

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

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

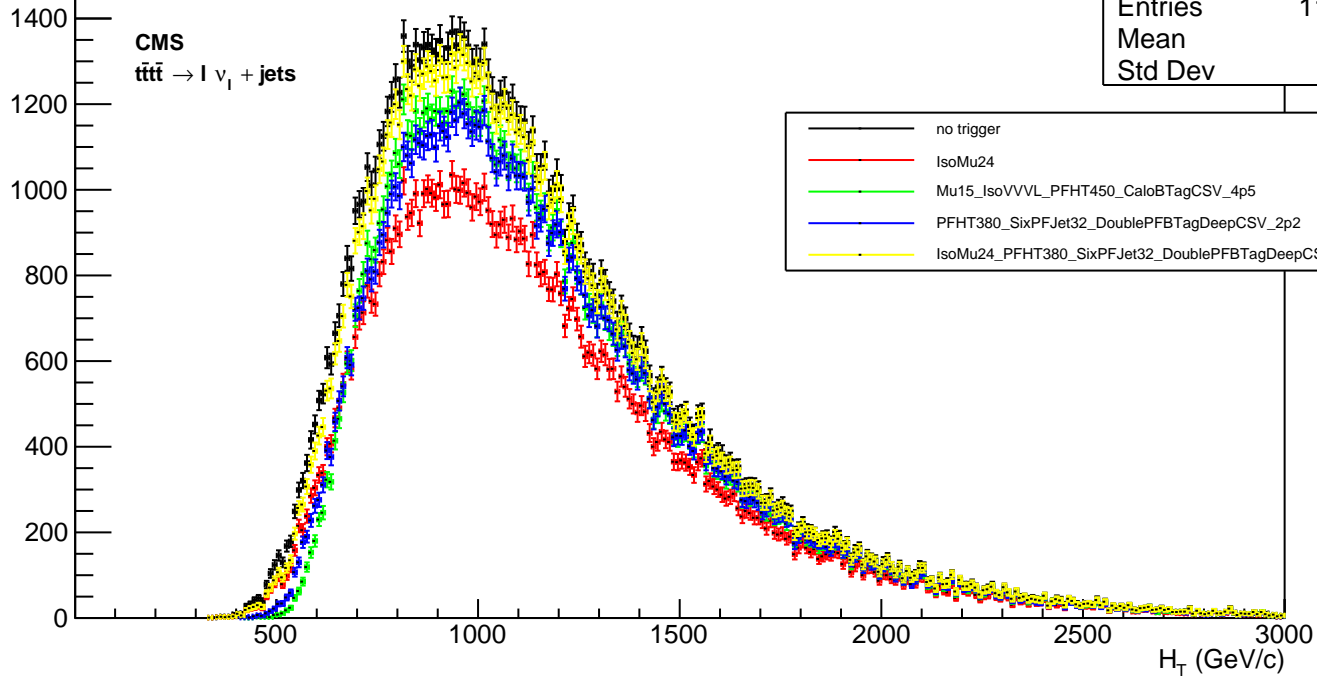
**Event Limit:** None (see last page)

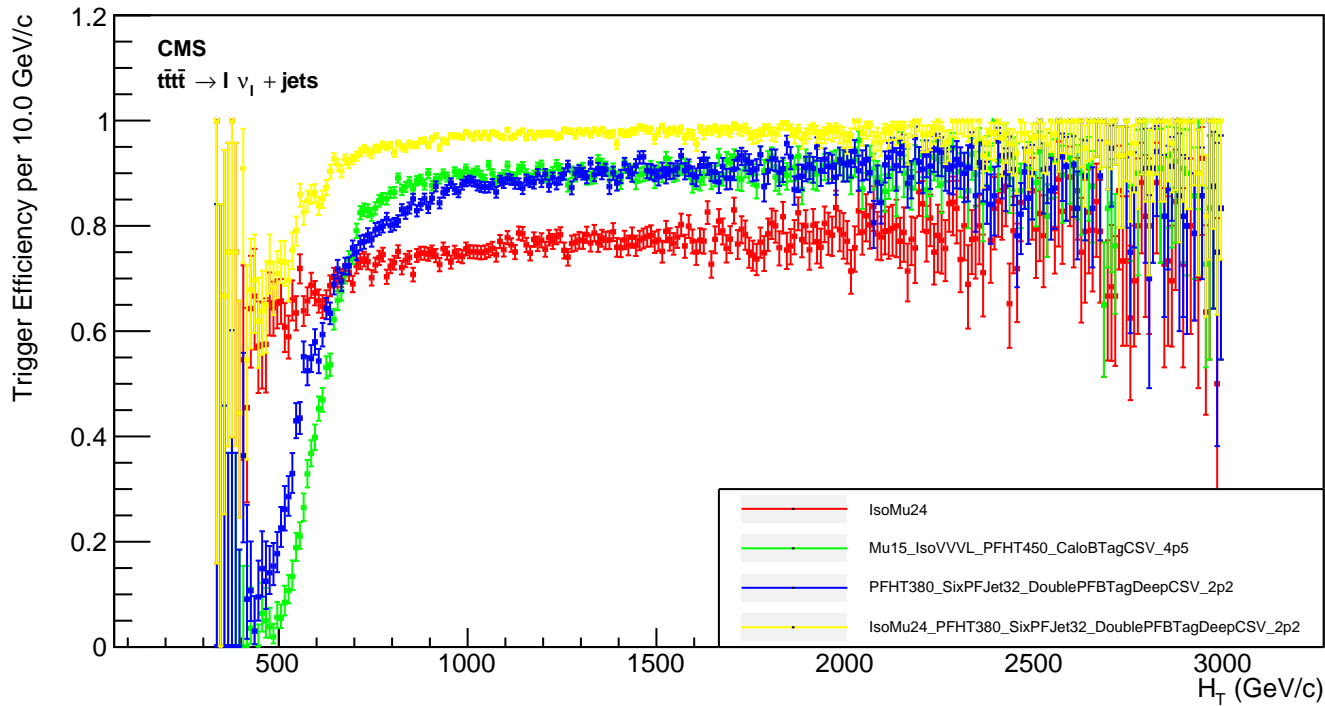
### **Off-line (post-)selection Requisites for:**

