

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

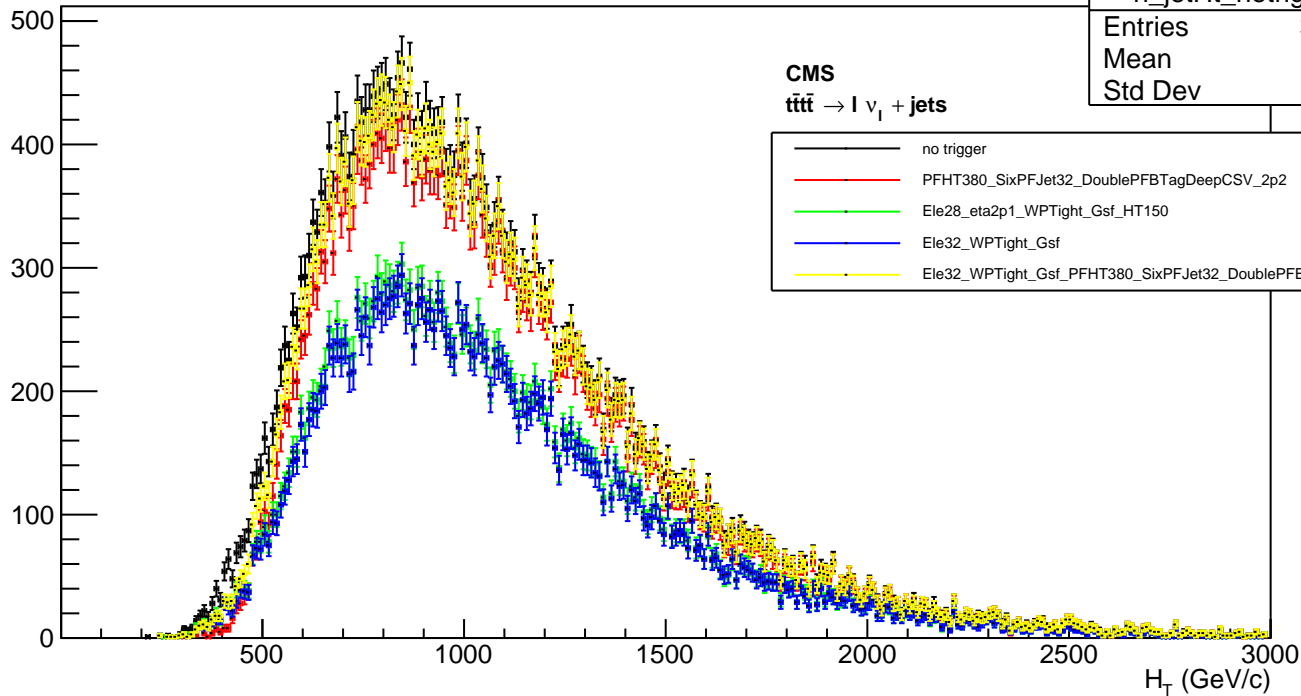
- **Jets:** number  $> 5$
- **Muons plus Electrons:** number  $> 0$

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

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

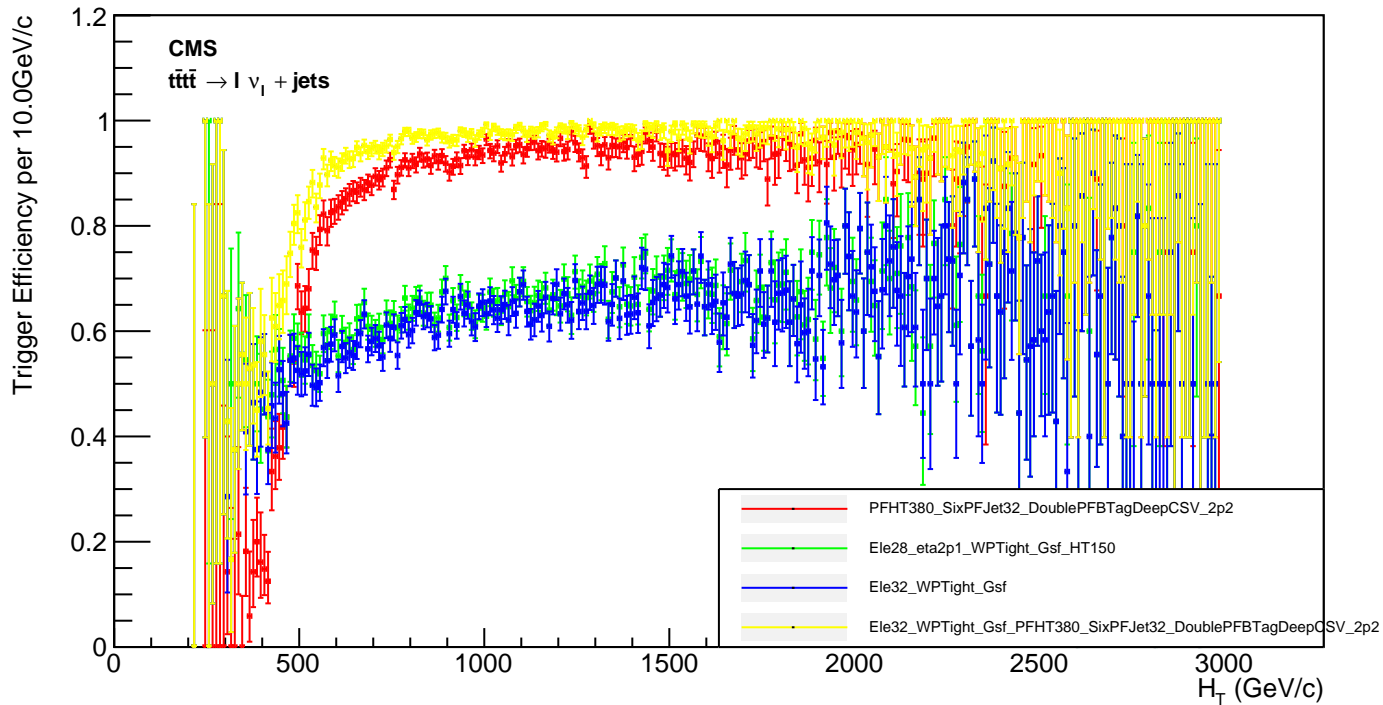
- **Jets:**  $\text{jetId} > 2$  ,  $p_T > 20$  and  $|\eta| < 2.4$  (for at least 6 jets)  
 $\text{btagDeepFlavB} > 0.7489$  (for at least one jet)
- **Electrons:** has tightId,  $|\eta| < 2.4$  and  $\text{miniPFRelIso\_all} < 0.10$  (for at least 1)

