

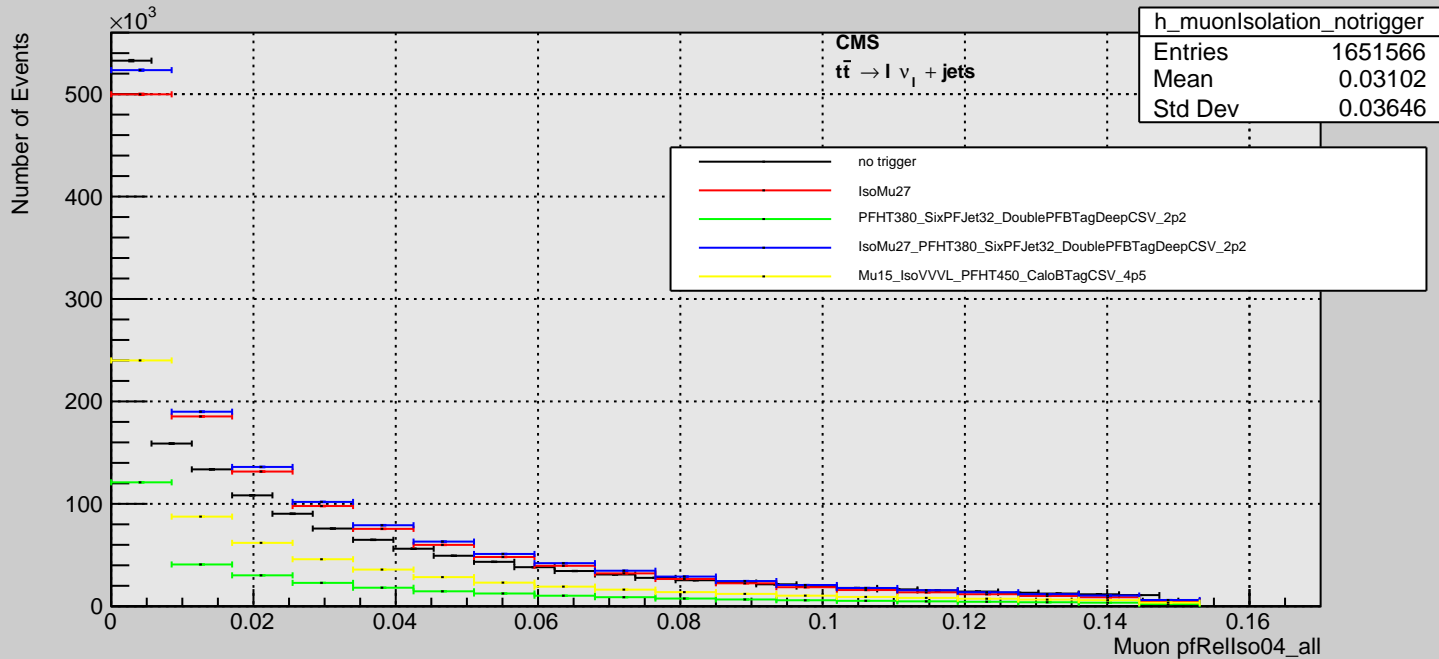
On-line (pre-)selection Requisites for:

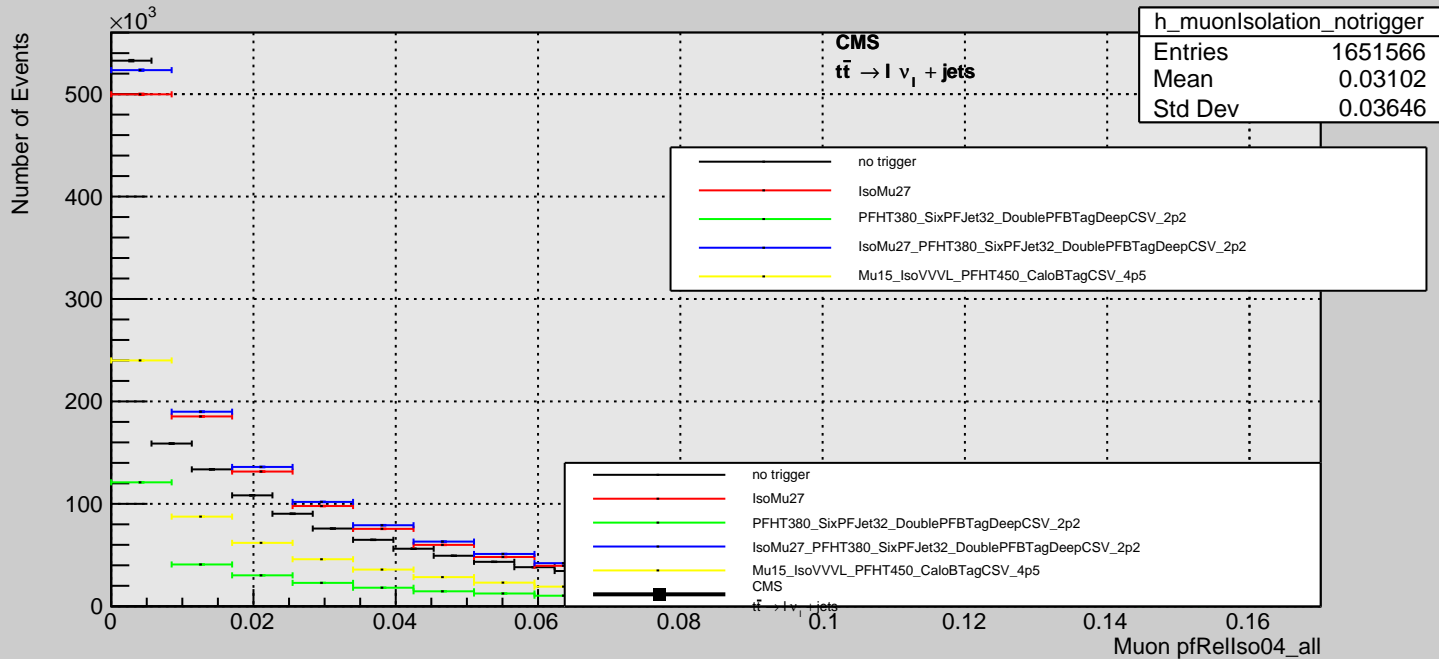
- **Jets:** number > 5
- **Muons plus Electrons:** number > 0

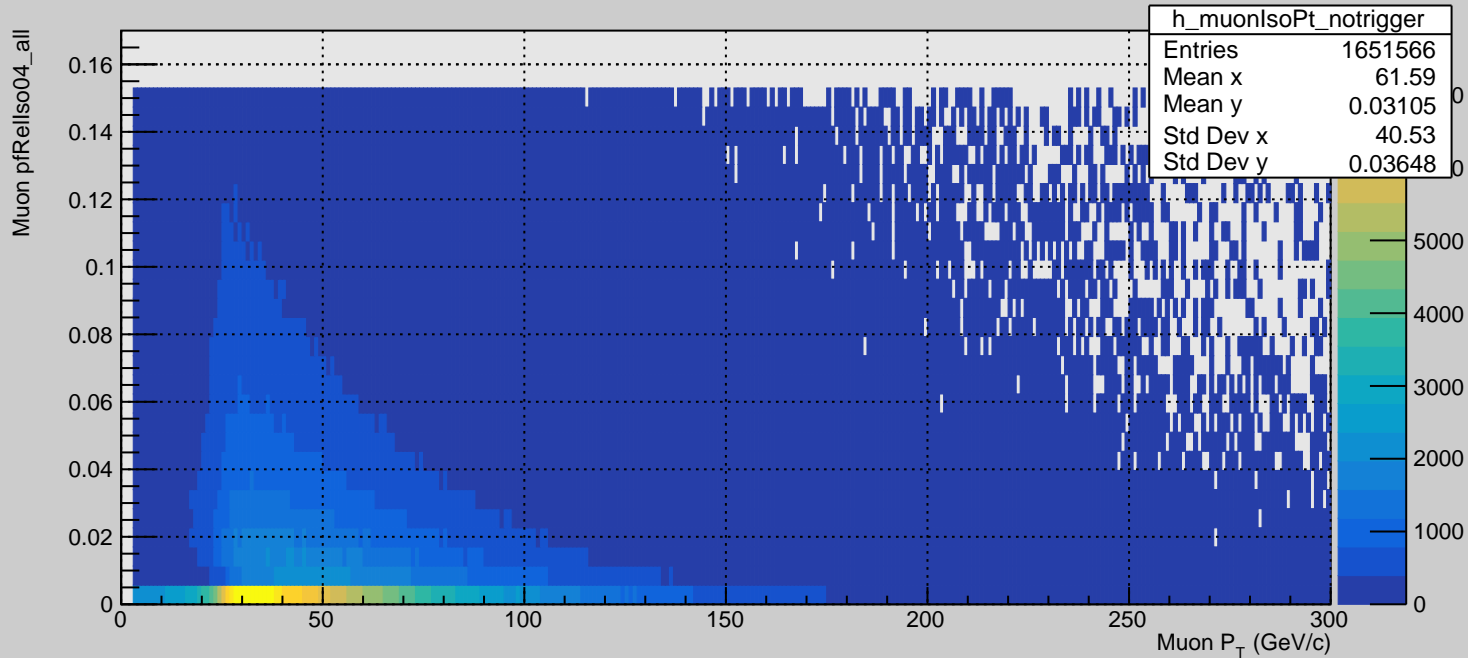
Event Limit: None (see last page)

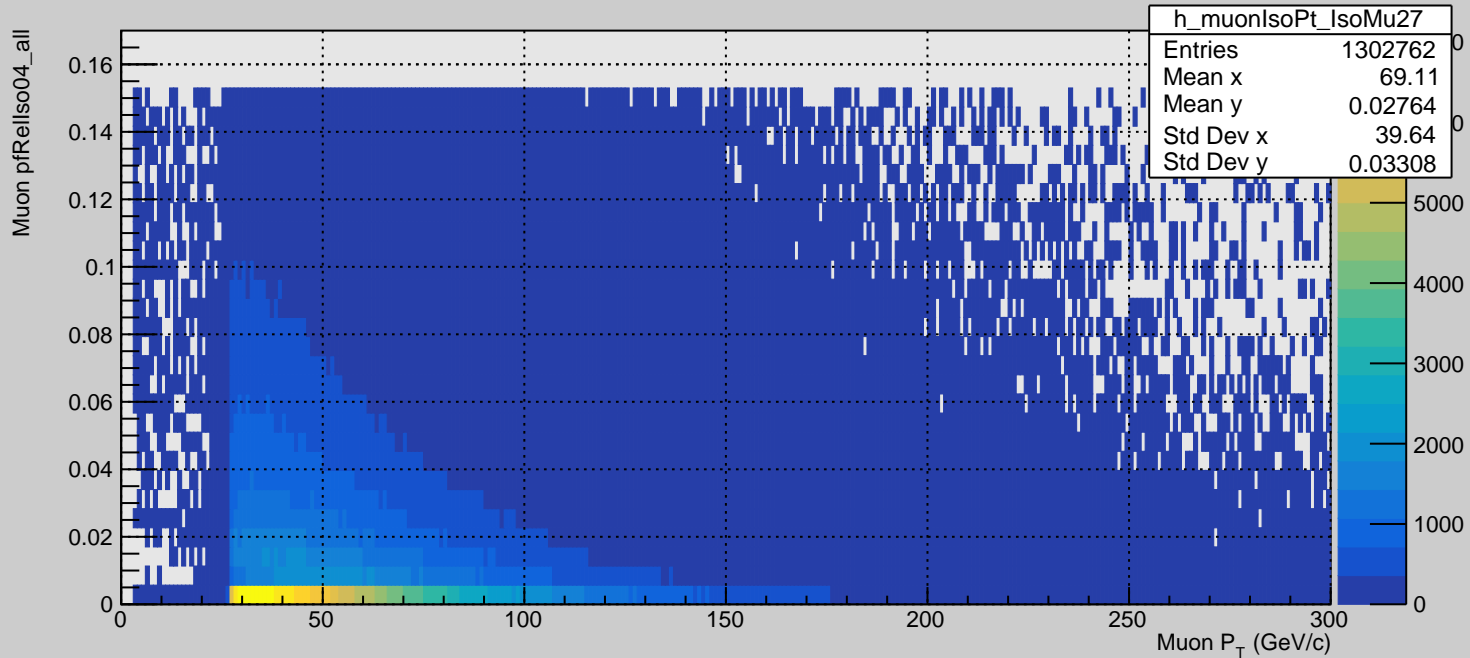
Off-line (post-)selection Requisites for:

- **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)



