

On-line (pre-)selection Requisites for:

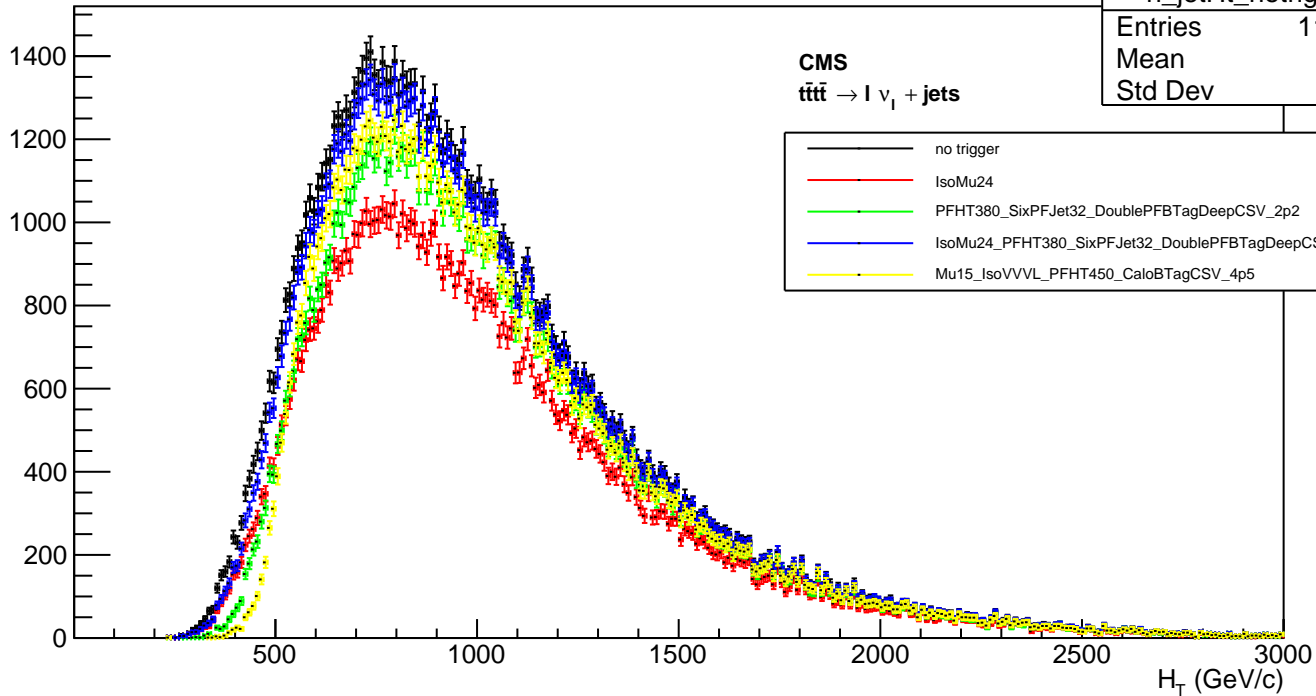
- **Jets:** number > 5
- **Muons plus Electrons:** number > 0

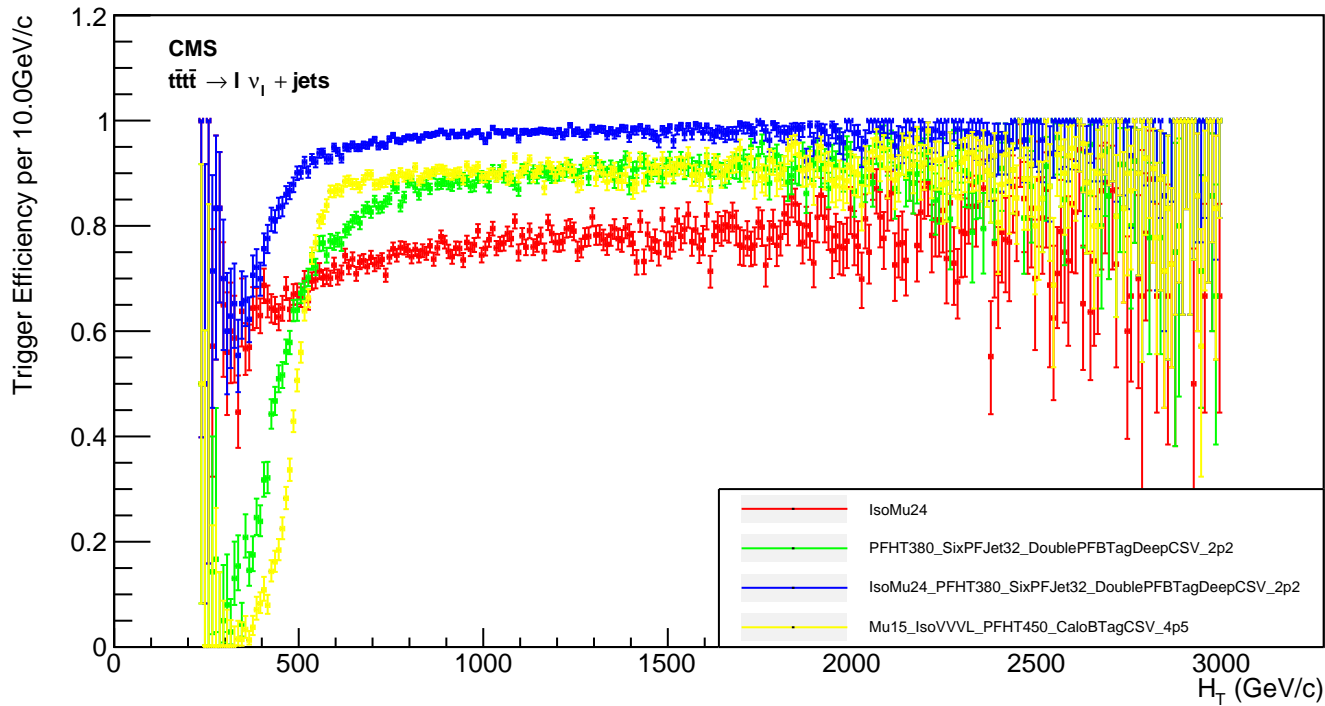
Event Limit: None (see last page)

Off-line (post-)selection Requisites for:

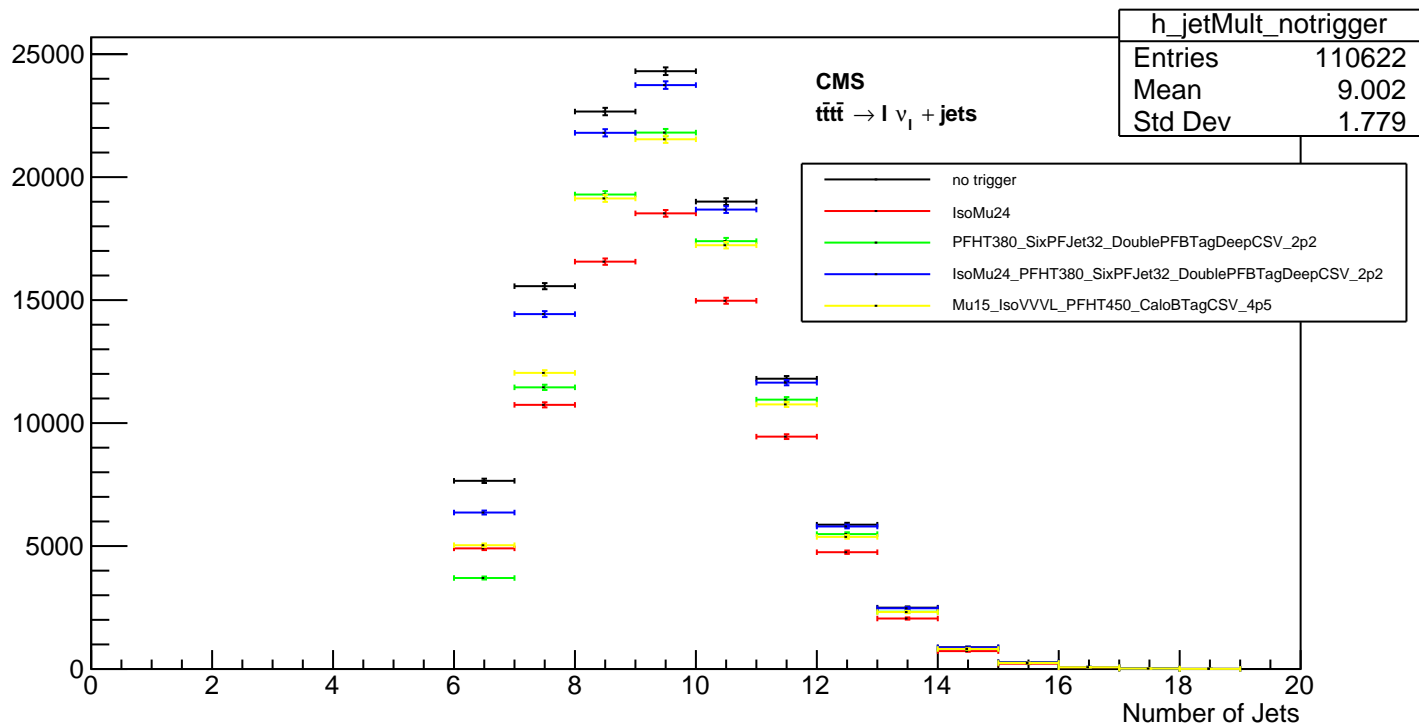
- **Jets:** $\text{jetId} > 2$, $p_T > 30$ and $|\eta| < 2.4$ (for at least 6 jets)
 $\text{btagDeepFlavB} > 0.7489$ (for at least one jet)
- **Muons:** has tightId, $|\eta| < 2.4$ and $\text{miniPFRellso_all} < 0.15$ (for at least 1)

