

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

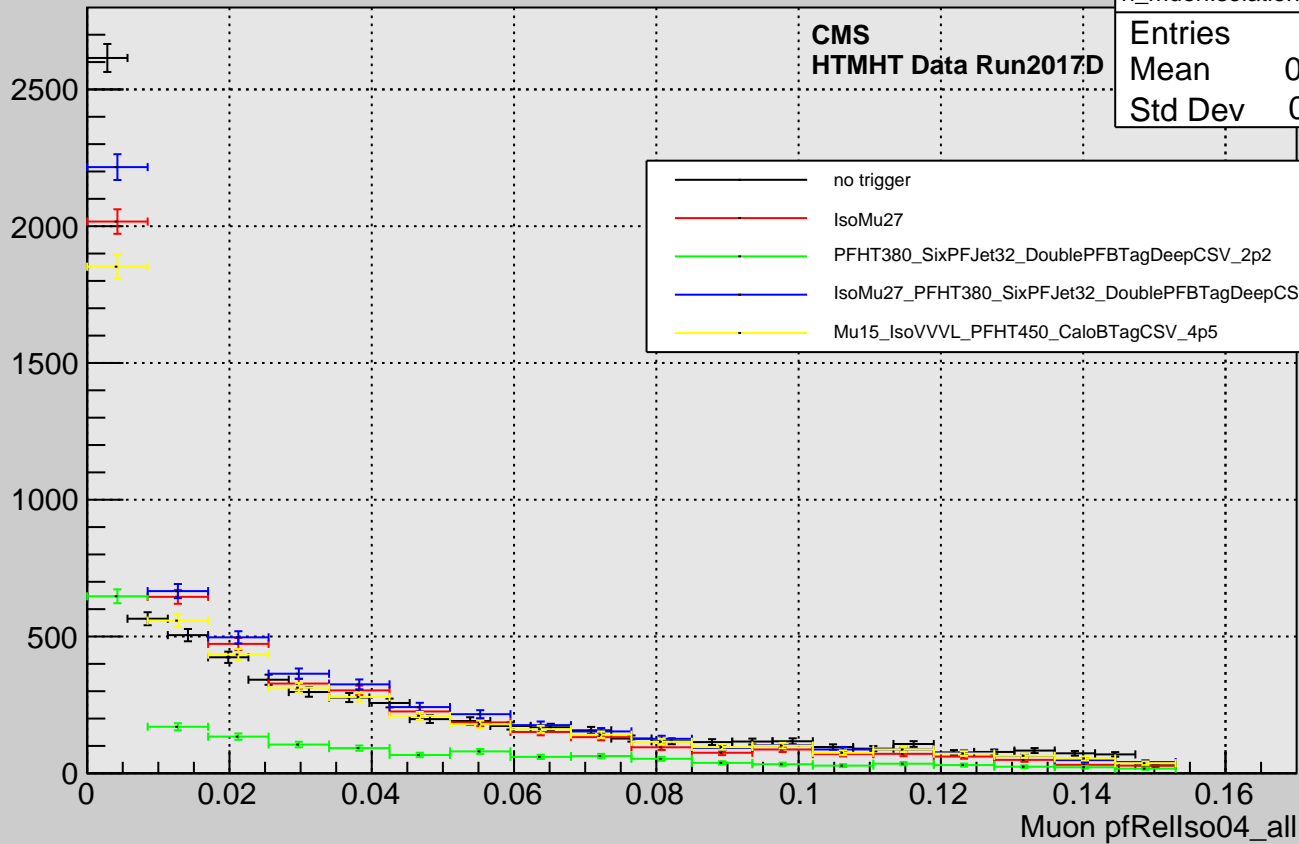
- **Jets:** number  $> 5$
- **Muons plus Electrons:** number  $> 0$