- **Jets:**  $\text{jetId} > 2$  ,  $p_T > 30$  and  $|\eta| < 2.4$  (for at least 6)  
 $\text{btagDeepFlavB} > 0.7489$  (for at least one jet)
- **Muons:** has tightId,  $|\eta| < 2.4$  and  $\text{miniPFRellso\_all} < 0.15$  (for at least 1)

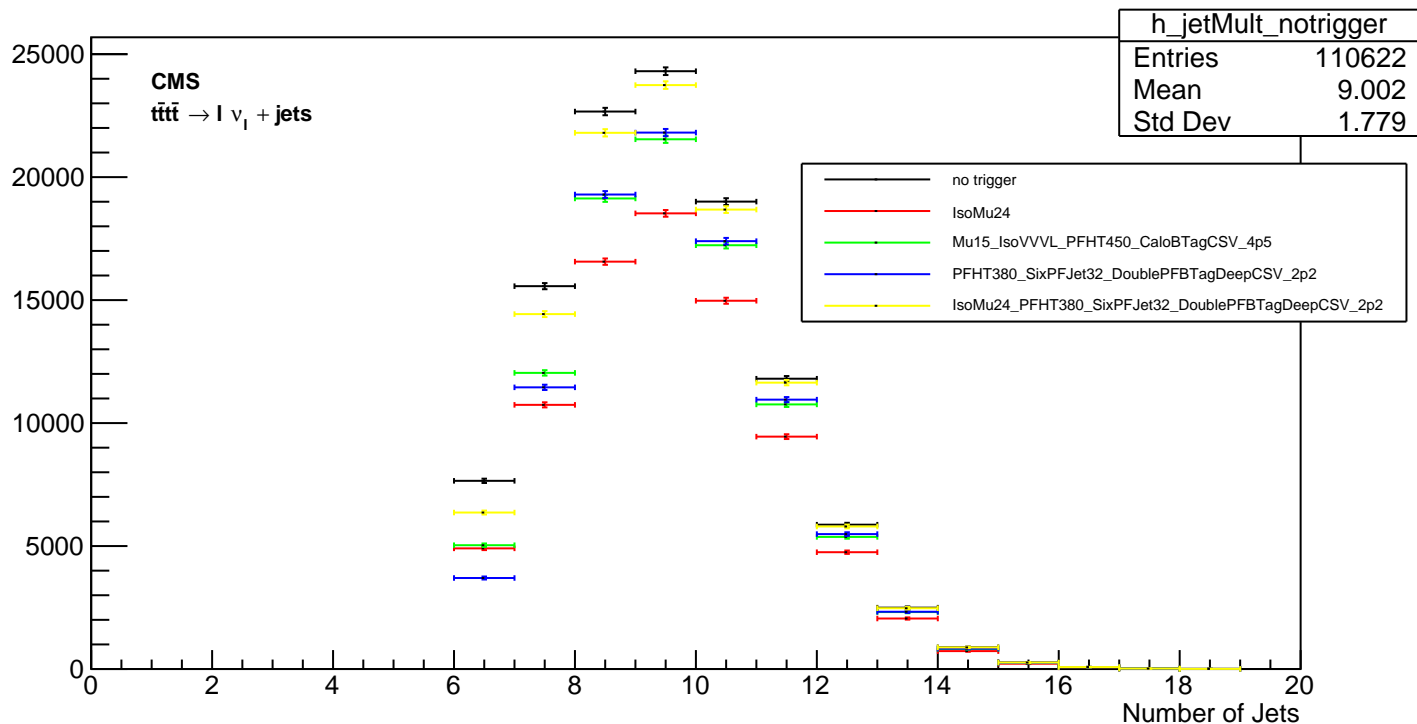
Number of Events per 10 GeV/c

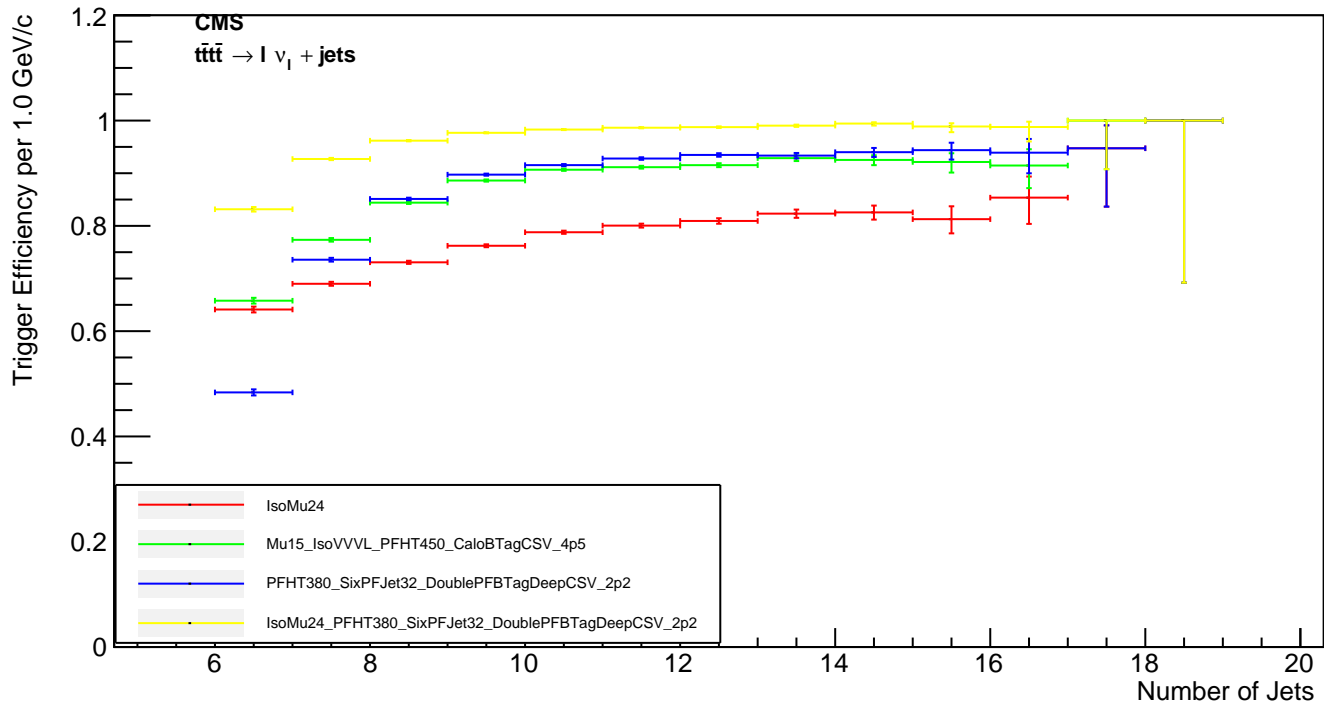
**CMS**  
 $t\bar{t}t\bar{t} \rightarrow l \nu_l + \text{jets}$