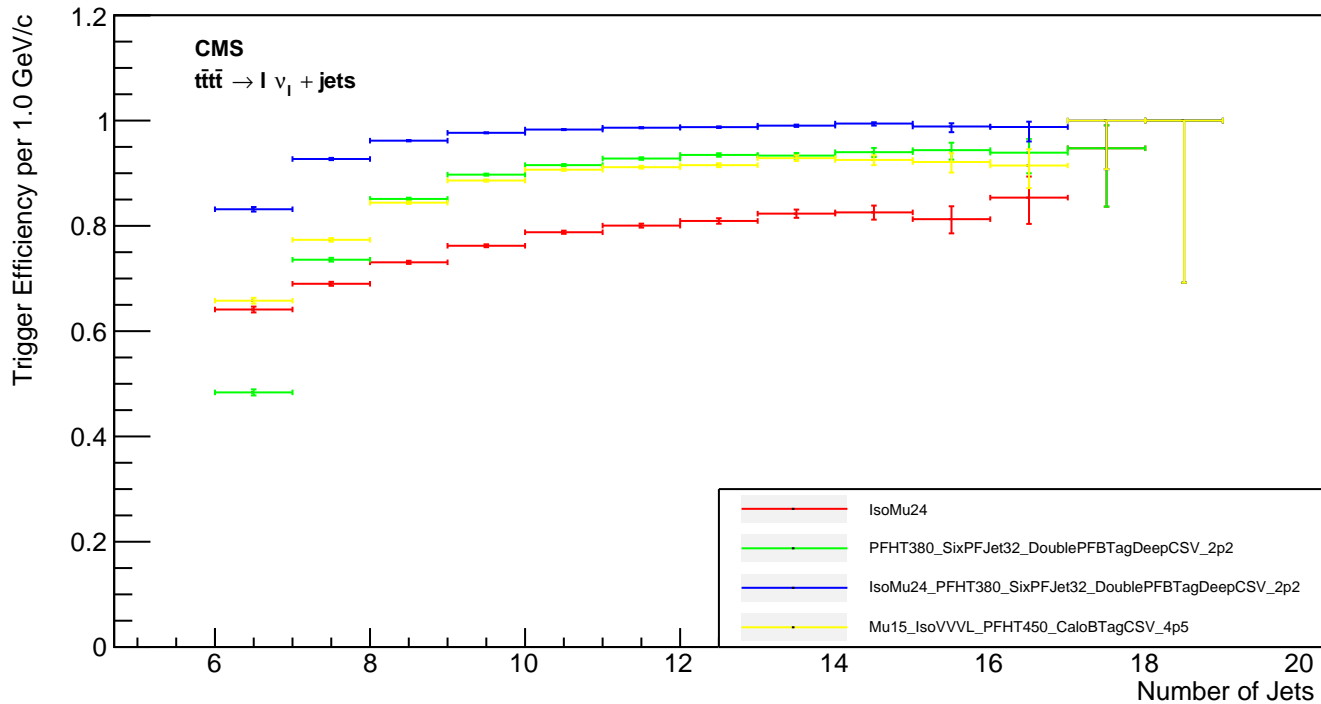
Number of Events per 10 GeV/c



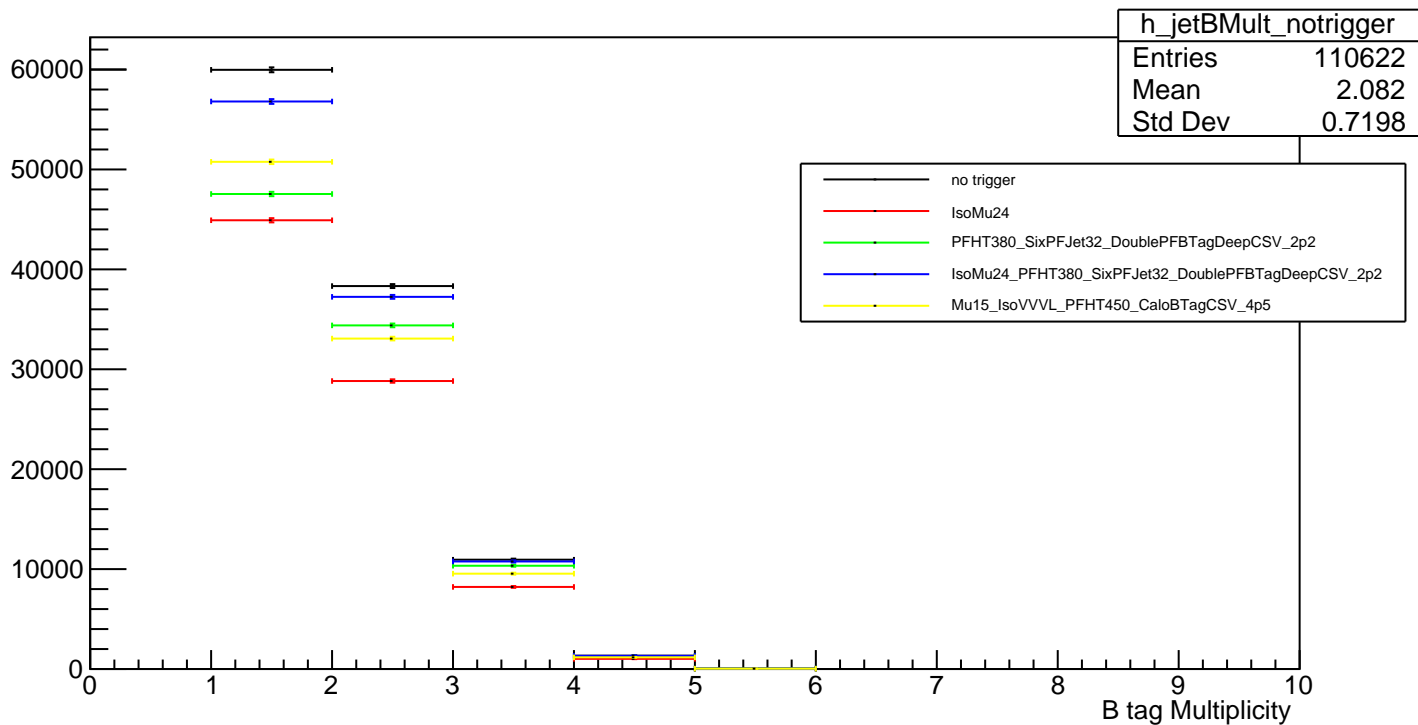


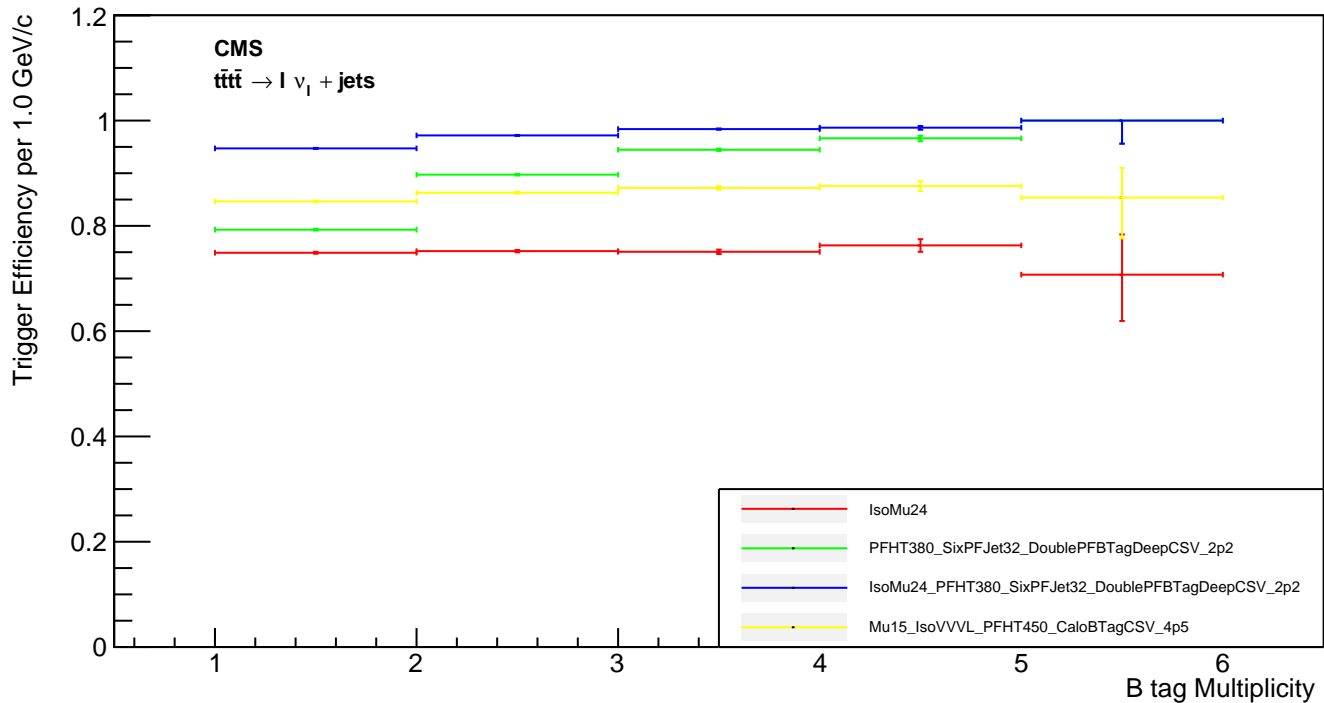
Number of Events per Number of Jets

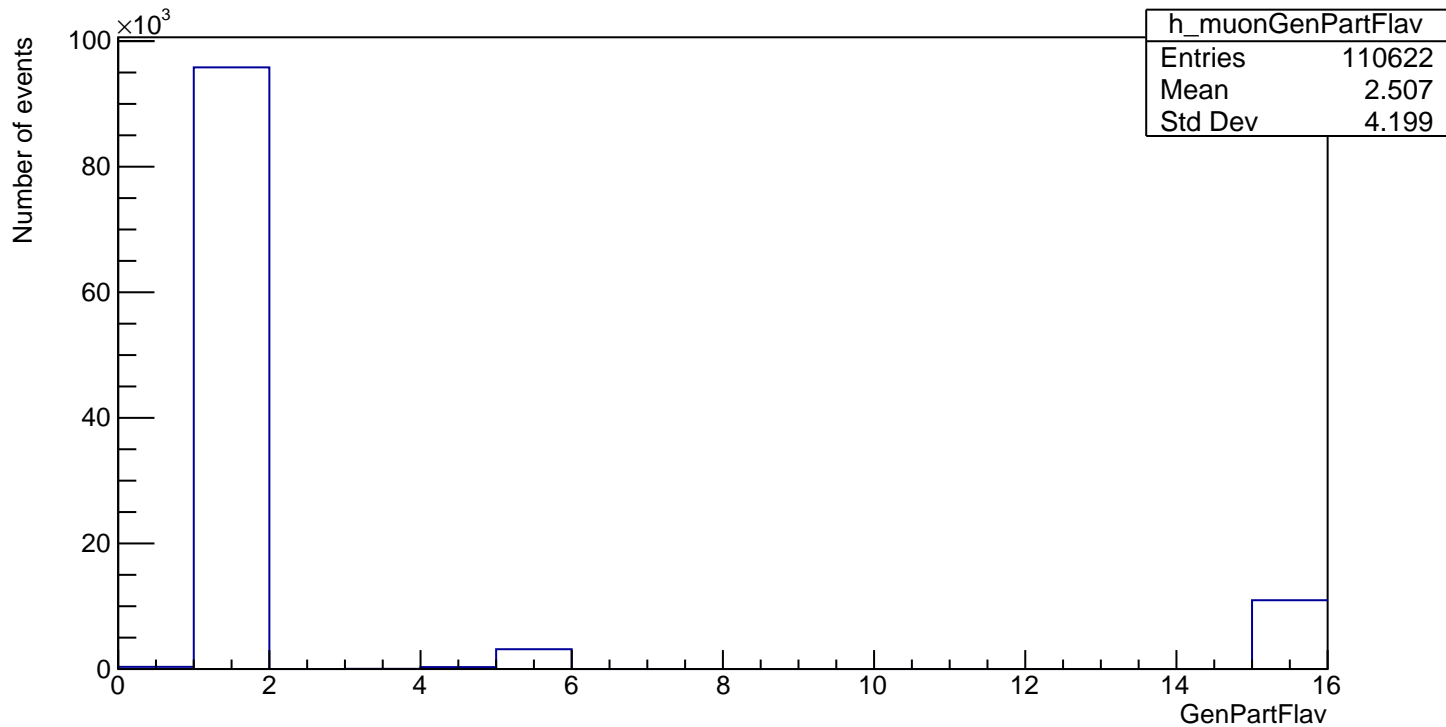