**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)

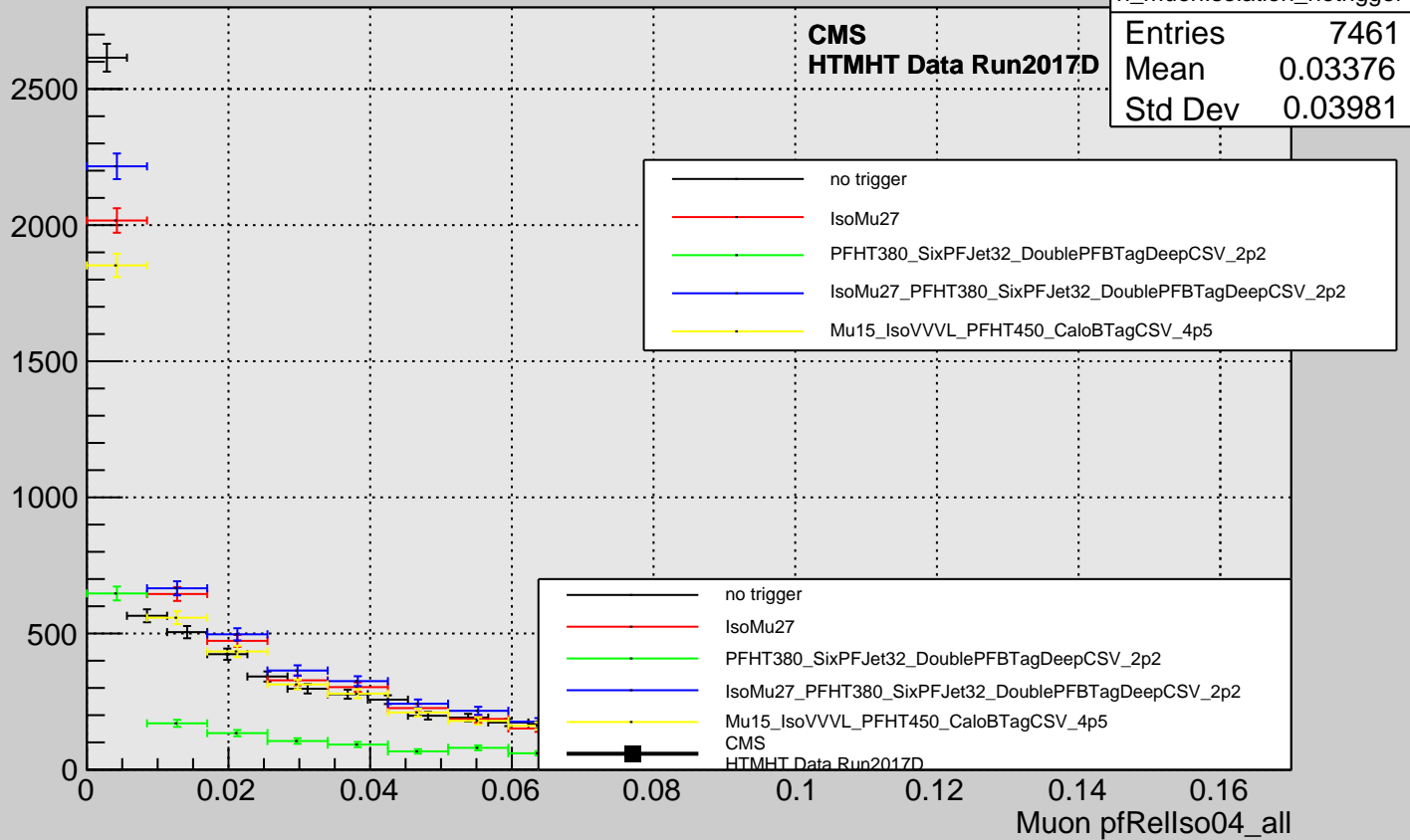
Number of Events

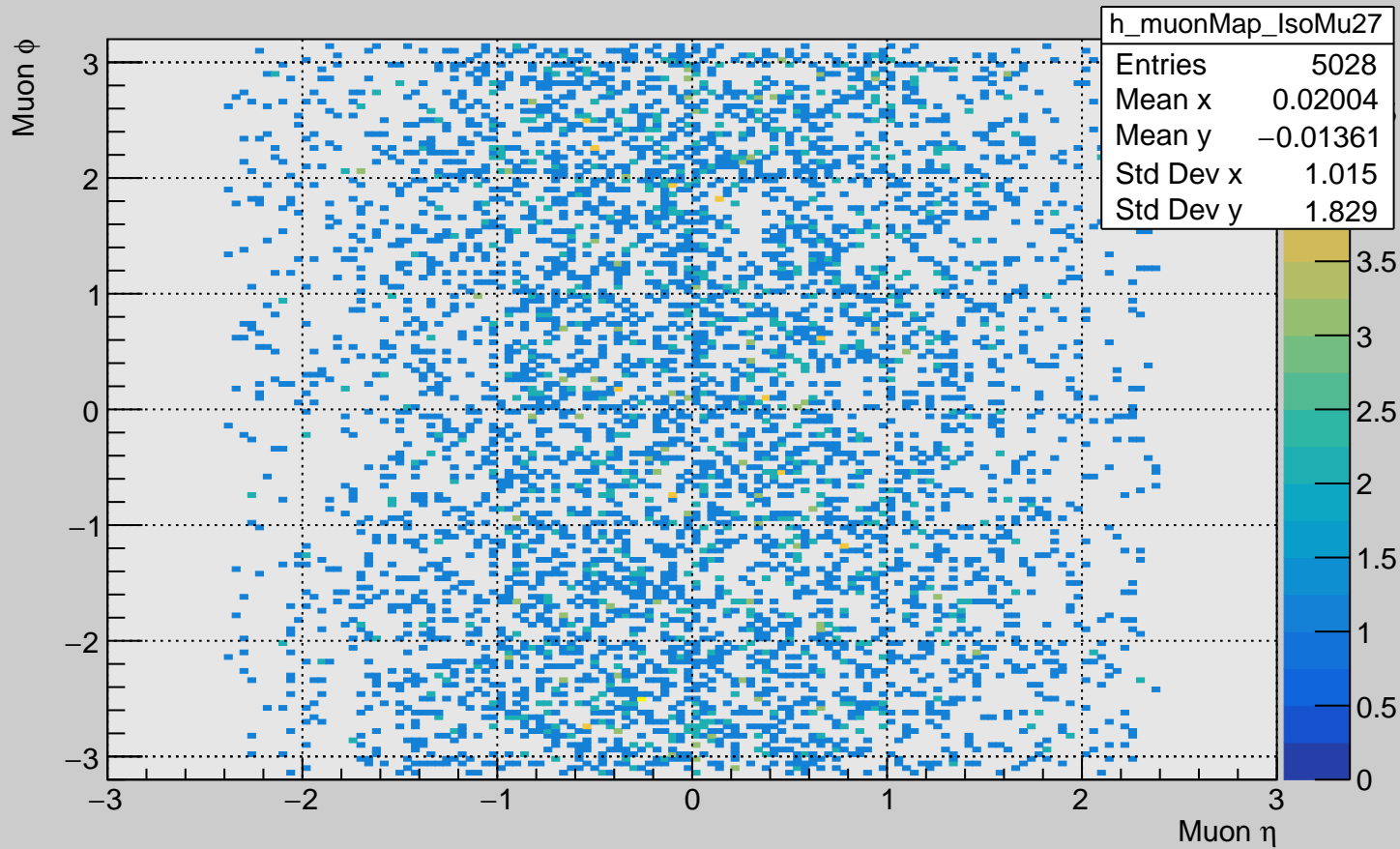


