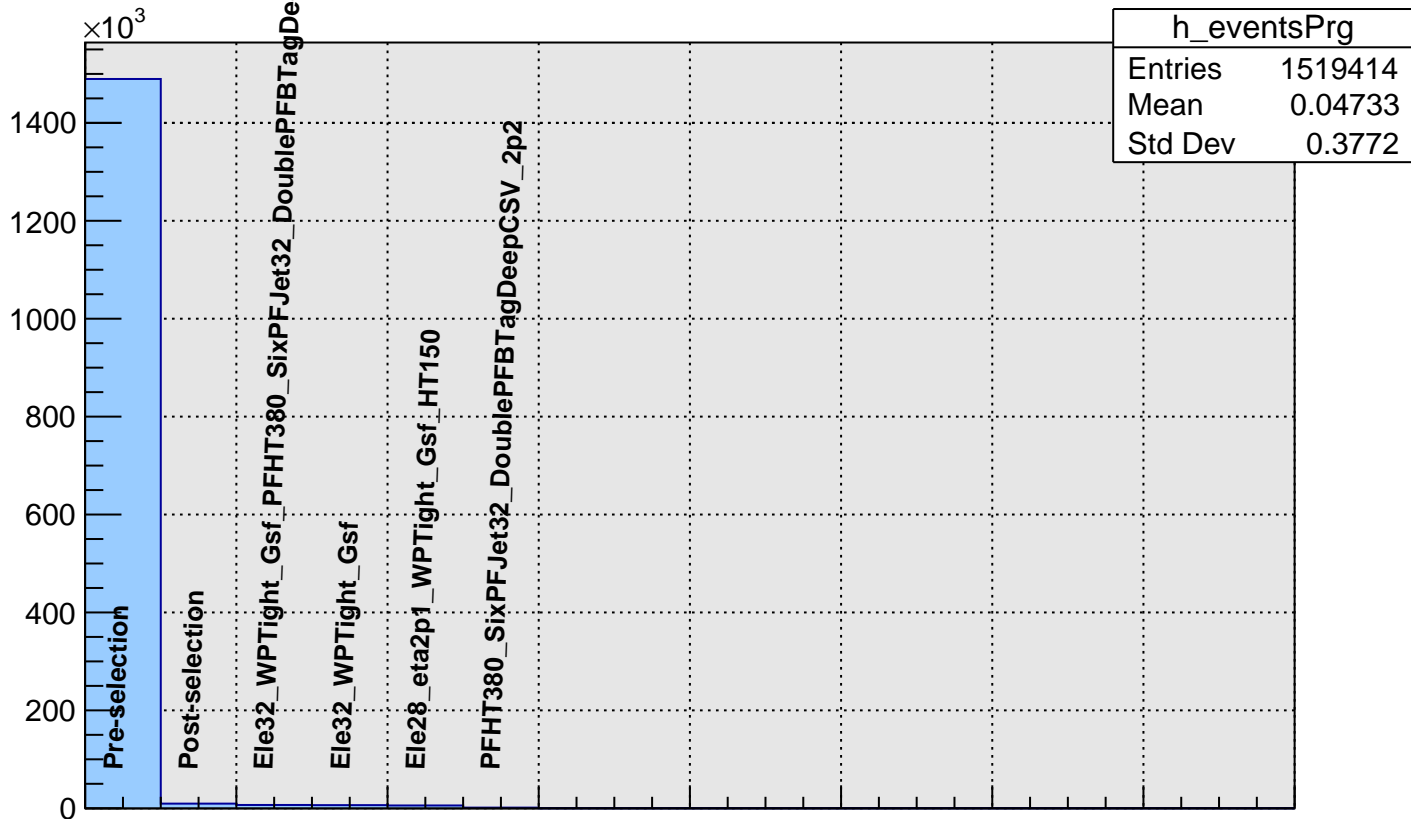


Trigger Efficiency per 0.046666666666667 GeV/c

**CMS**  
 **$t\bar{t} \rightarrow l \nu_l + \text{jets}$**



Total Number of Accepted Events



Cuts and Triggers

h_eventsPrg	
Entries	1519414
Mean	0.04733
Std Dev	0.3772