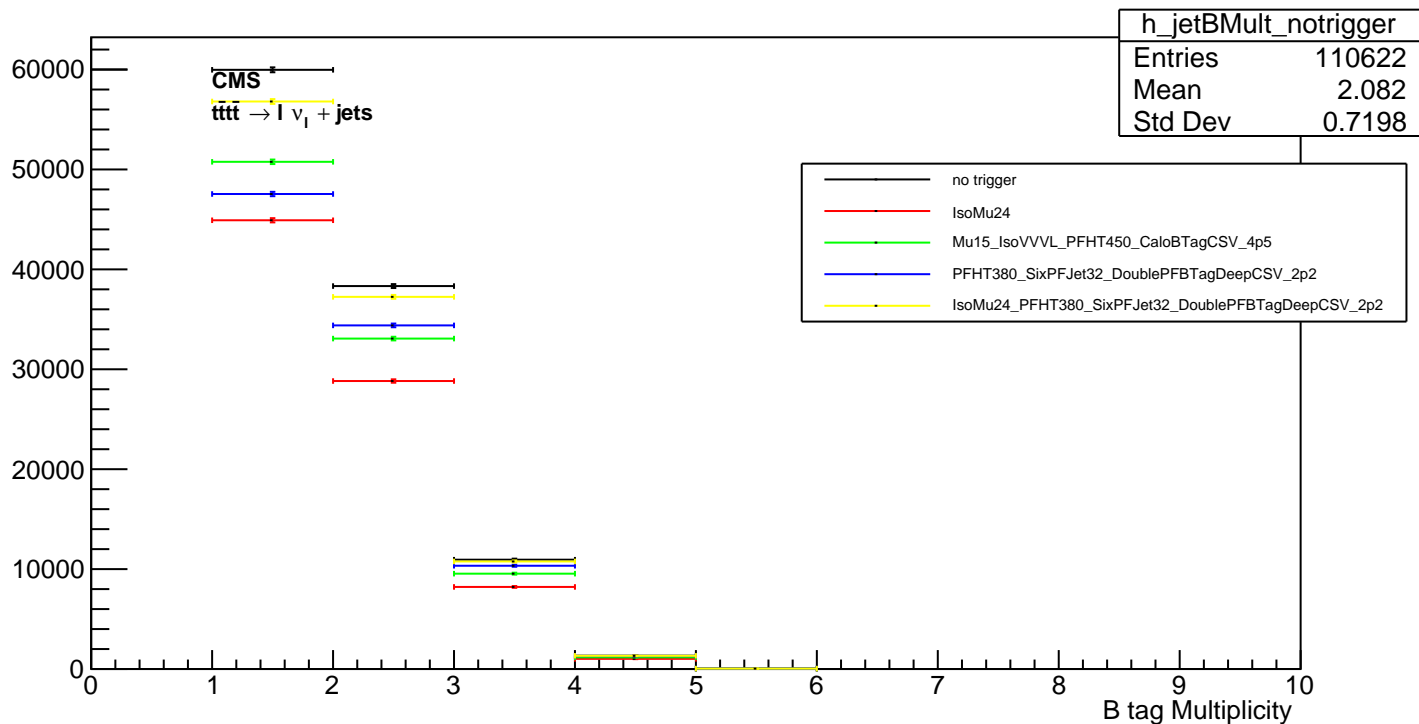


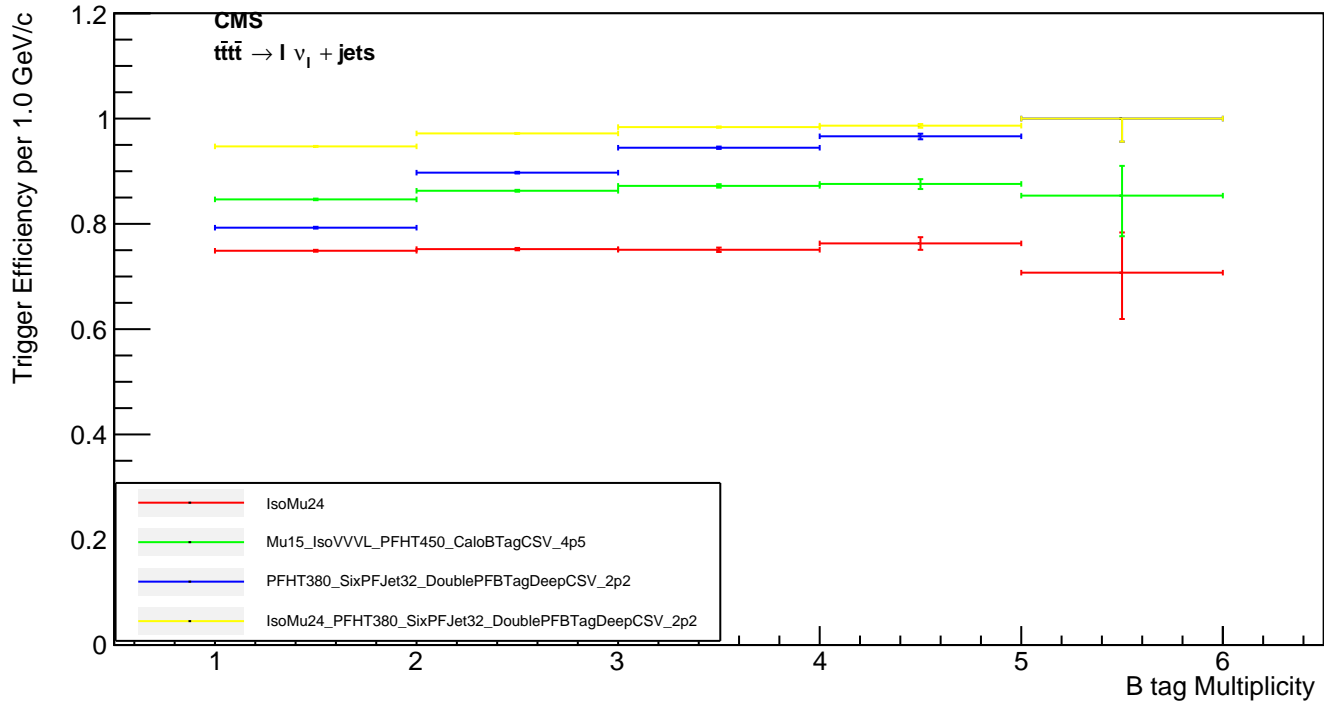
Number of Events per Number of Jets

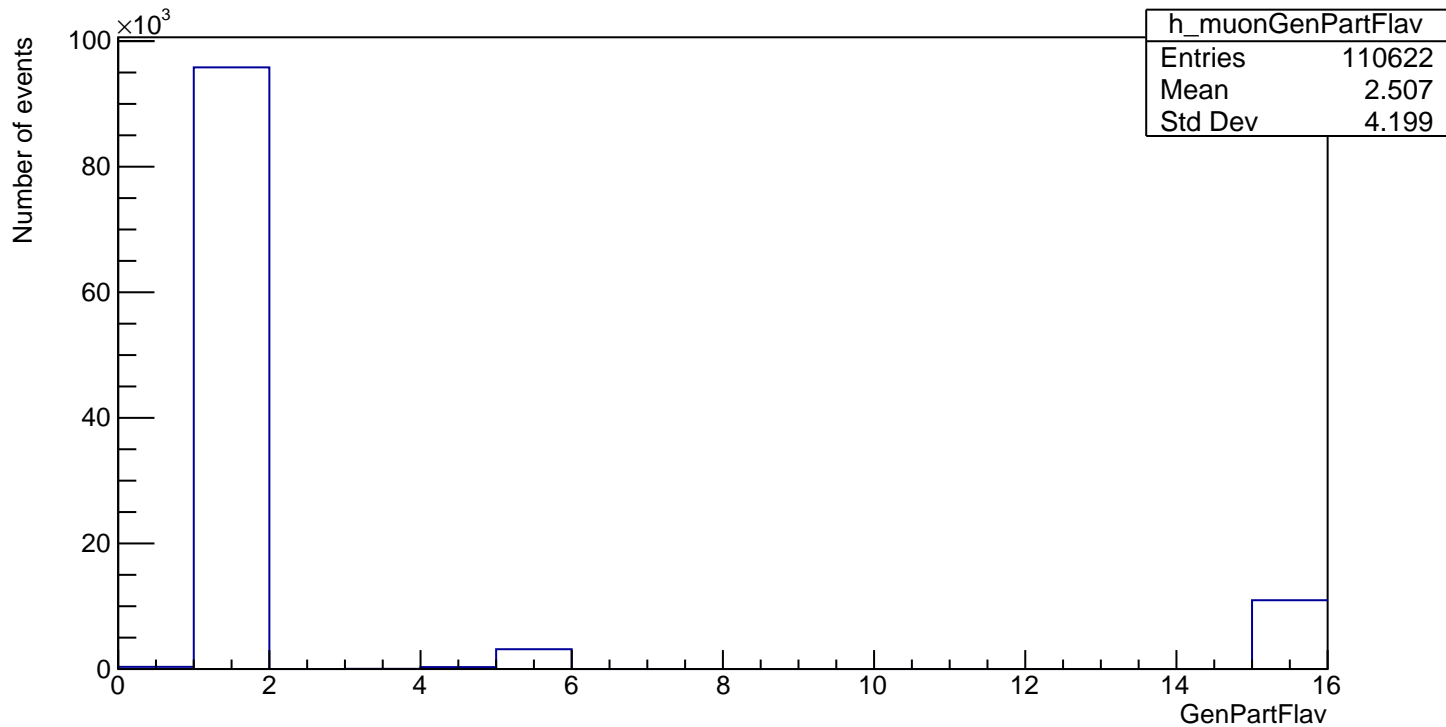