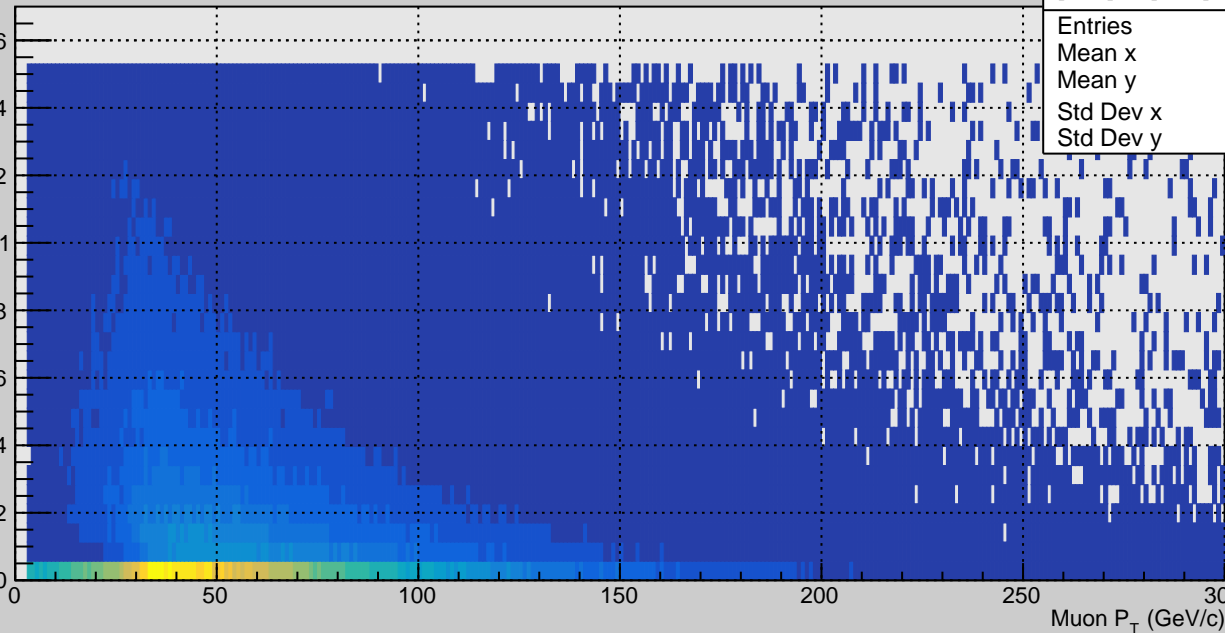






Muon pRelIso04_all

0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0



h_muonIsoPt_PFHT380_SixPFJet32_DoublePFBTagDeepCSV_2p2

Entries	323677
Mean x	67.12
Mean y	0.03141
Std Dev x	45.57
Std Dev y	0.03697

800

600

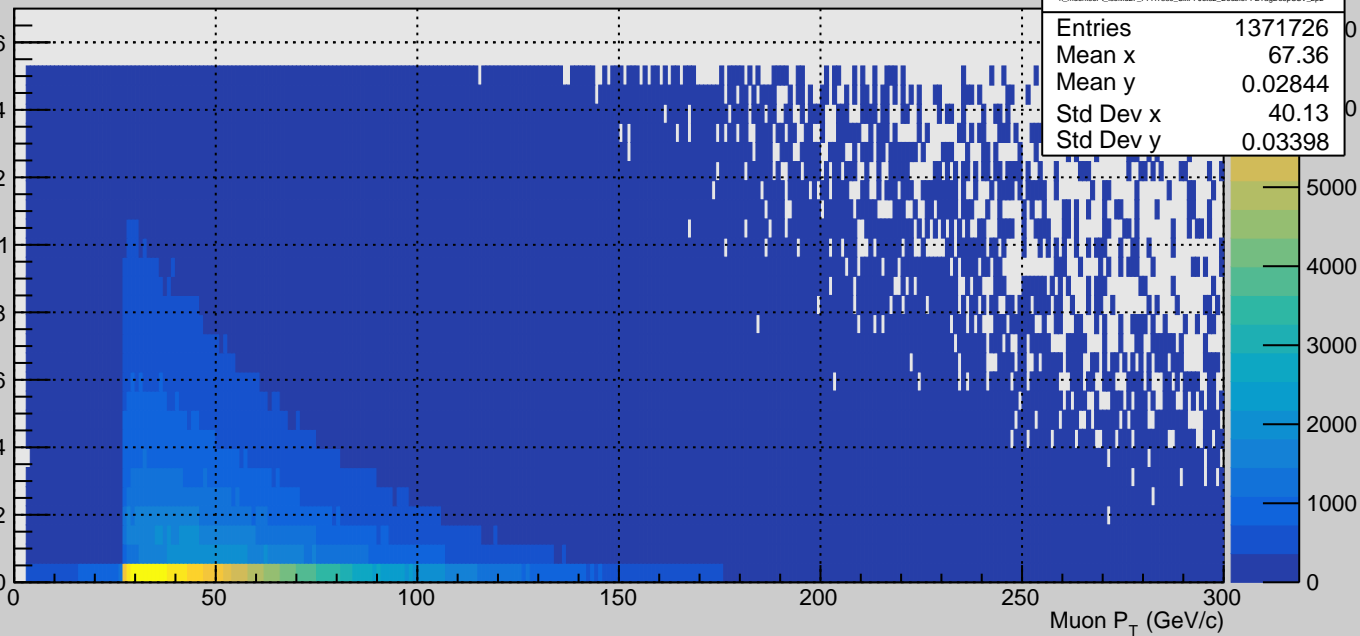
400

200

0

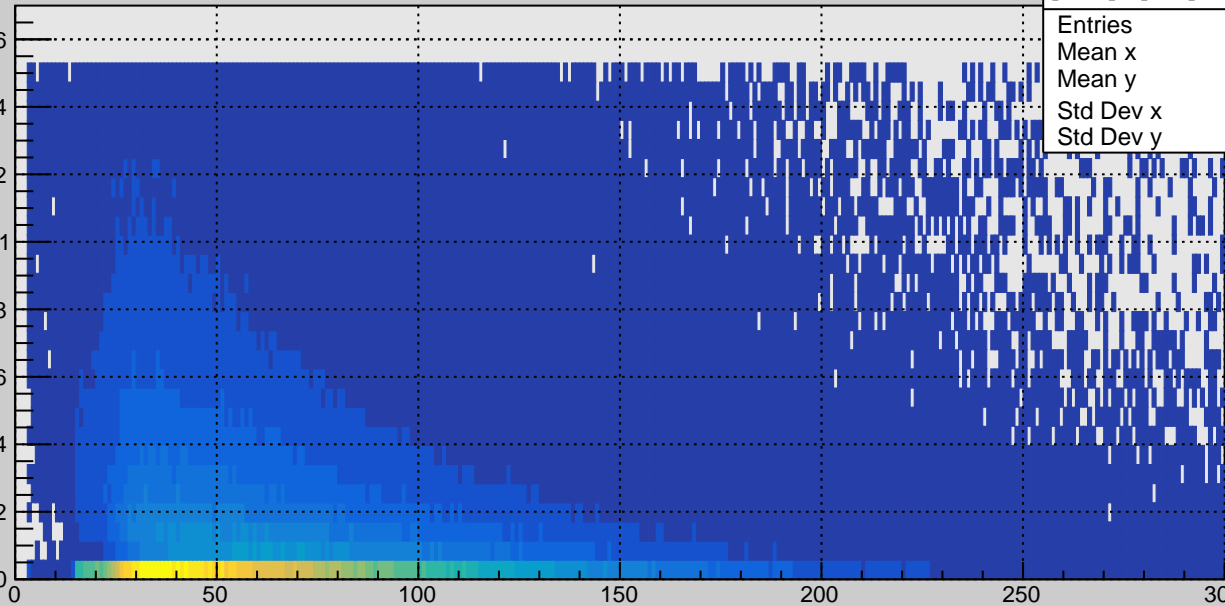
Muon pRelIso04_all

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



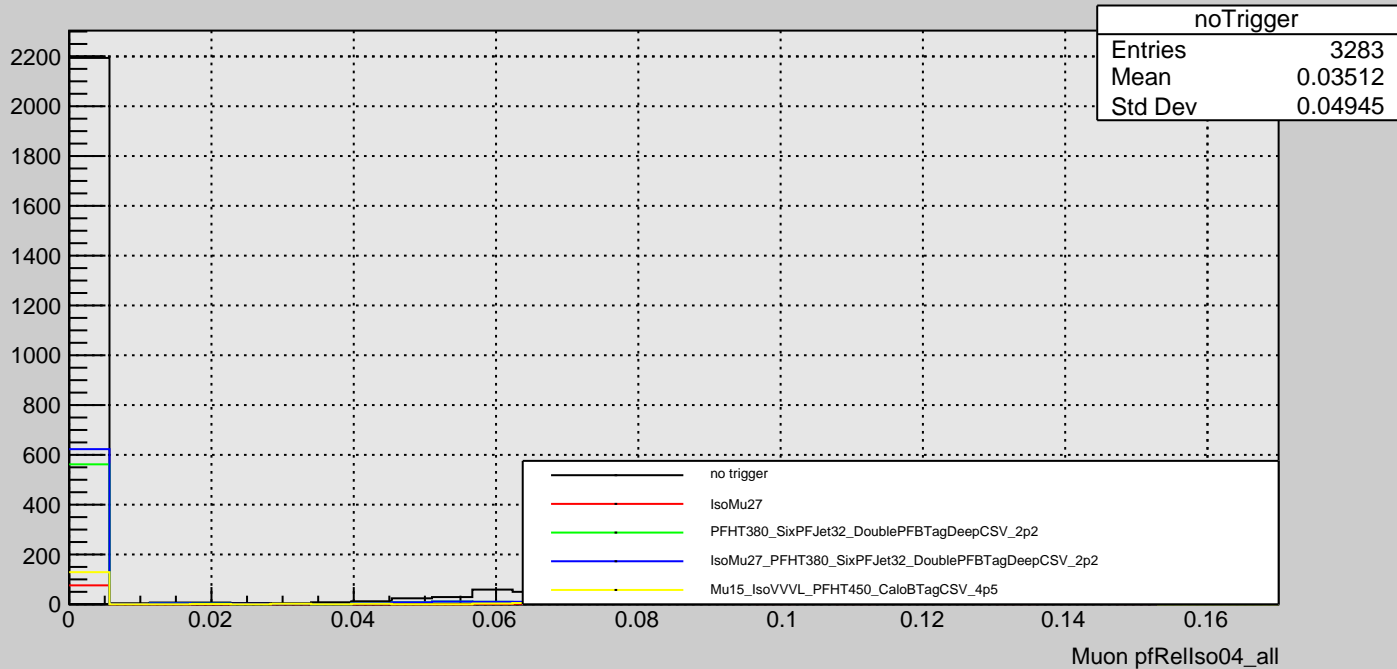
h_muonIsoPt_Mu15_IsoVVVL_PFHT450_CaloBTagCSV_4p5

Entries	635253
Mean x	77.6
Mean y	0.02963
Std Dev x	49.07
Std Dev y	0.03531

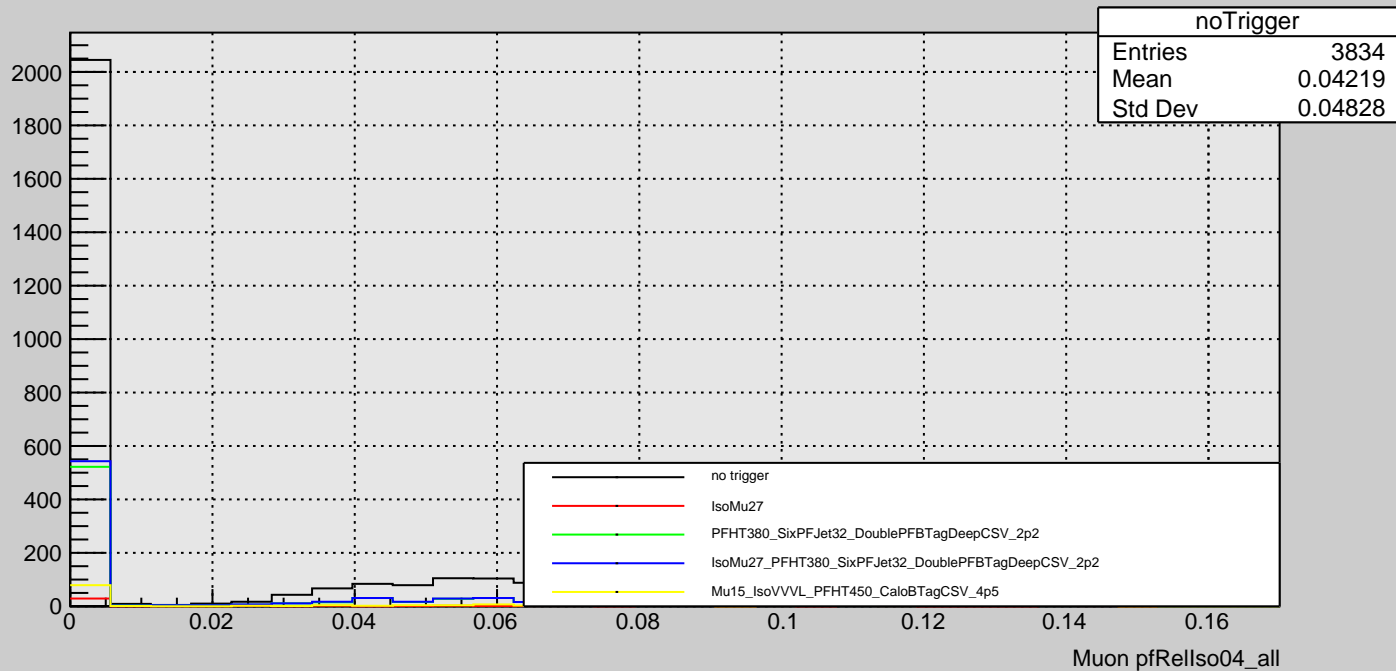
1600
1400
1200
1000
800
600
400
200
0

Muon P_T (GeV/c)

