

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

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

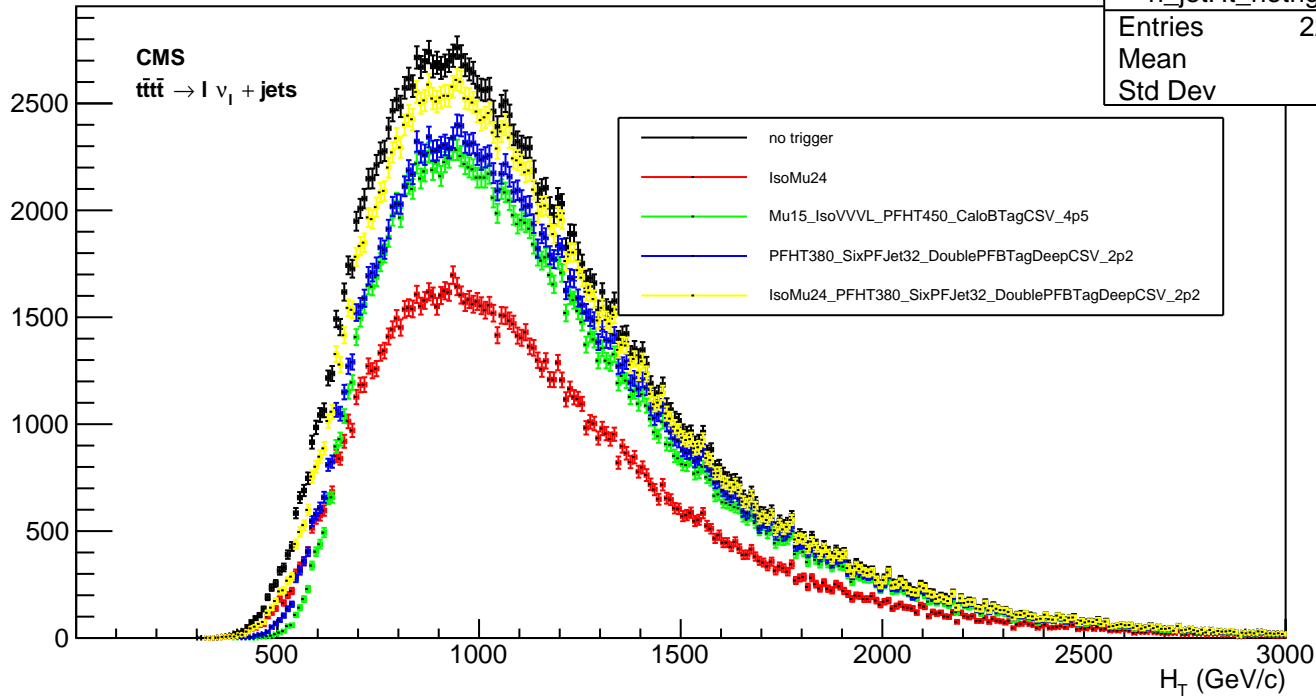
**Event Limit:** None (see last page)

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

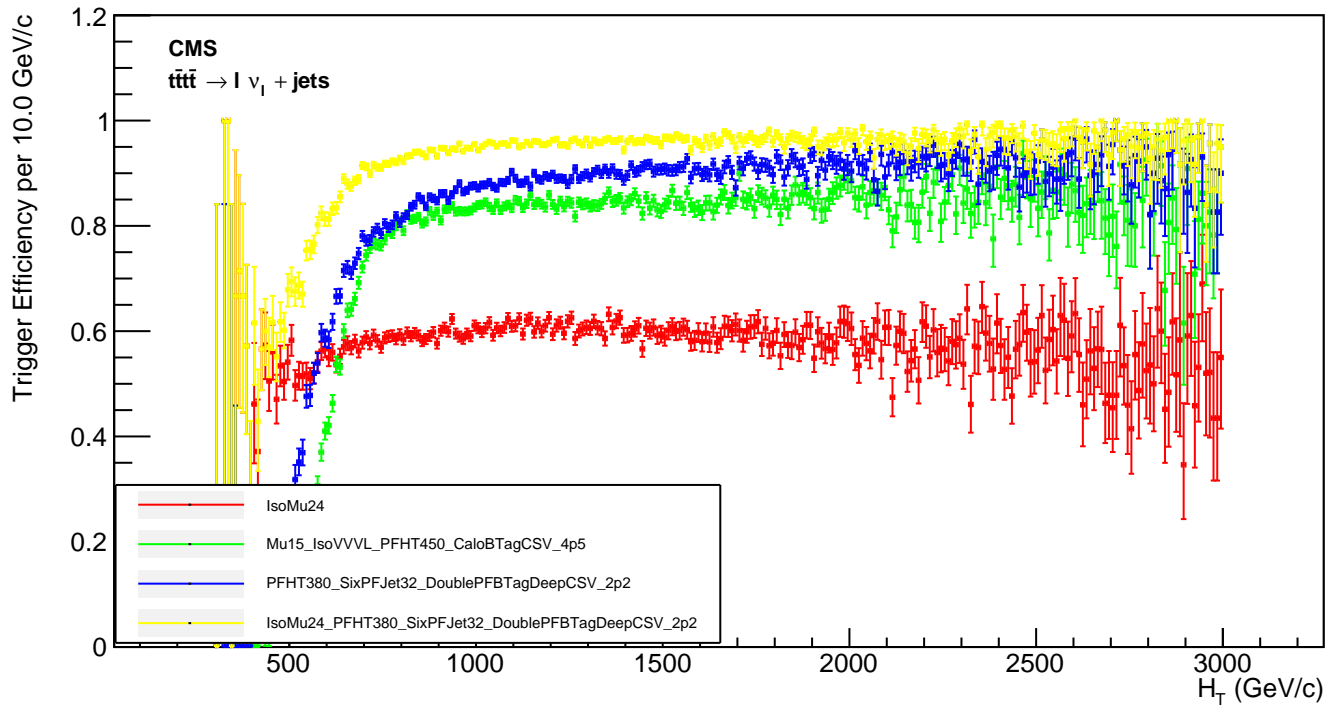
- **Jets:**  $\text{jetId} > 2$  ,  $p_T > 30$  and  $|\eta| < 2.4$  (for at least 6)  
 $\text{btagDeepFlavB} > 0.7489$  (for at least one jet)
- **Muons:** has tightId,  $|\eta| < 2.4$  and  $\text{miniPFRellso\_all} < 0.15$  (for at least 1)