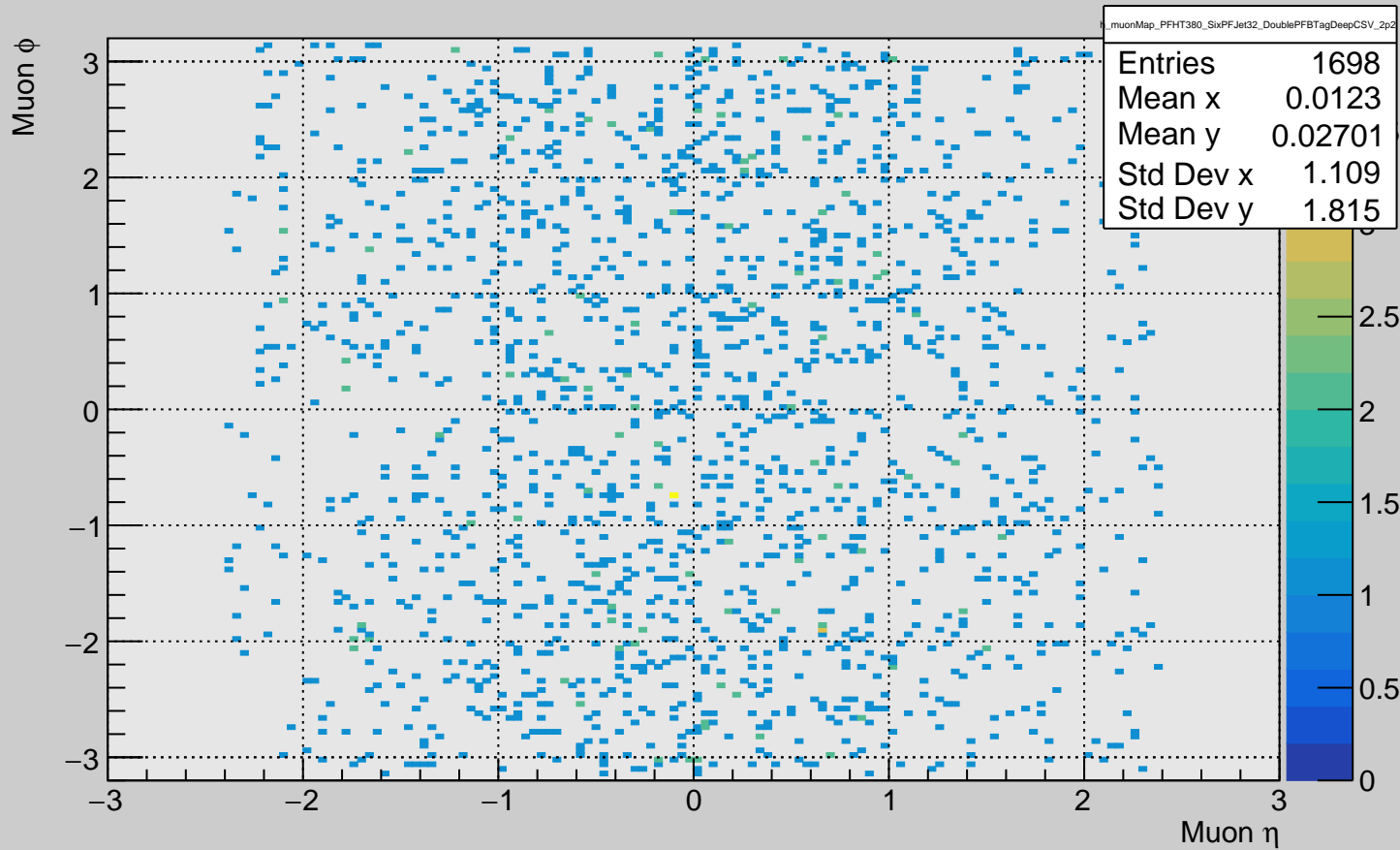
h\_muonIsolation\_notrigger

Entries	7461
Mean	0.03376
Std Dev	0.03981

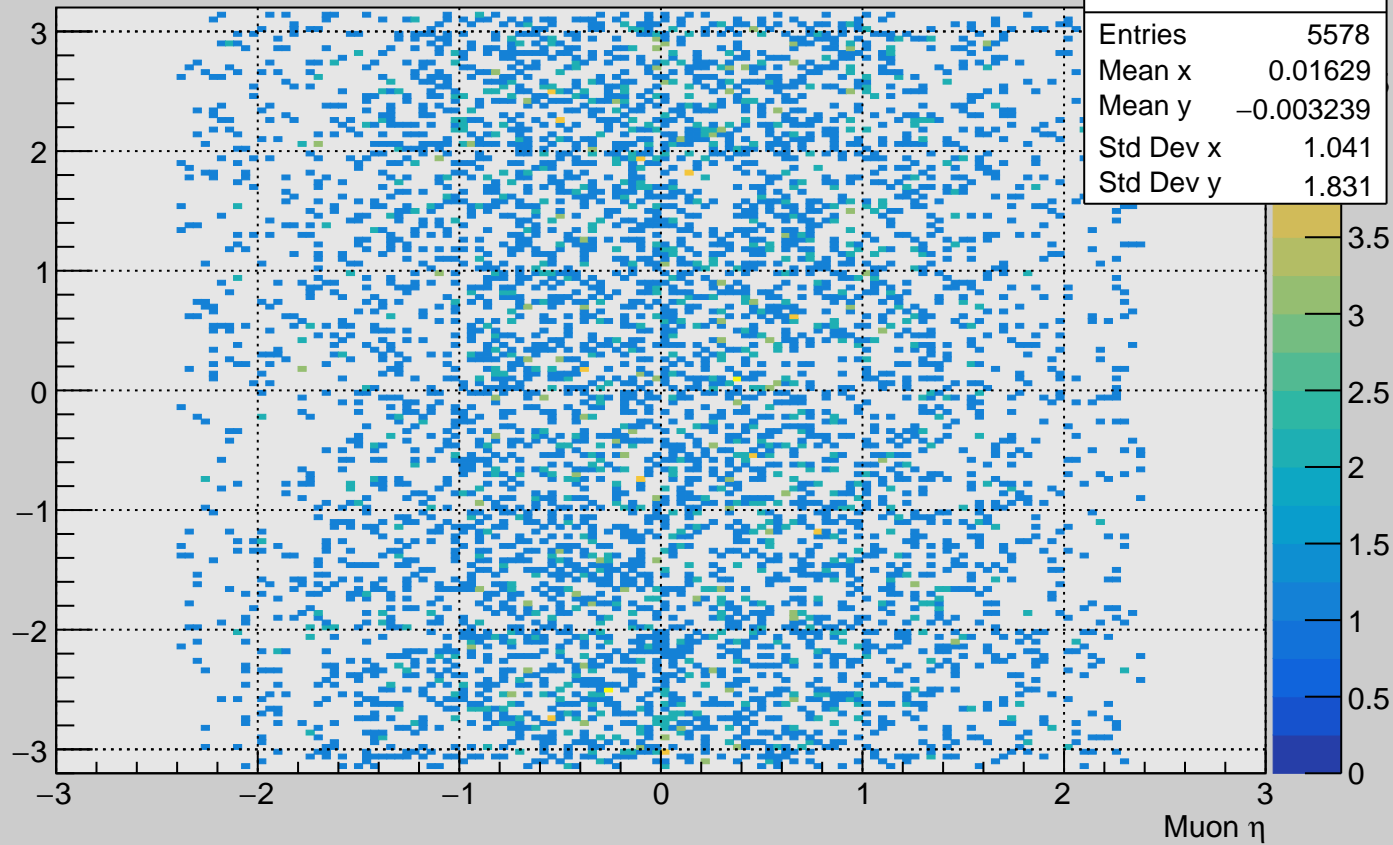
Number of Events