Number of Events per 10 GeV/c

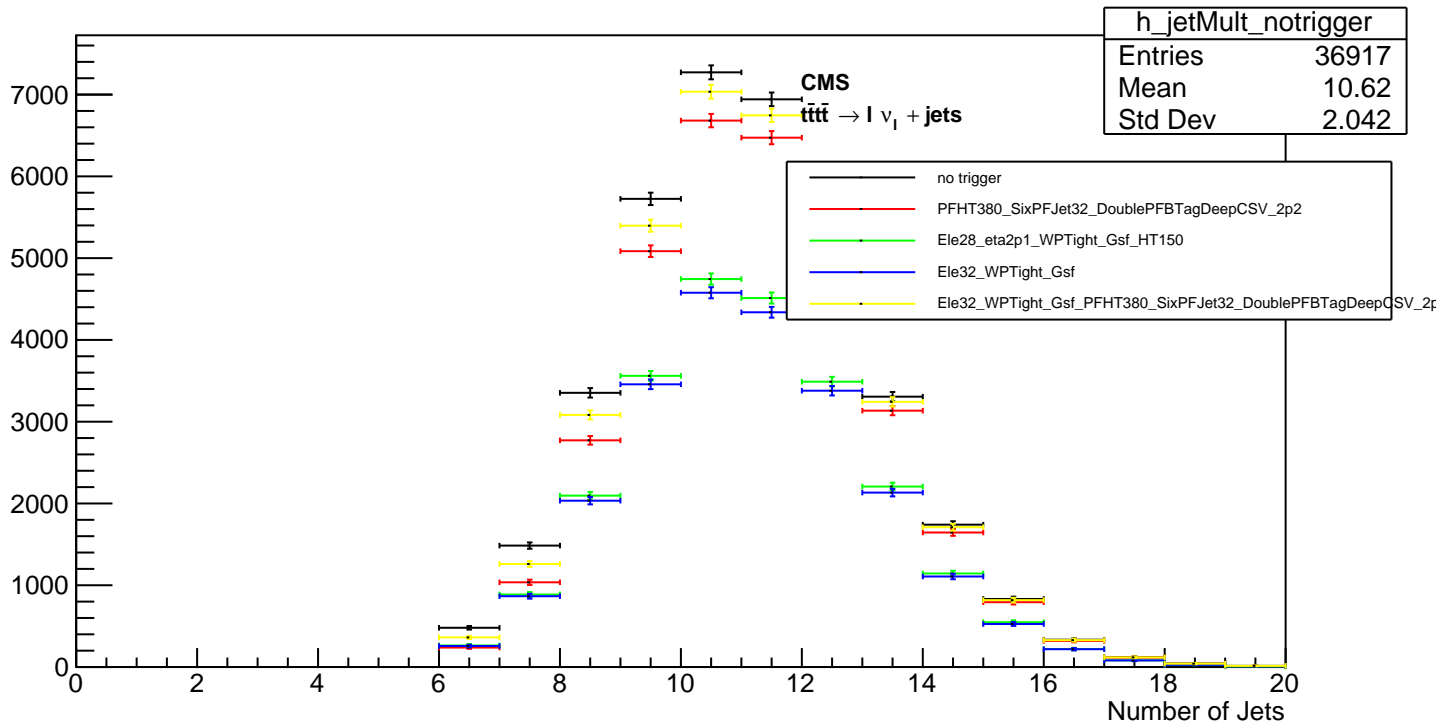


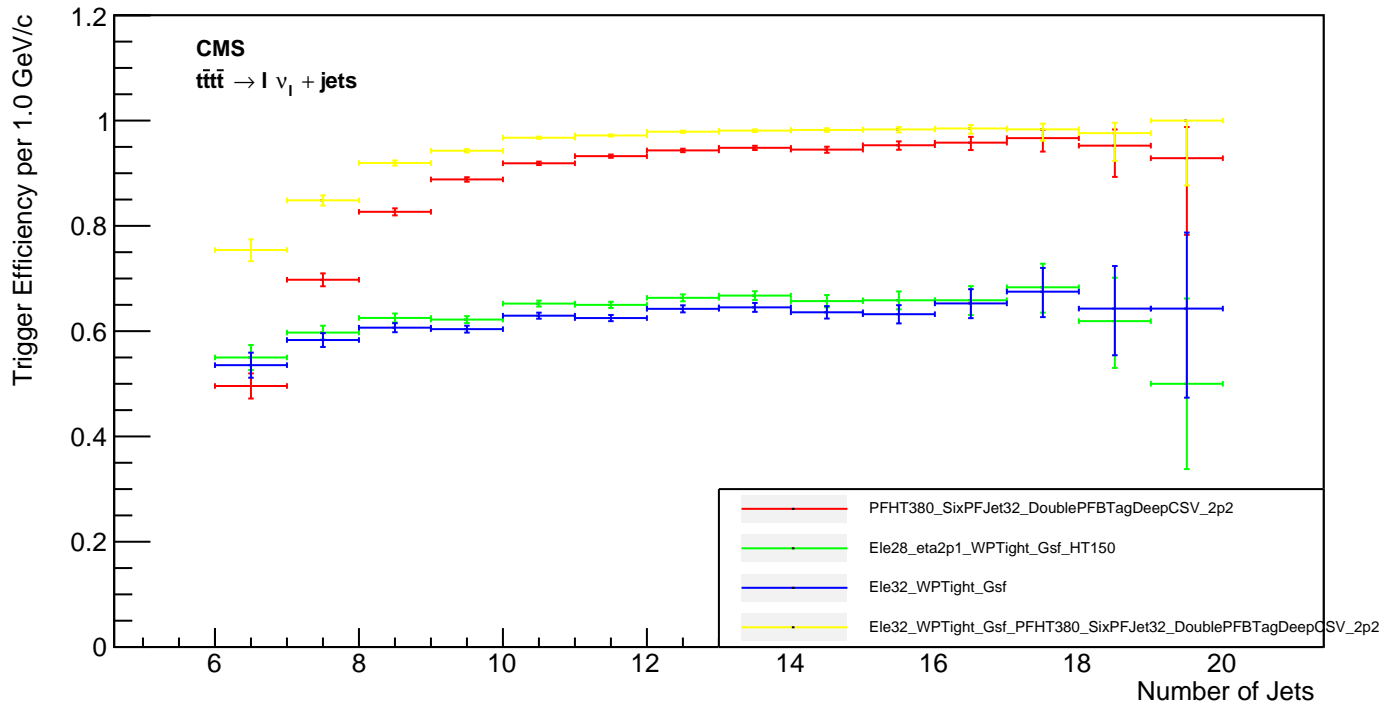
h\_jetHt\_notrigger

Entries	36917
Mean	1059
Std Dev	413.3

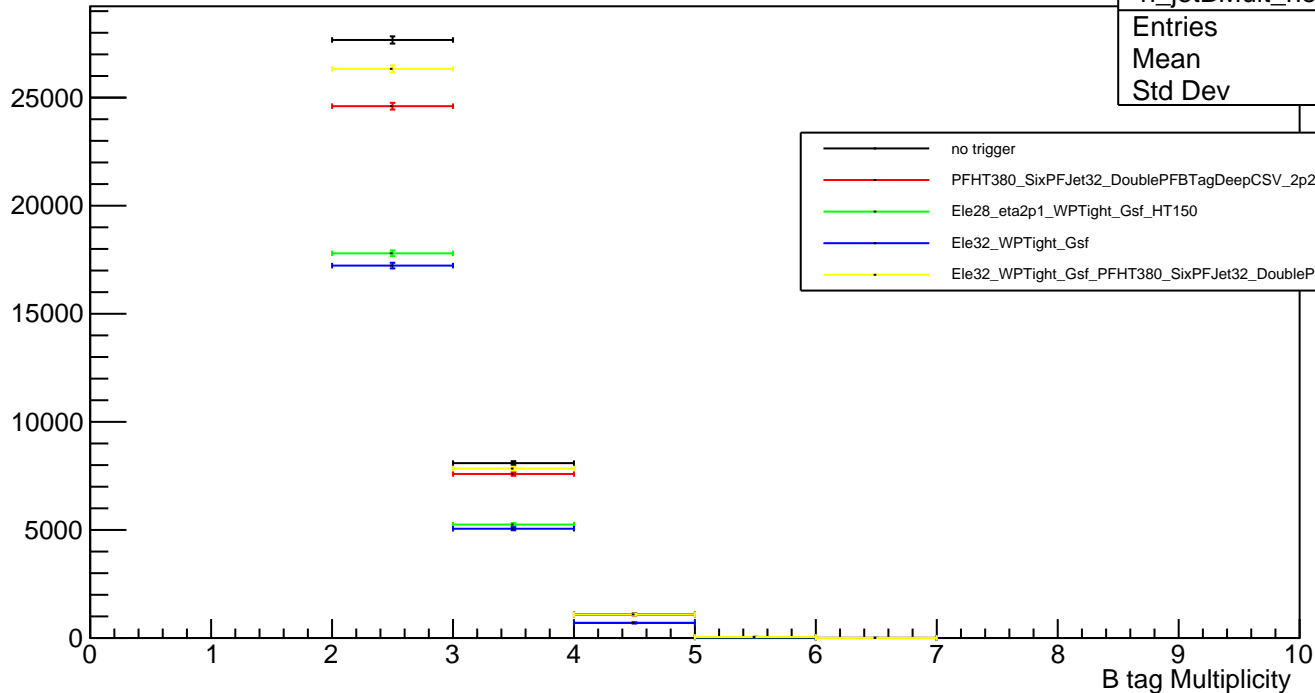


Number of Events per Number of Jets