Number of Events per 10 GeV/c

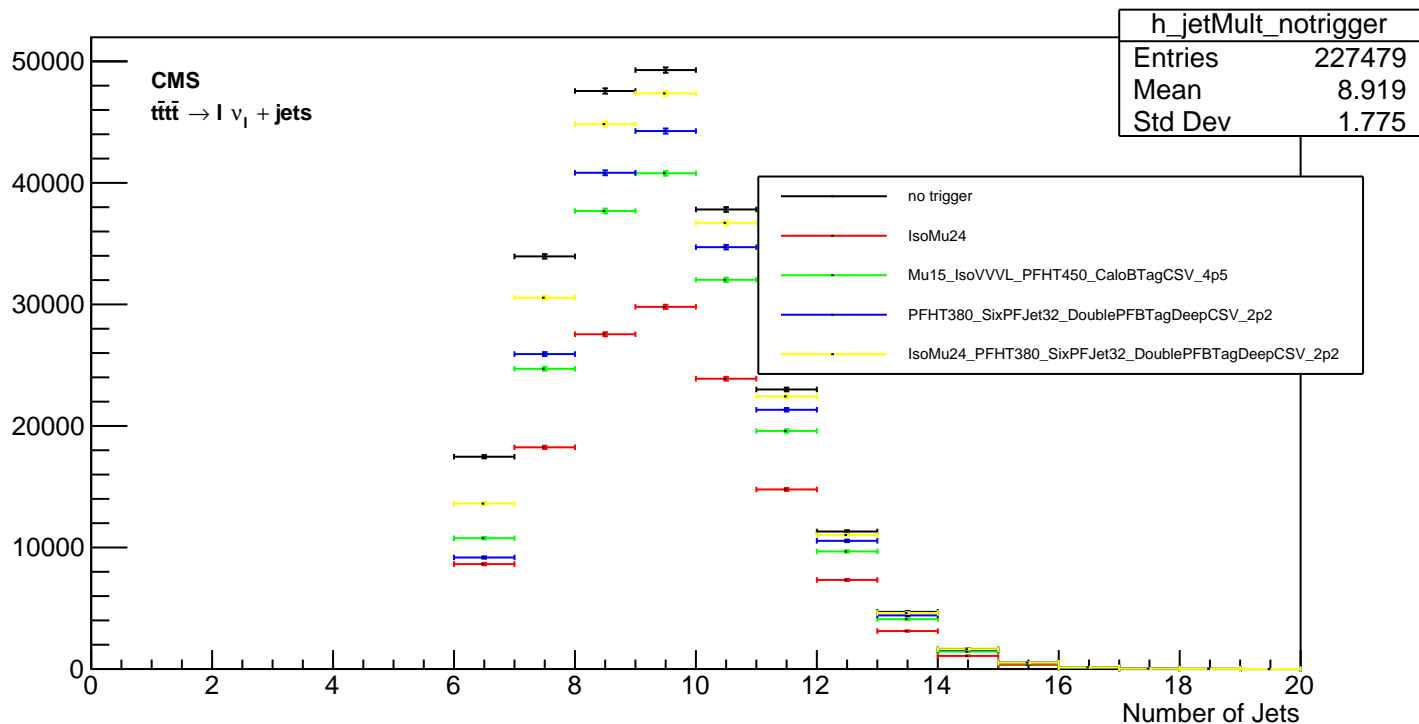
**CMS**  
 **$t\bar{t}t\bar{t} \rightarrow l \nu_l + \text{jets}$**

