

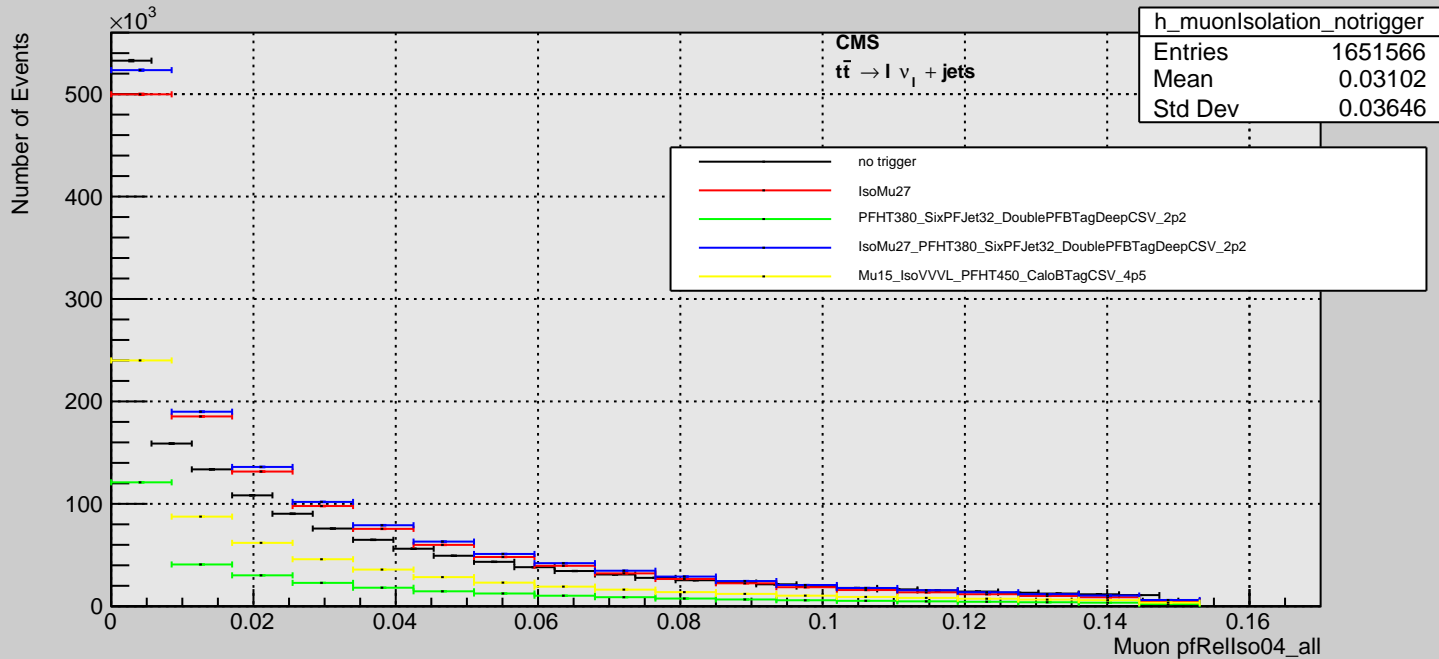
**On-line (pre-)selection Requisites for:**

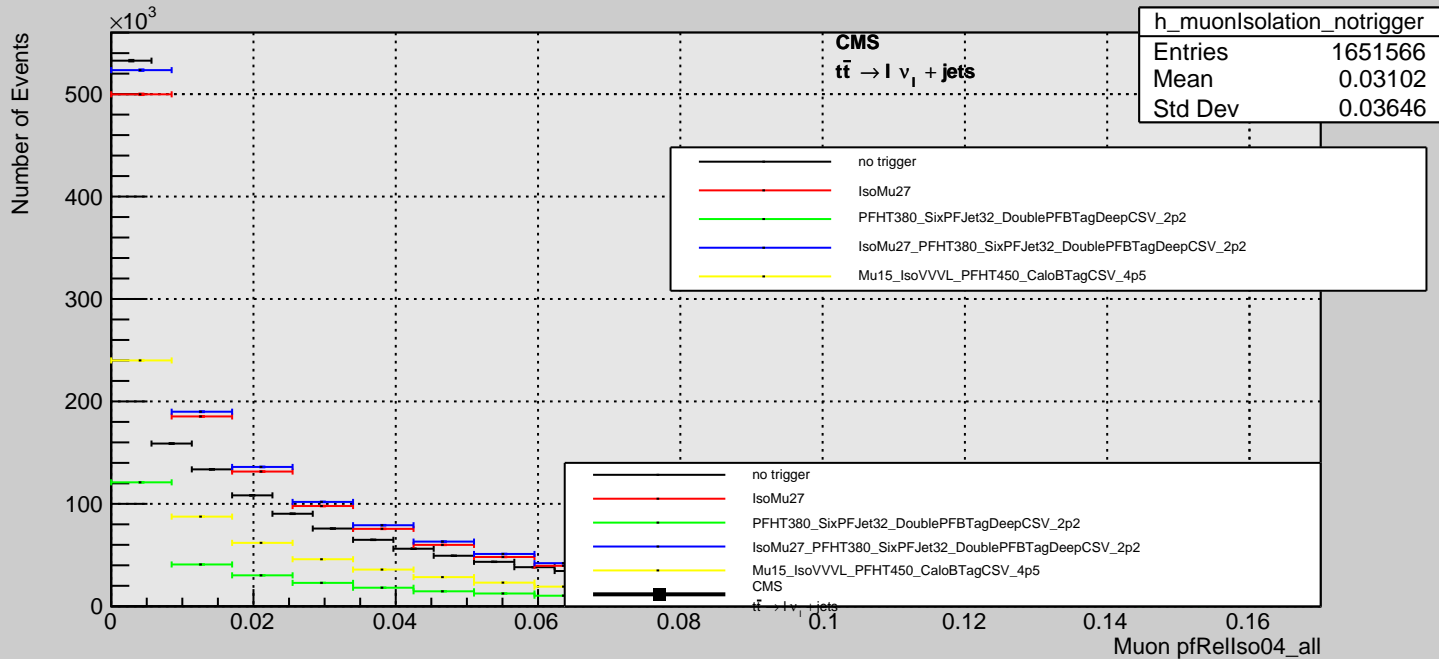
- **Jets:** number  $> 5$
- **Muons plus Electrons:** number  $> 0$

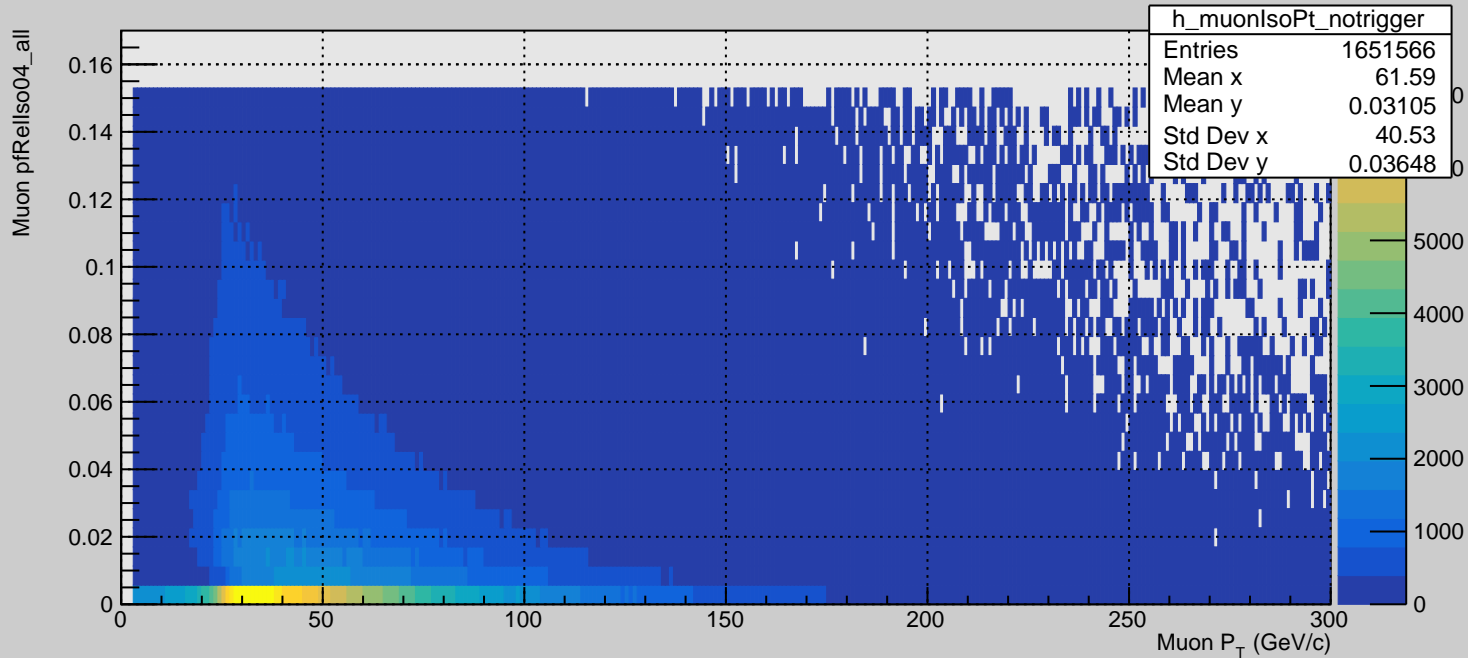
**Event Limit:** None (see last page)

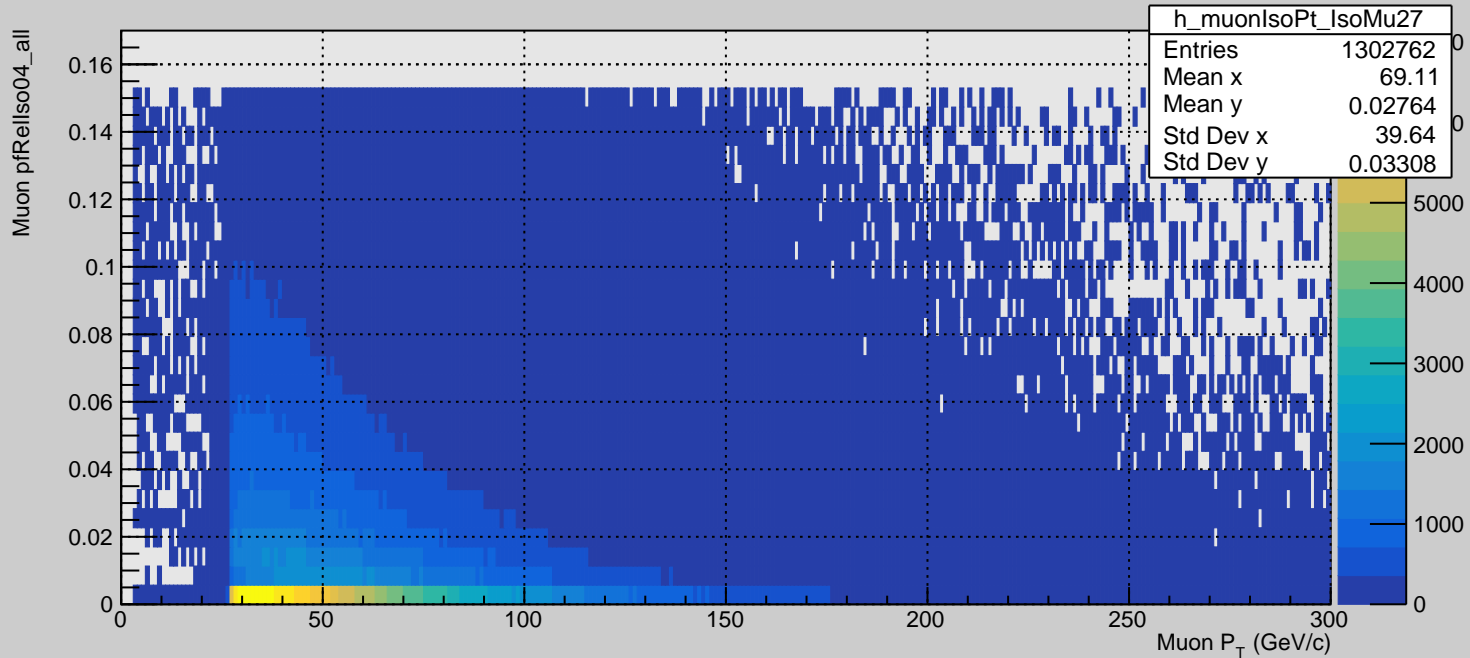
**Off-line (post-)selection Requisites for:**