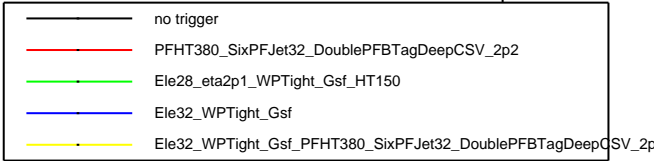


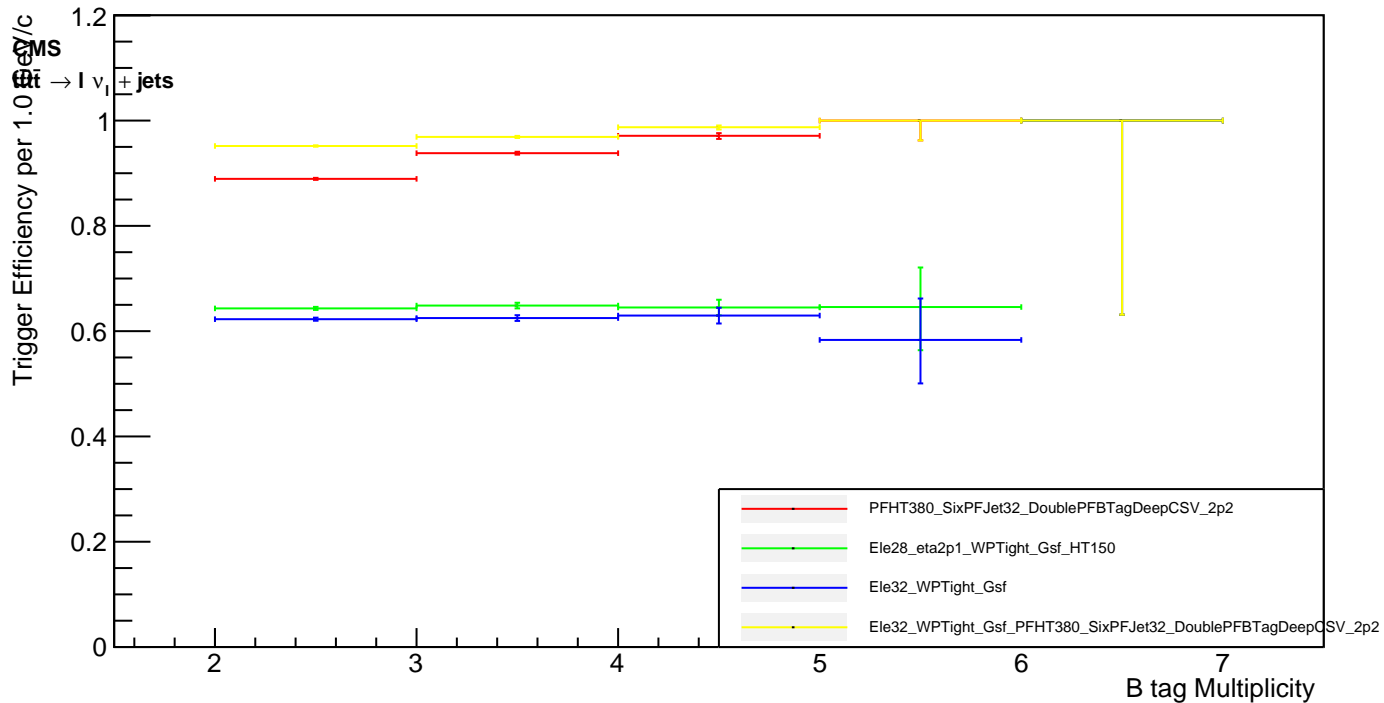


Number of Events per Number of Jets

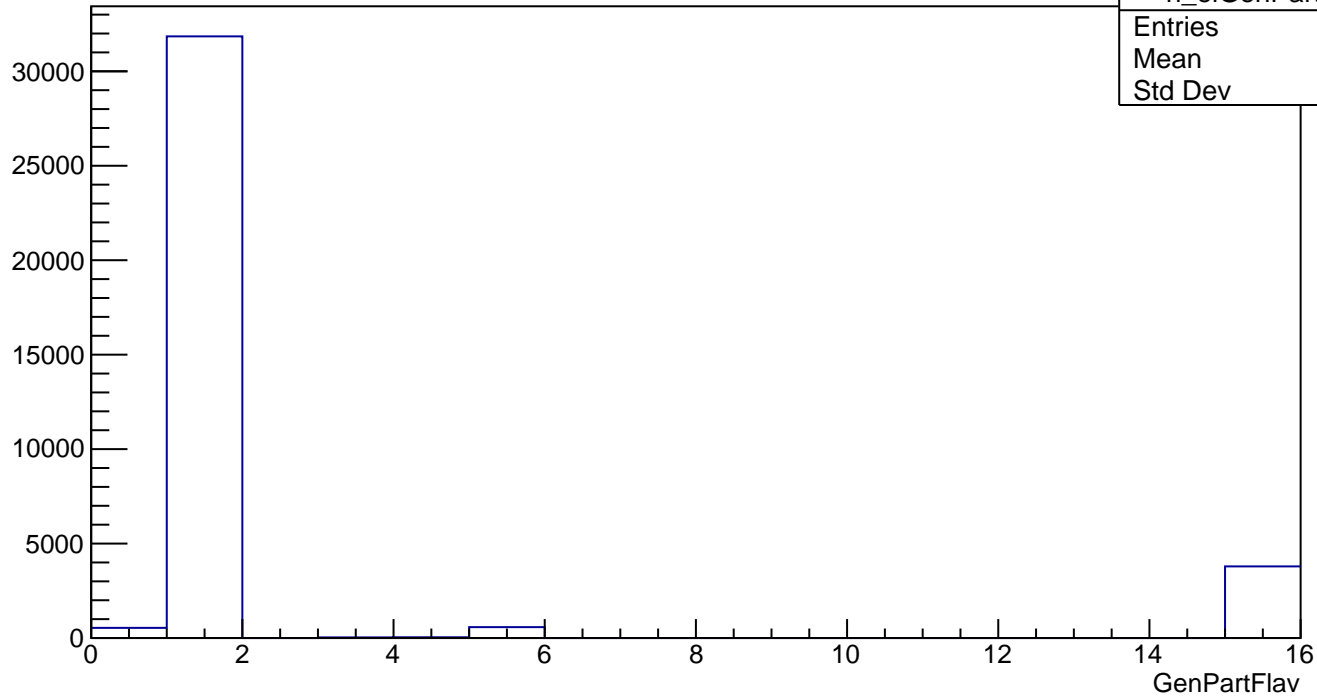


h_jetBMult_notrigger	
Entries	36917
Mean	2.783
Std Dev	0.5217



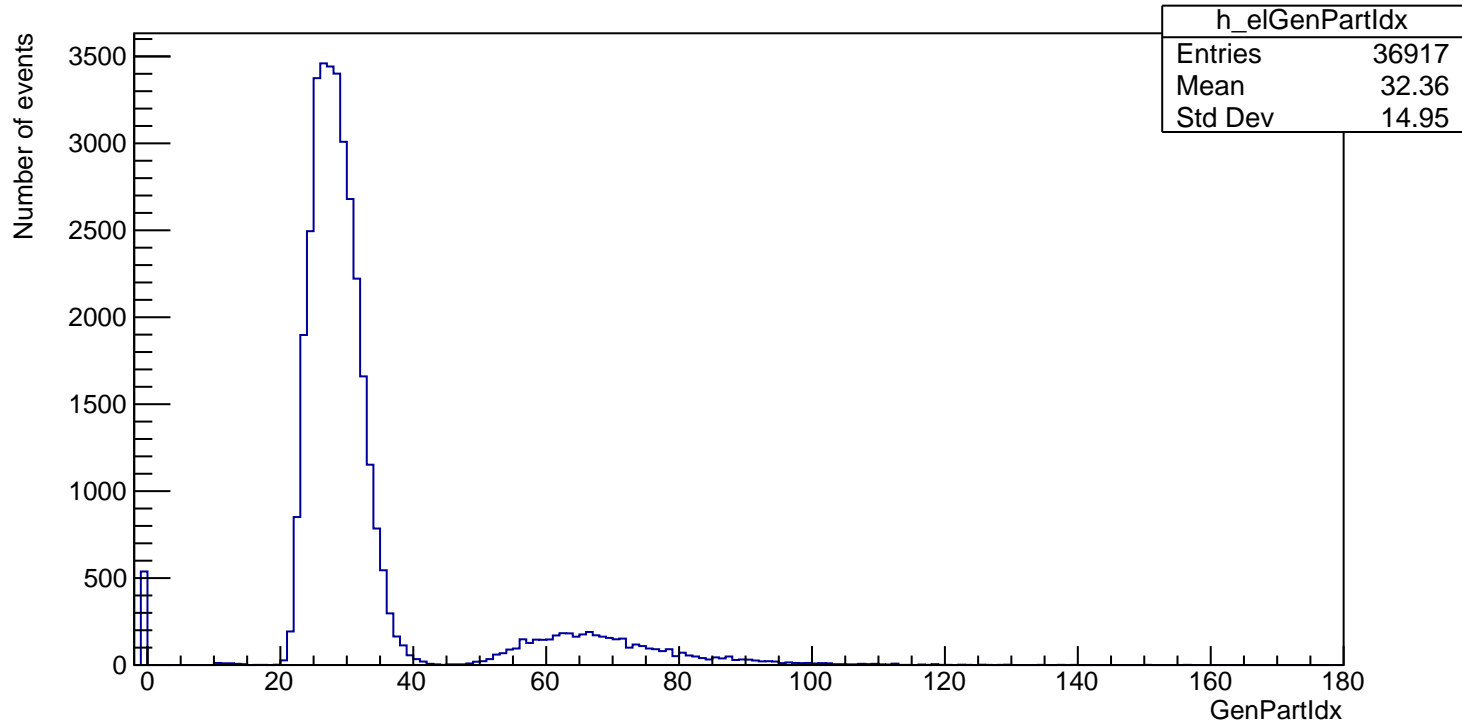