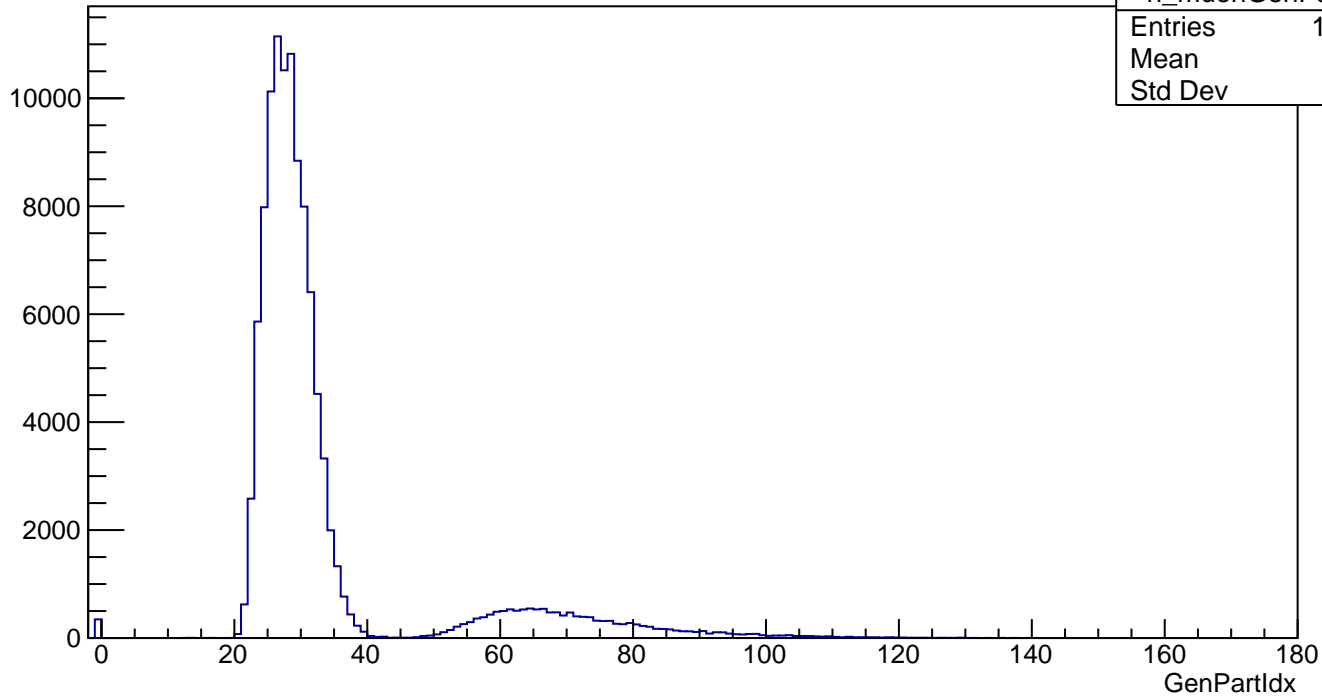
Number of Events per Number of Jets







Number of events



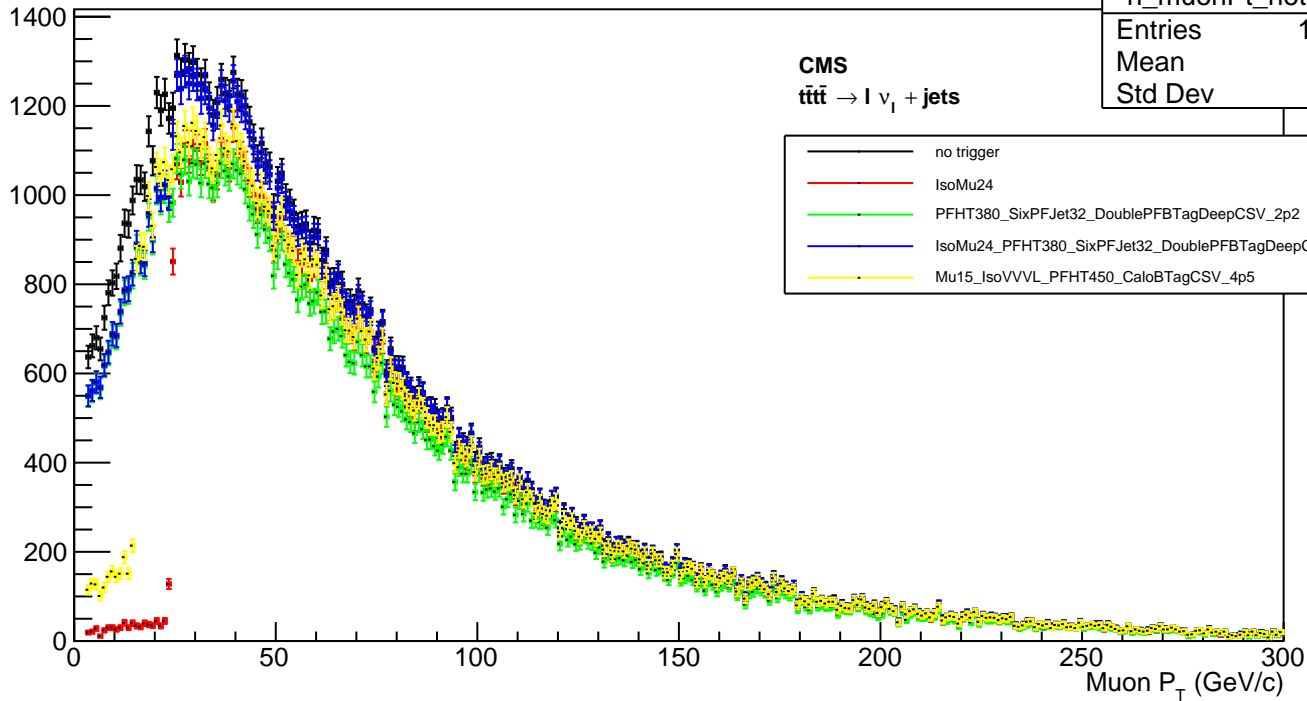
Number of Events

50000
40000
30000
20000
10000
0

h_muonRellso04_all	
Entries	110622
Mean	0.03635