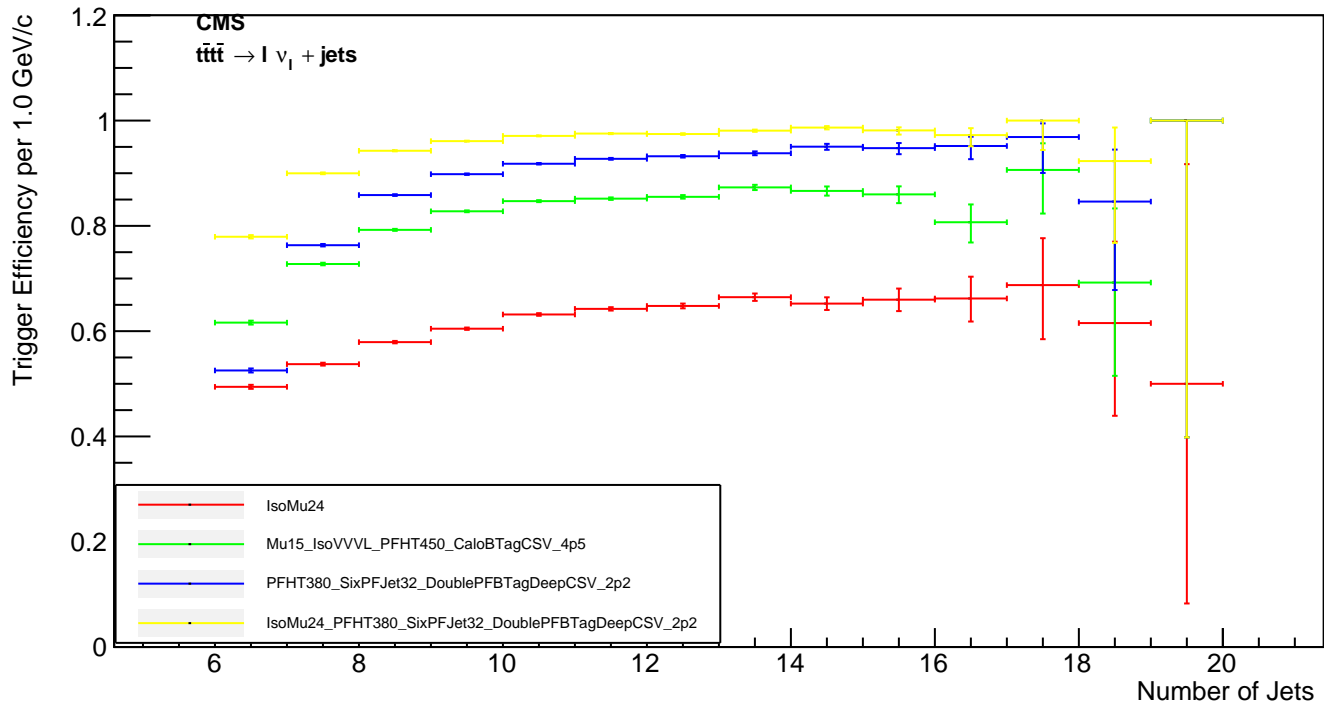


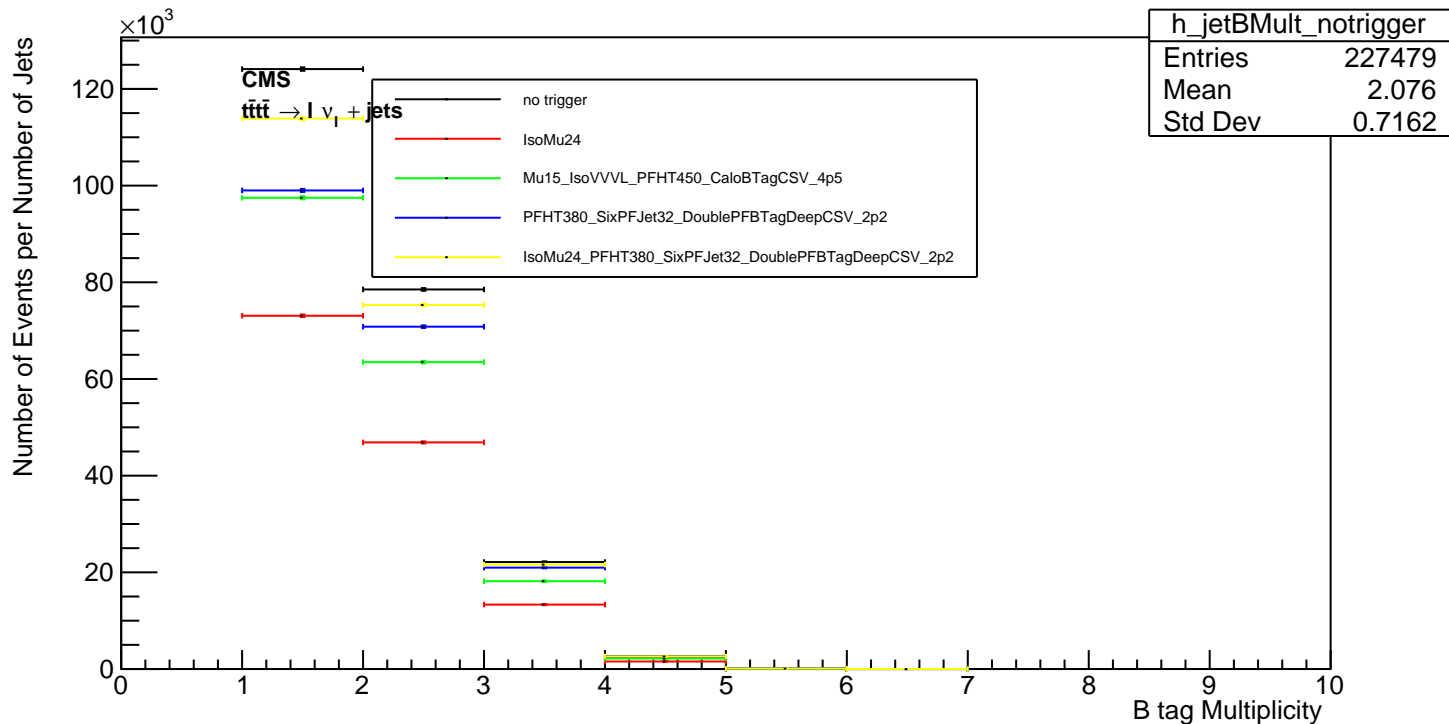
h_jetHt_notrigger	
Entries	227479
Mean	1148
Std Dev	414.9