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



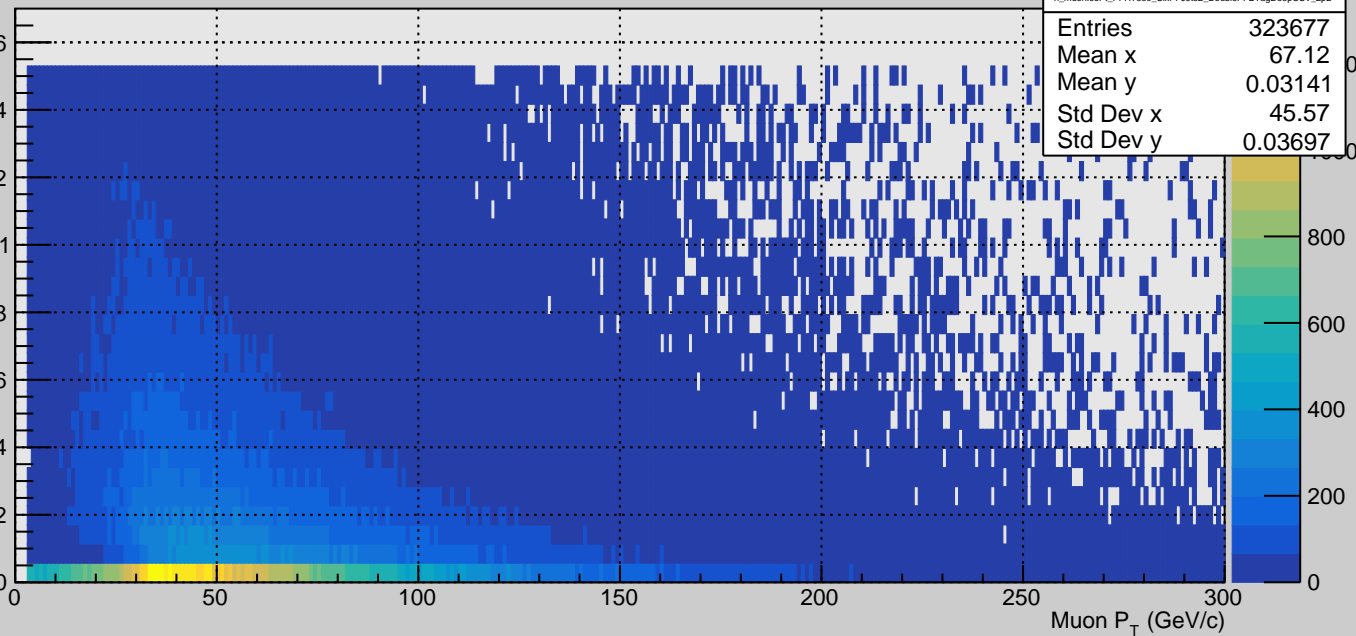






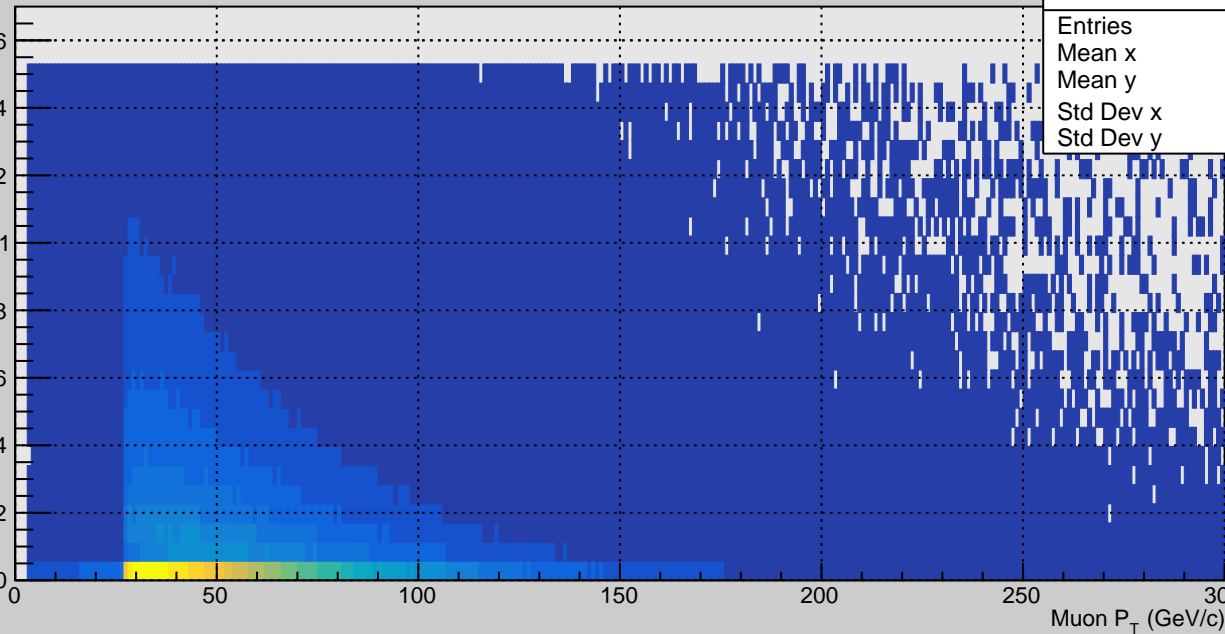
Muon pRelIso04\_all

0.16  
0.14  
0.12  
0.1  
0.08  
0.06  
0.04  
0.02  
0



Muon pfRelIso04\_all

0.16  
0.14  
0.12  
0.1  
0.08  
0.06  
0.04  
0.02  
0

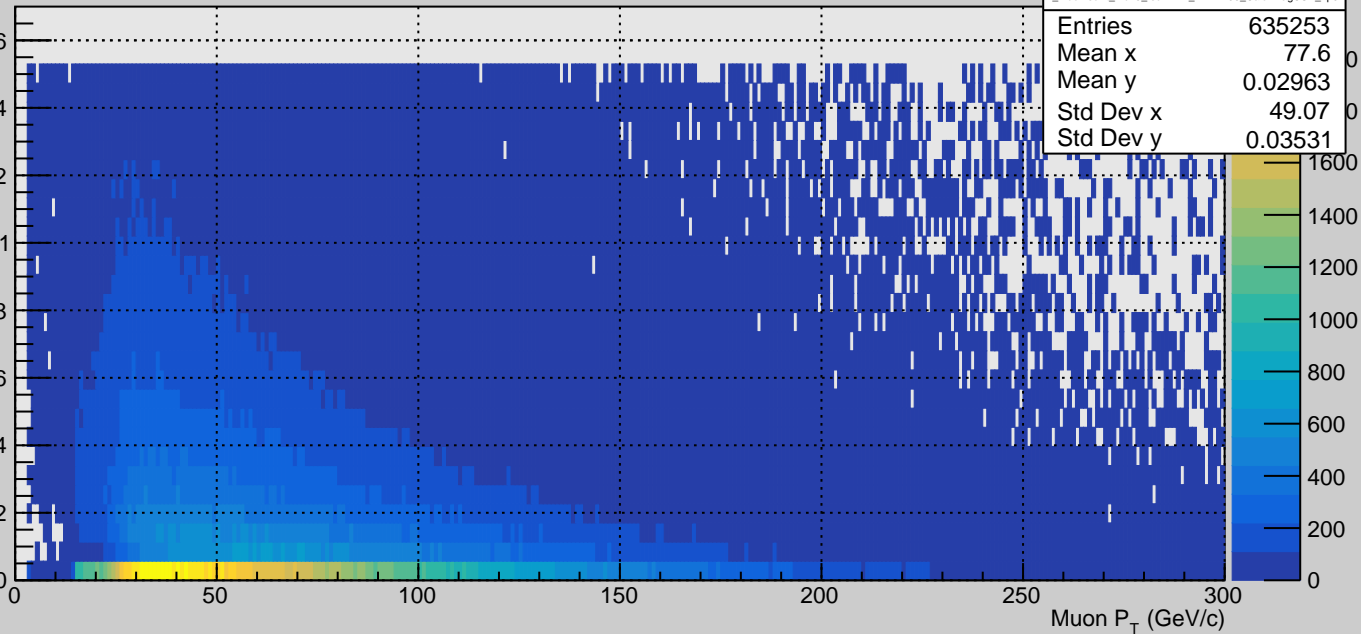


h_muonIsoPT_IsoMu27_PFHT380_SixPFJet32_DoublePFBTagDeepCSV_2p2	
Entries	1371726
Mean x	67.36
Mean y	0.02844
Std Dev x	40.13
Std Dev y	0.03398