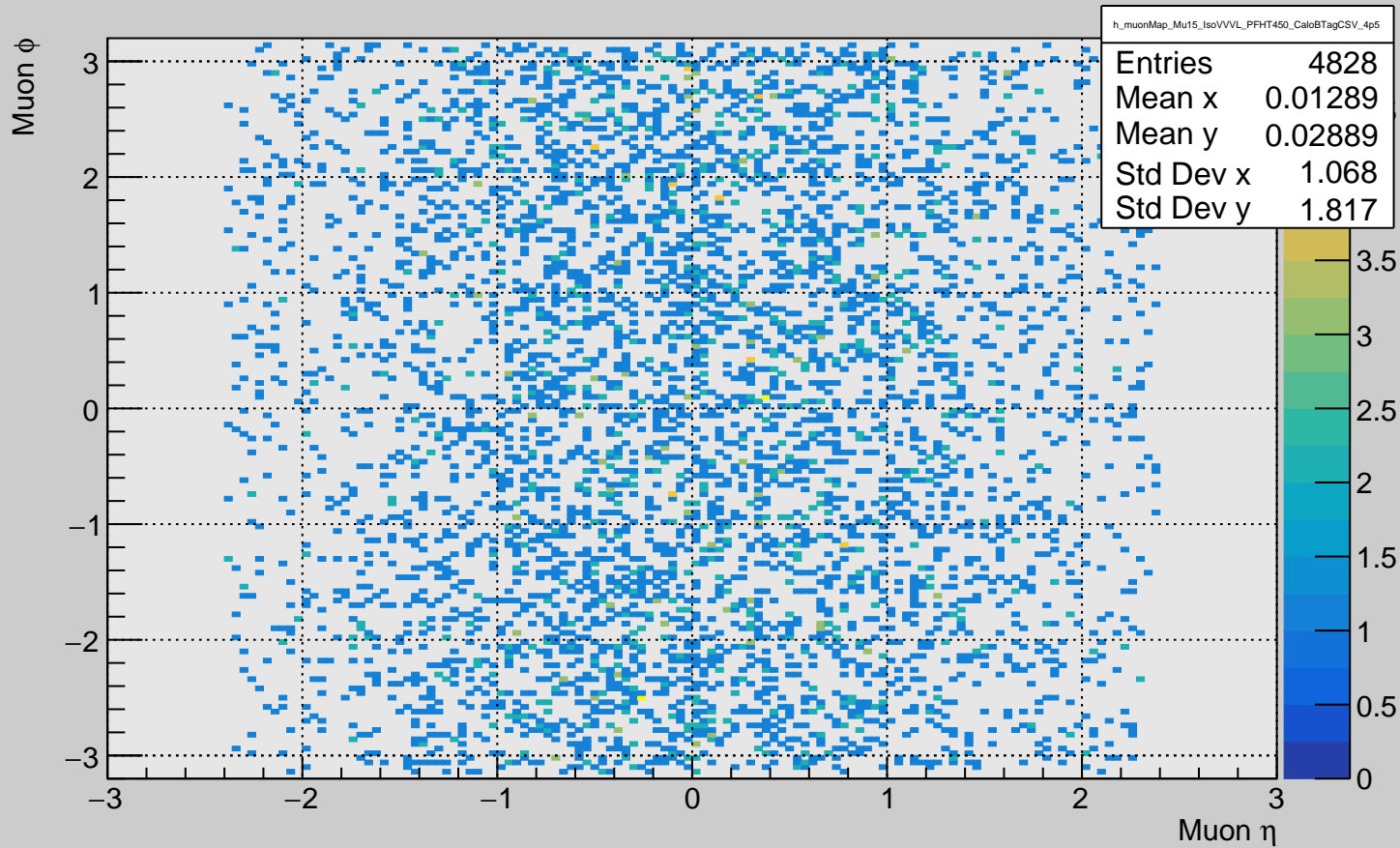






Muon  $\phi$





Number of Events per 10 GeV/c

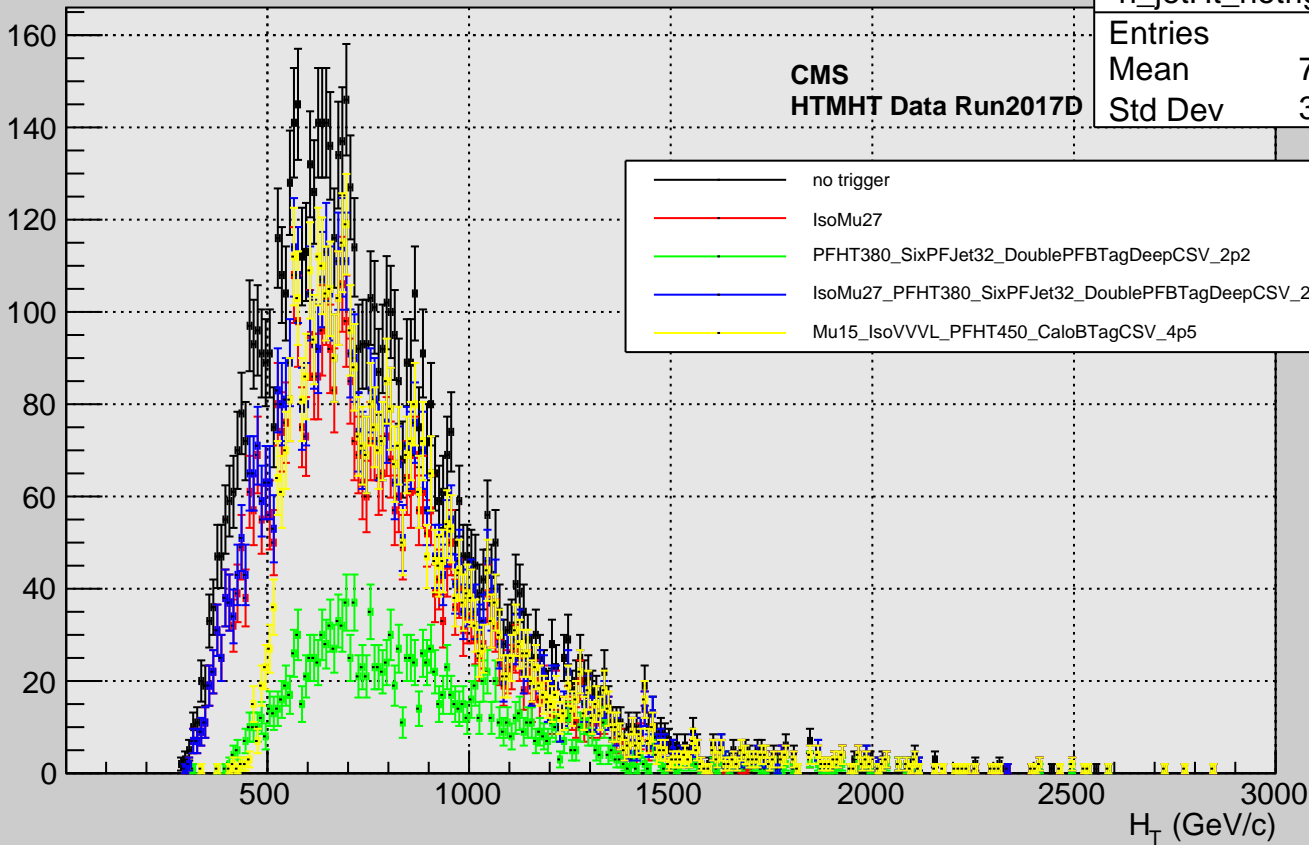
**CMS**  
**HTMHT Data Run2017D**

h\_jetHt\_nottrigger