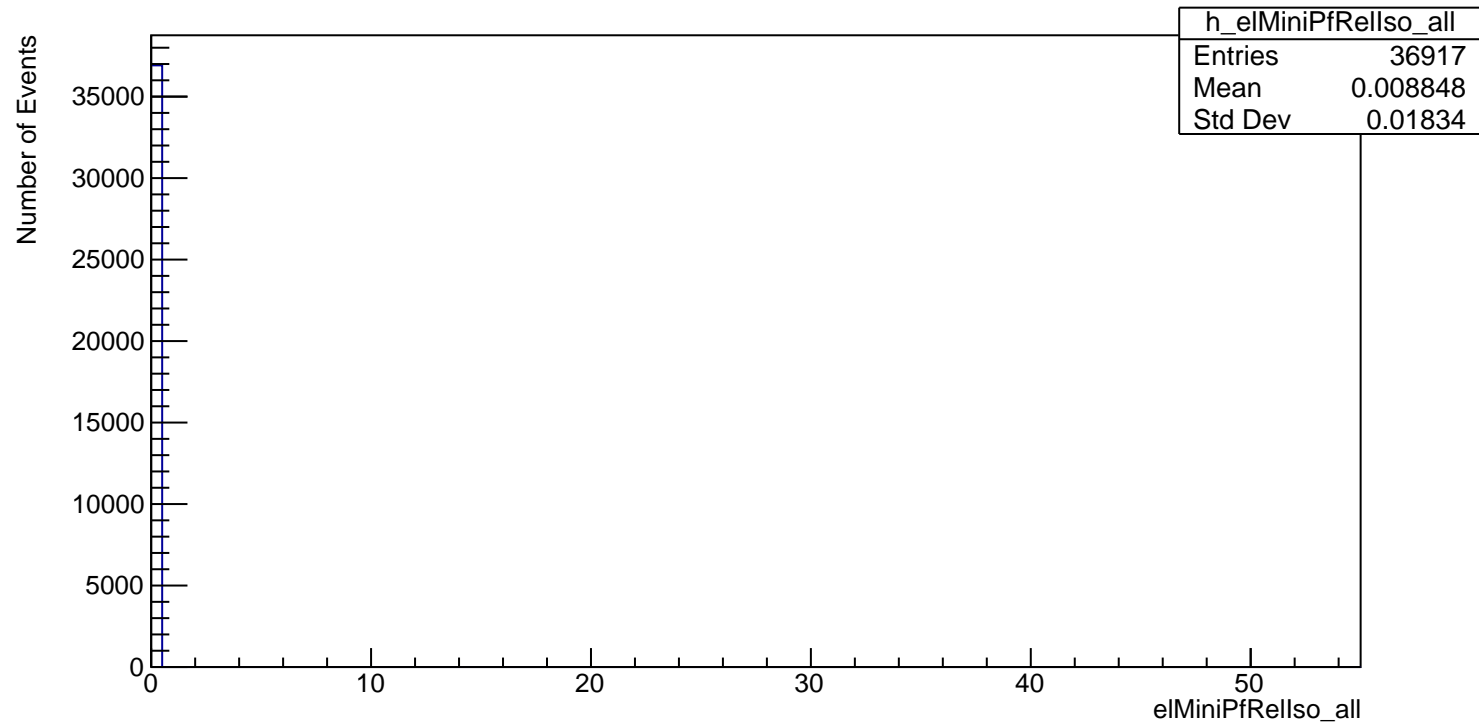
Number of events



h_elGenPartFlav	
Entries	36917
Mean	2.495
Std Dev	4.269







Number of Events per 1 GeV/c

**CMS**

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

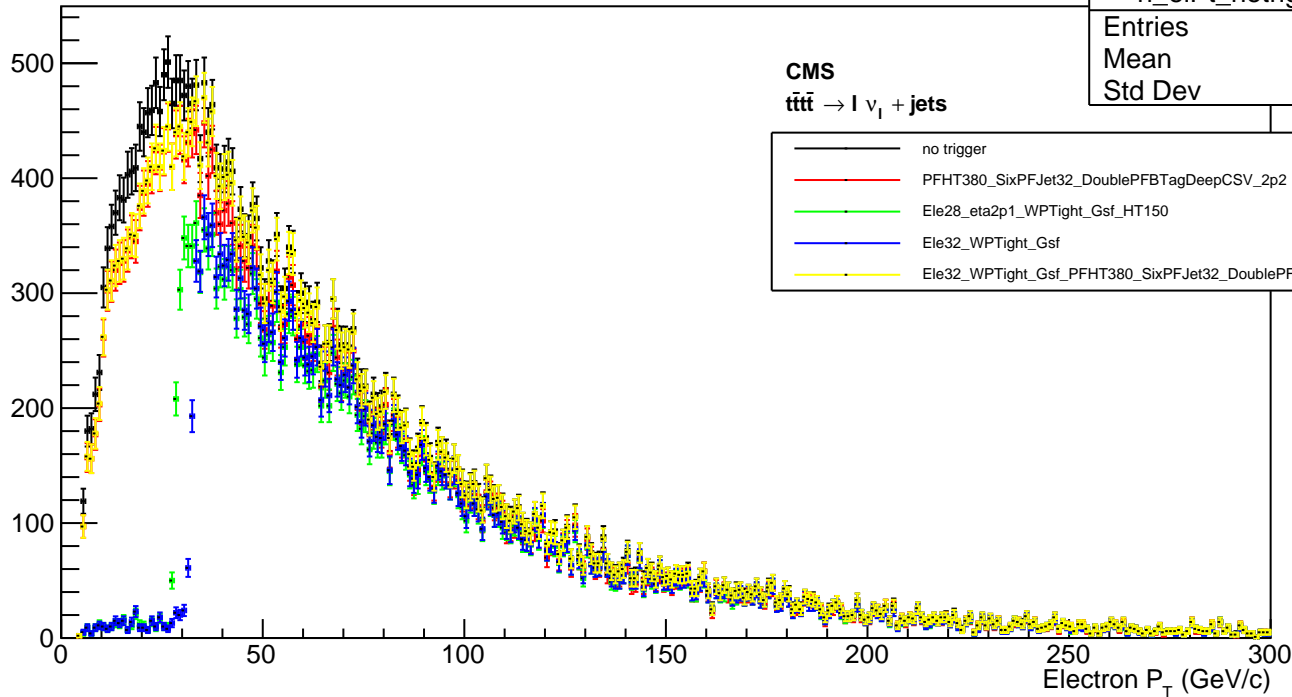
h\_elPt\_notrigger

Entries 36917

Mean 66.94

Std Dev 52.07

- no trigger
- PFHT380\_SixPFJet32\_DoublePFBTagDeepCSV\_2p2
- Ele28\_eta2p1\_WPTight\_Gsf\_HT150
- Ele32\_WPTight\_Gsf
- Ele32\_WPTight\_Gsf\_PFHT380\_SixPFJet32\_DoublePFBTagDeepCSV\_2p2