5000  
4000  
3000  
2000  
1000  
0

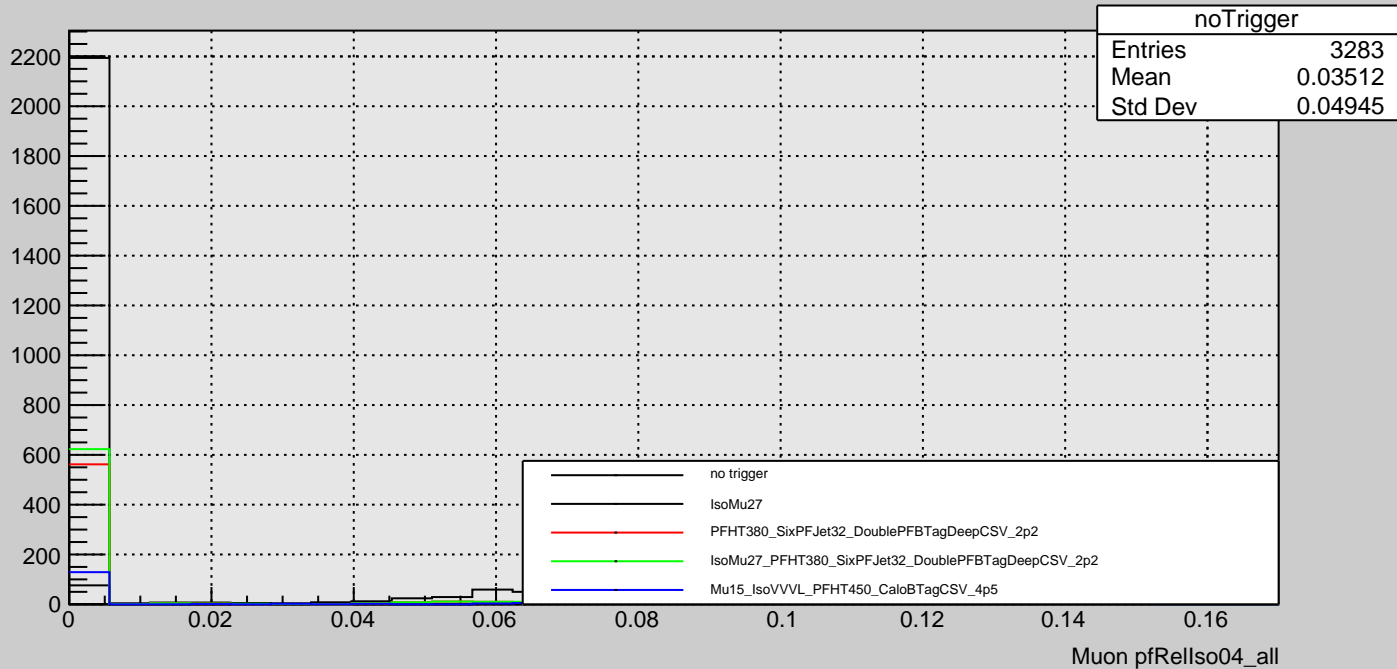
Muon pfRelIso04\_all

0.16  
0.14  
0.12  
0.1  
0.08  
0.06  
0.04  
0.02  
0

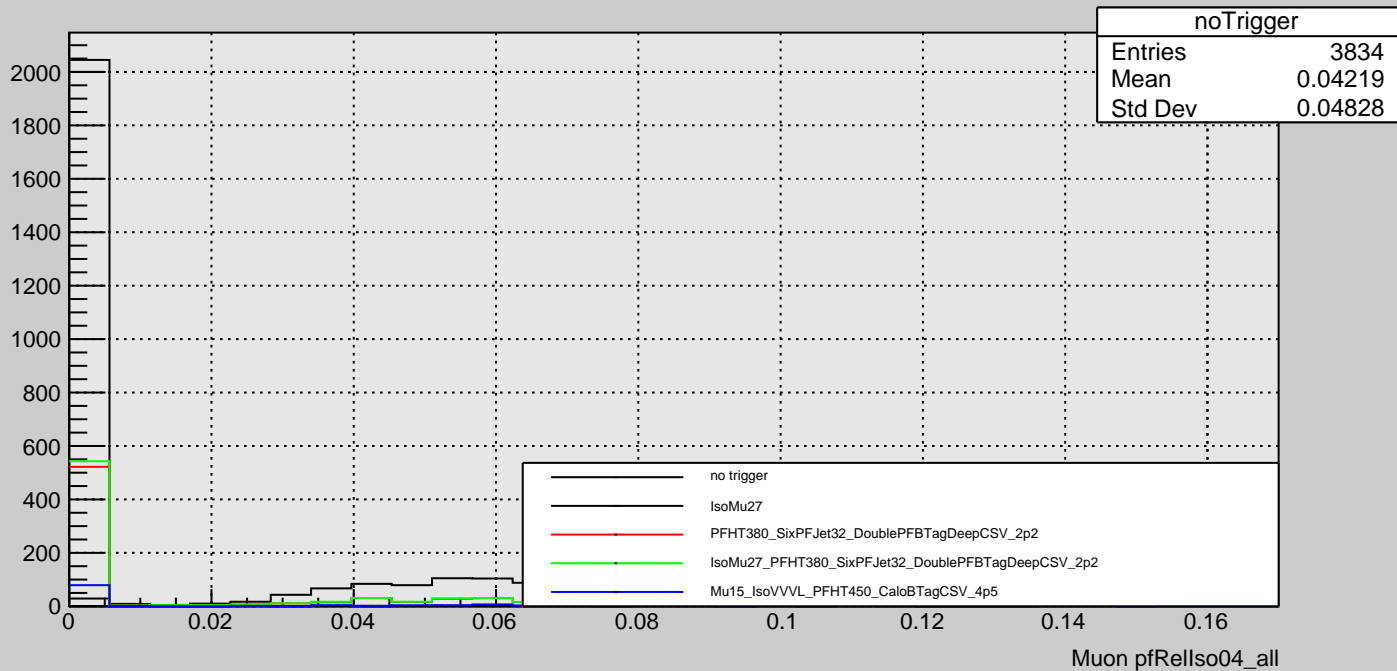




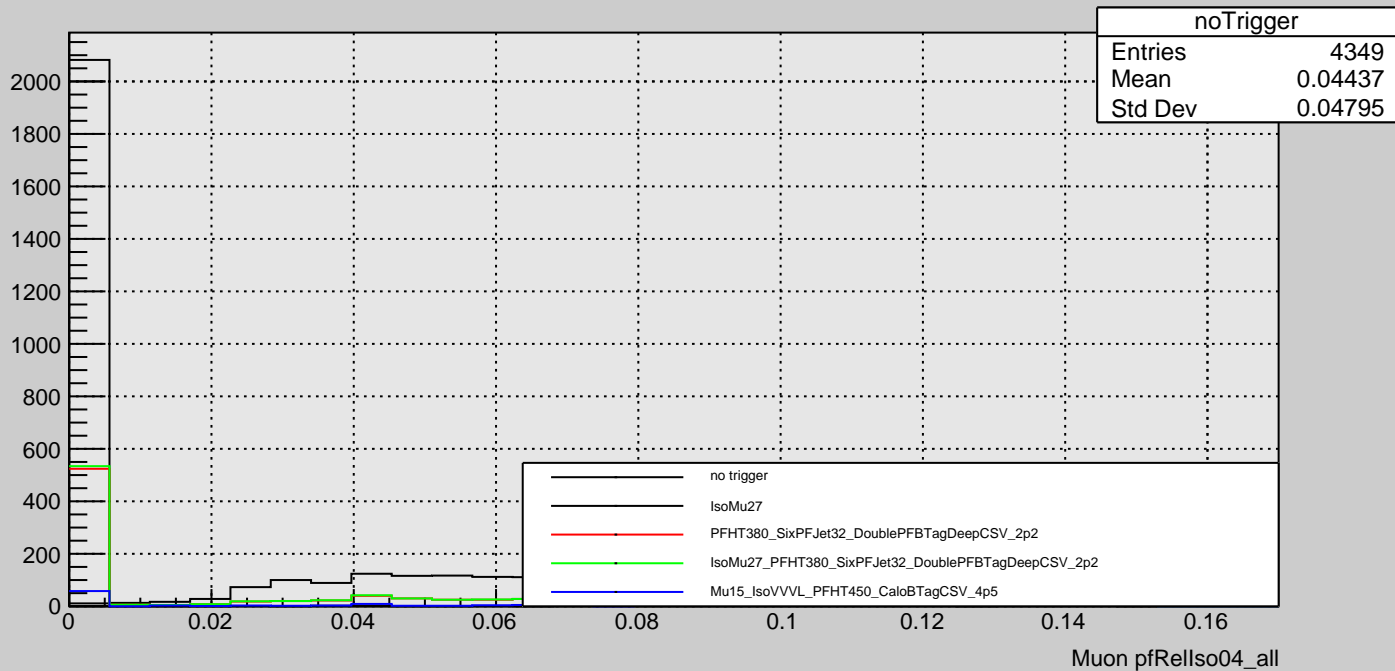
**Muon Pt = 4**



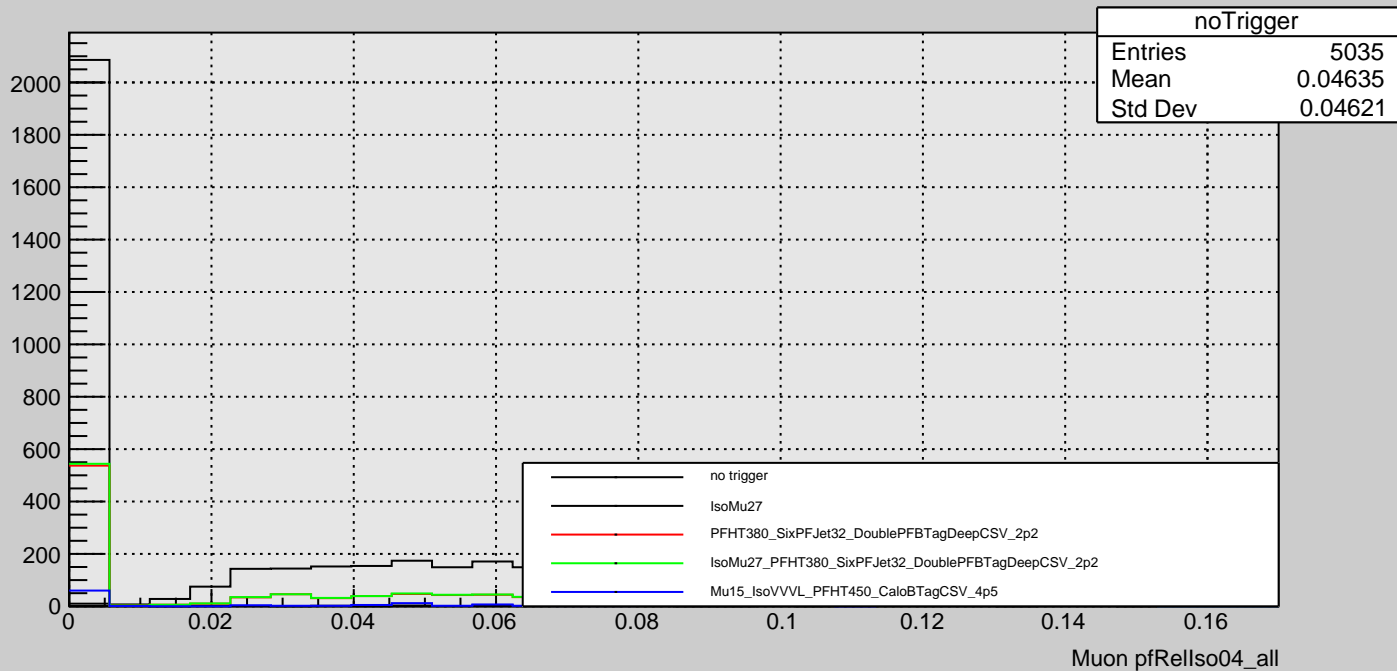