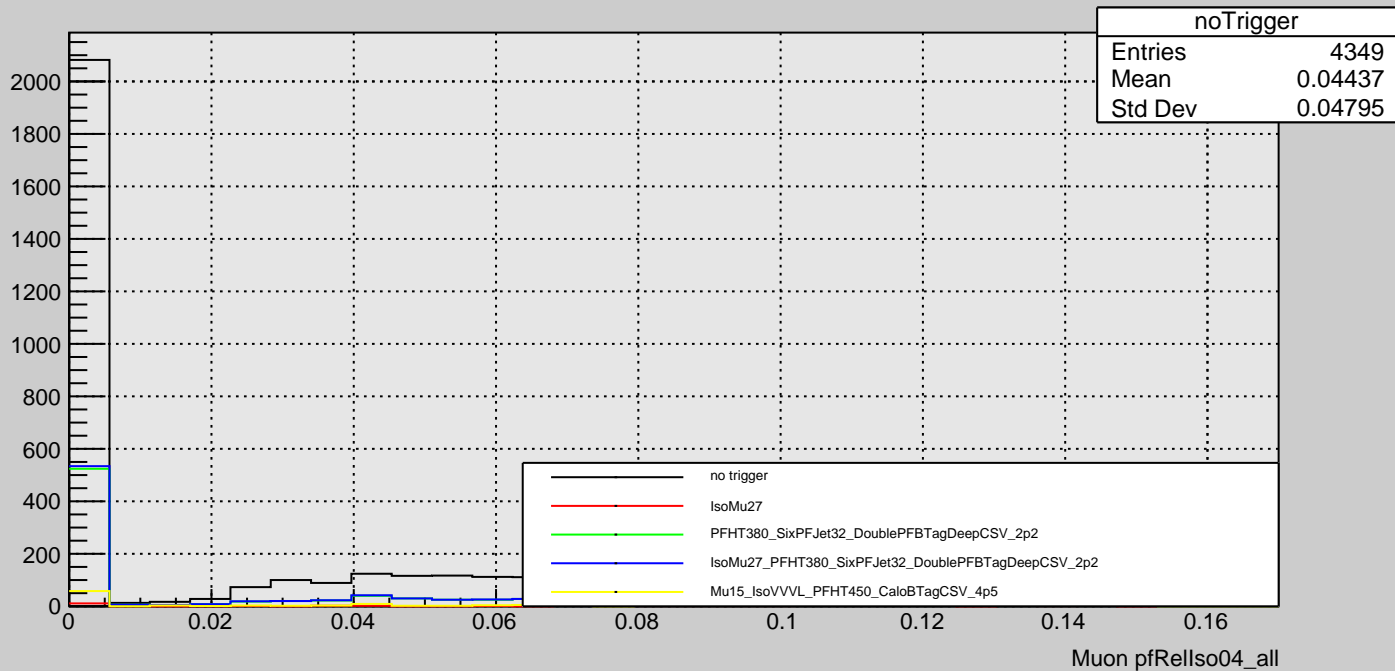
Muon Pt = 4



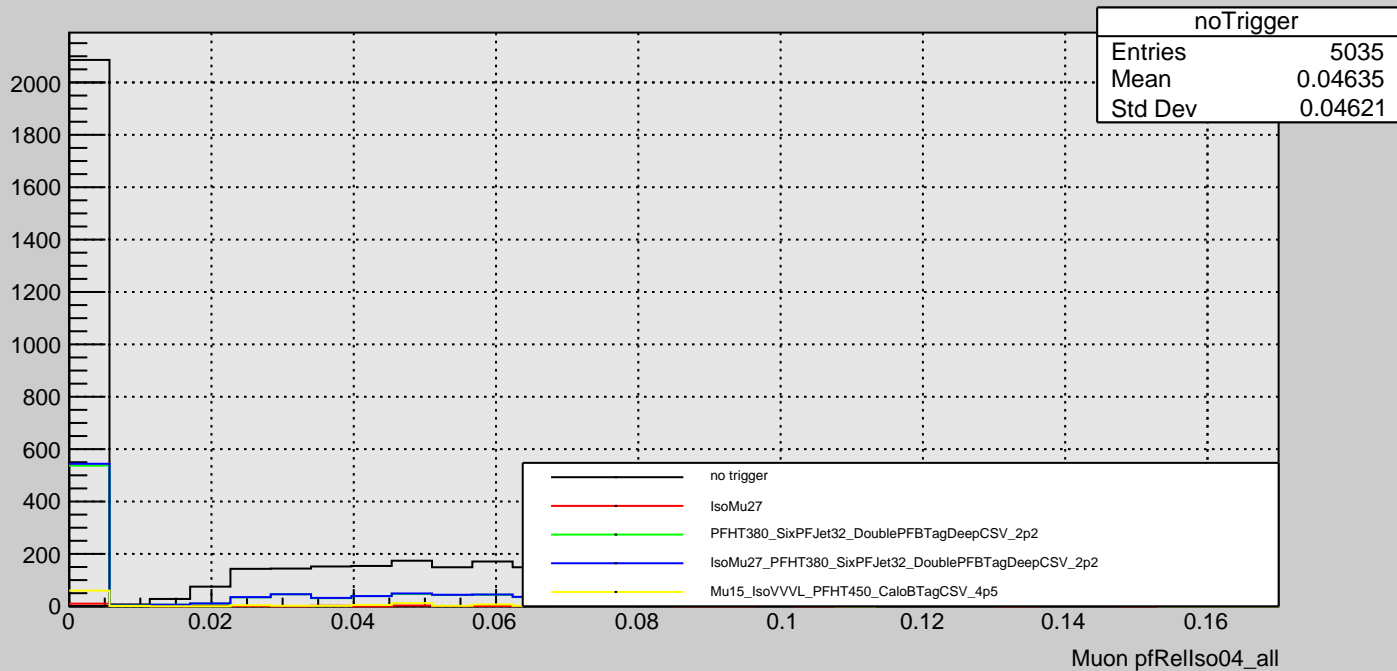
Muon Pt = 6



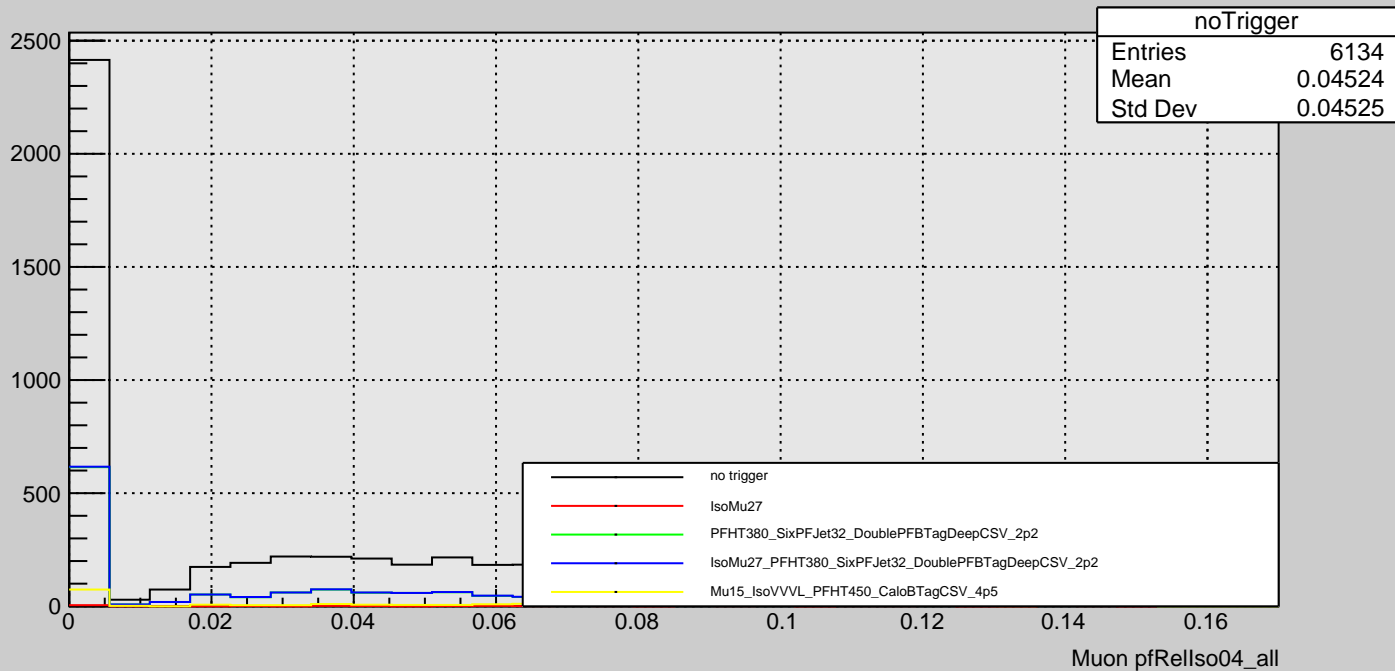
Muon Pt = 8



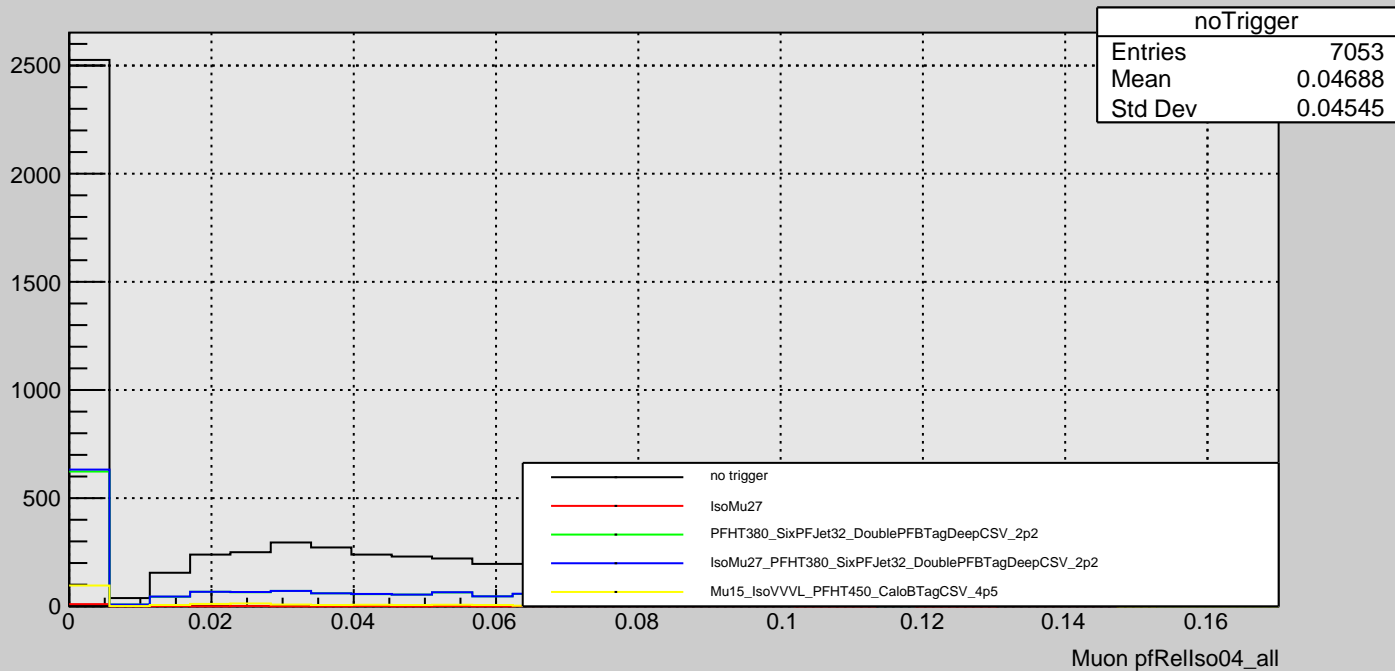
Muon Pt = 10



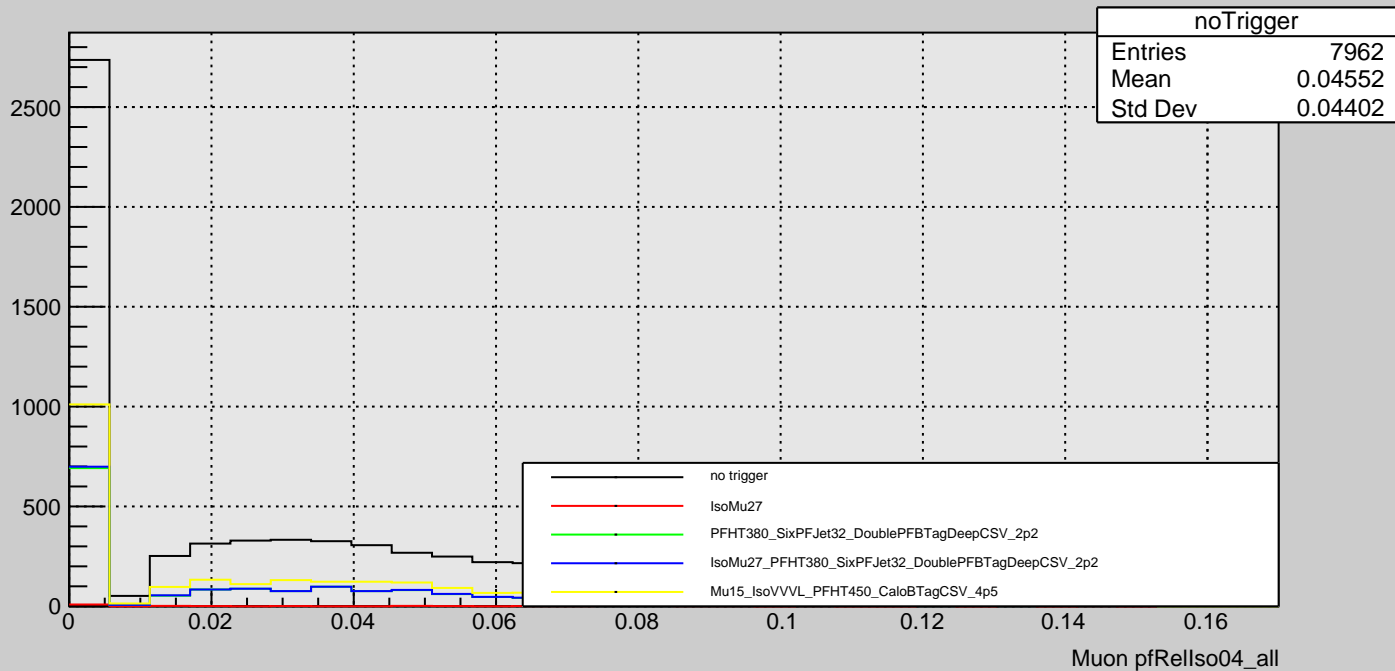
Muon Pt = 12