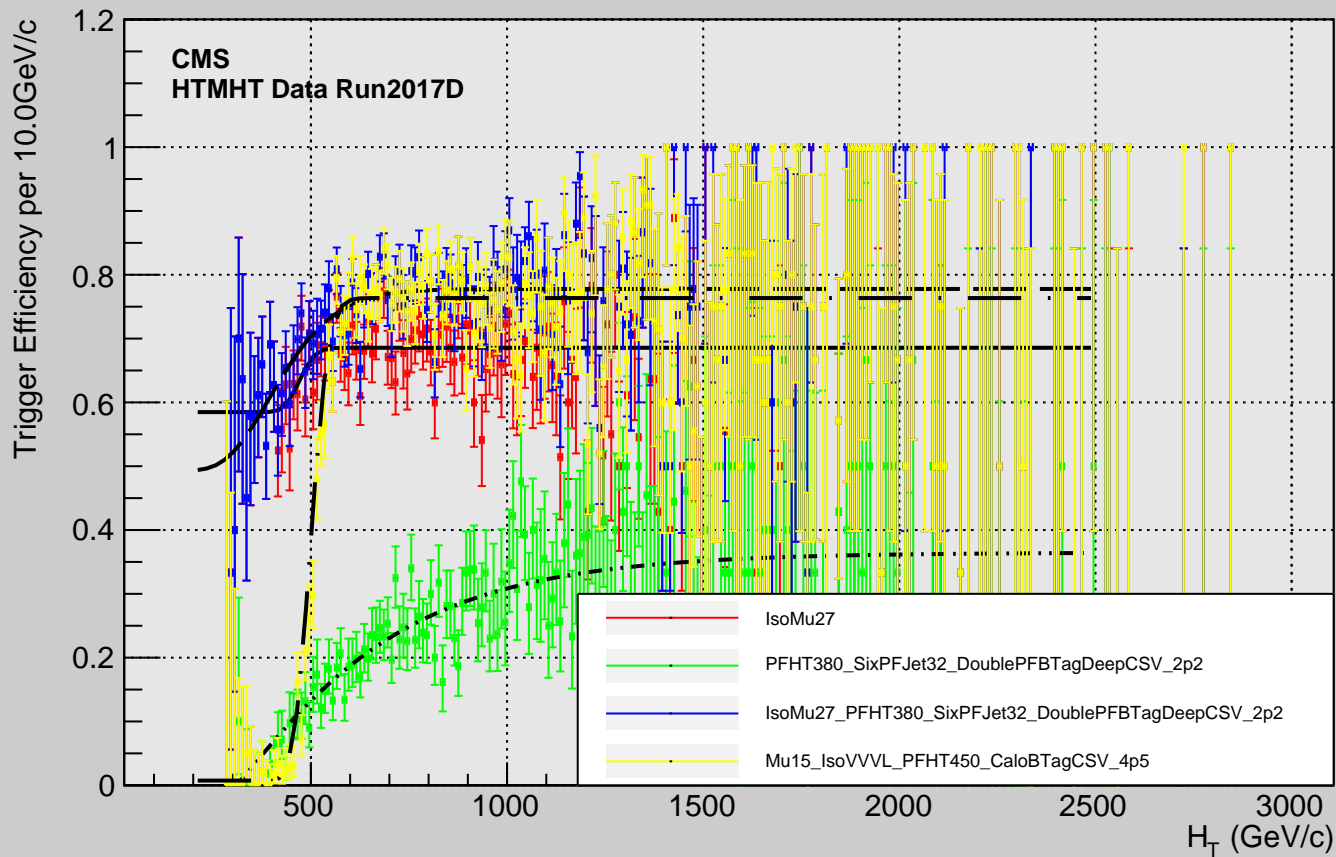
Entries 7461

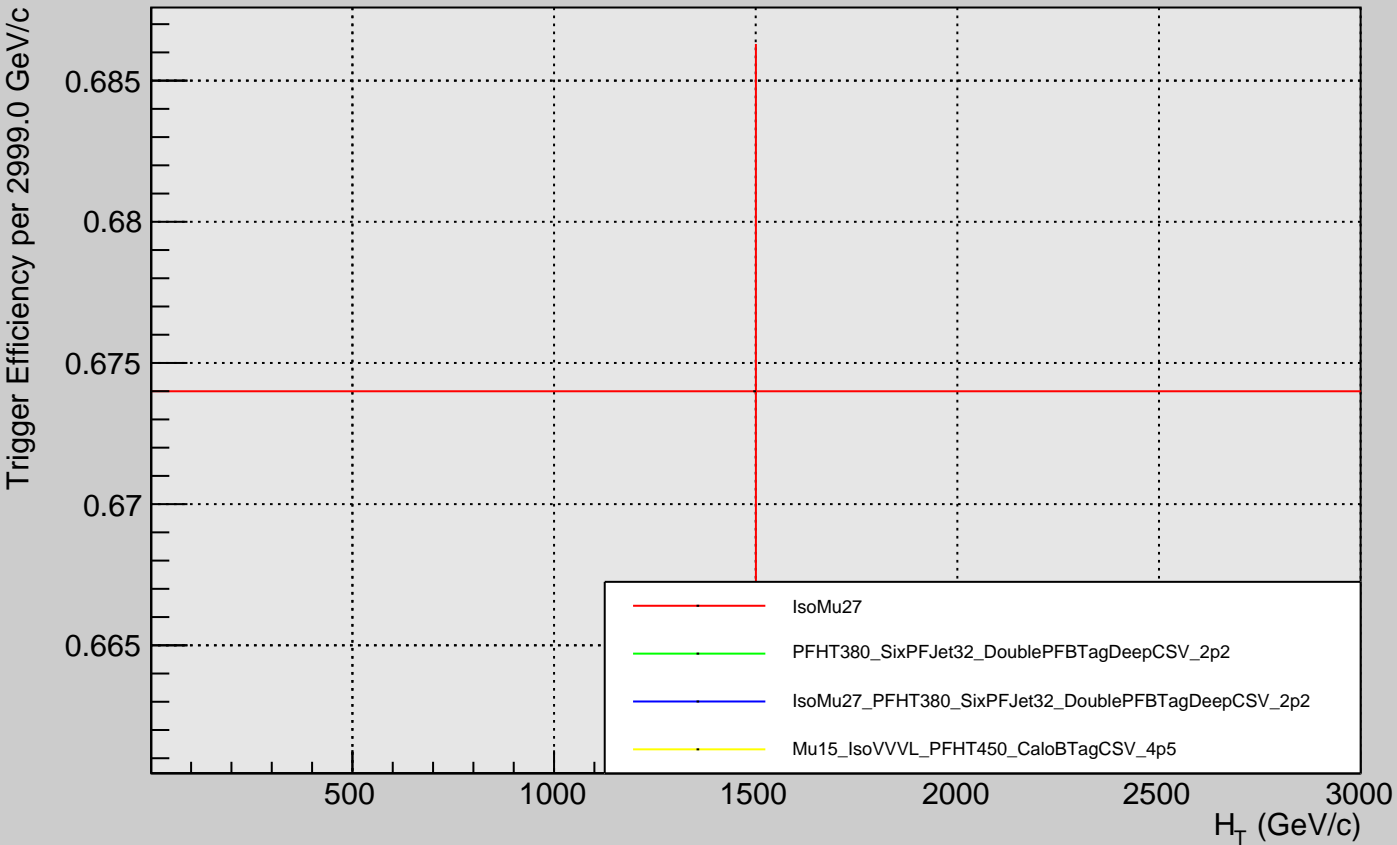
Mean 783.7

Std Dev 310.7

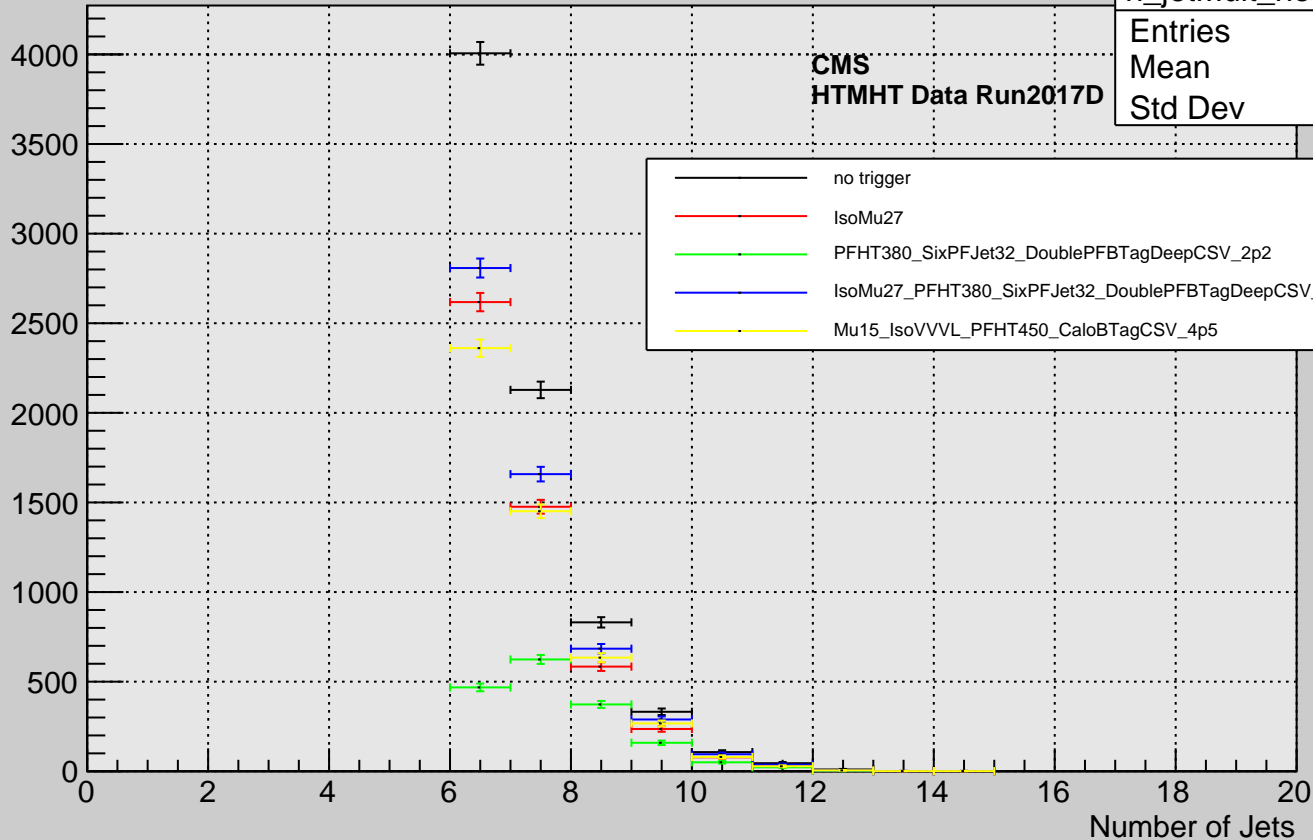