**Muon Pt = 6**



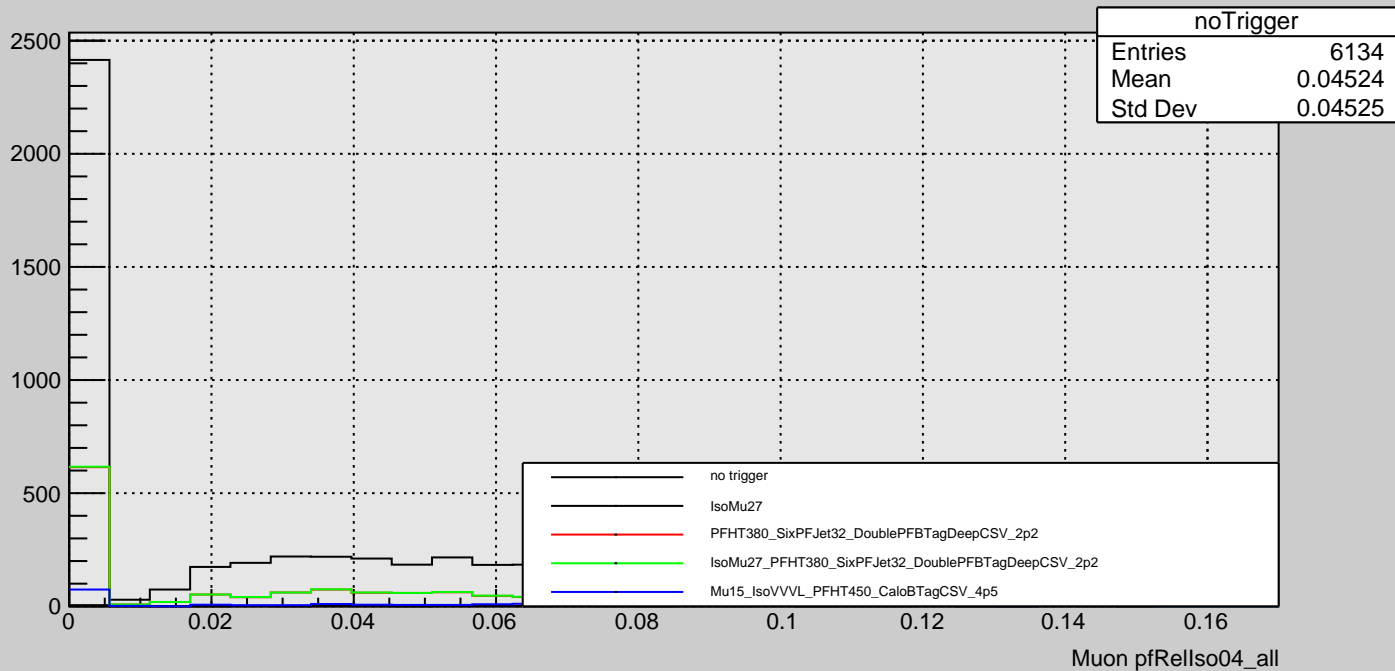
**Muon Pt = 8**



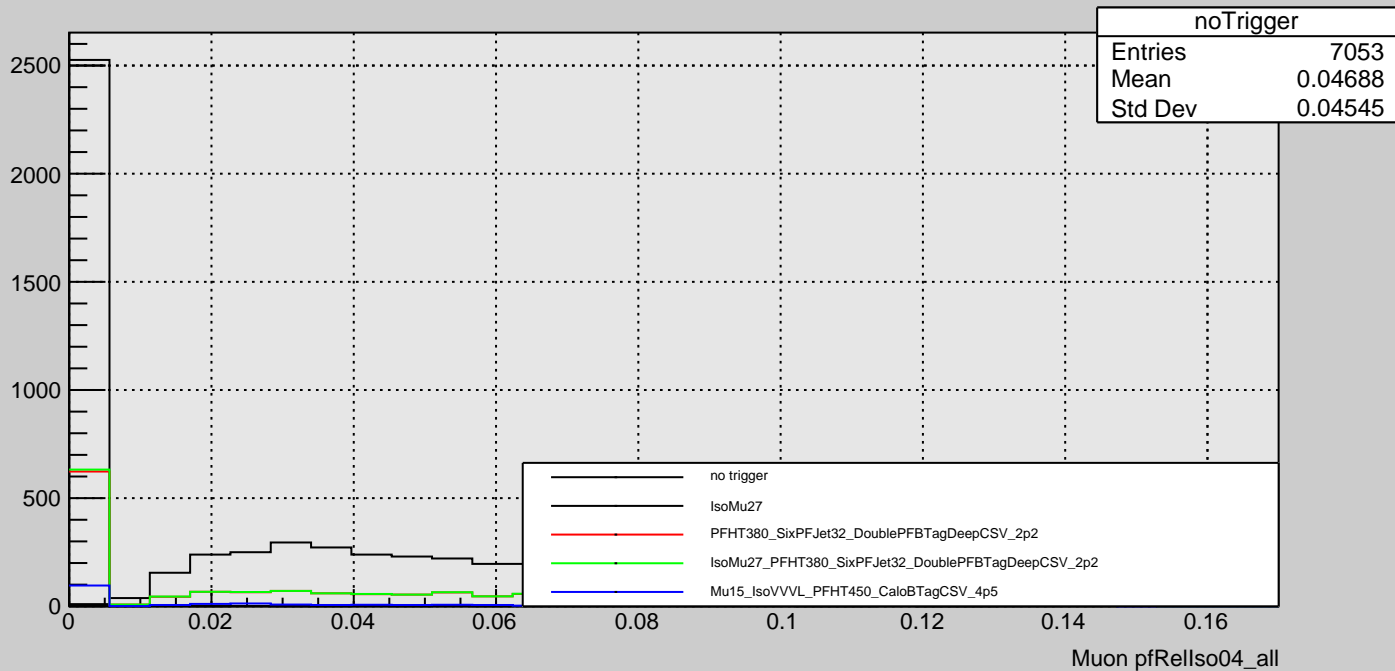
**Muon Pt = 10**



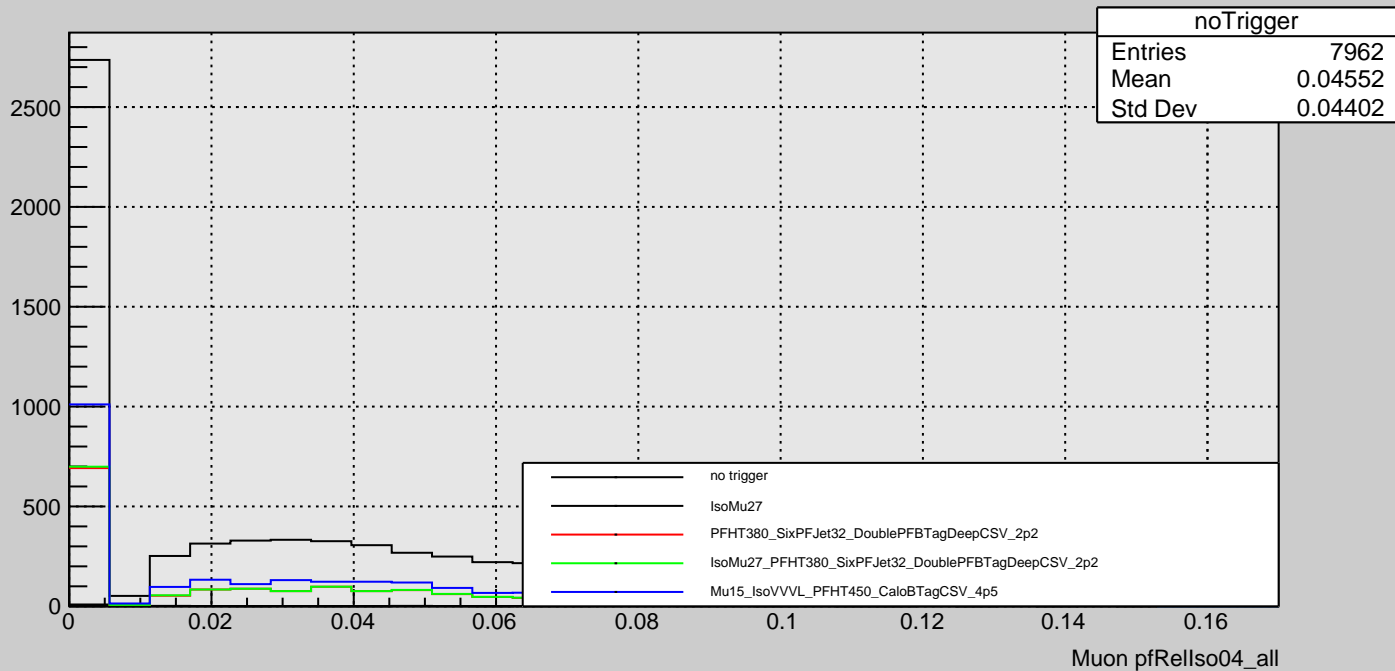
**Muon Pt = 12**



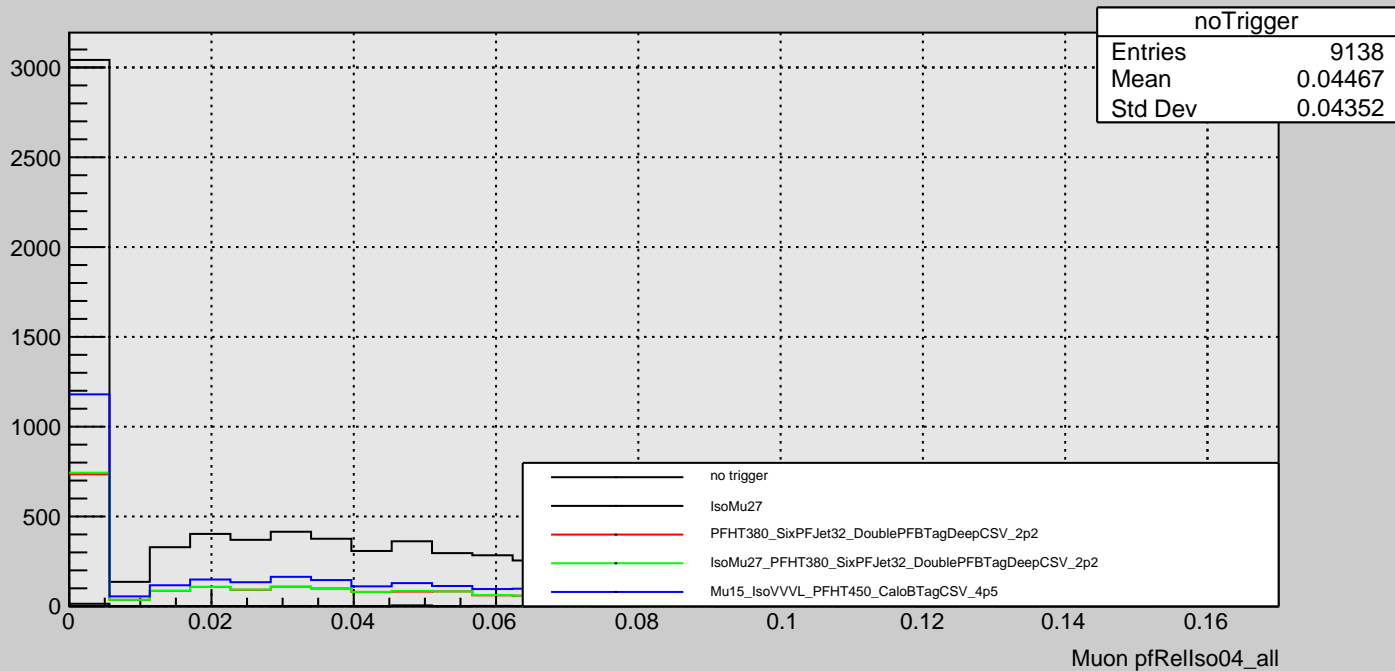
**Muon Pt = 14**



**Muon Pt = 16**

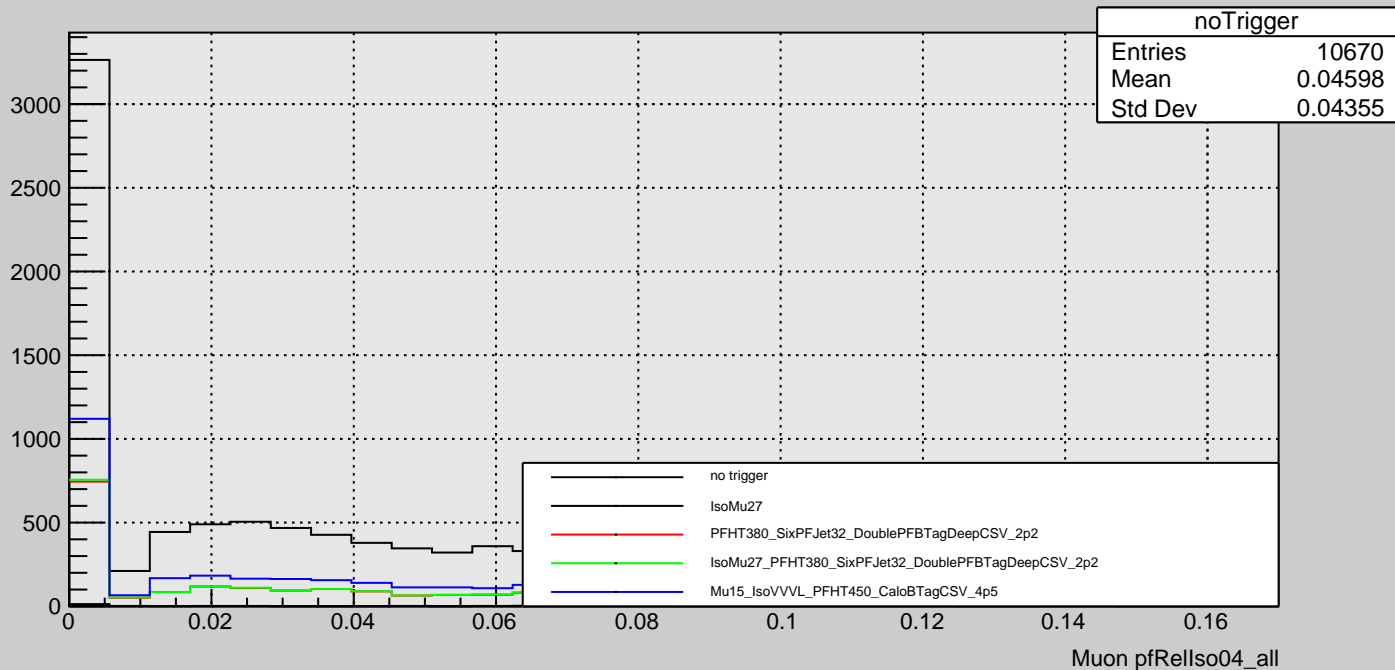