Std Dev	0.03975

muonRellso04_all

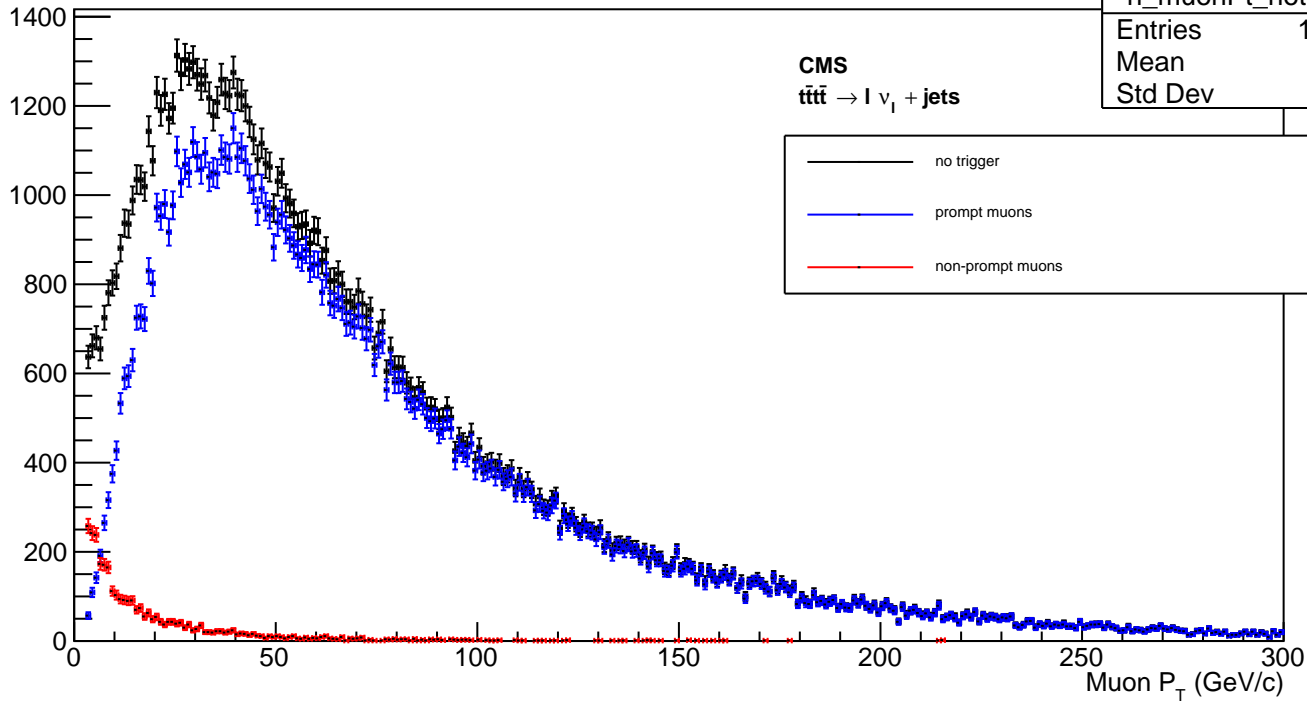
Number of Events per 1 GeV/c



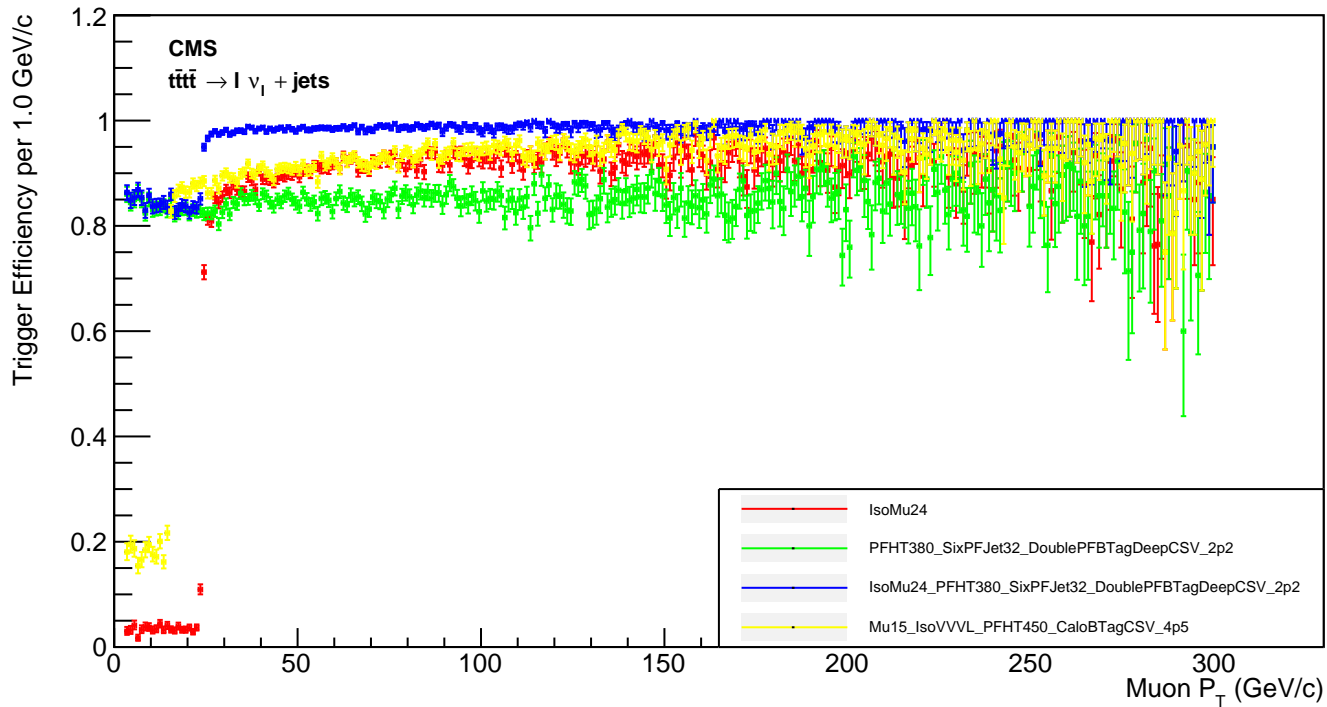
h_muonPt_notrigger

Entries	110622
Mean	68.62
Std Dev	53.53

Number of Events per 1 GeV/c