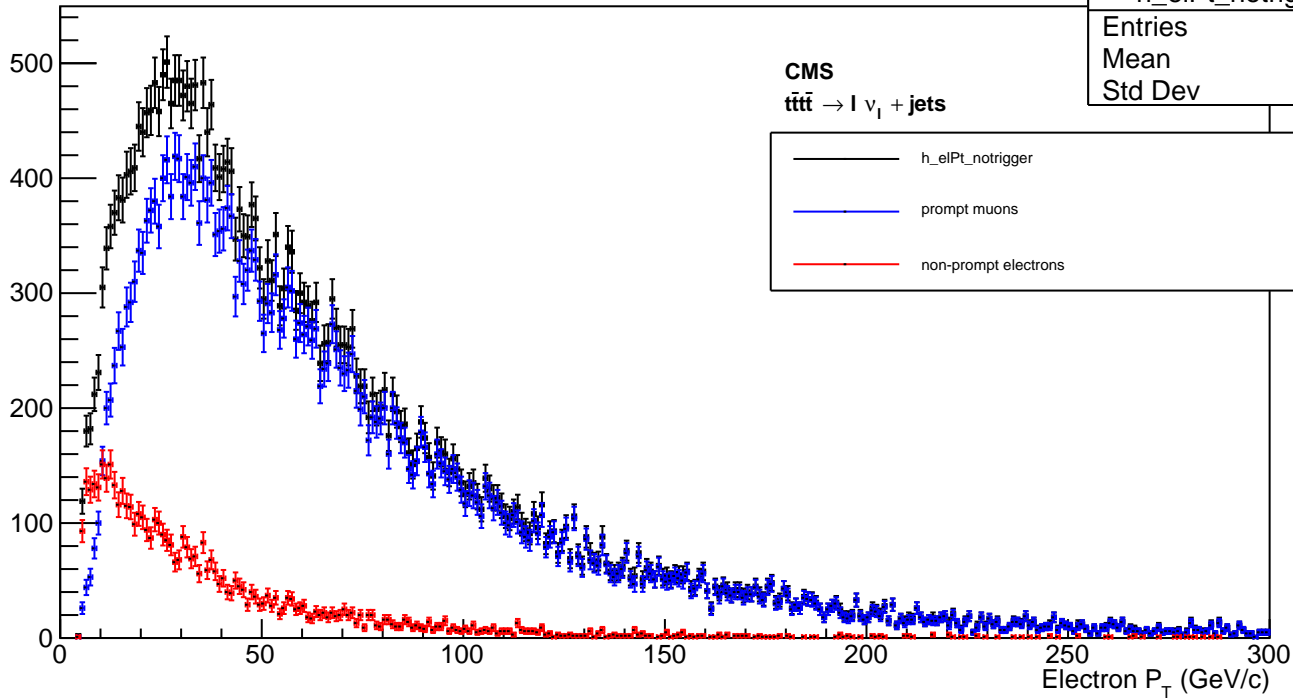
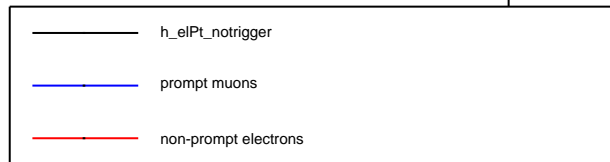


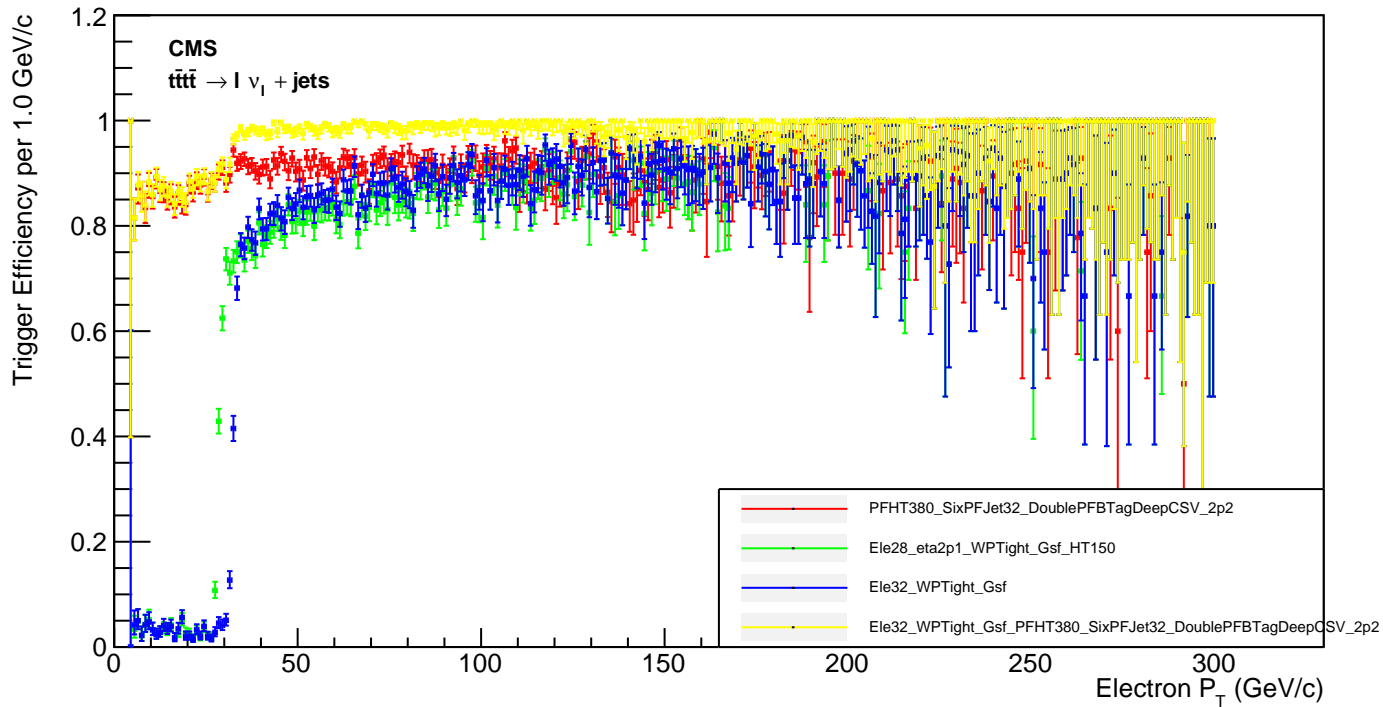
Number of Events per 1 GeV/c

**CMS**

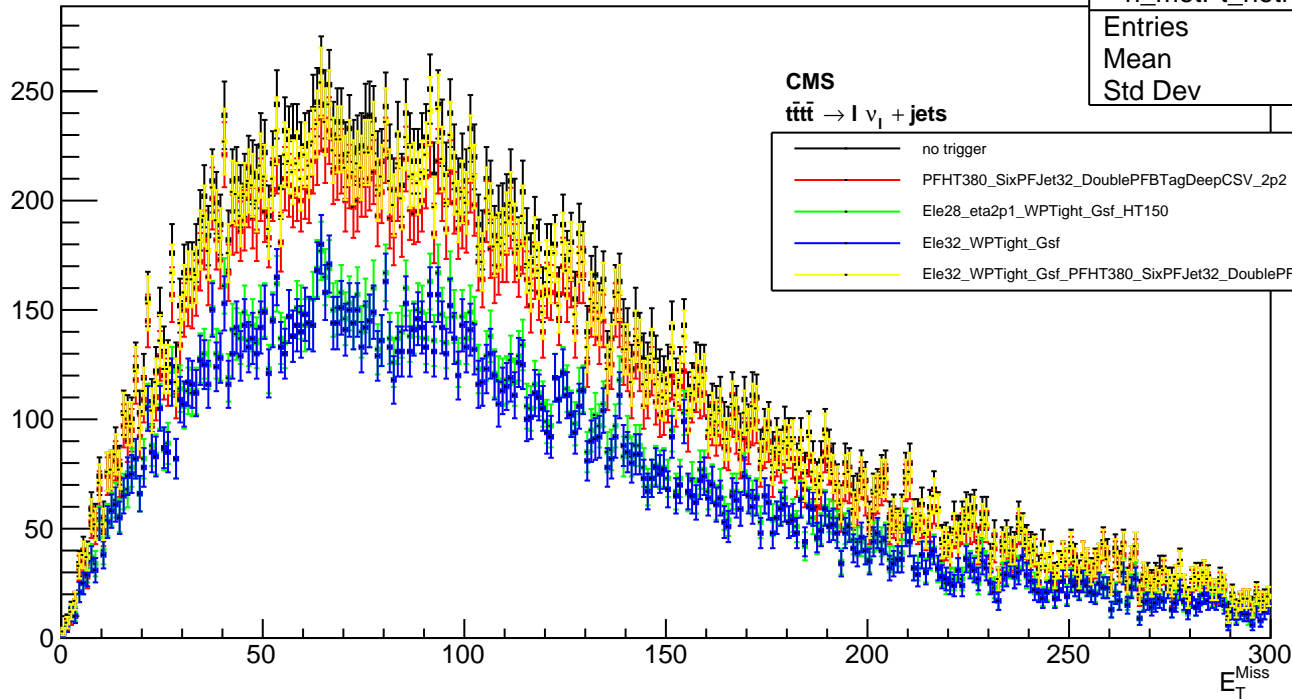
$t\bar{t}t\bar{t} \rightarrow l \nu_l + \text{jets}$