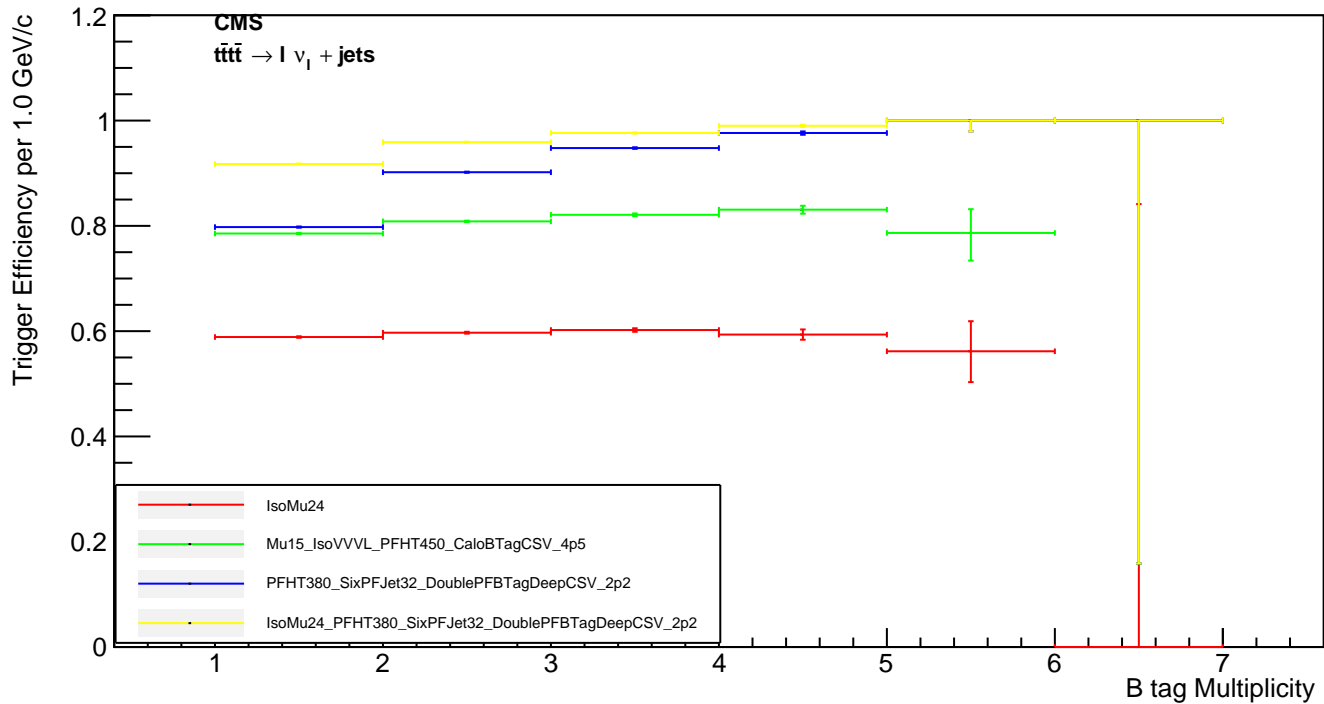


Number of Events per Number of Jets

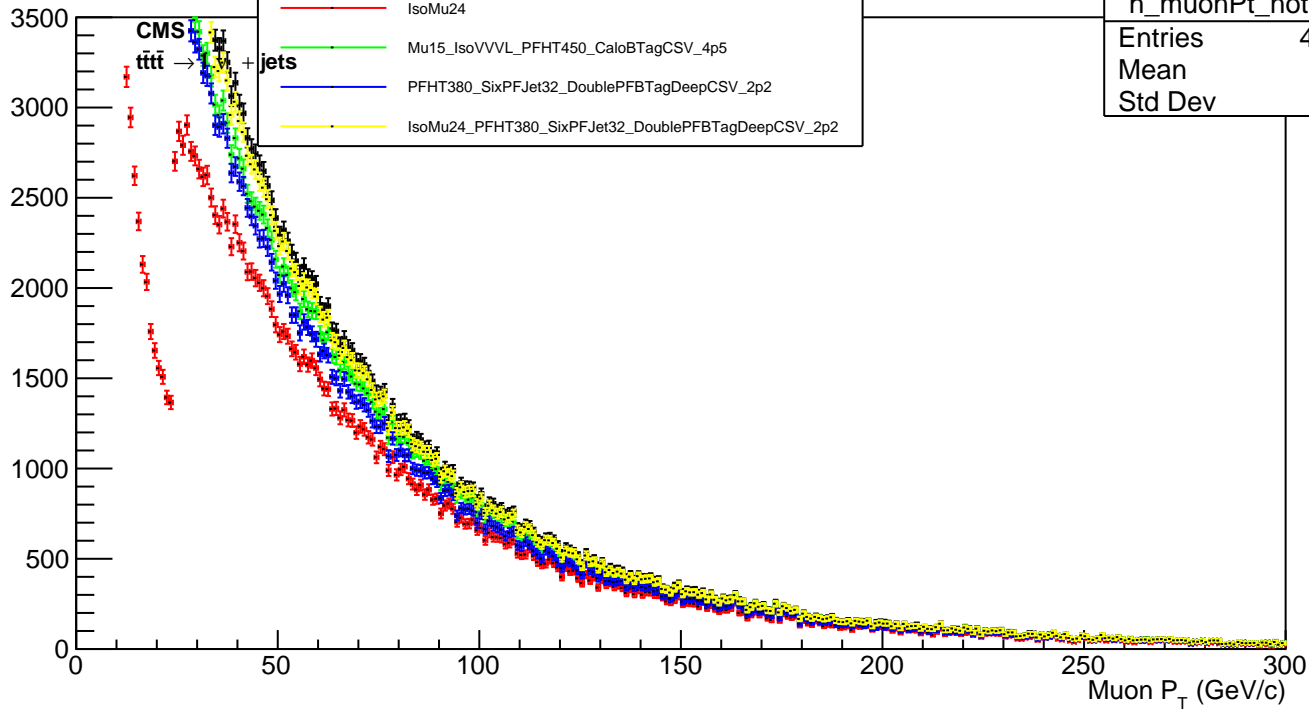






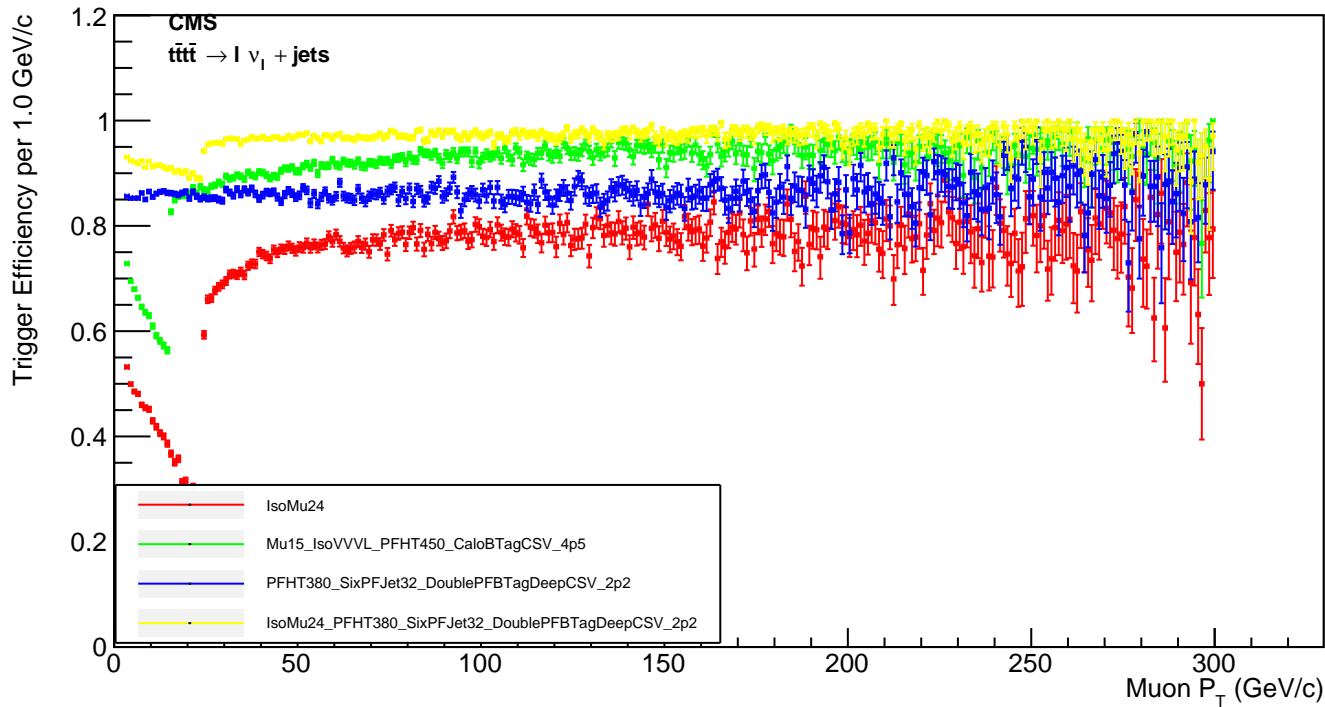


Number of Events per 1 GeV/c