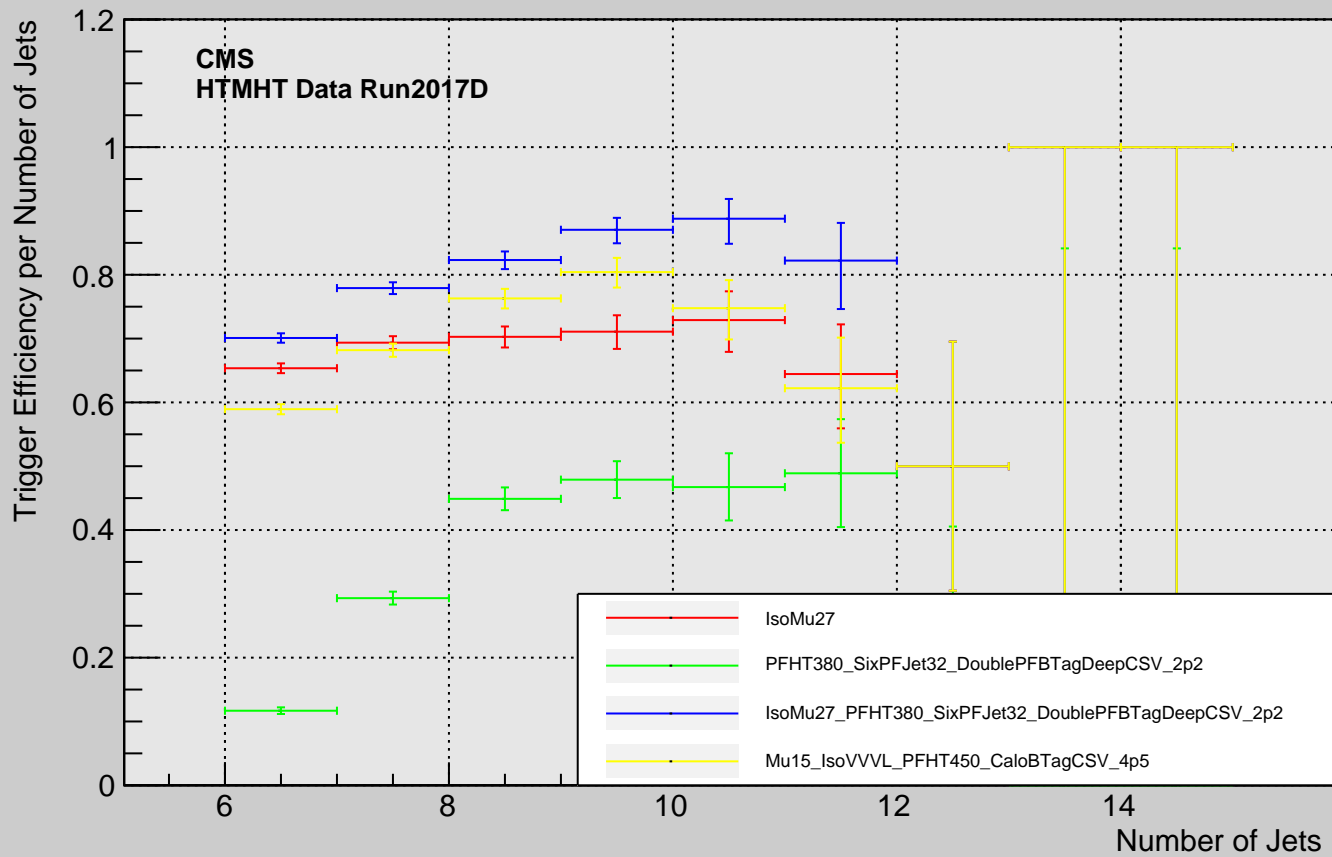




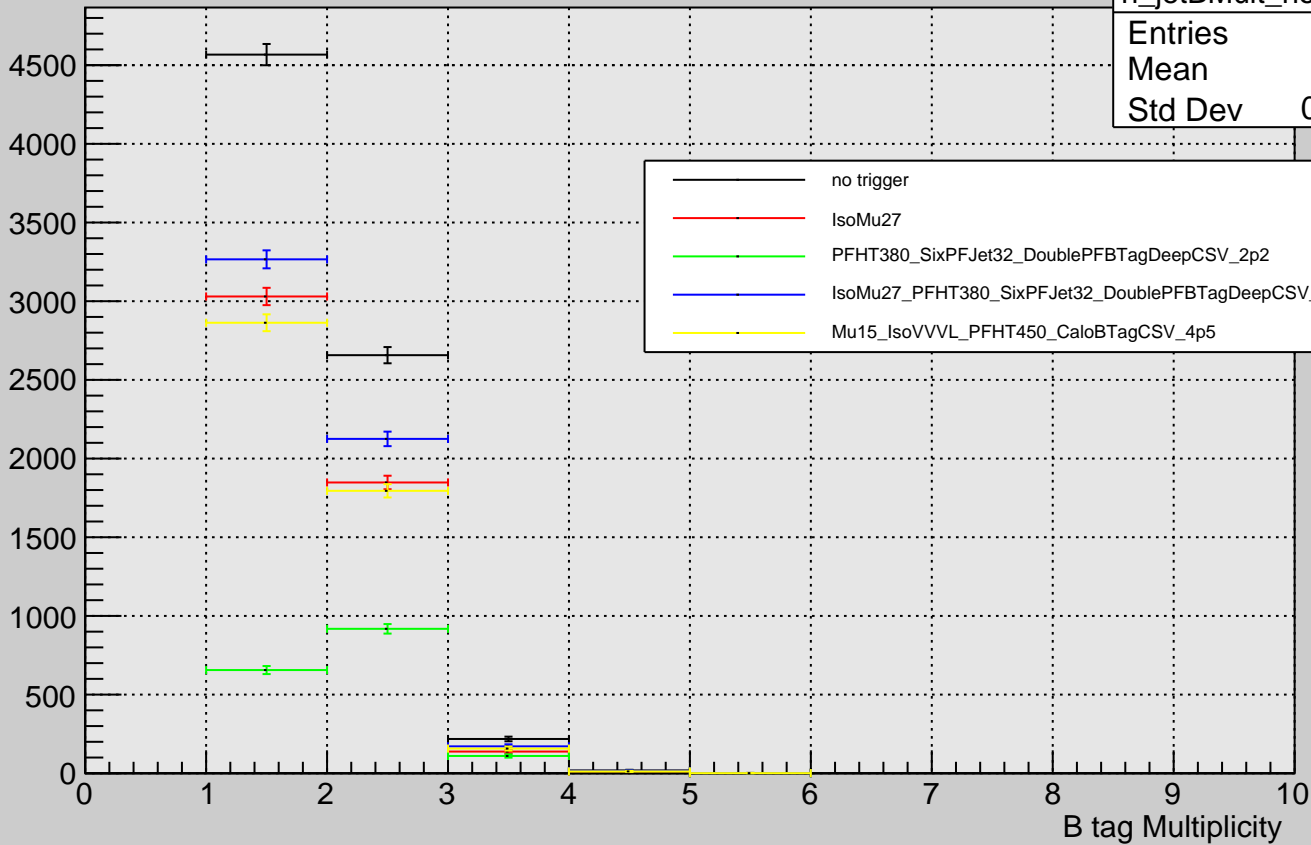


Number of Events per Number of Jets





Number of Events per Number of Jets