**Muon Pt = 18**

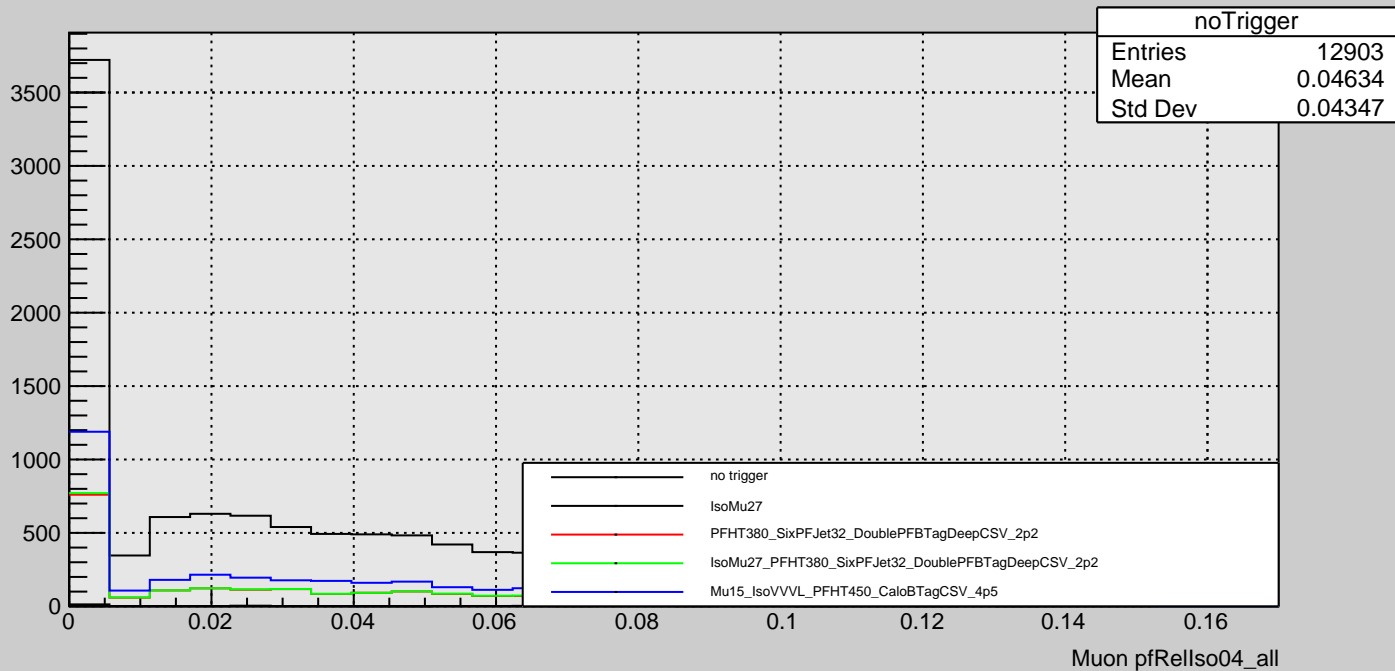




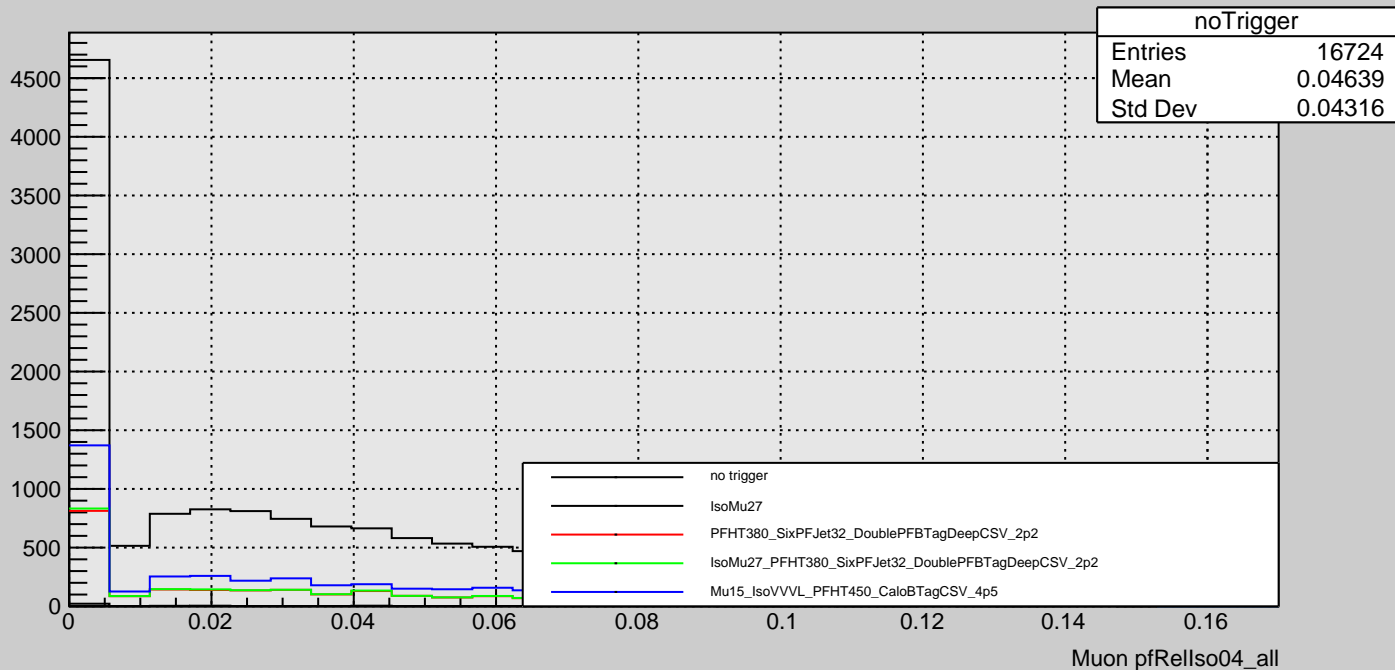
**Muon Pt = 20**



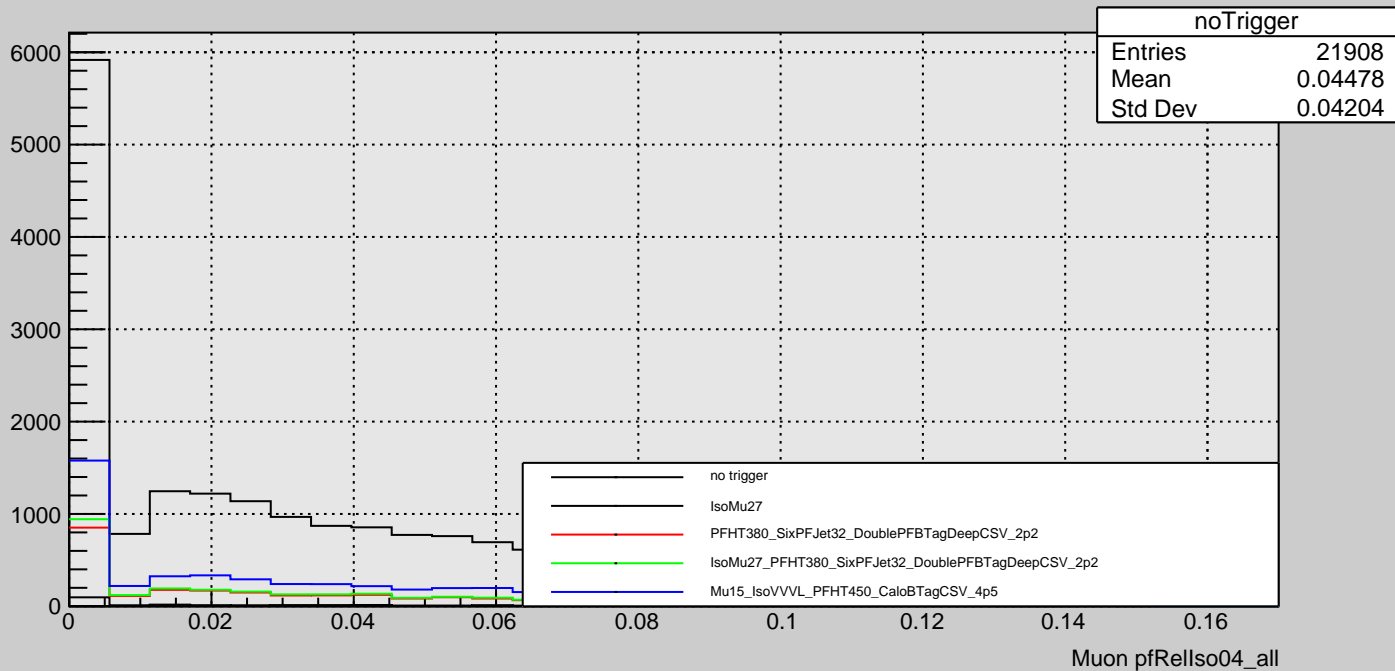
**Muon Pt = 22**



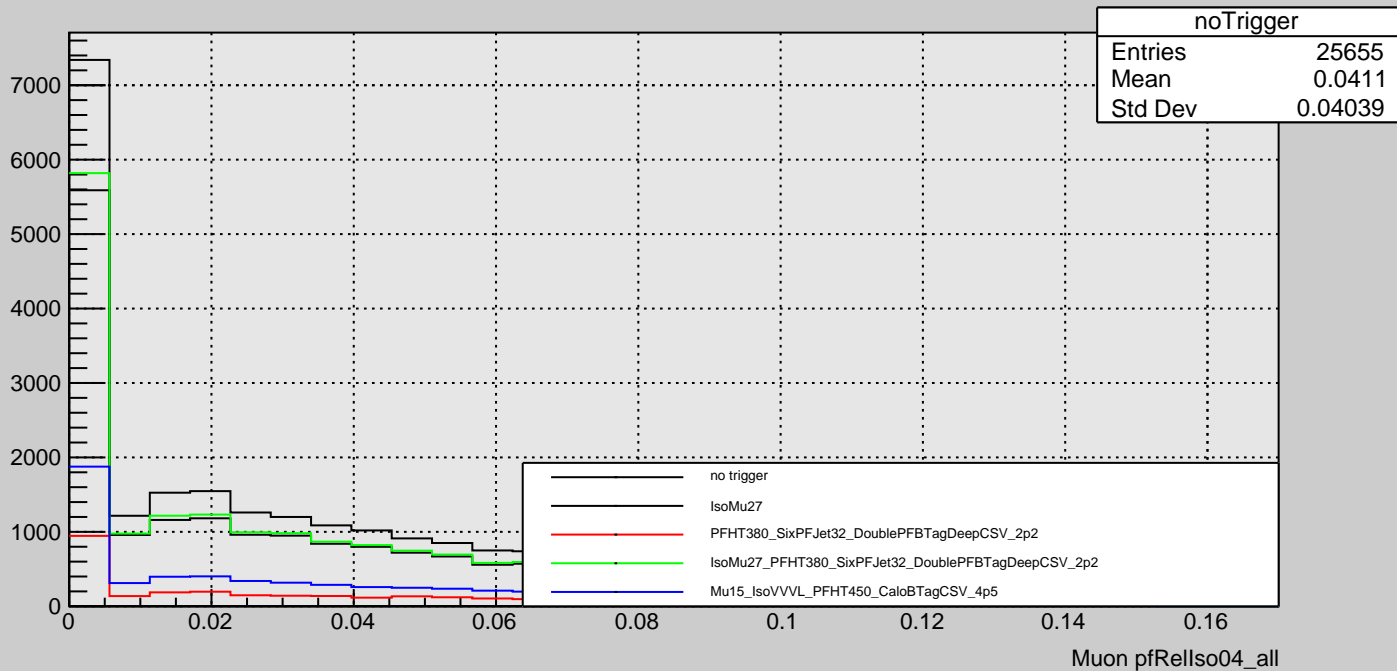
**Muon Pt = 24**



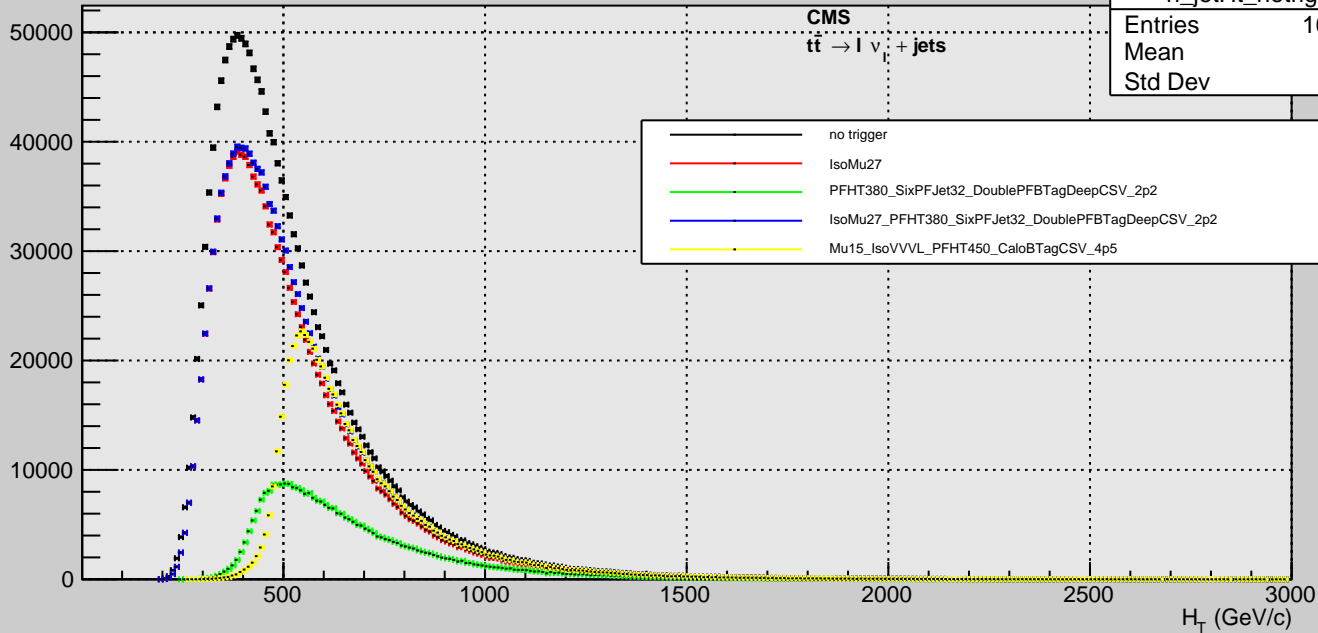
**Muon Pt = 26**

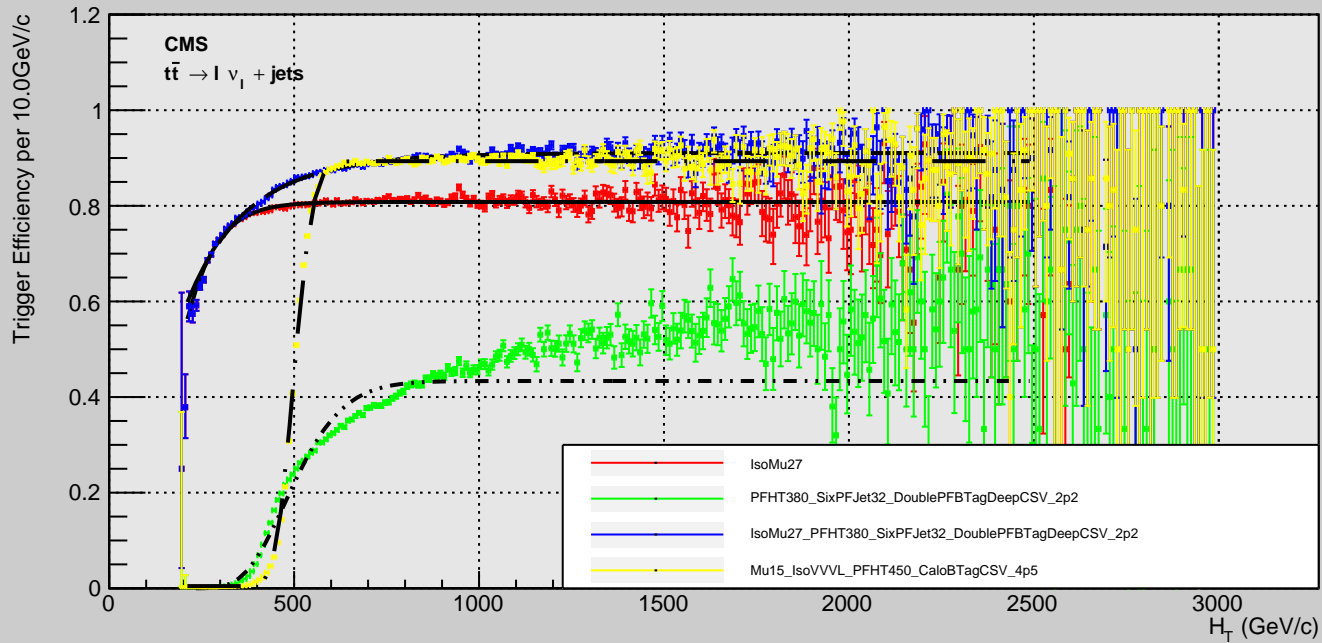