h_muonPt_notrigger	
Entries	110622
Mean	68.62
Std Dev	53.53



Number of Events per 1 GeV/c

CMS

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

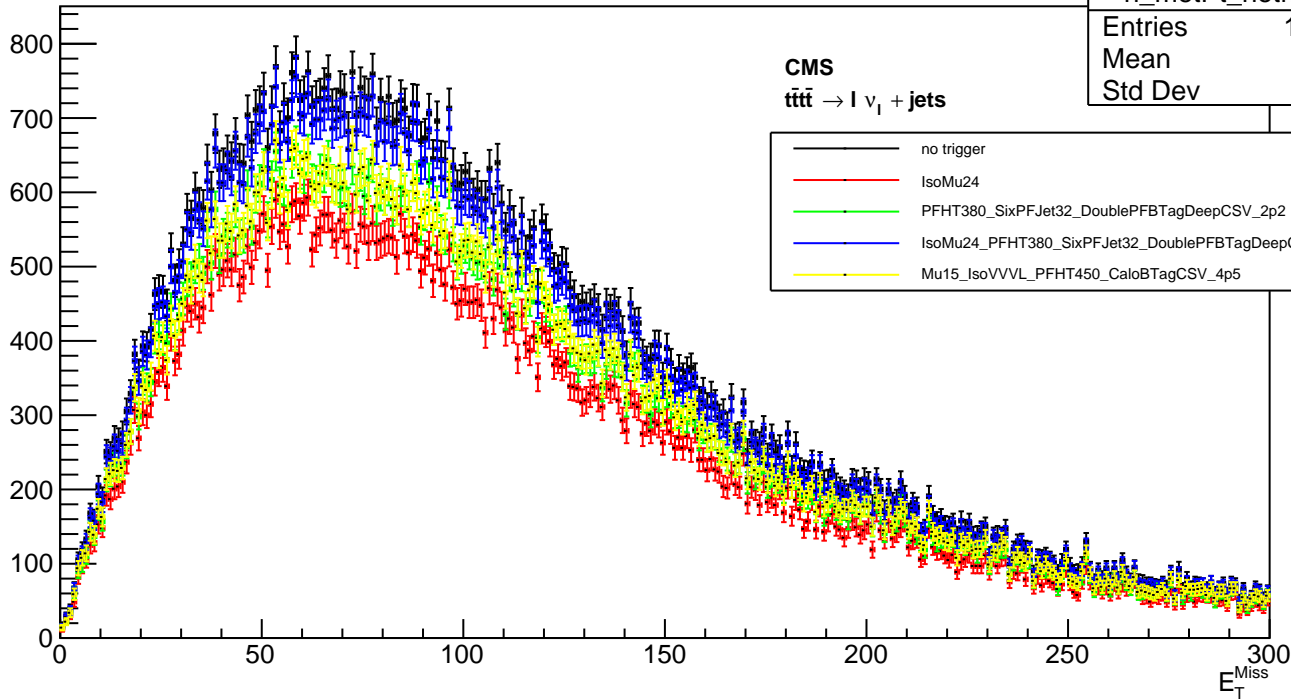
h_metPt_notrigger

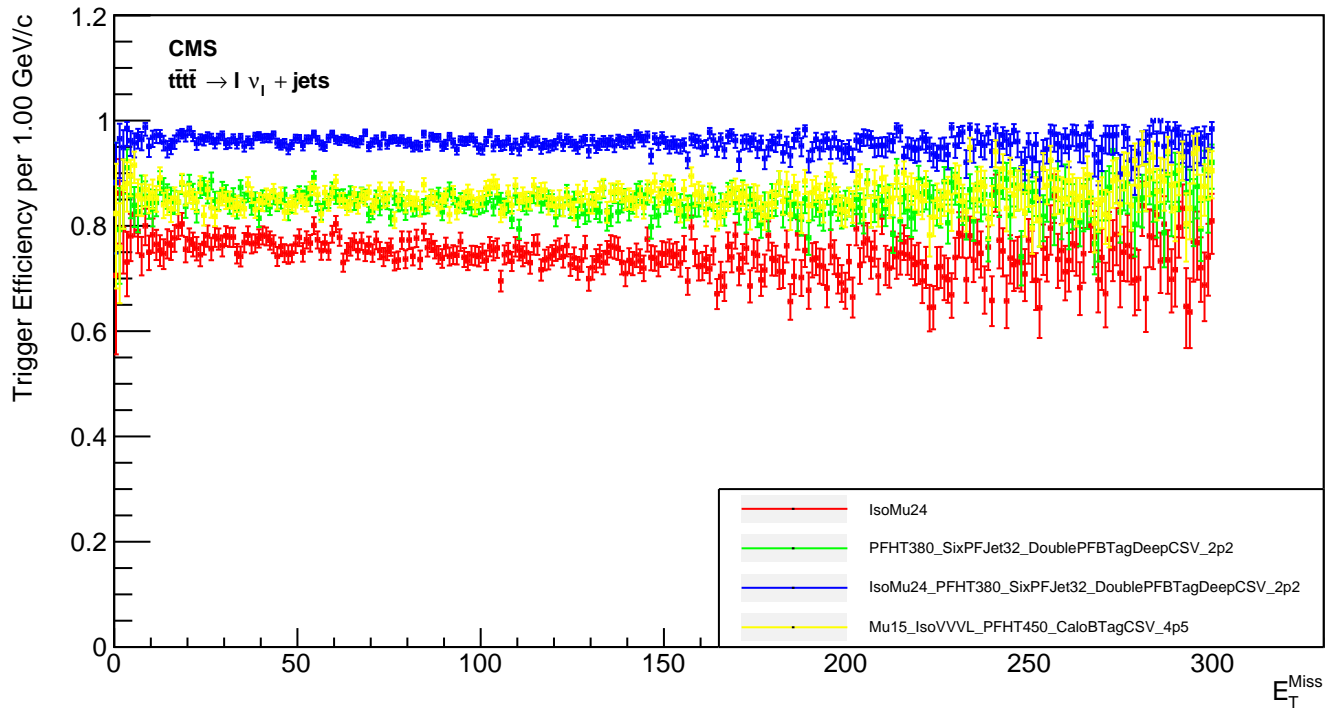