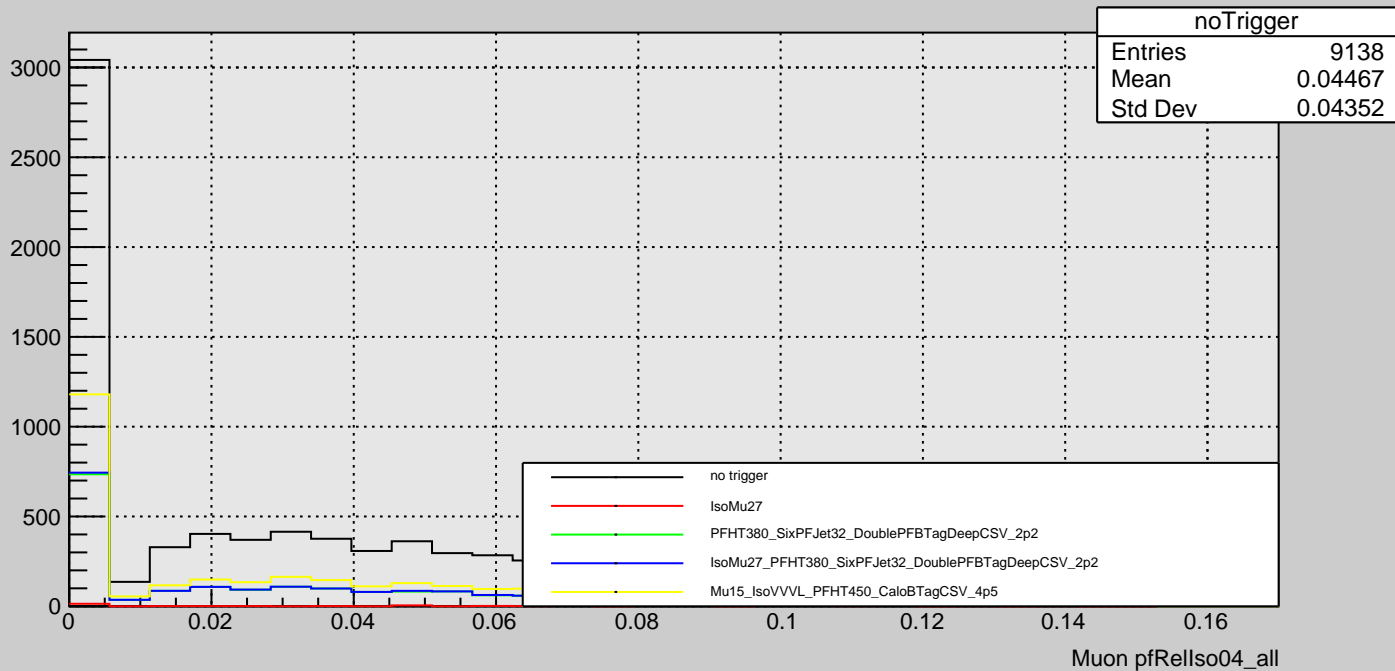
Muon Pt = 14



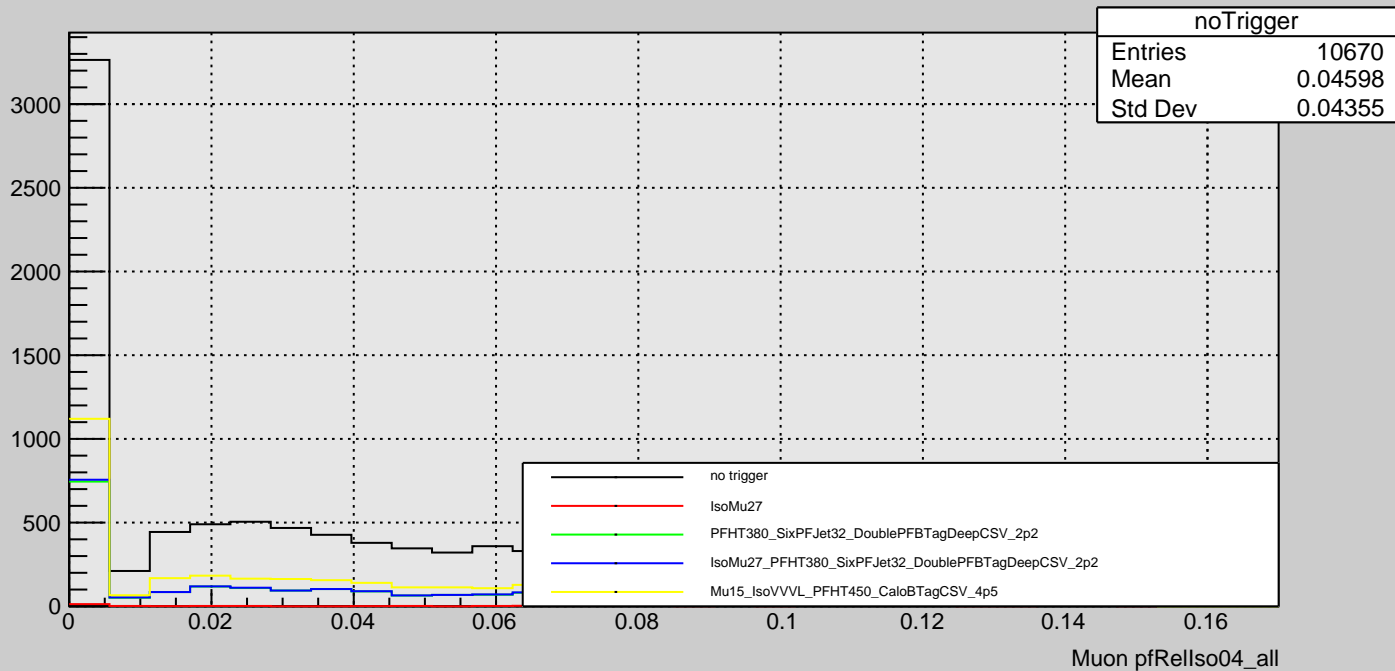
Muon Pt = 16



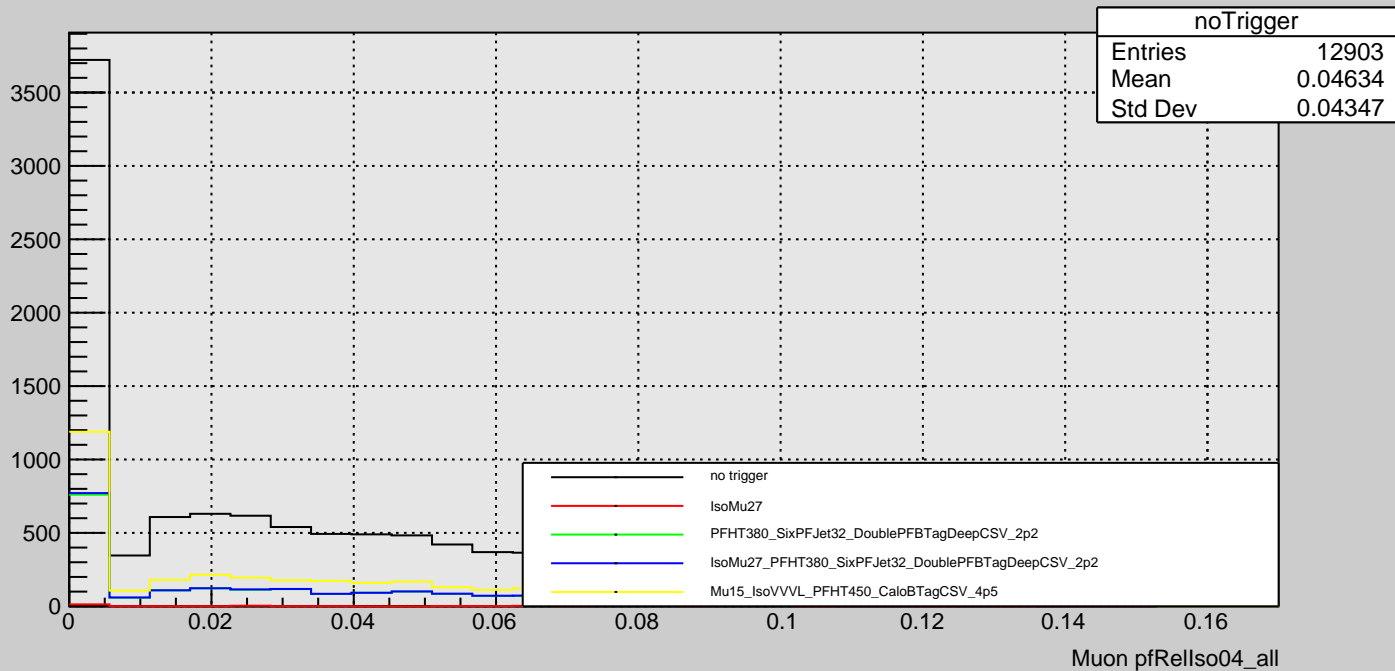
Muon Pt = 18



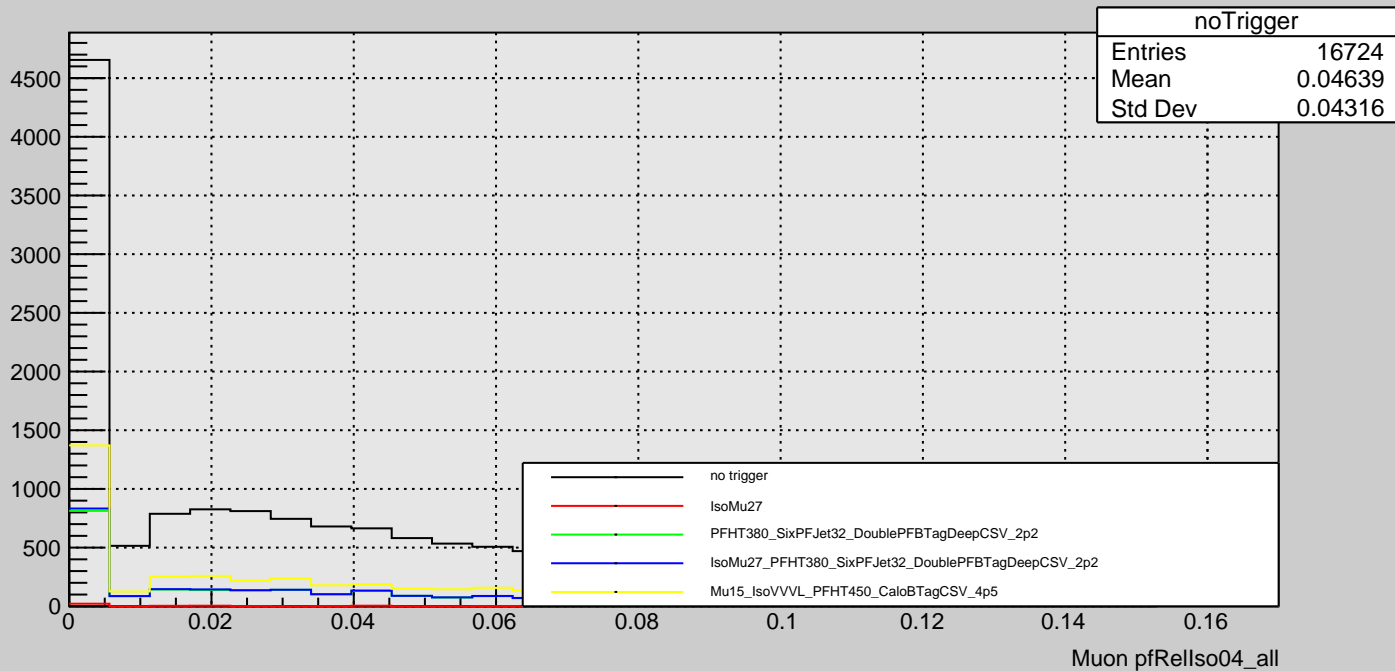
Muon Pt = 20



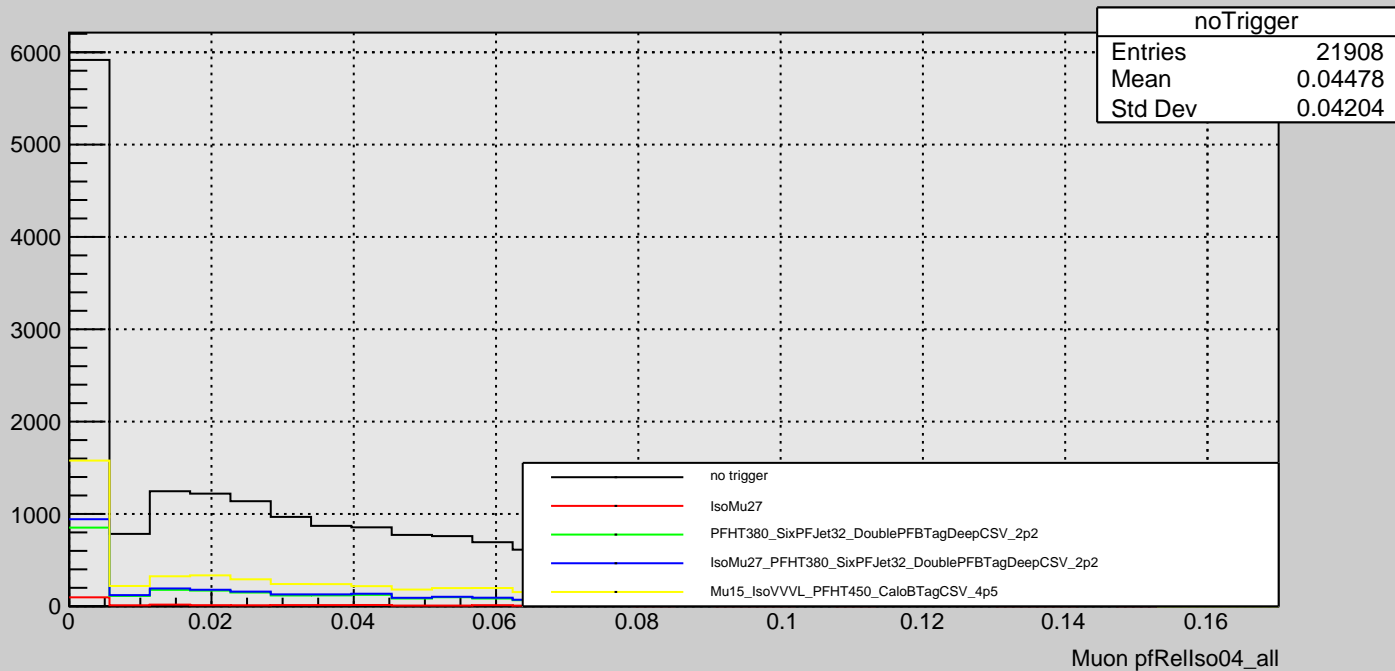
Muon Pt = 22