Number of Events per Number of Jets

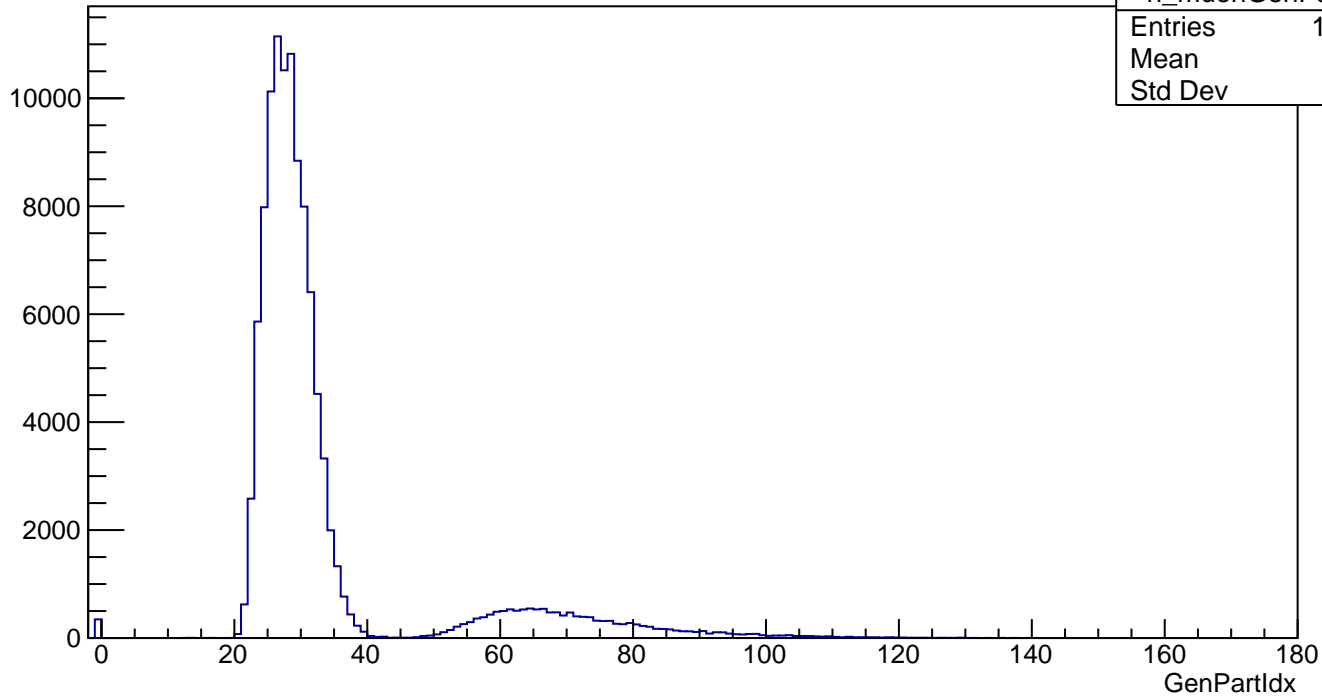




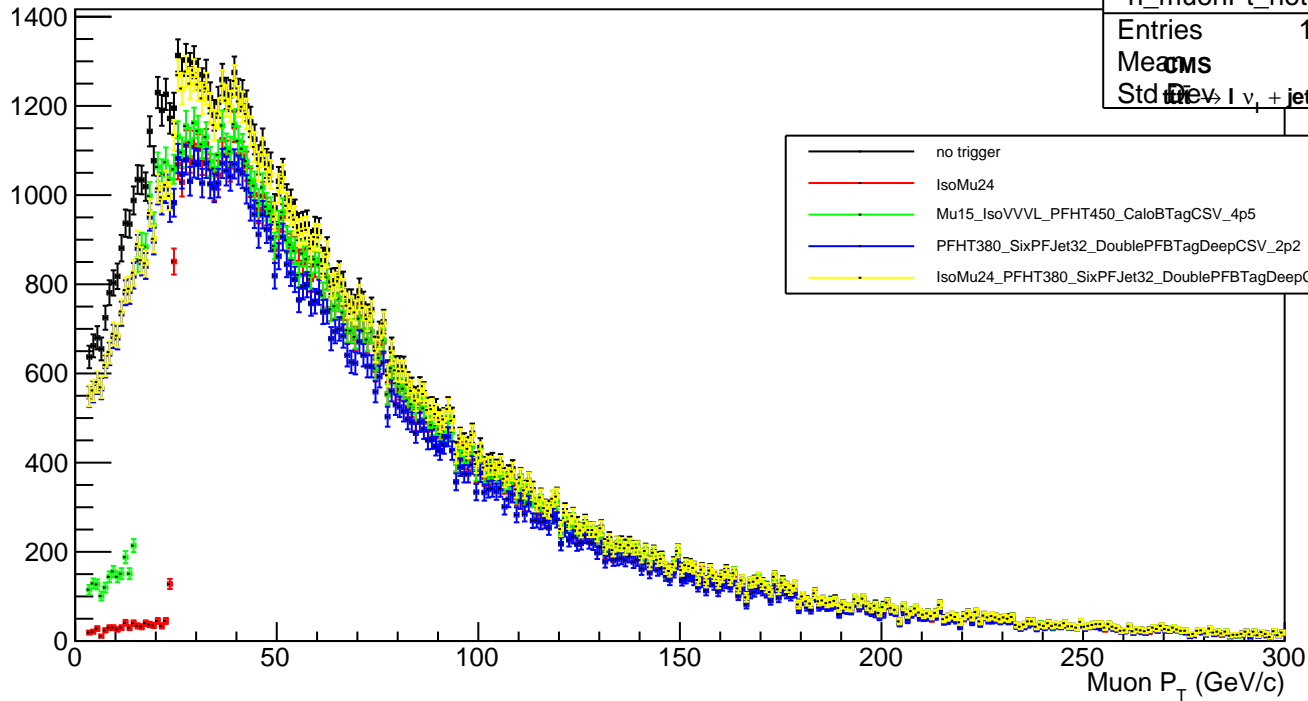