h_muonPt_notrigger	
Entries	420395
Mean	41.74
Std Dev	47.93



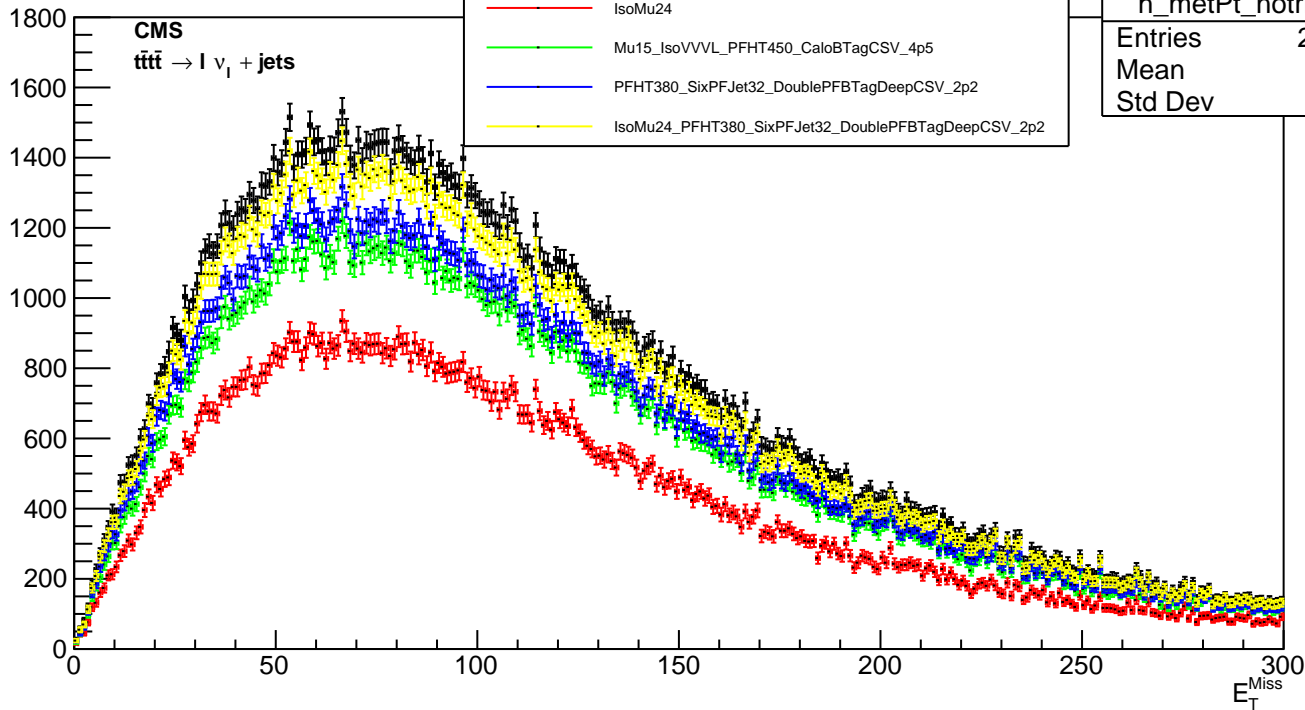


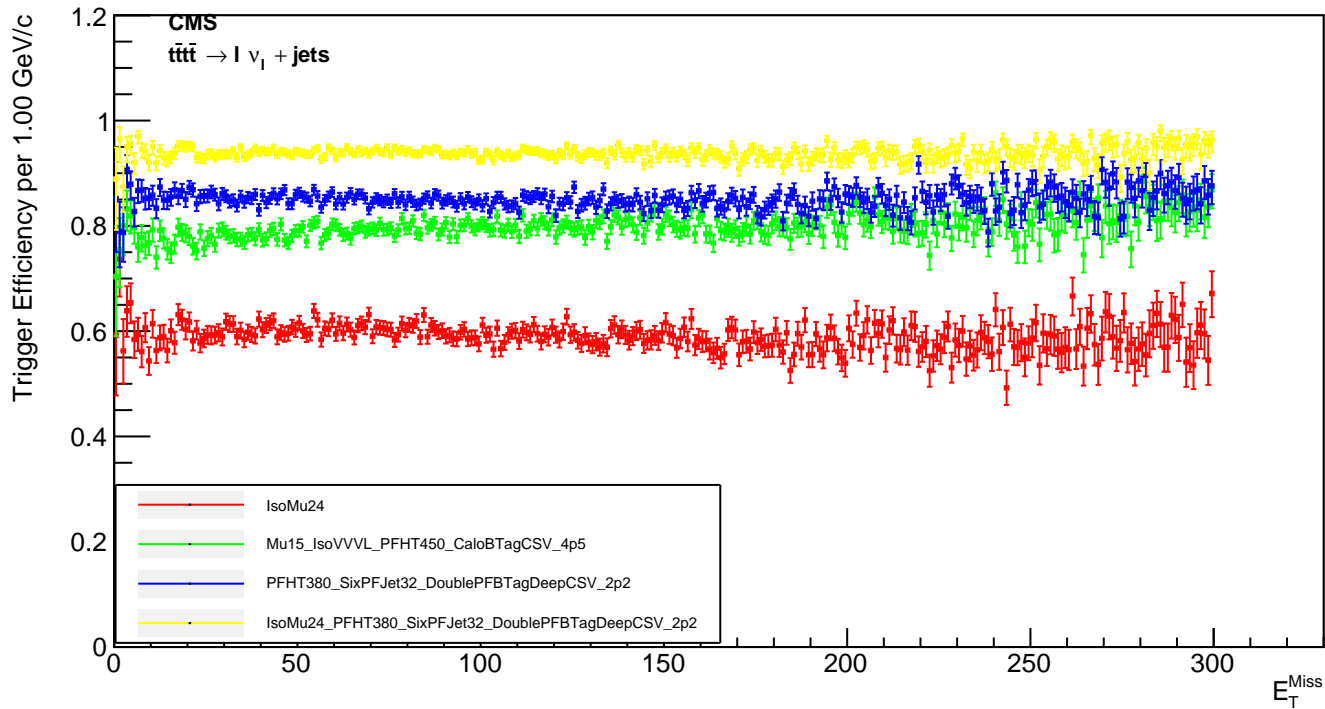
Number of Events per 1 GeV/c

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

- no trigger
- IsoMu24
- Mu15\_IsoVVVL\_PFHT450\_CaloBTagCSV\_4p5
- PFHT380\_SixPFJet32\_DoublePFBTagDeepCSV\_2p2
- IsoMu24\_PFHT380\_SixPFJet32\_DoublePFBTagDeepCSV\_2p2