**Muon Pt = 28**

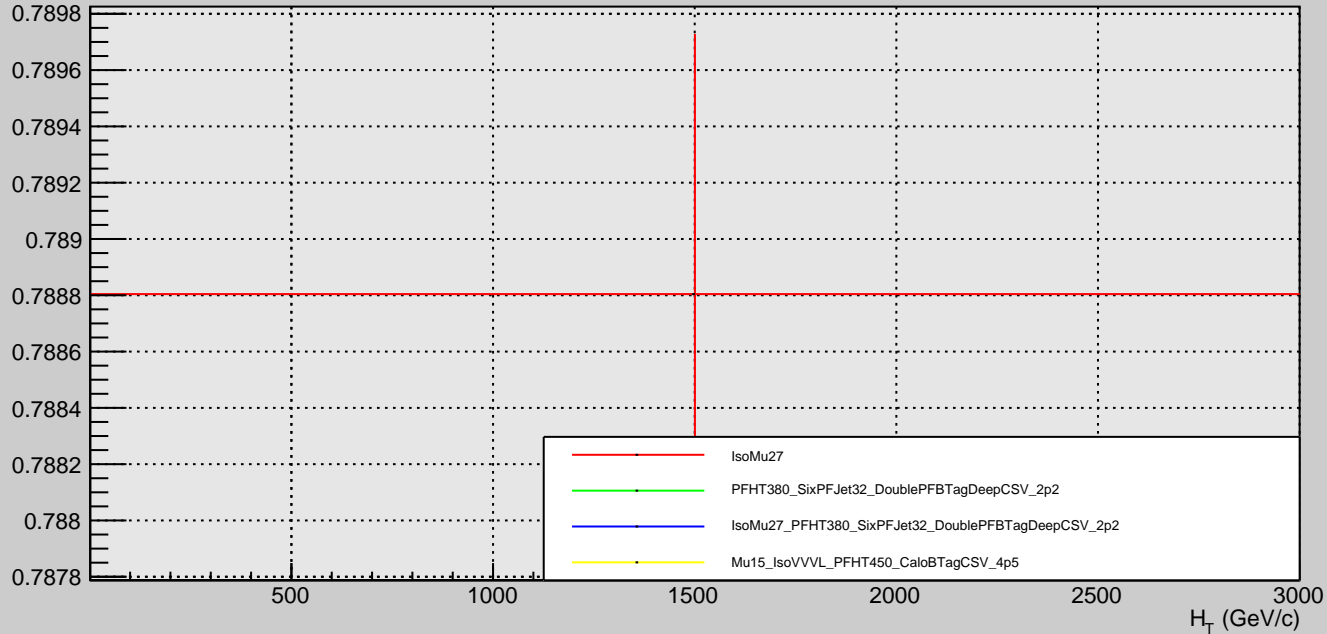


Number of Events per 10 GeV/c



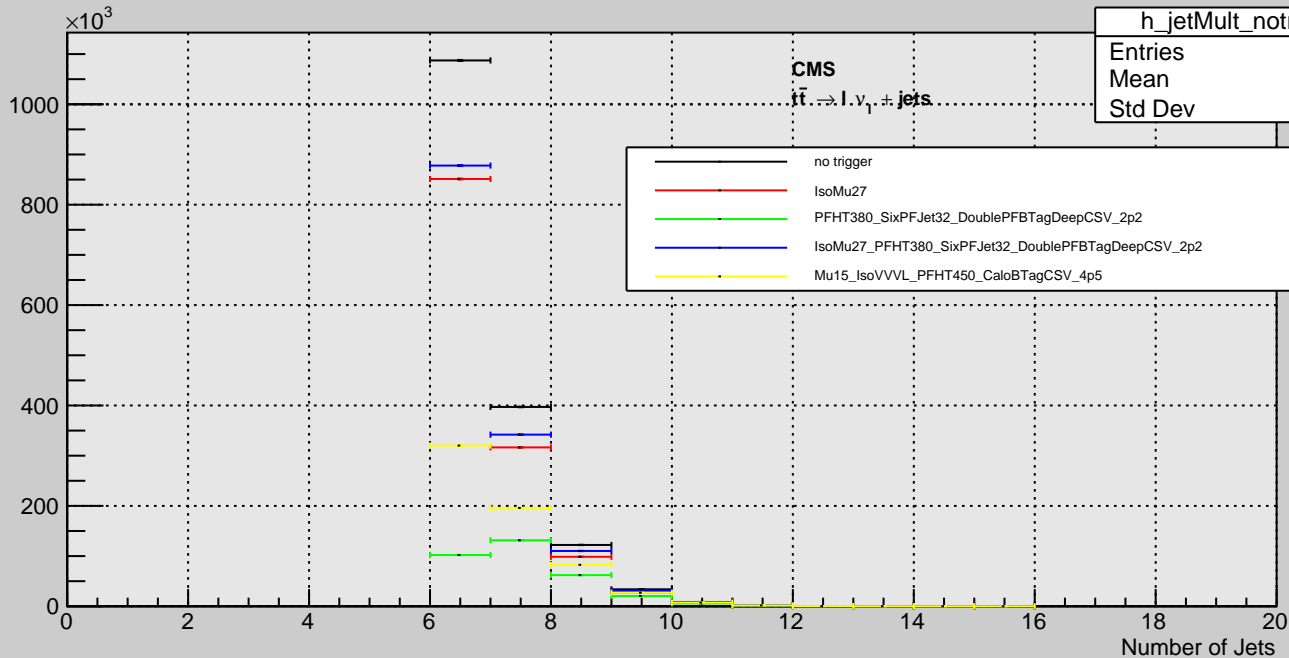


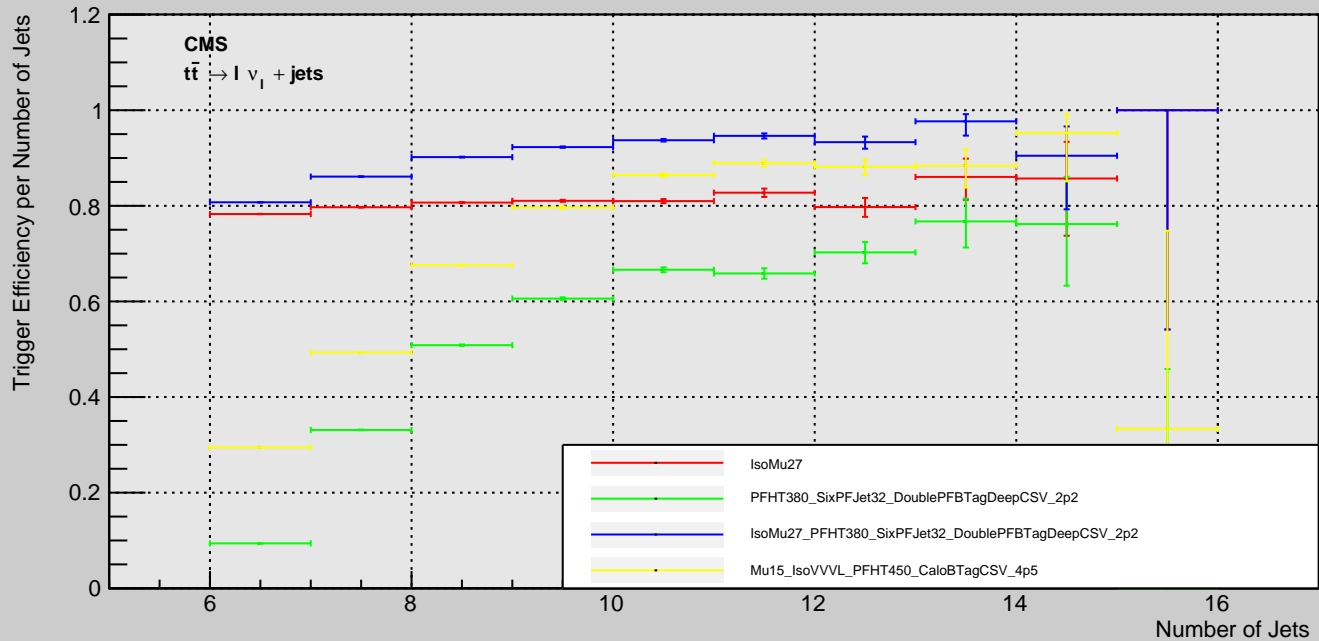
Trigger Efficiency per 2999.0 GeV/c

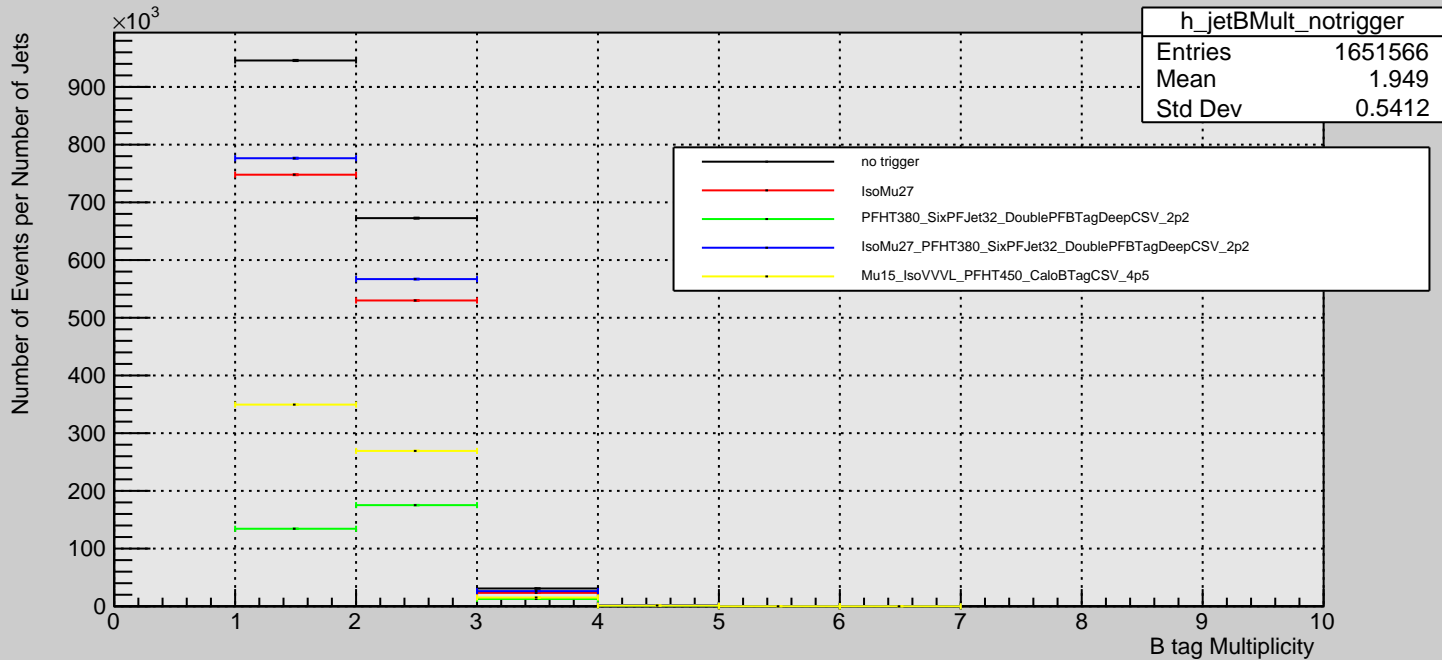


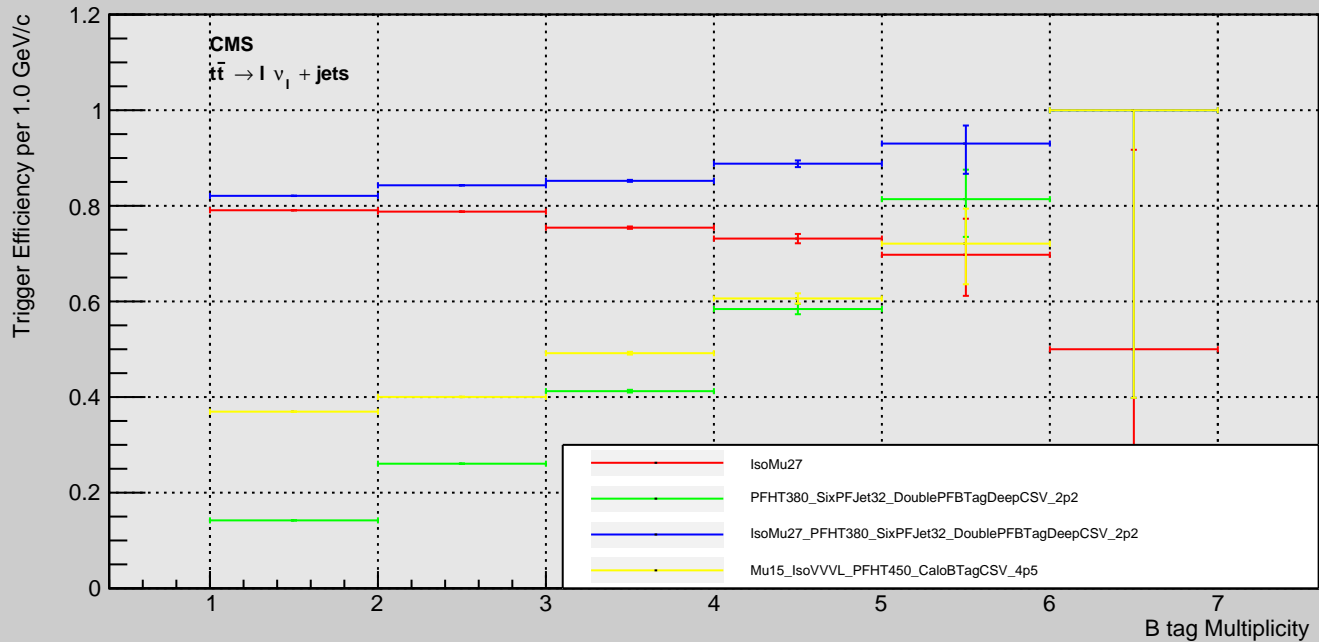