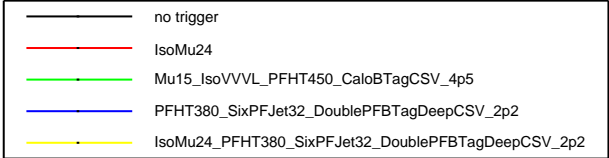
Number of events



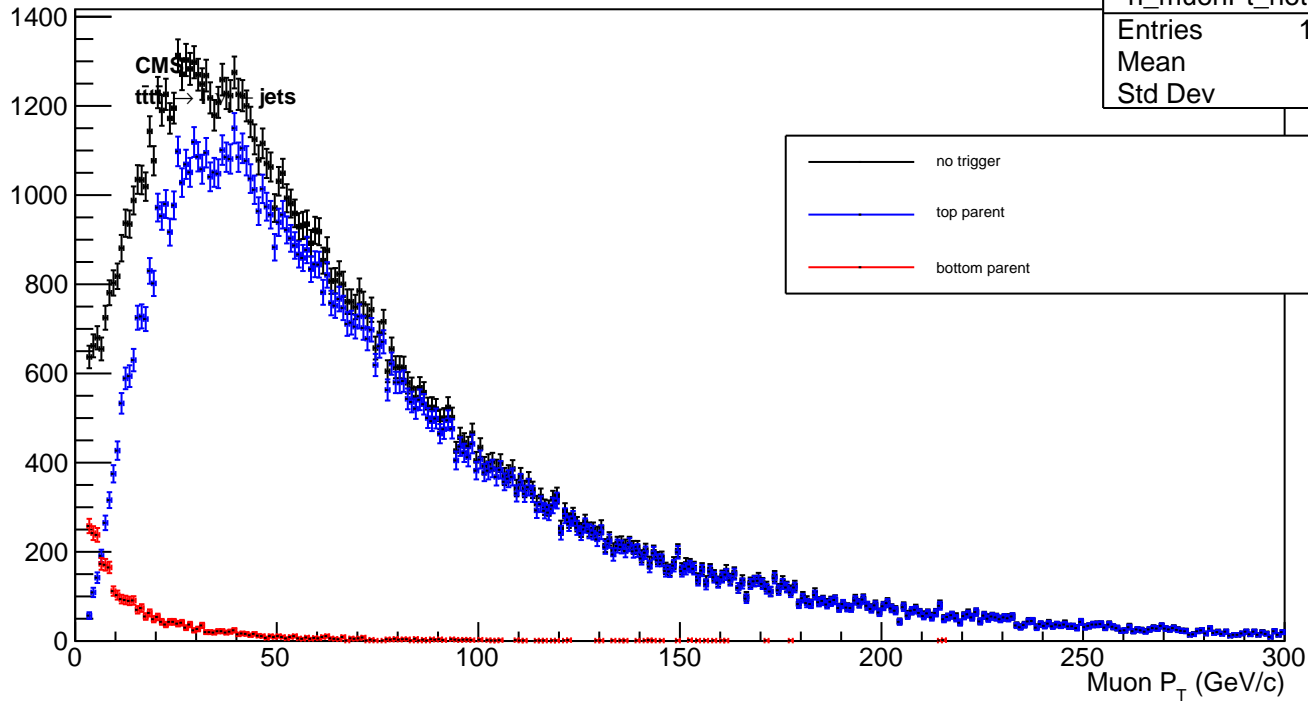
Number of Events per 1 GeV/c