h_elPt_notrigger	
Entries	36917
Mean	66.94
Std Dev	52.07



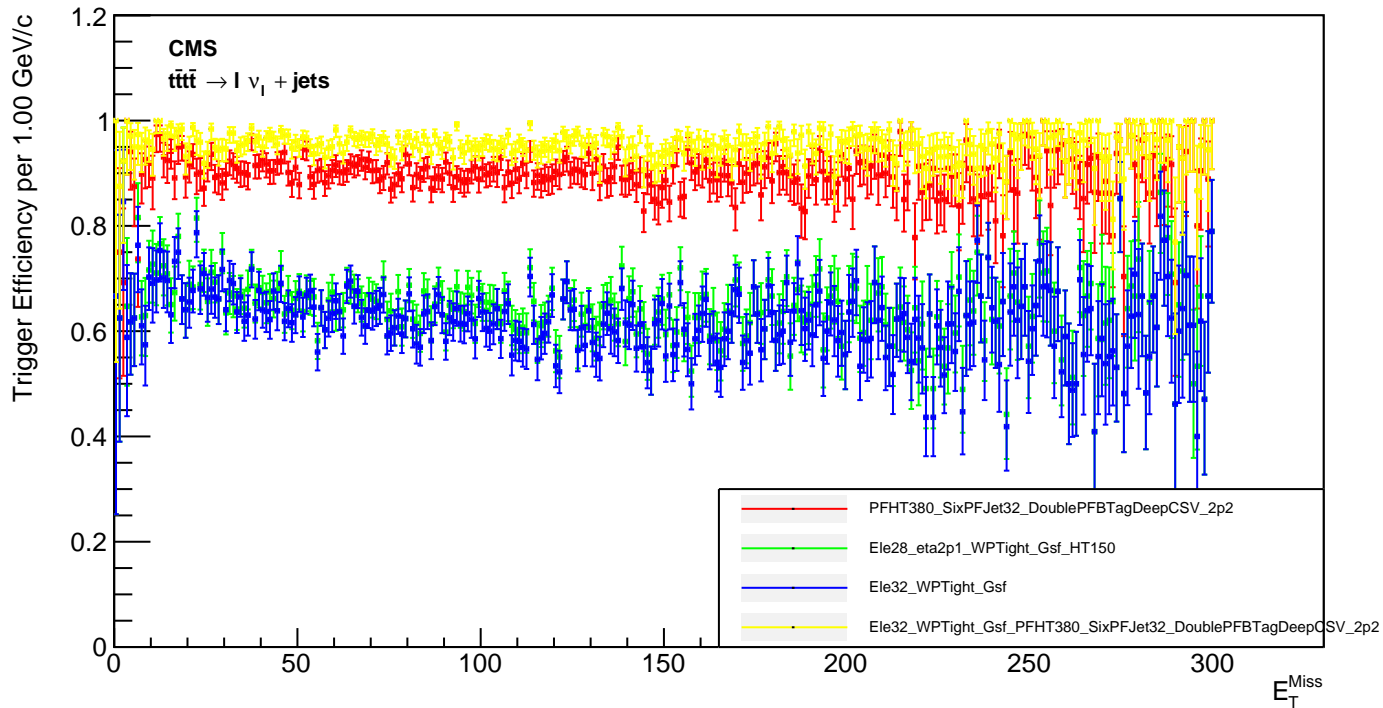


Number of Events per 1 GeV/c

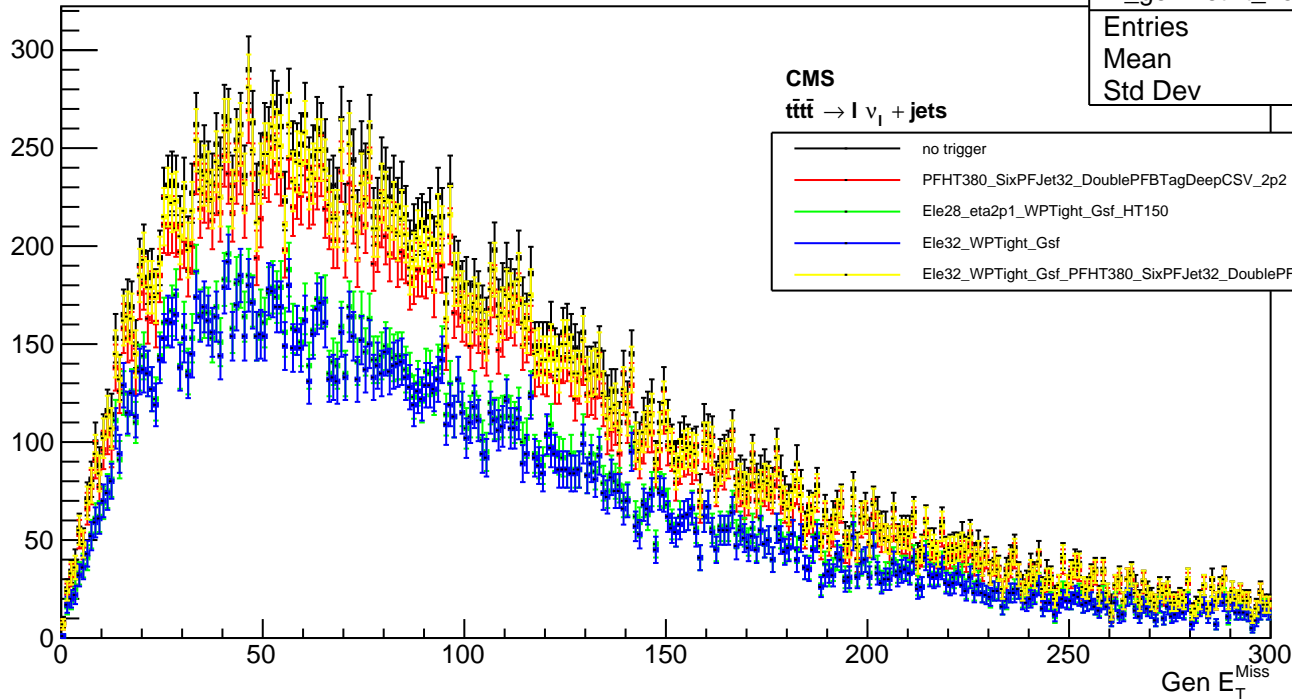


h\_metPt\_notrigger

Entries	36917
Mean	110.4
Std Dev	65.25

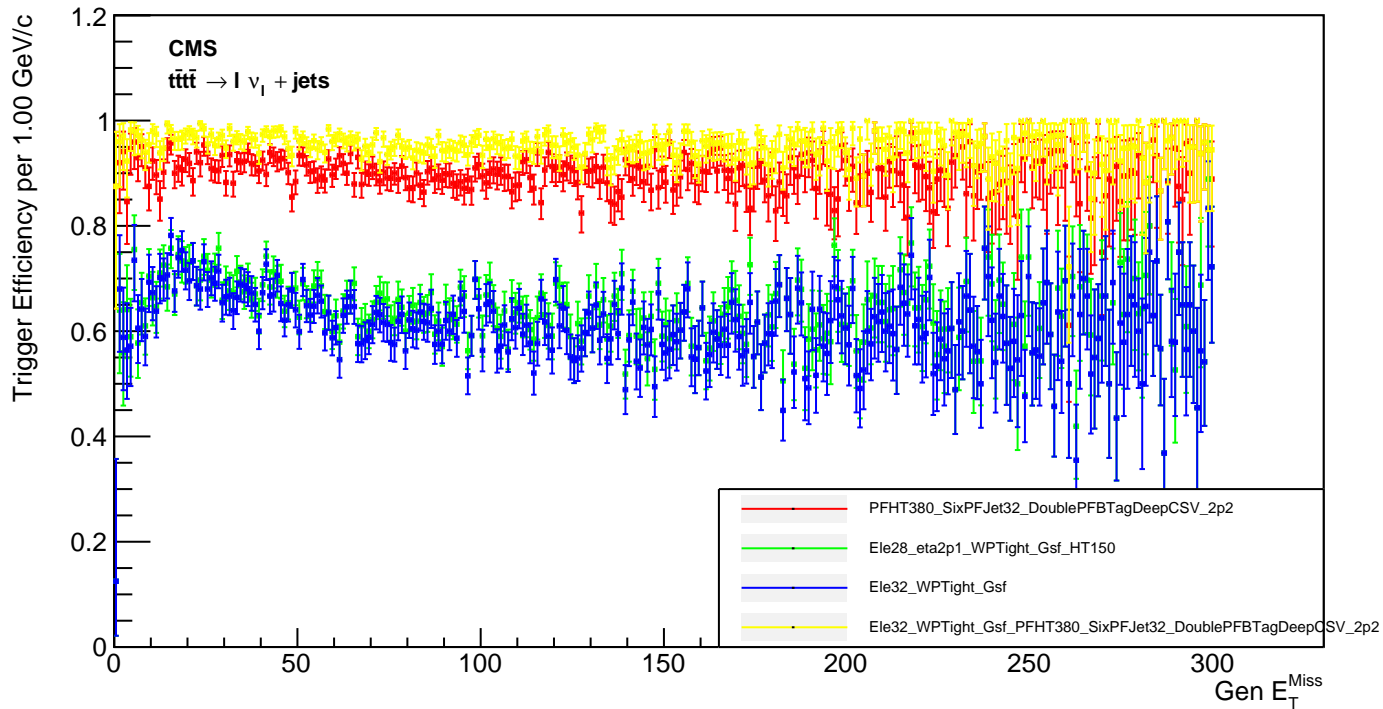