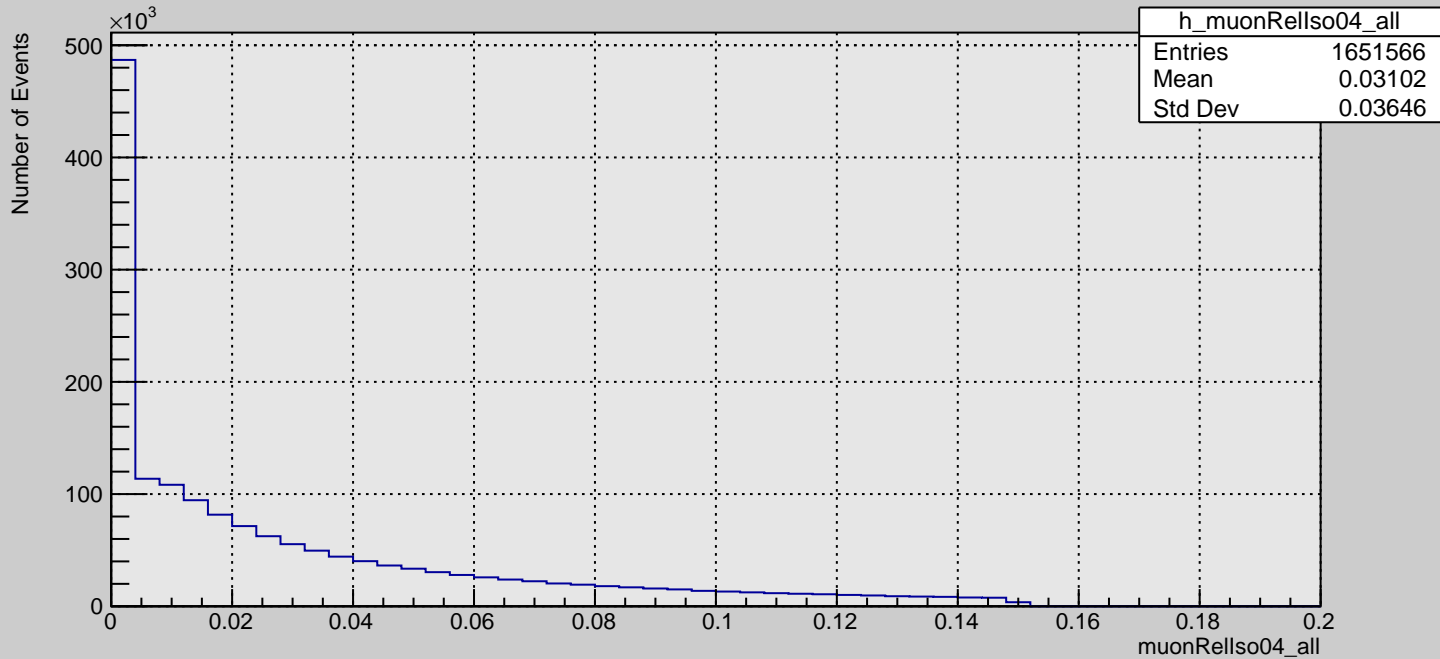
Number of Events per Number of Jets





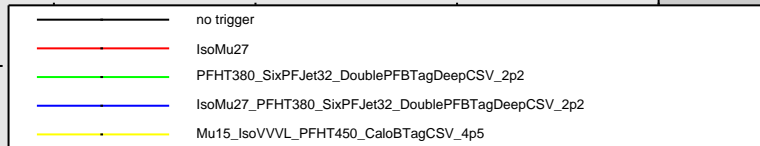




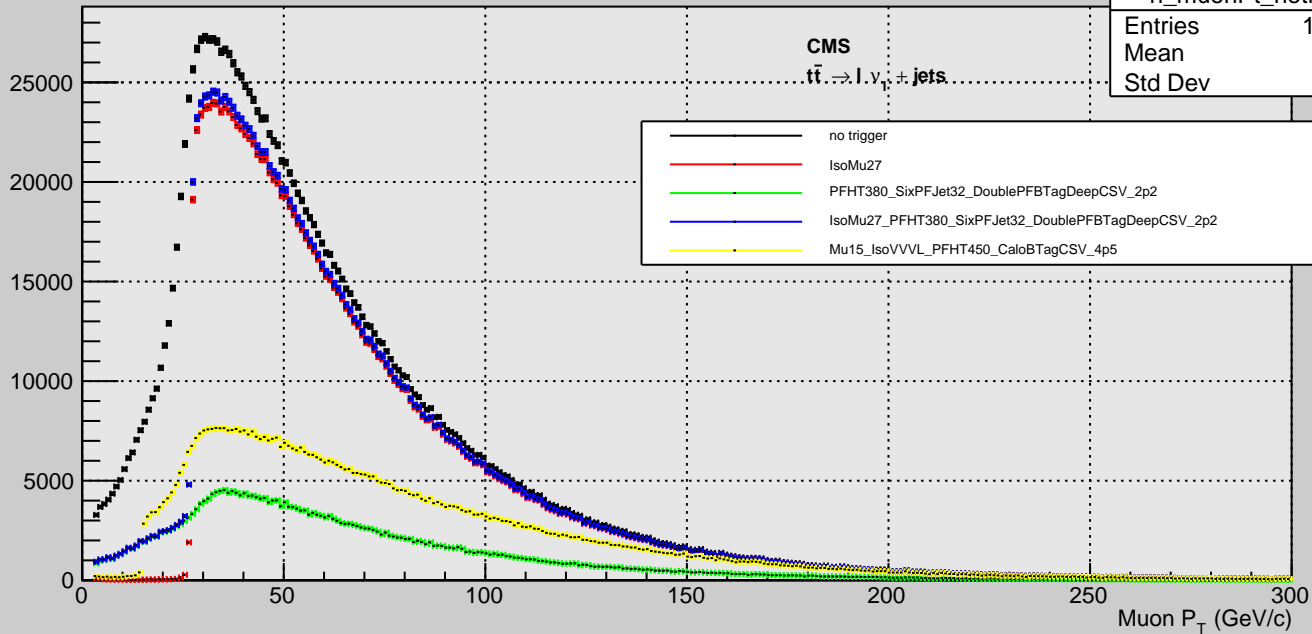


h_muonPt_notrigger	
Entries	1651566
Mean	61.59
Std Dev	40.53

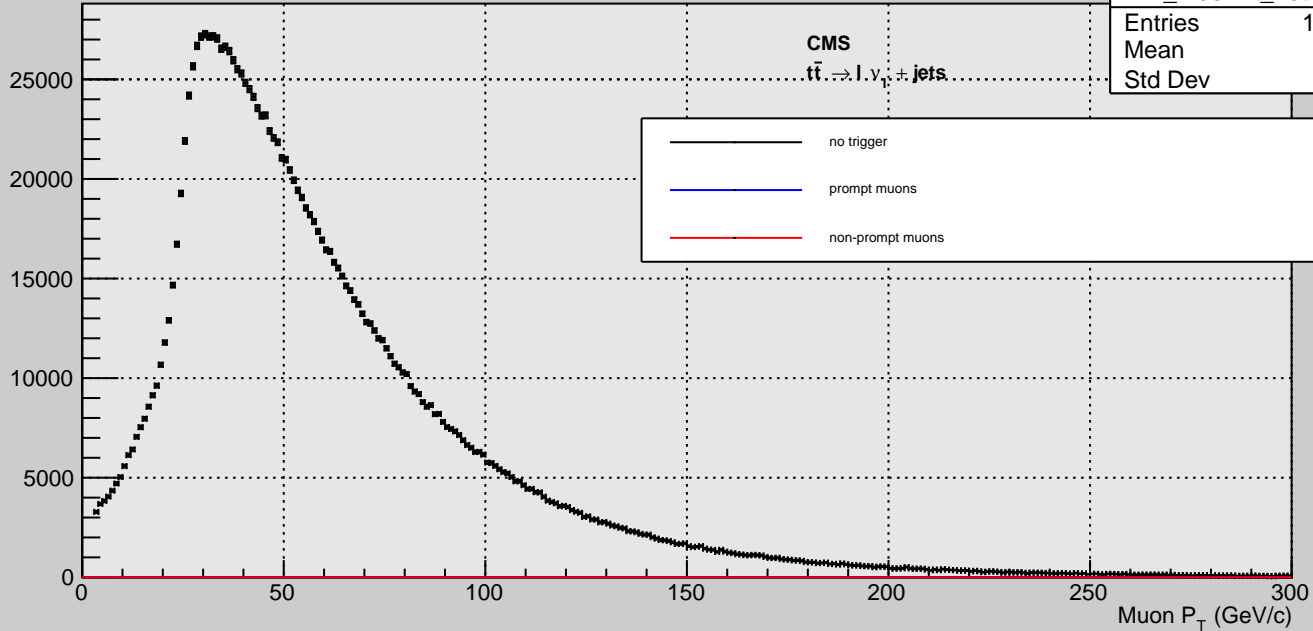
**CMS**  
 $t\bar{t} \rightarrow l, \nu_l + \text{jets}$