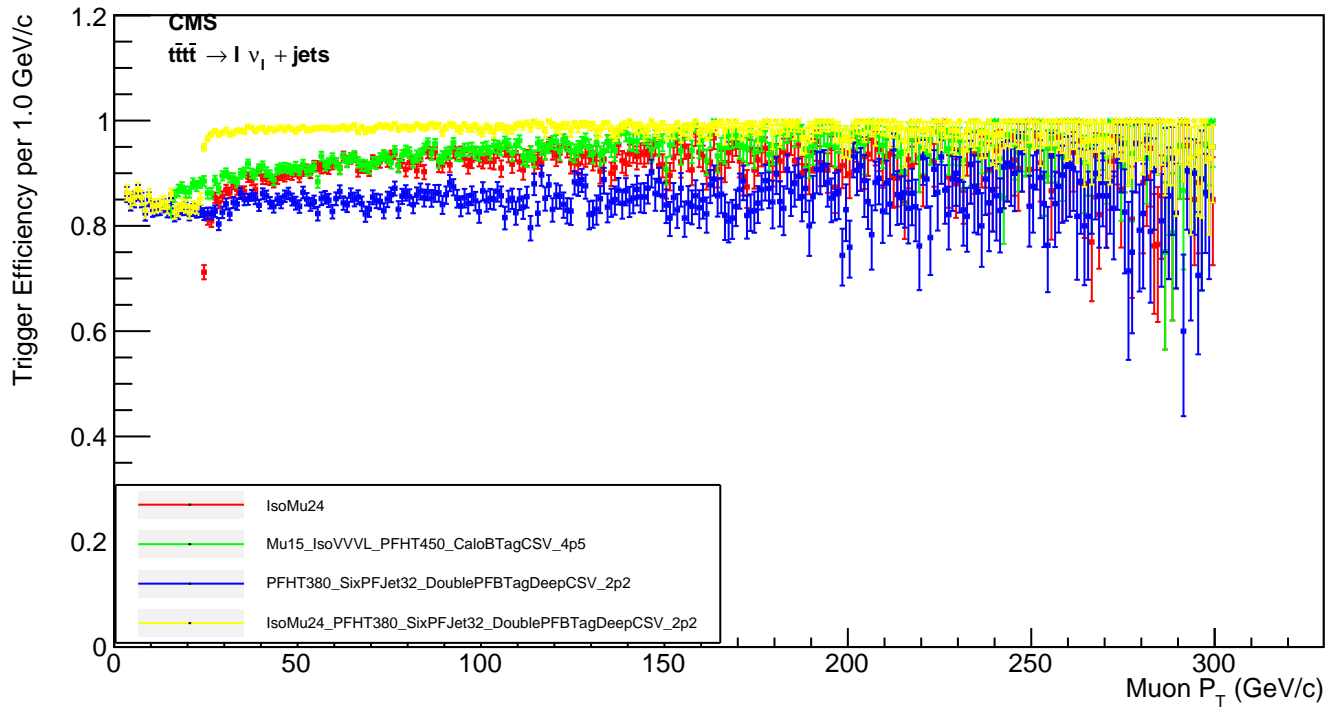


h_muonPt_notrigger	
Entries	110622
Mean	68.62
Std Dev	53.53



Number of Events per 1 GeV/c





Number of Events per 1 GeV/c