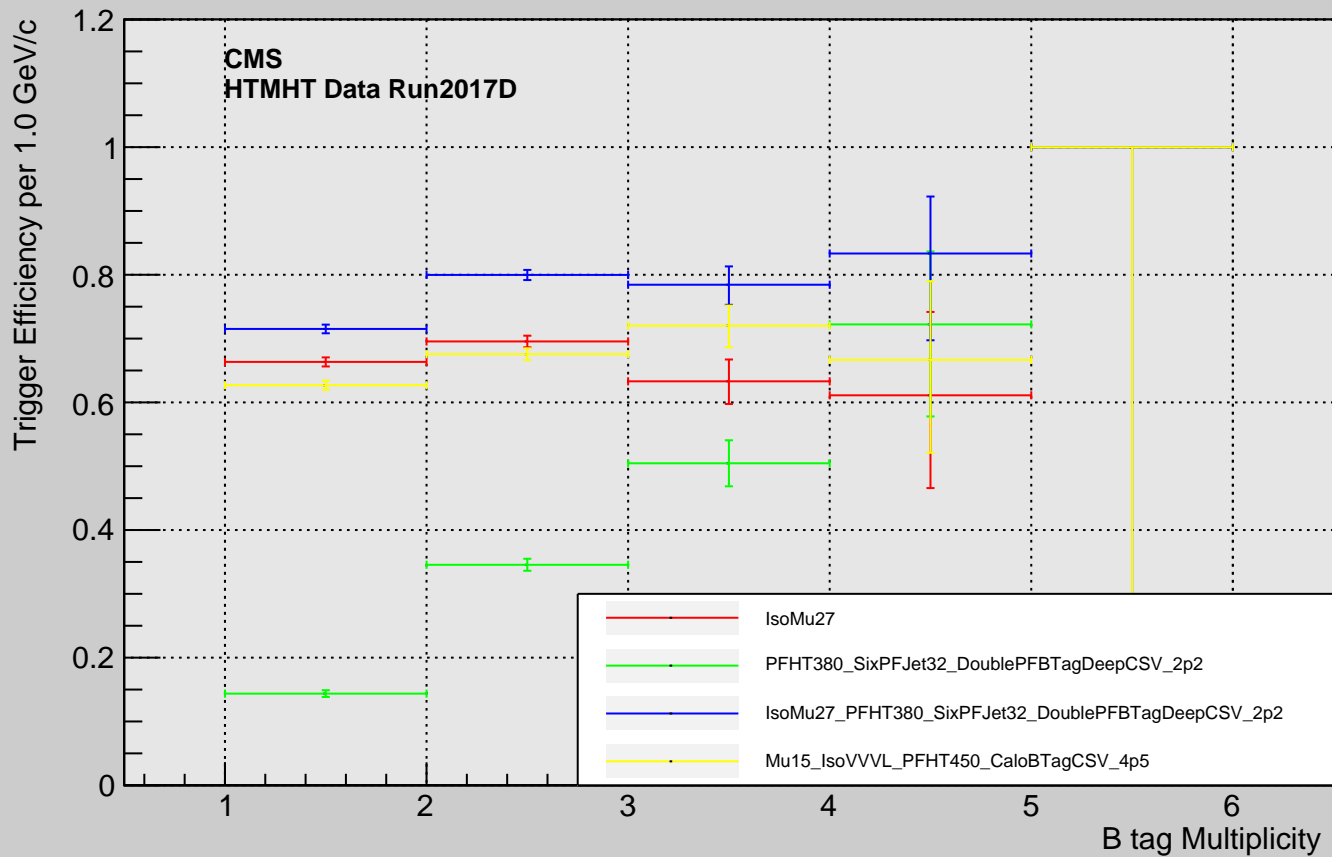


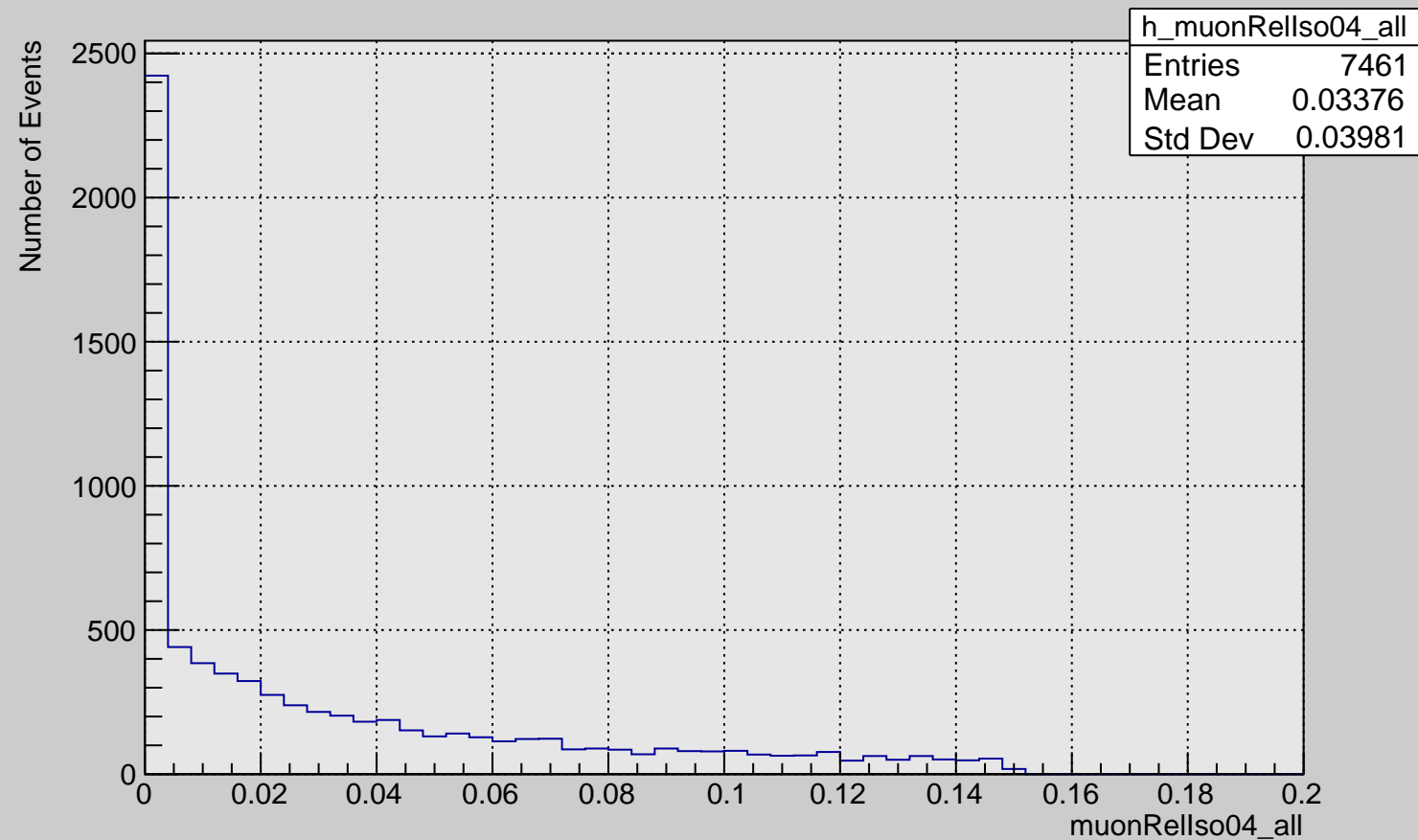
h\_jetBMult\_notrigger

Entries 7461

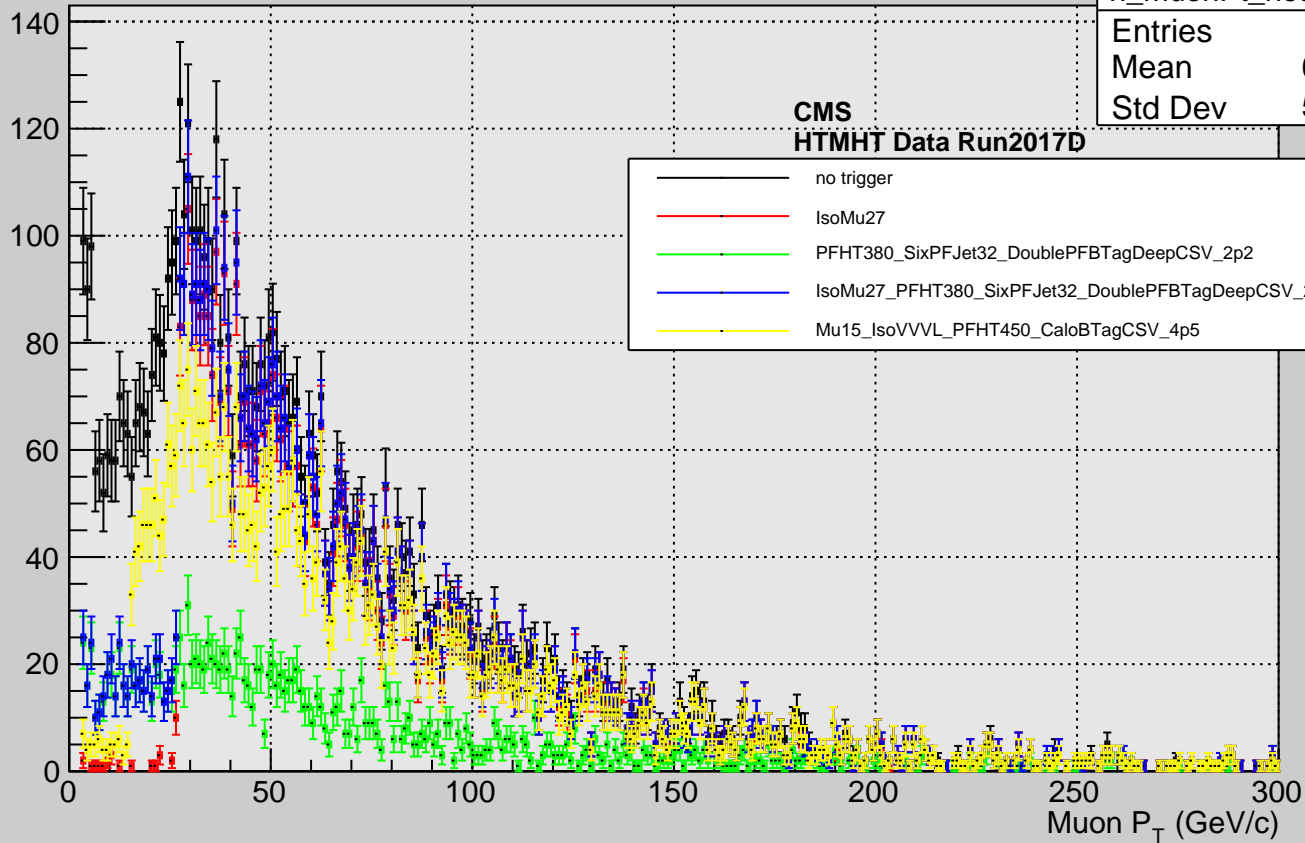
Mean 1.922

Std Dev 0.5643