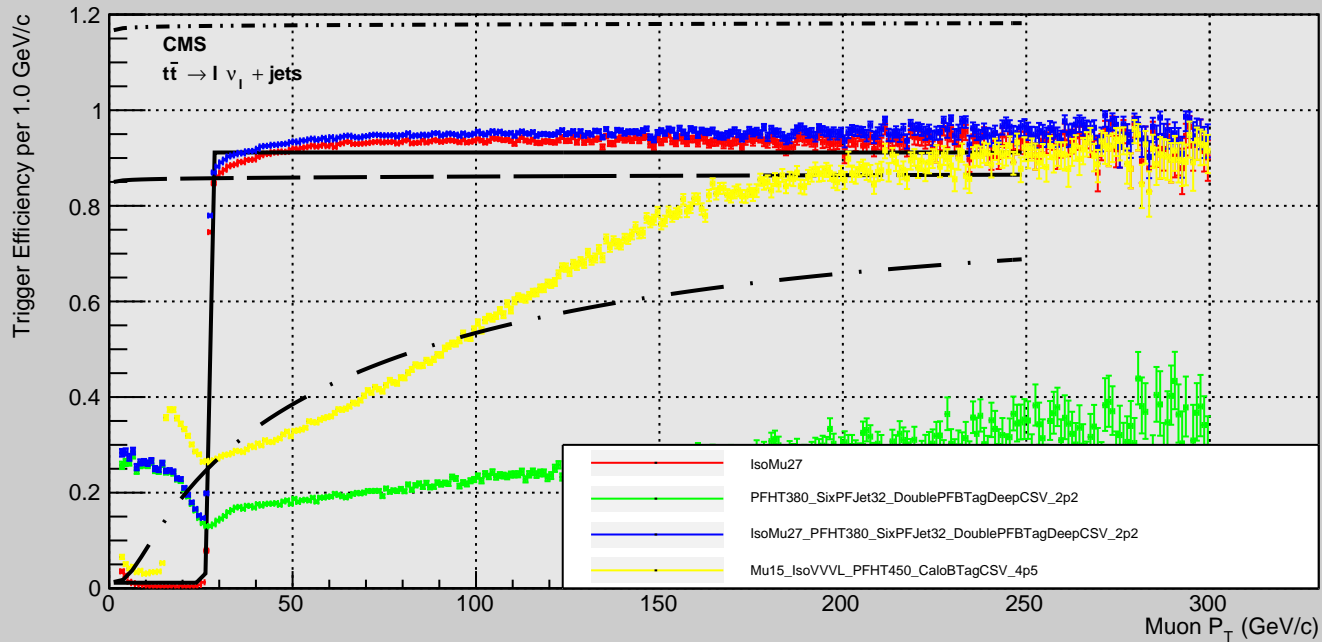
Number of Events per 1 GeV/c



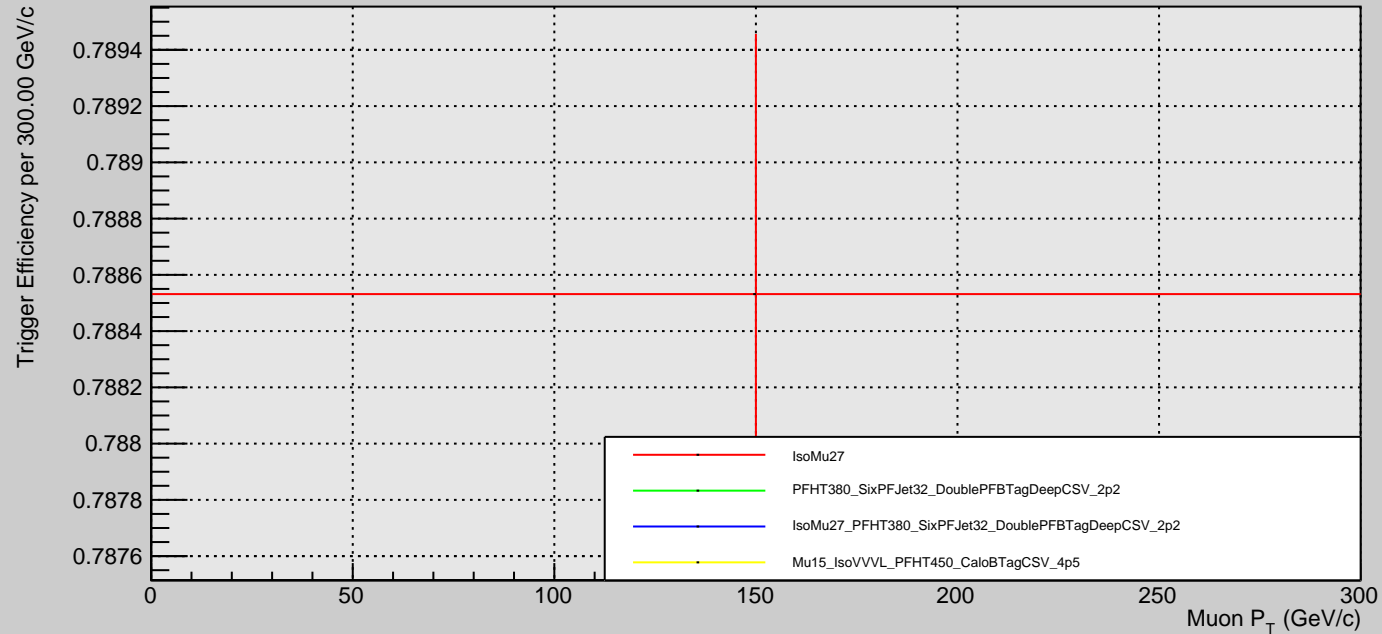
Number of Events per 1 GeV/c



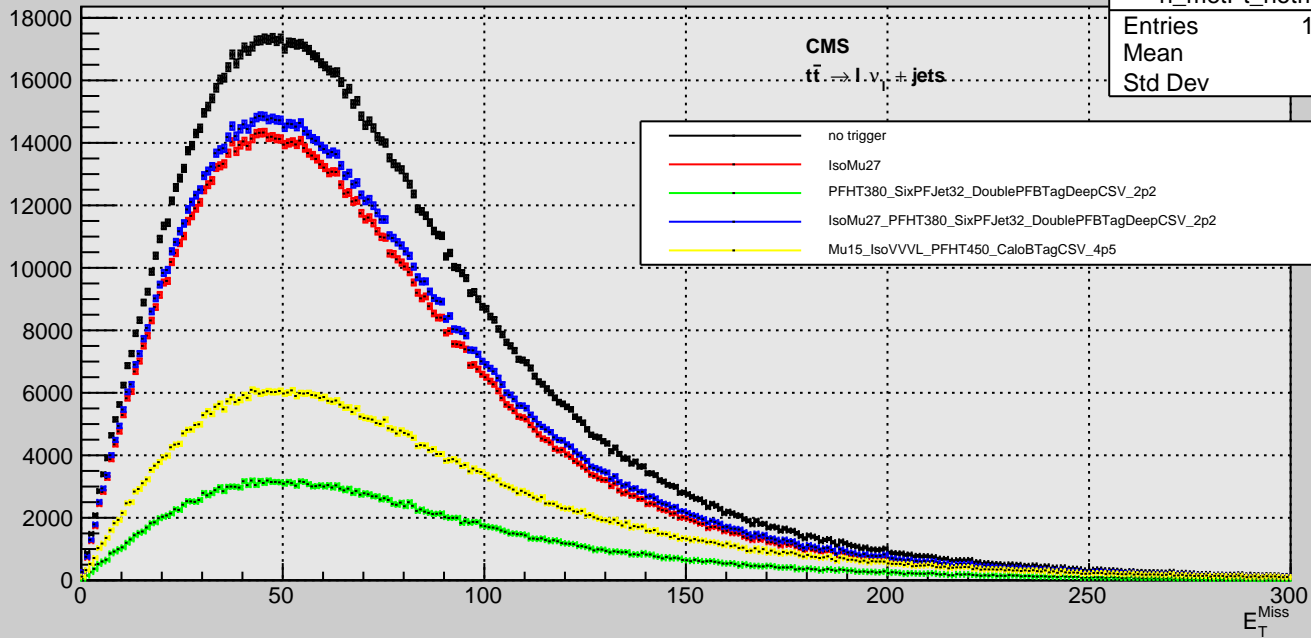
h_muonPt_notrigger	
Entries	1651566
Mean	61.59
Std Dev	40.53





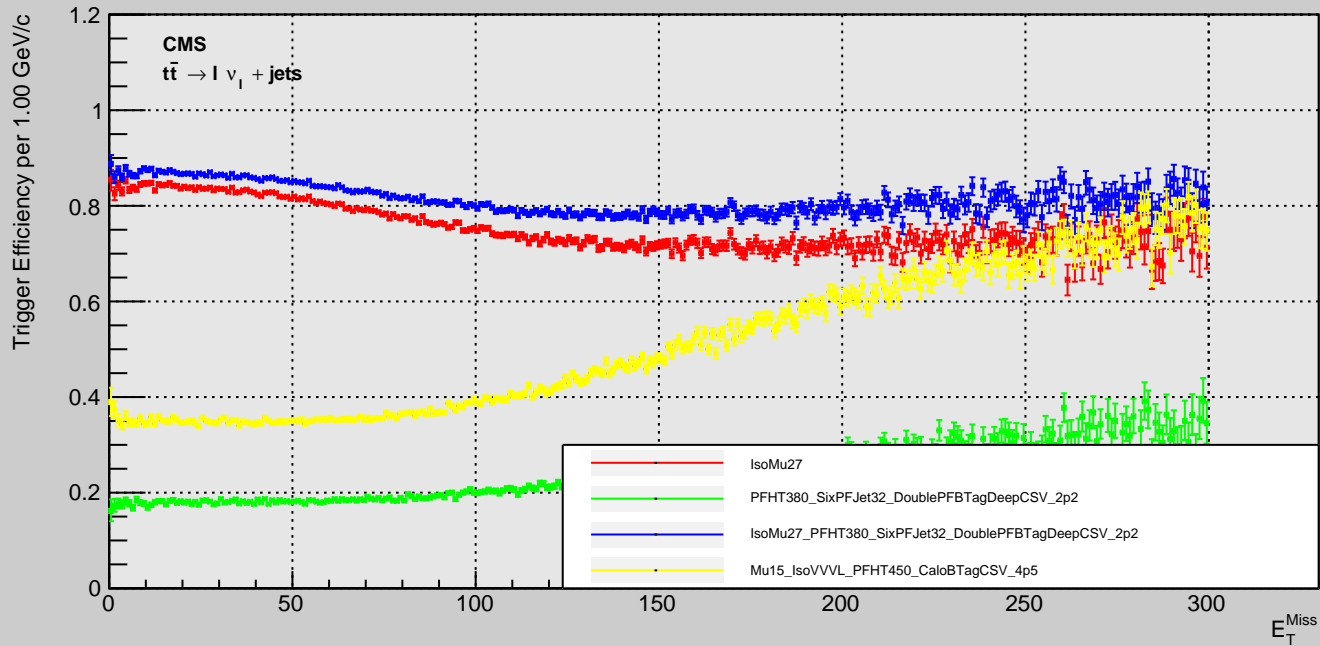


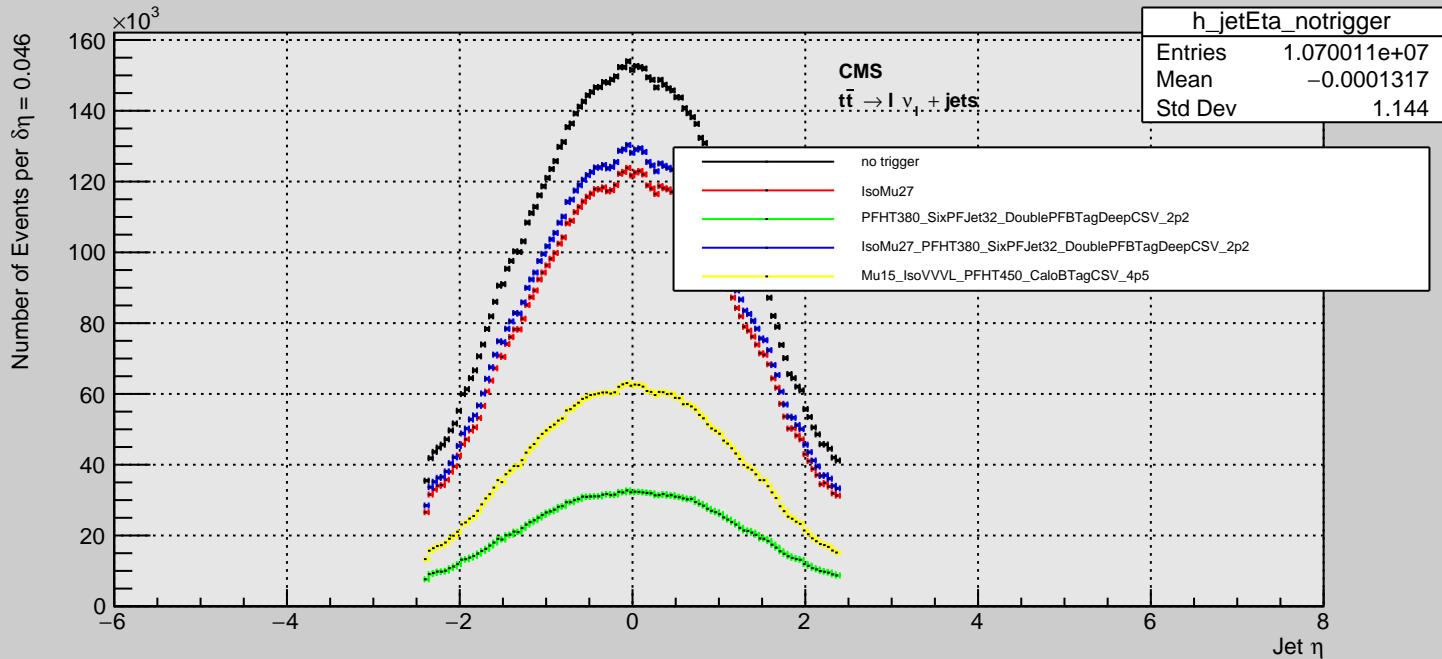
Number of Events per 1 GeV/c



h\_metPt\_notrigger

Entries	1651566
Mean	74.35
Std Dev	47.57





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