Number of Events per 1GeV/c

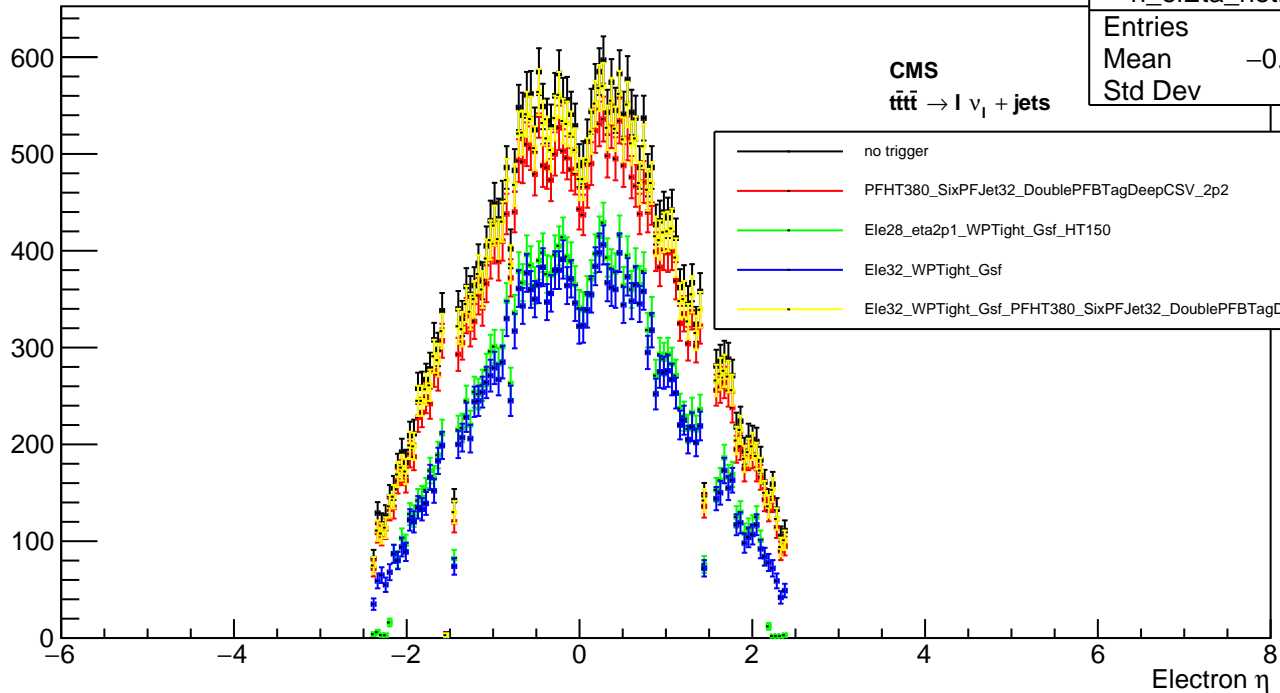


h_genMetPt_notrigger	
Entries	36917
Mean	100.4
Std Dev	65.4





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



h_elEta_notrigger	
Entries	36917
Mean	-0.002024
Std Dev	1.102

Trigger Efficiency per 0.04666666666666667 GeV/c