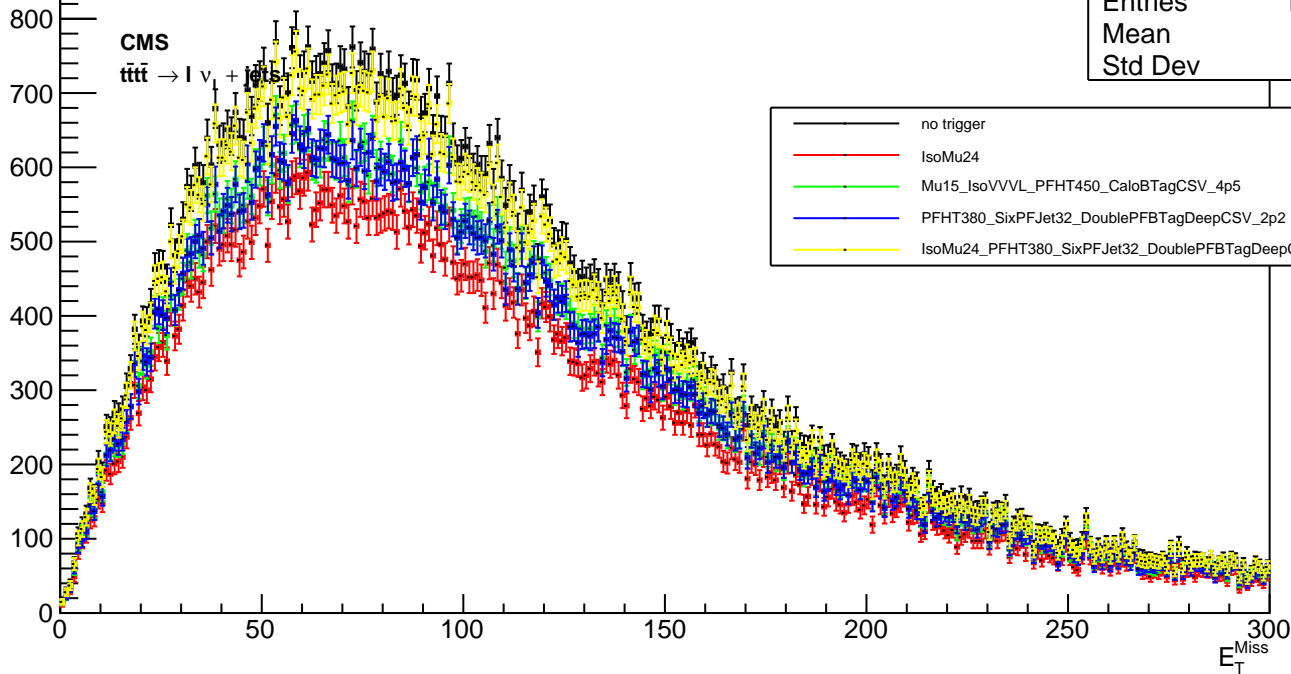
CMS

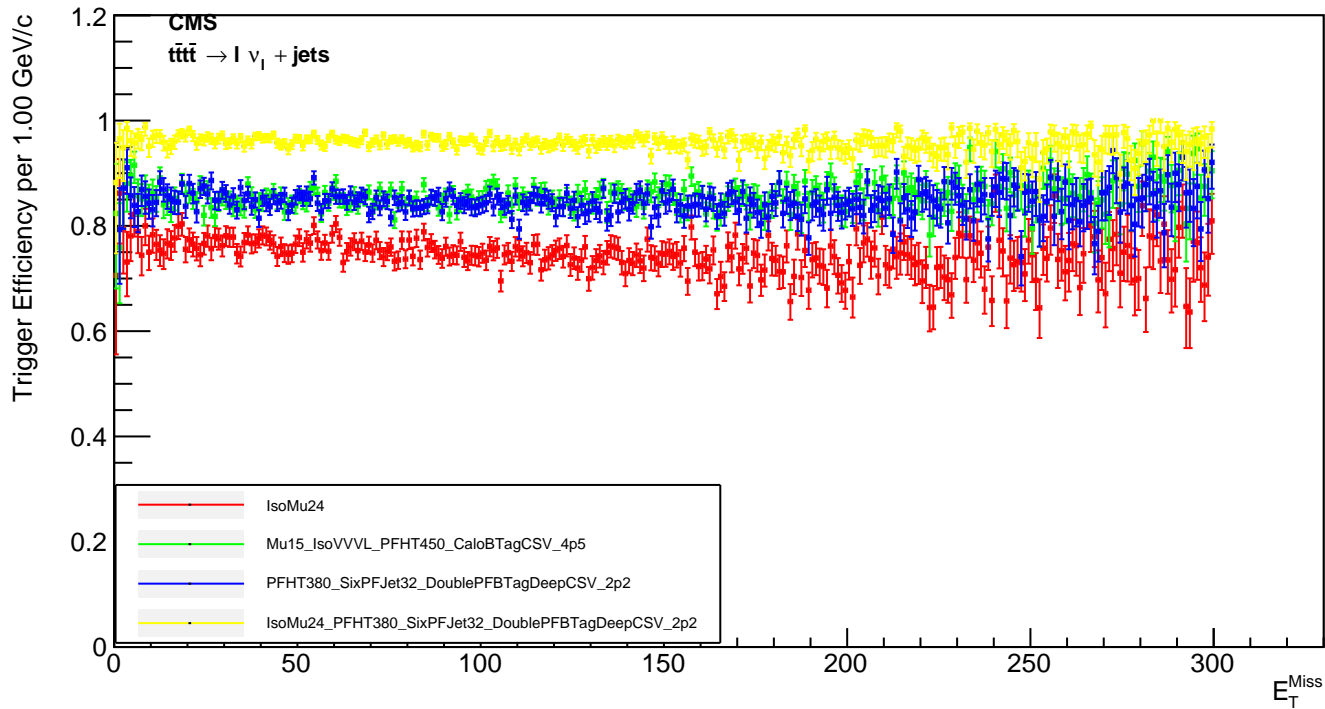
$t\bar{t}t\bar{t} \rightarrow l \nu + jets$