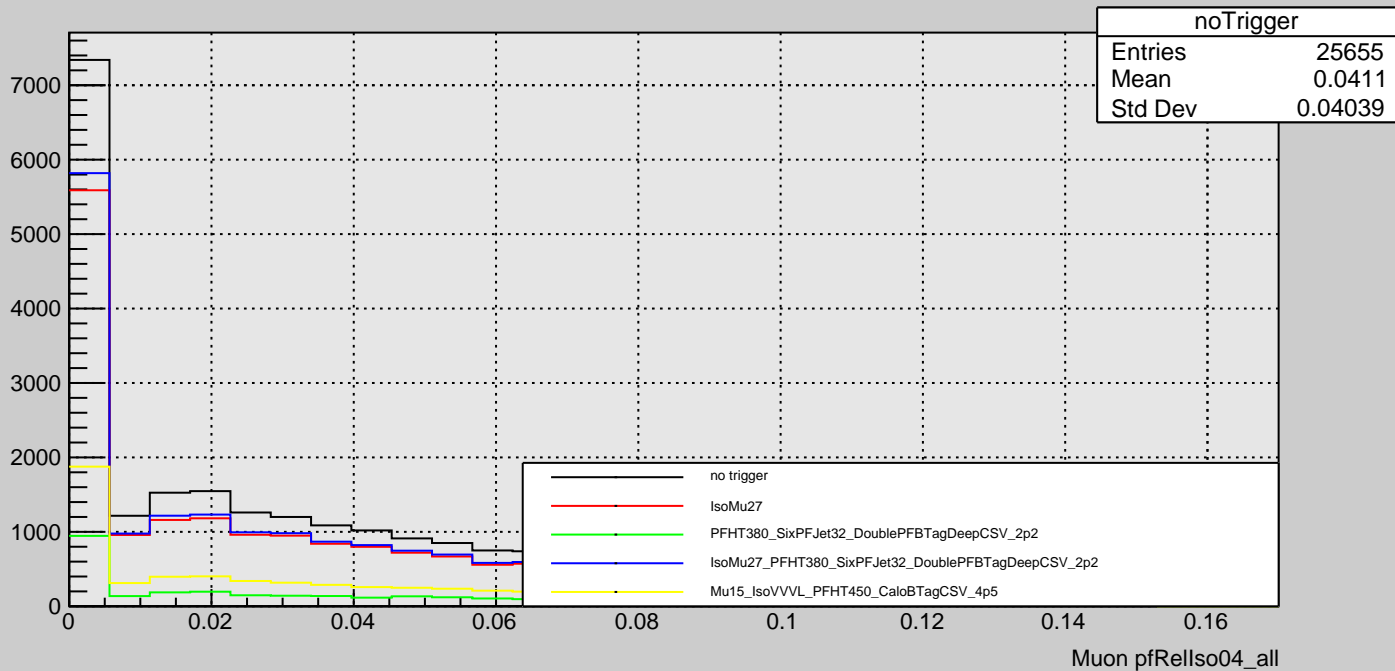
Muon Pt = 24



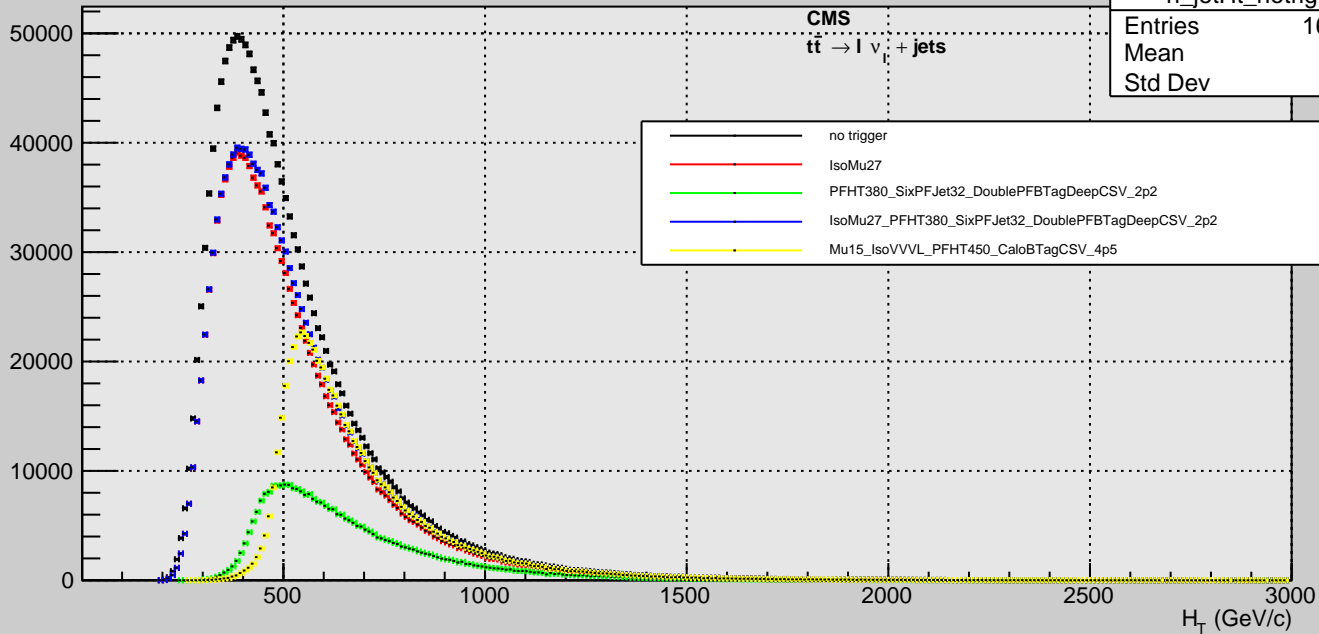
Muon Pt = 26

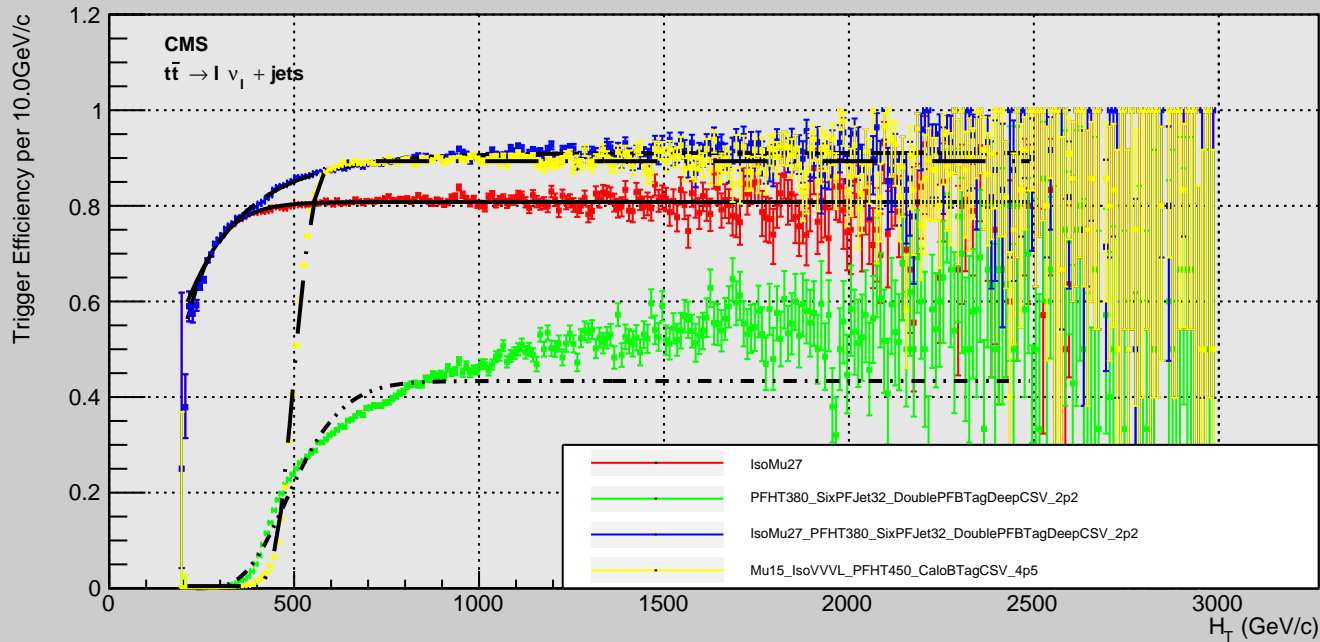


Muon Pt = 28

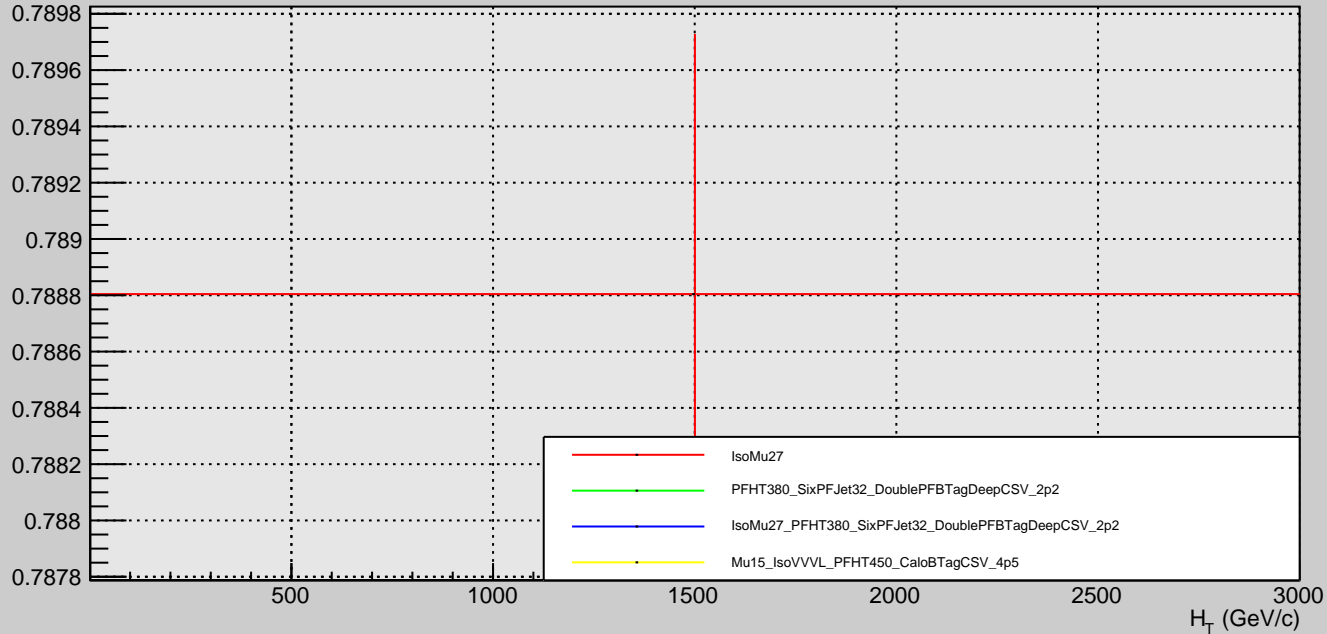


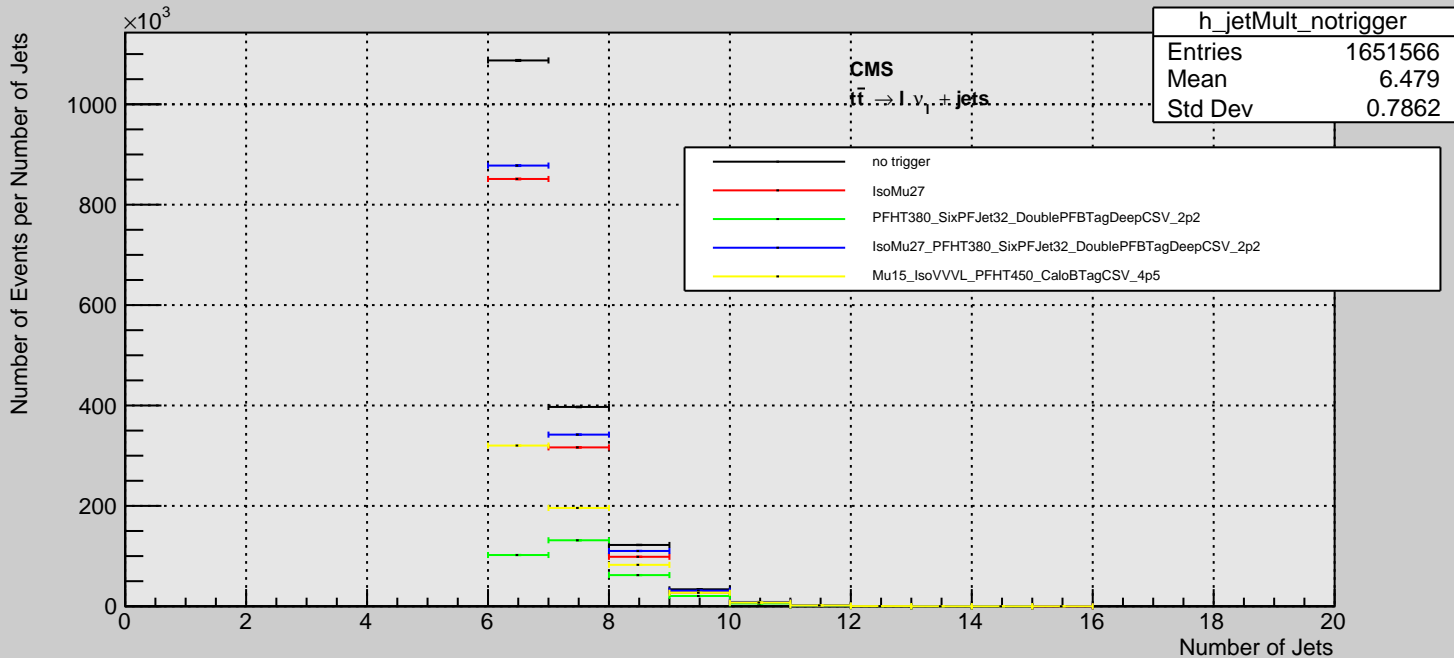
Number of Events per 10 GeV/c

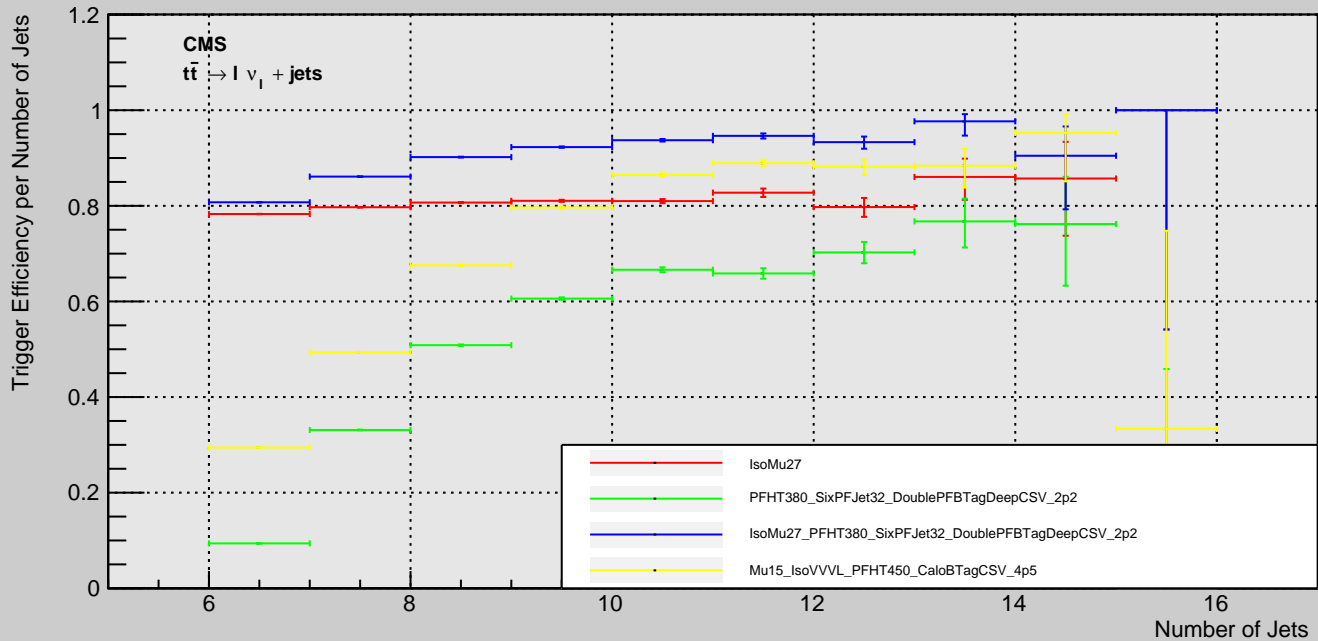