Entries 110622

Mean 107.3

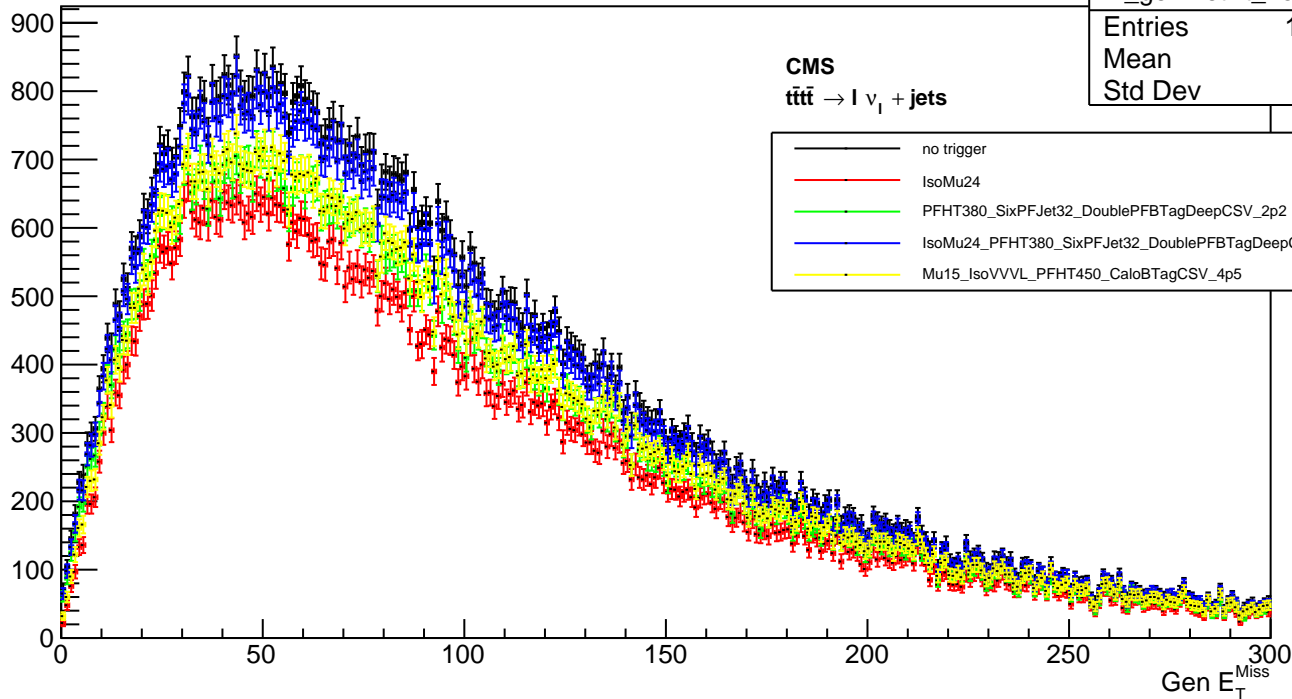
Std Dev 64.66

- no trigger
- IsoMu24
- PFHT380_SixPFJet32_DoublePFBTagDeepCSV_2p2
- IsoMu24_PFHT380_SixPFJet32_DoublePFBTagDeepCSV_2p2
- Mu15_IsoVVVL_PFHT450_CaloBTagCSV_4p5