h\_metPt\_notrigger

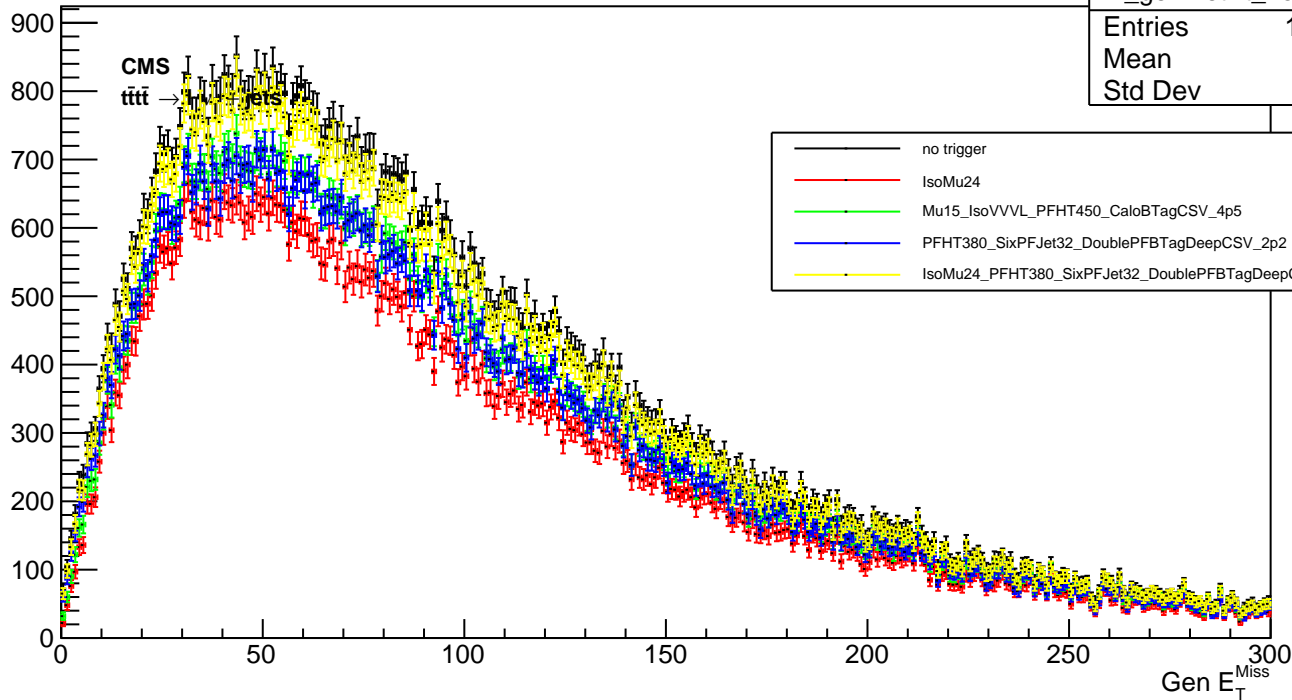
Entries	110622
Mean	107.3
Std Dev	64.66

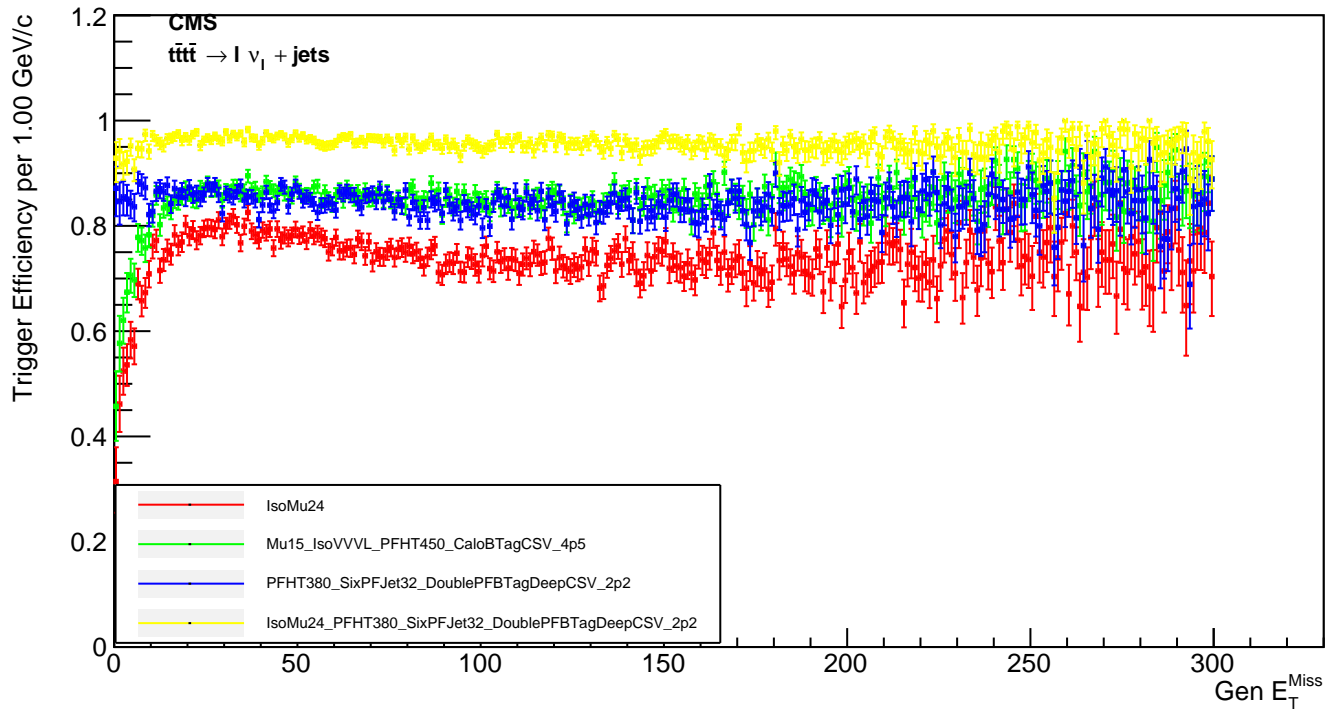
—	no trigger
—	IsoMu24
—	Mu15_IsoVVVL_PFHT450_CaloBTagCSV_4p5
—	PFHT380_SixPFJet32_DoublePFBTagDeepCSV_2p2
—	IsoMu24_PFHT380_SixPFJet32_DoublePFBTagDeepCSV_2p2





Number of Events per 1GeV/c







Trigger Efficiency per 0.04666666666667 GeV/c