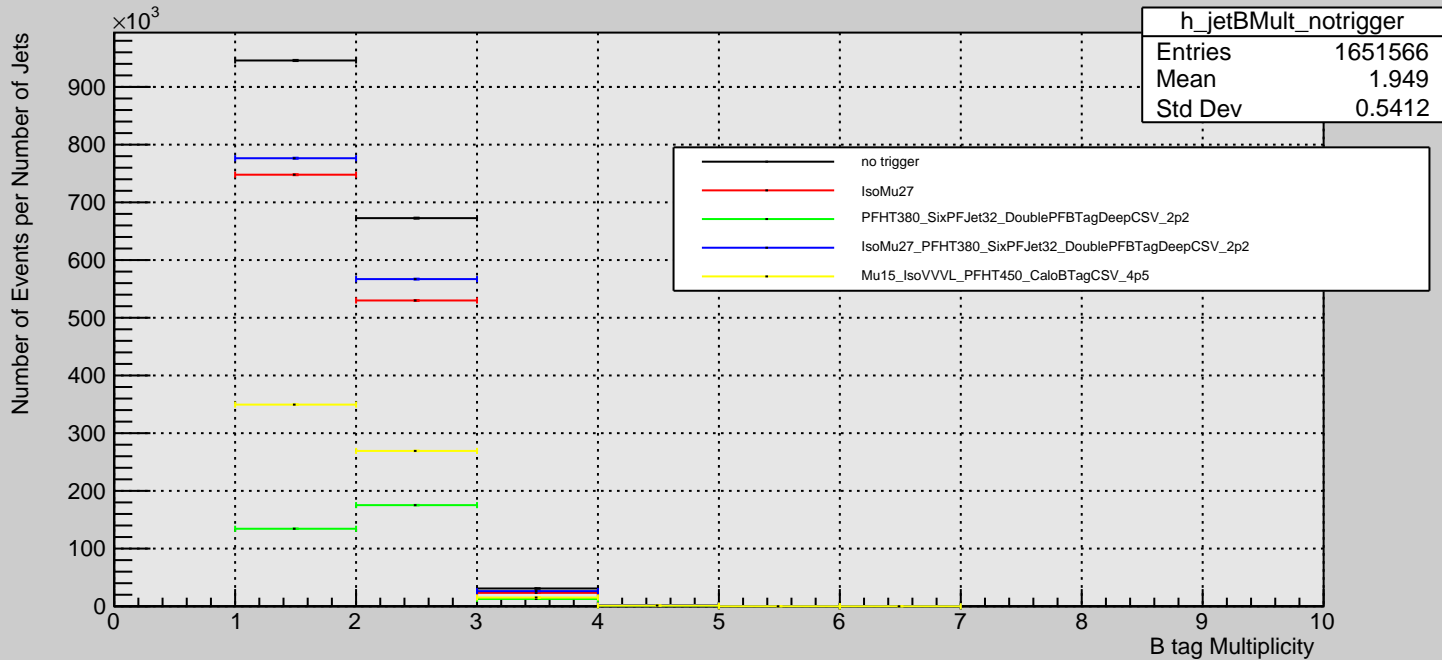


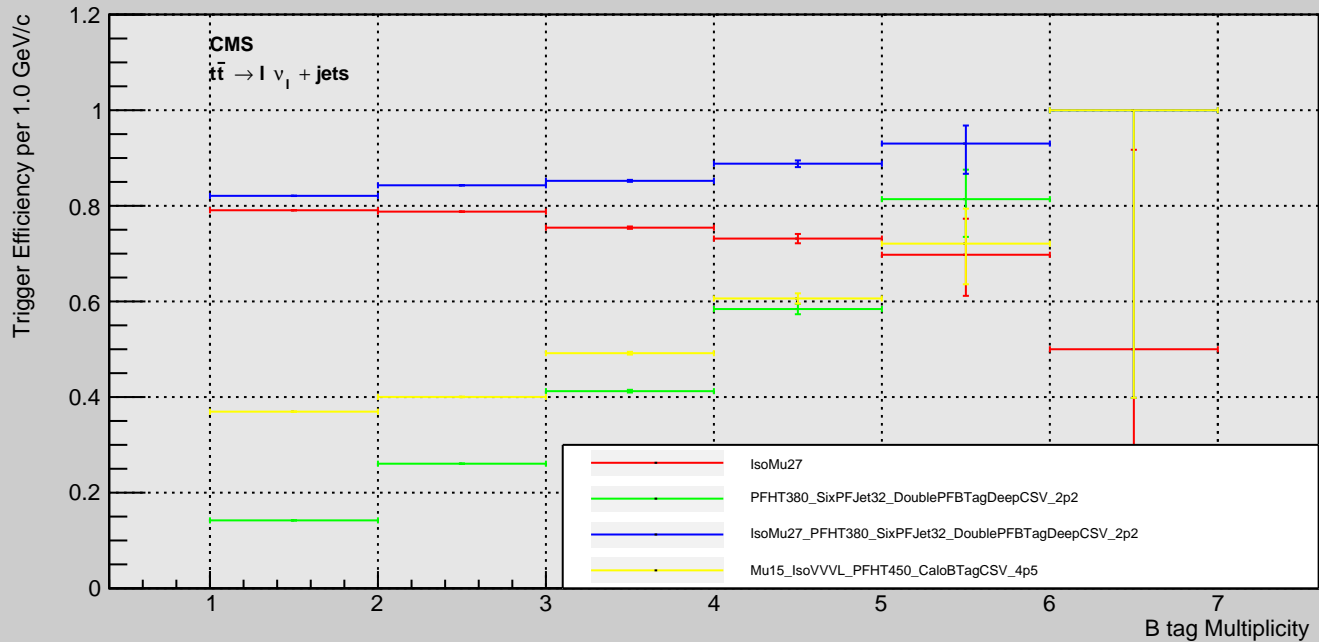
Trigger Efficiency per 2999.0 GeV/c

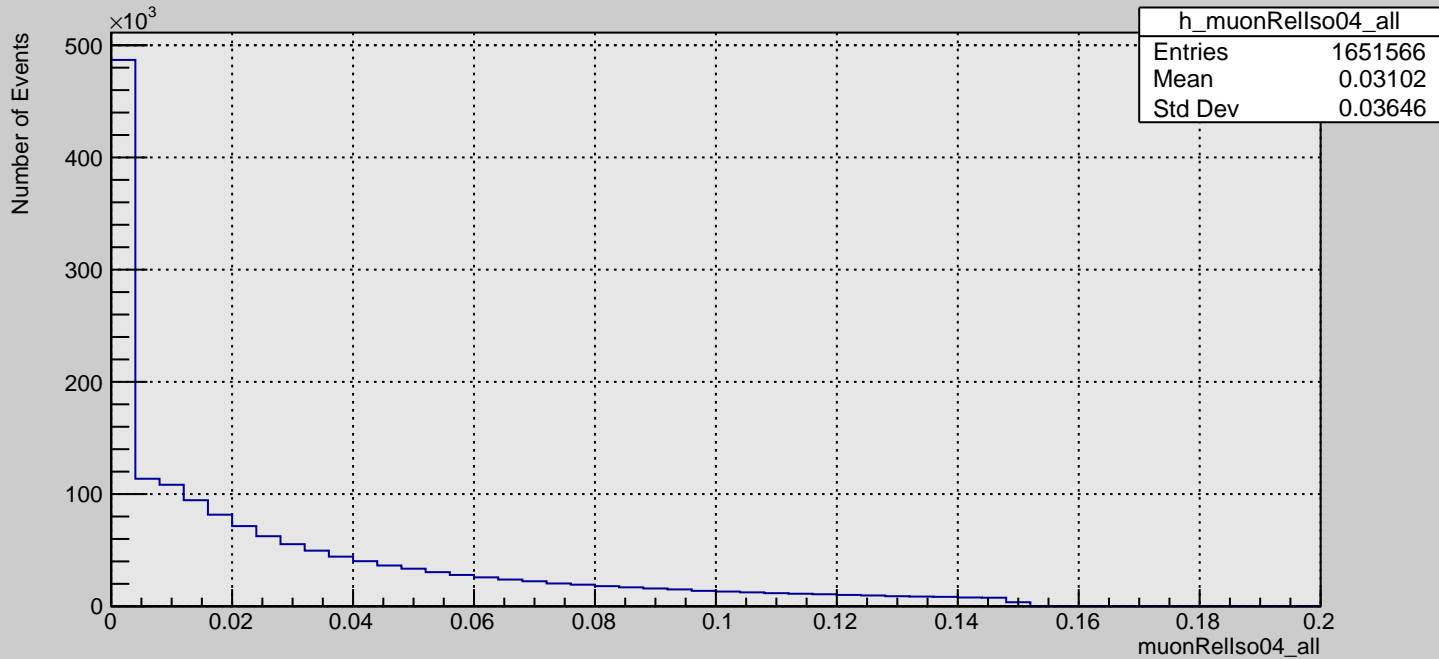






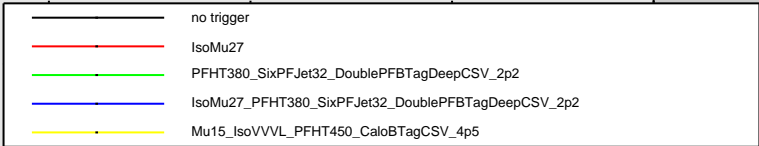




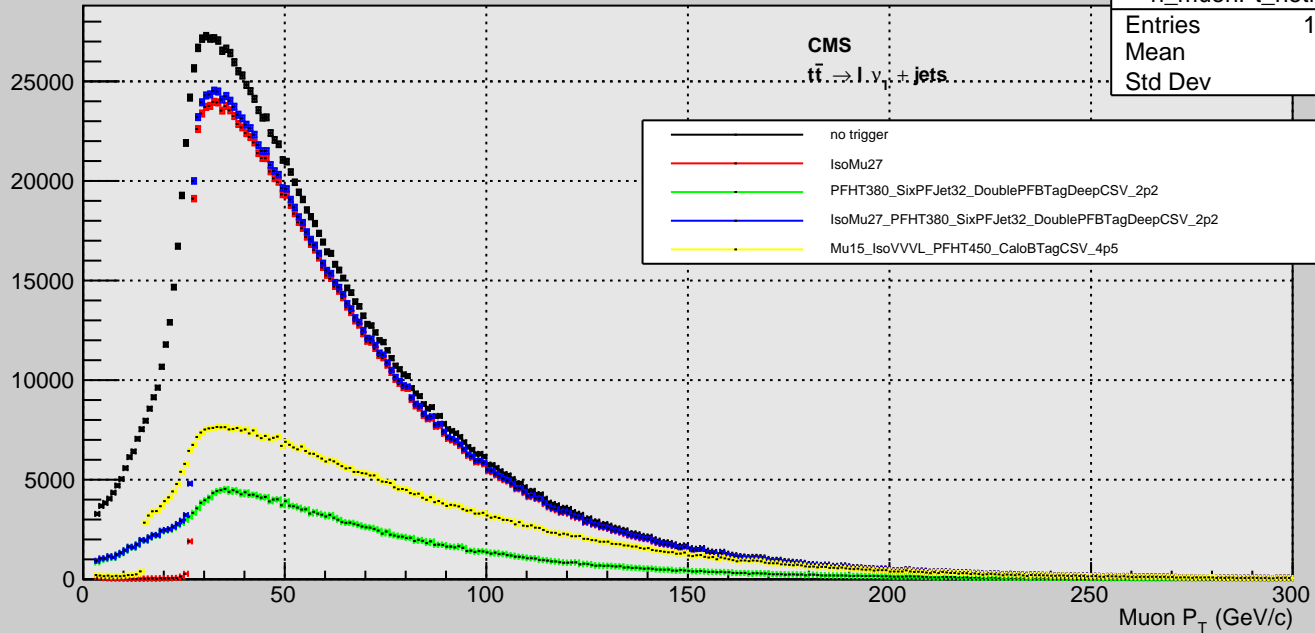


h_muonPt_notrigger	