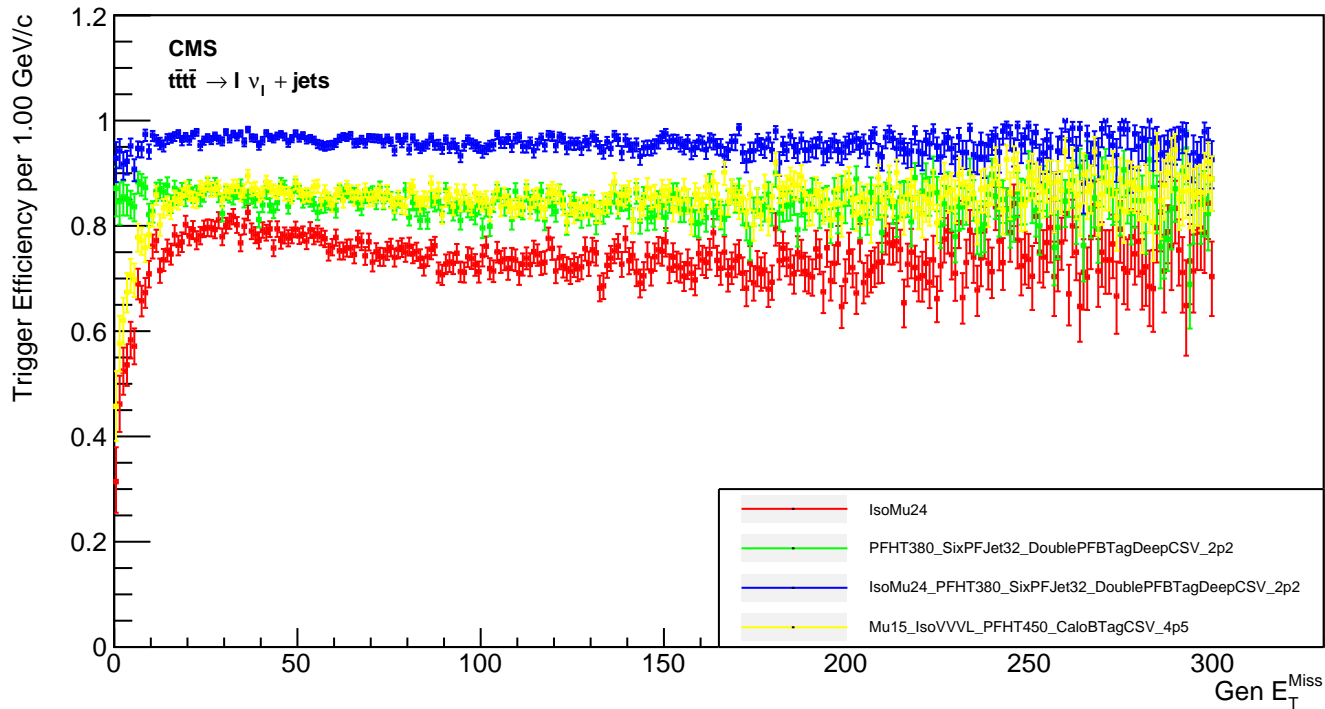




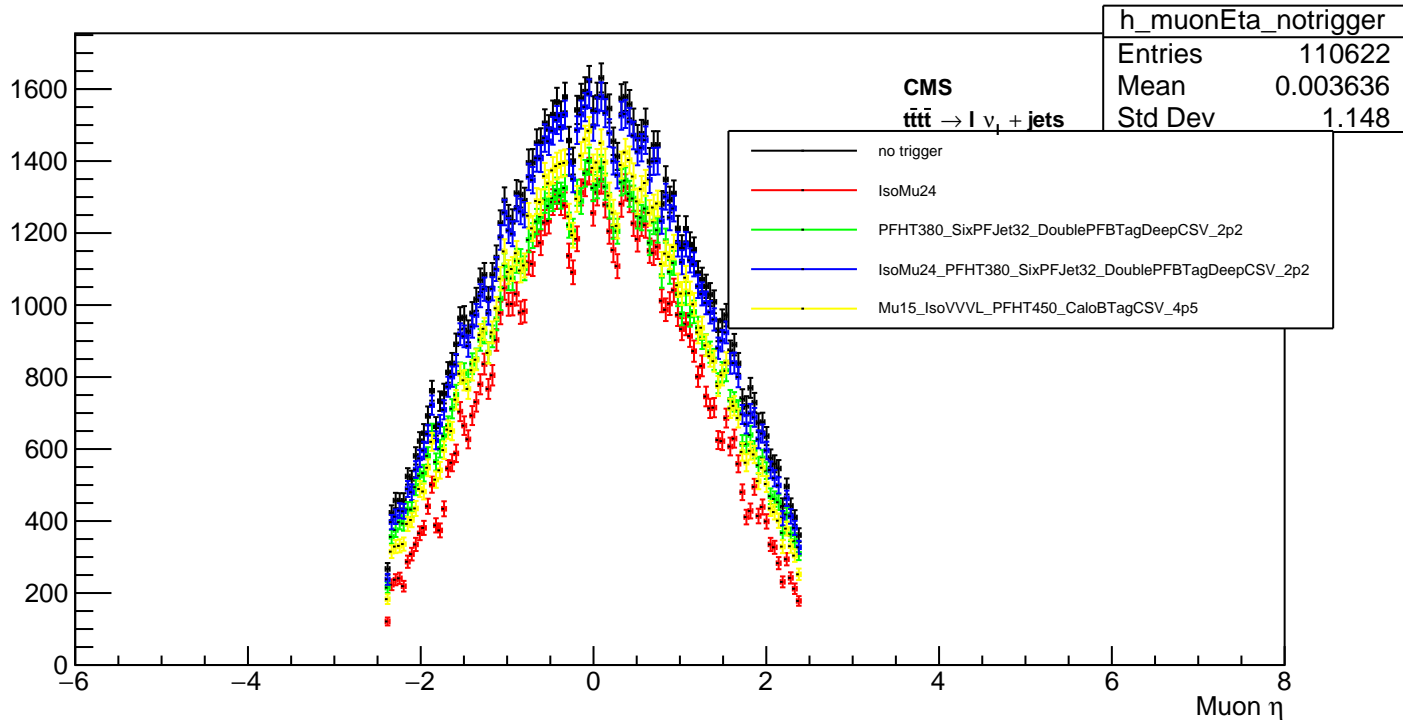
Number of Events per 1GeV/c



h_genMetPt_notrigger	
Entries	110622
Mean	96.05
Std Dev	64.66



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



Trigger Efficiency per 0.0466666666667 GeV/c