h_metPt_notrigger	
Entries	227479
Mean	110.3
Std Dev	65.61



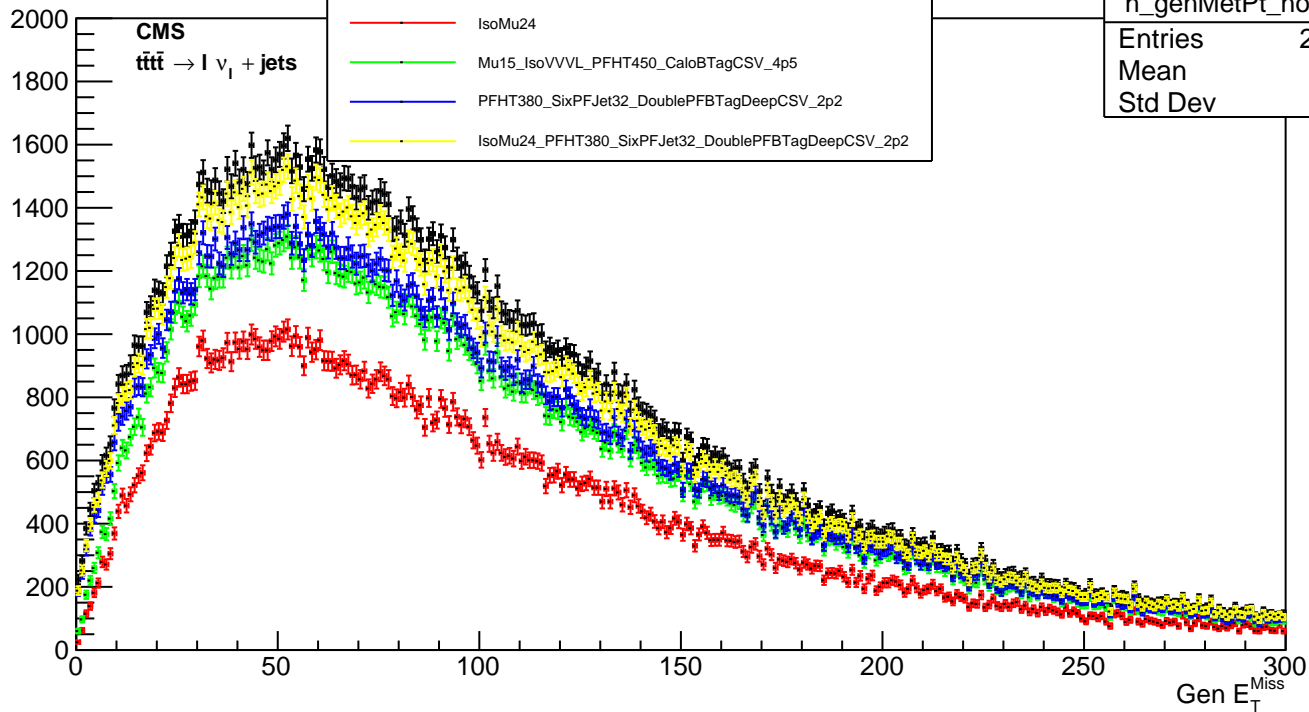


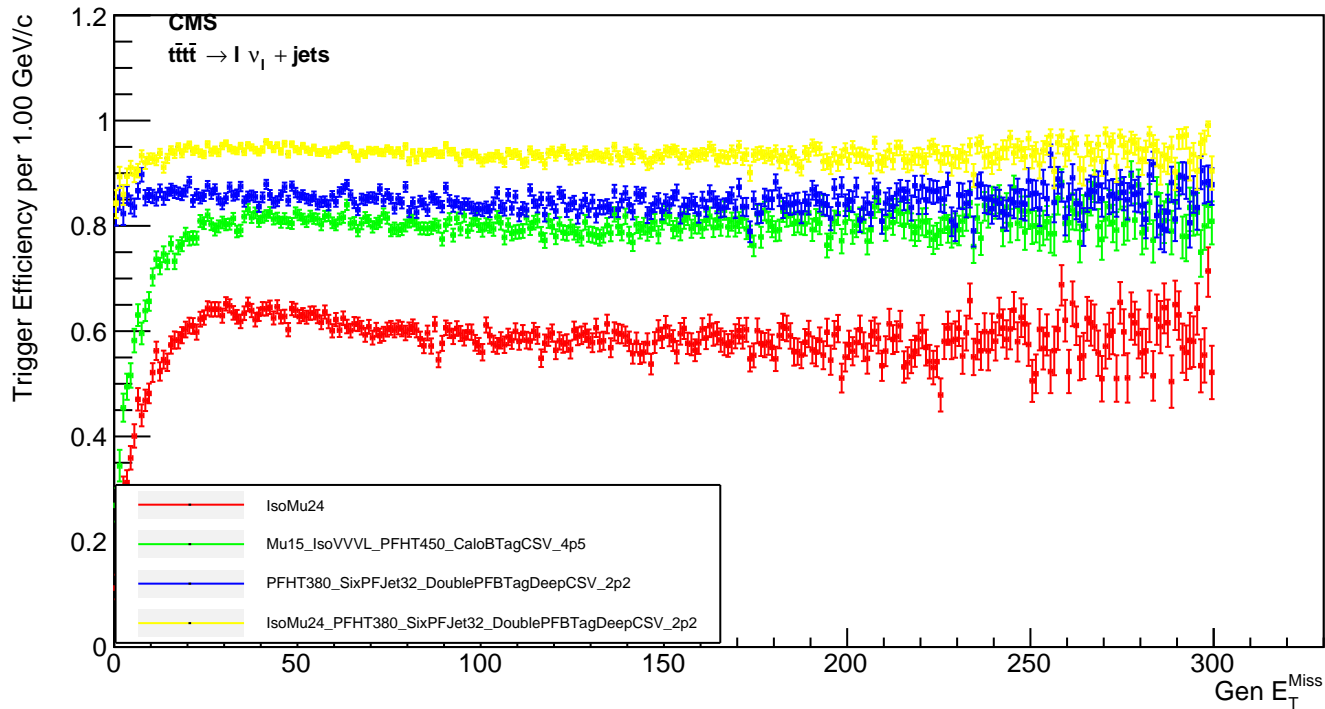
Number of Events per 1GeV/c

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

- no trigger
- IsoMu24
- Mu15\_IsoVVVL\_PFHT450\_CaloBTagCSV\_4p5
- PFHT380\_SixPFJet32\_DoublePFBTagDeepCSV\_2p2
- IsoMu24\_PFHT380\_SixPFJet32\_DoublePFBTagDeepCSV\_2p2

h_genMetPt_notrigger	
Entries	227479
Mean	99.49
Std Dev	65.95





Trigger Efficiency per 0.046666666666667 GeV/c