Entries	1651566
Mean	61.59
Std Dev	40.53

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

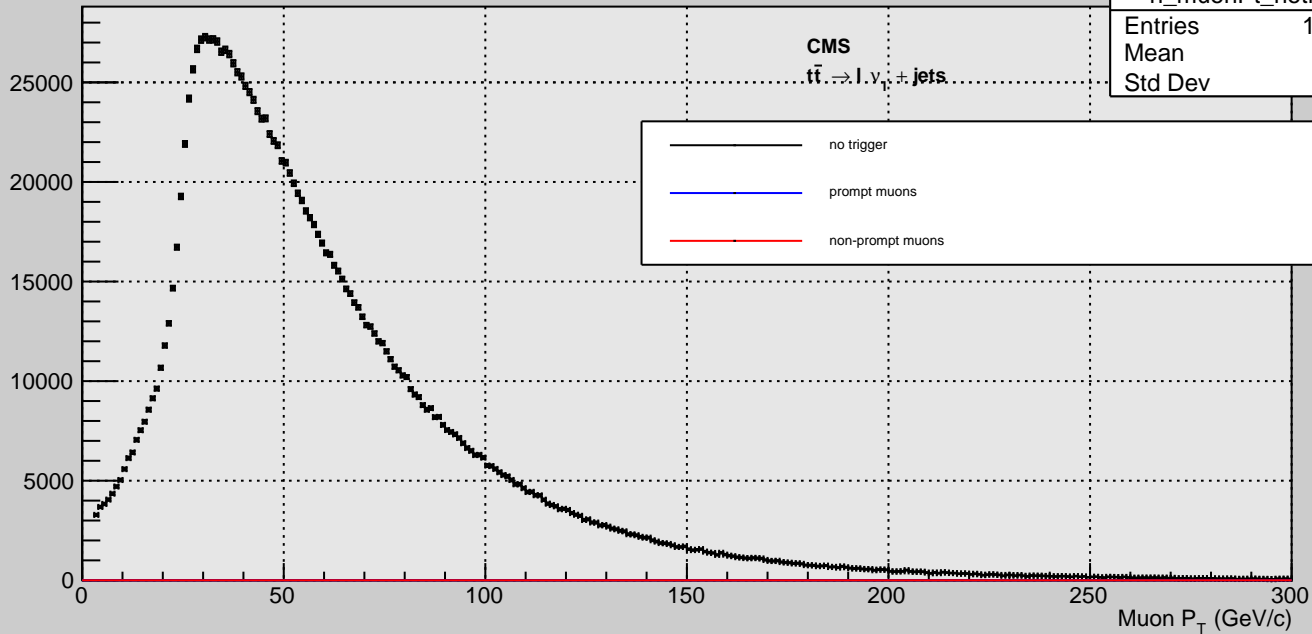


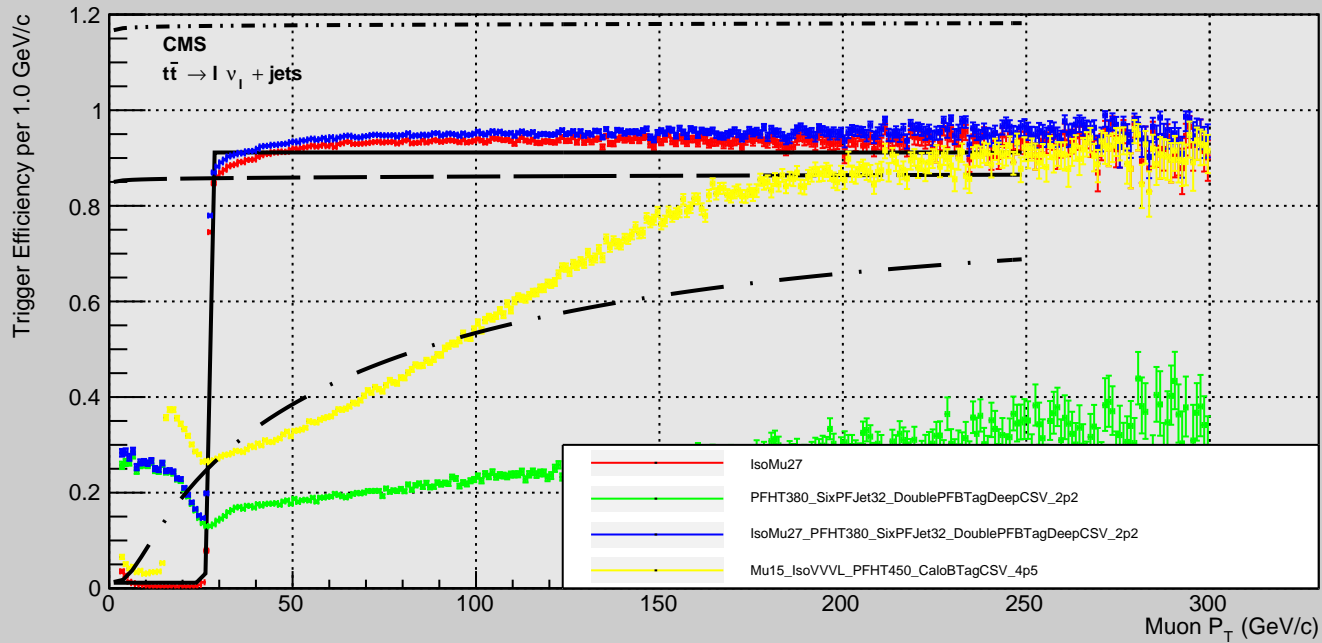
Number of Events per 1 GeV/c

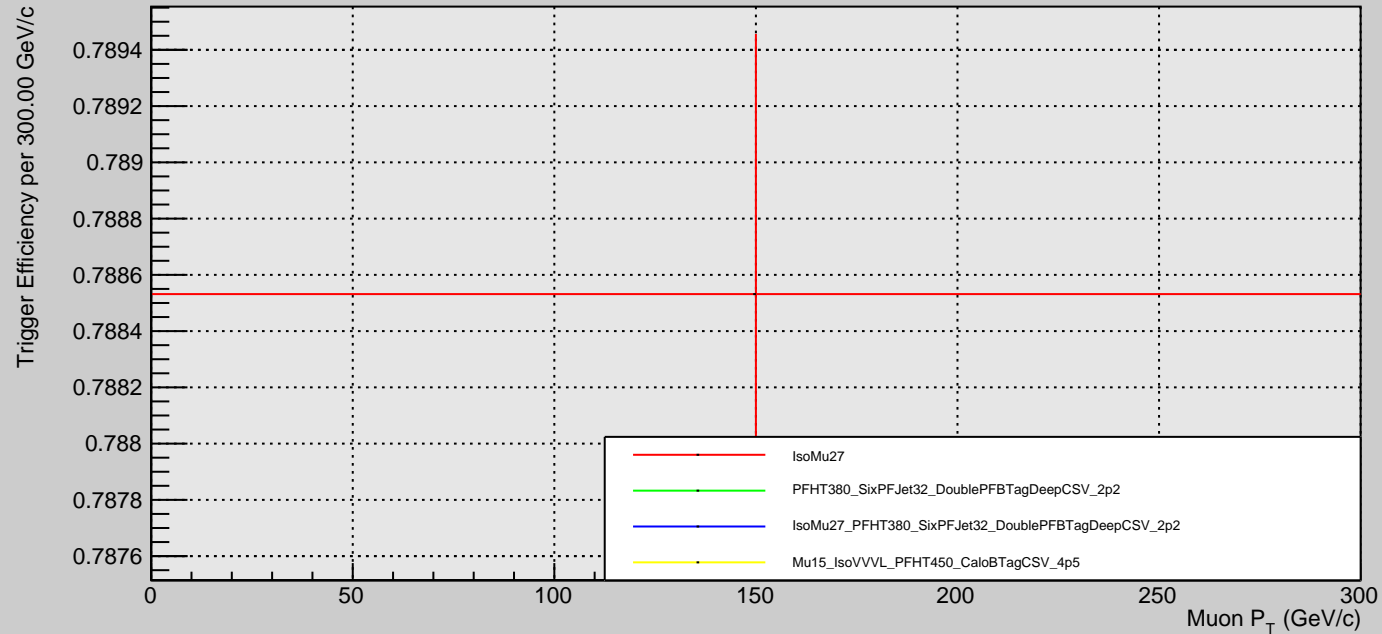


Muon P_T (GeV/c)

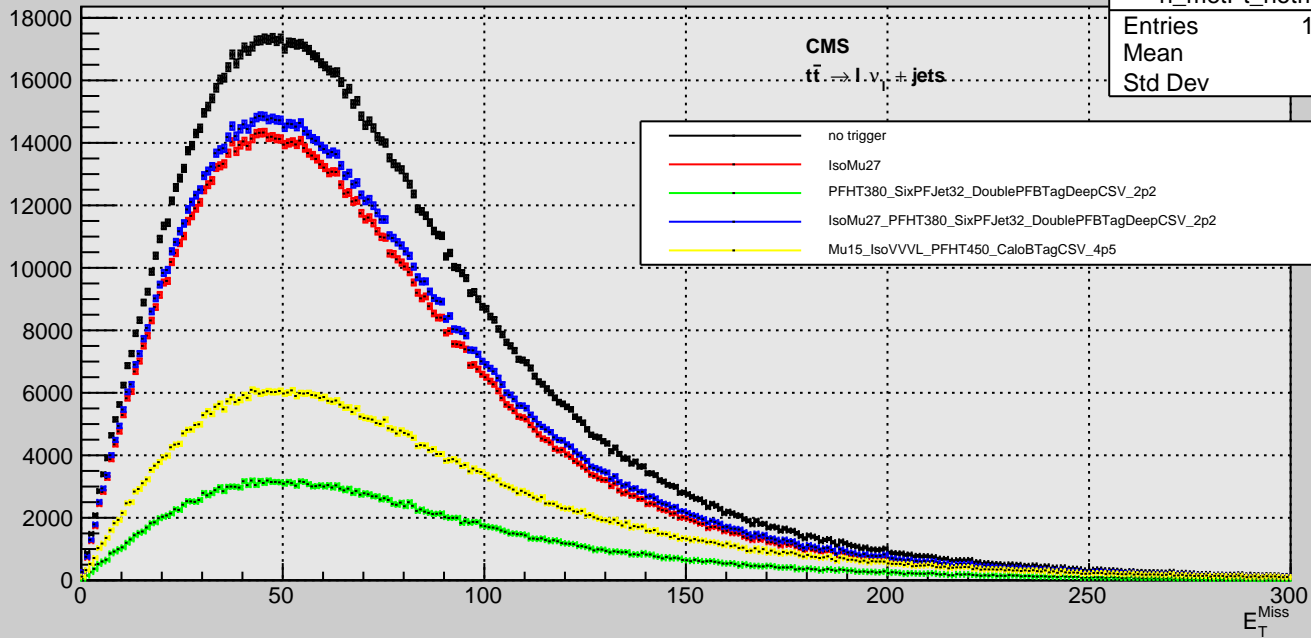
Number of Events per 1 GeV/c





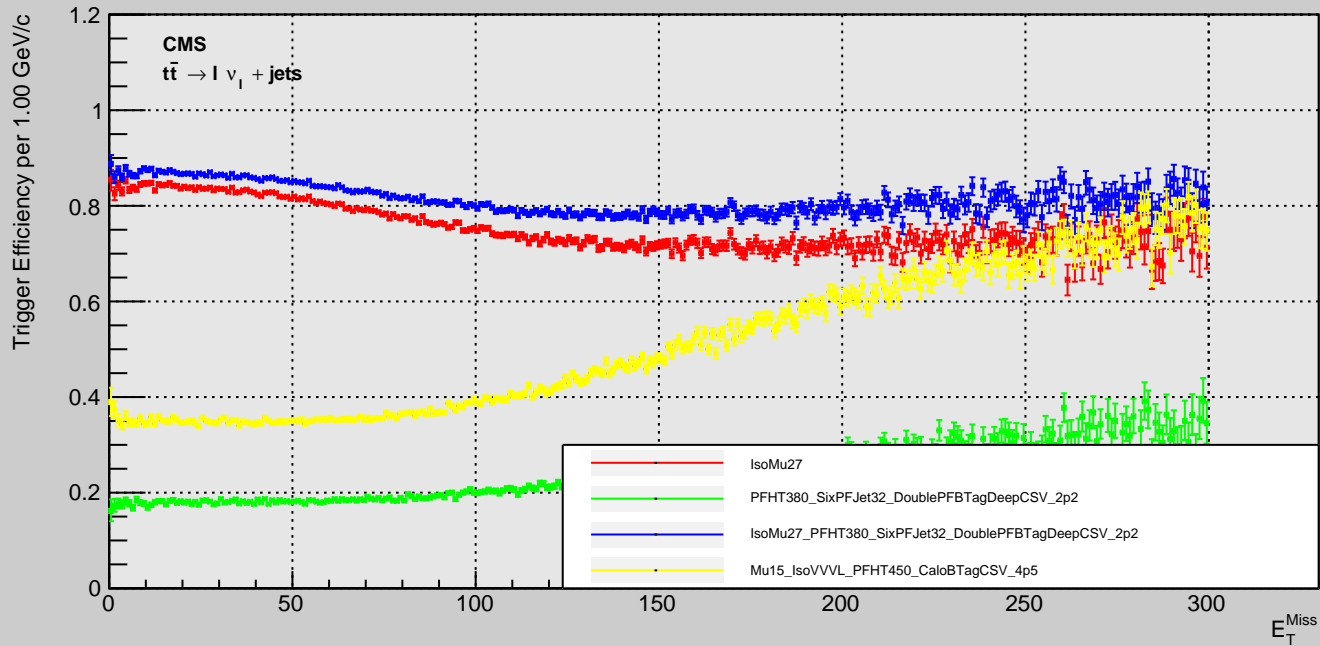


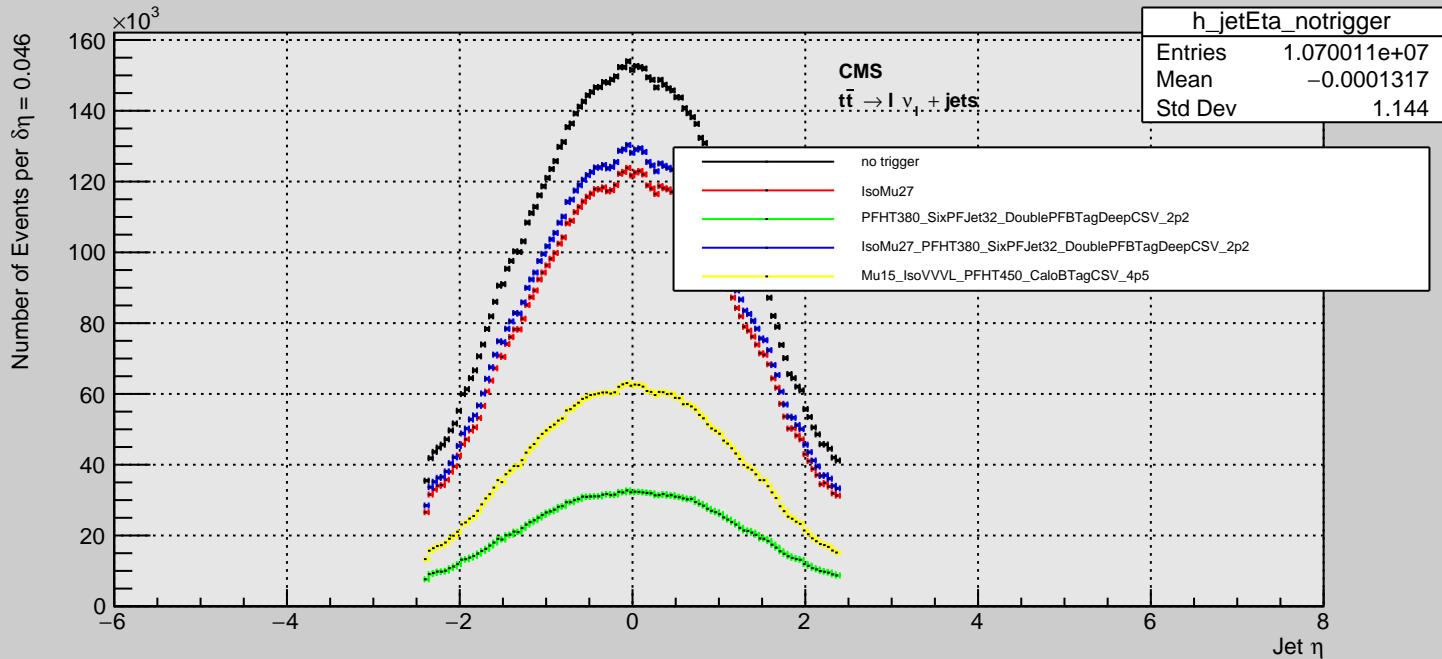
Number of Events per 1 GeV/c



h_metPt_notrigger

Entries	1651566
Mean	74.35
Std Dev	47.57





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