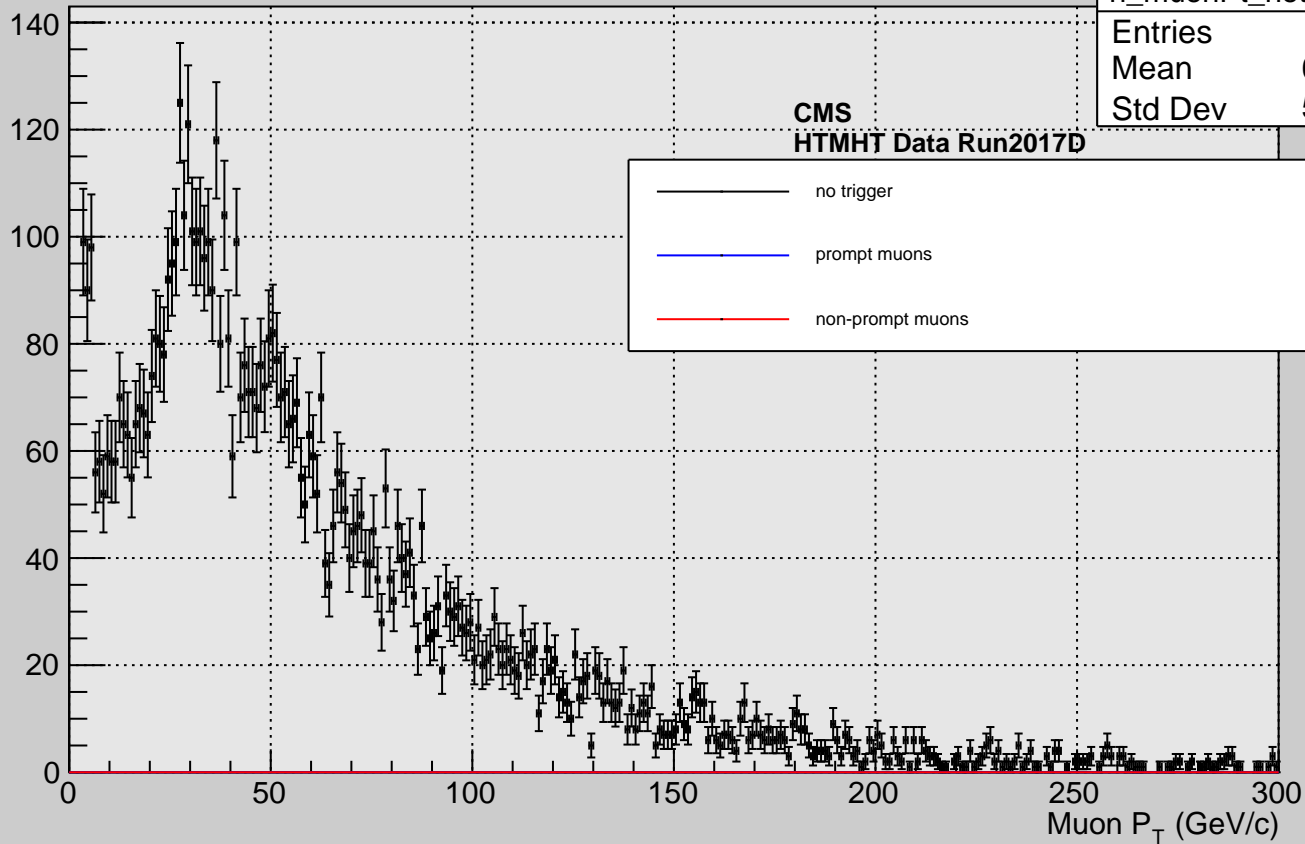
Number of Events per 1 GeV/c



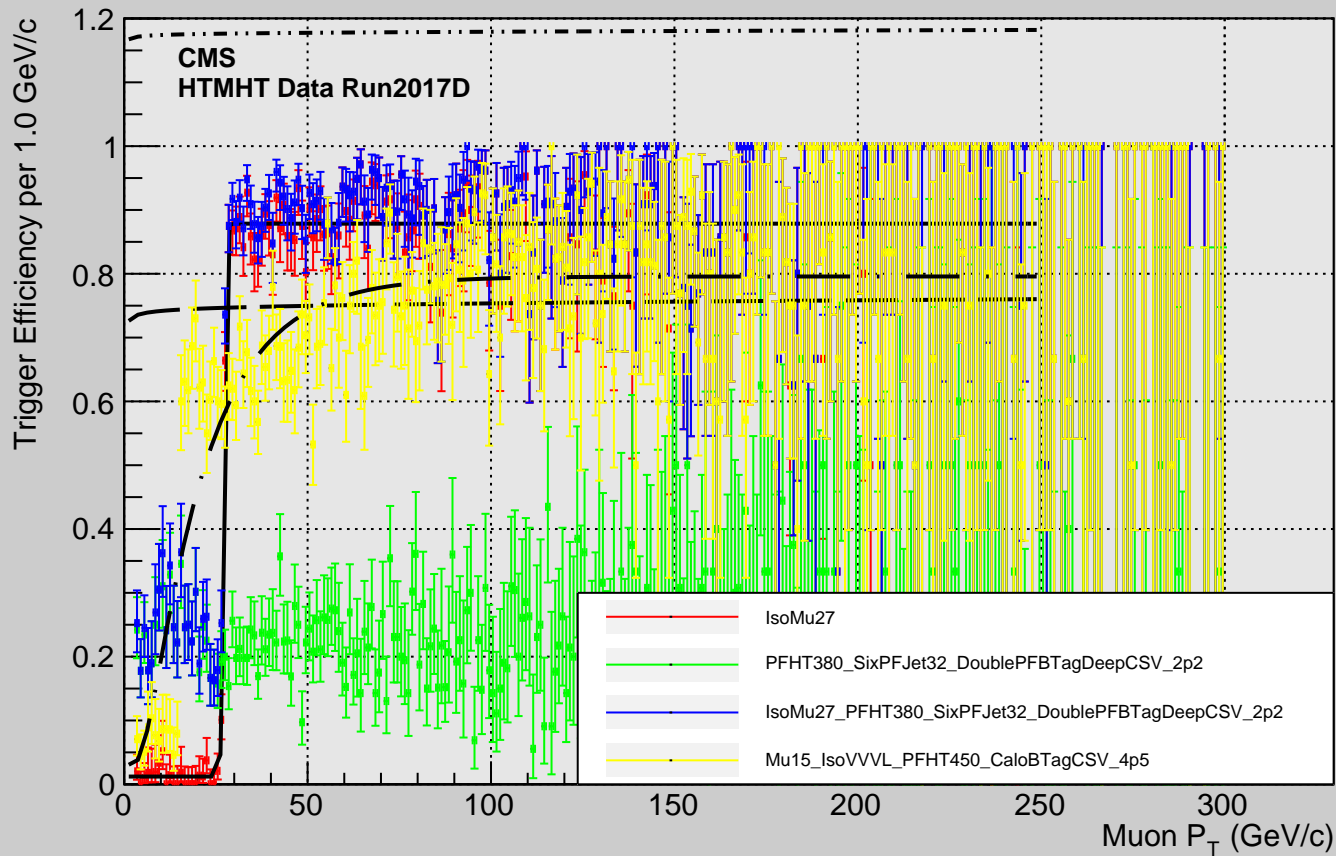
h_muonPt_notrigger	
Entries	7461
Mean	63.07
Std Dev	51.17



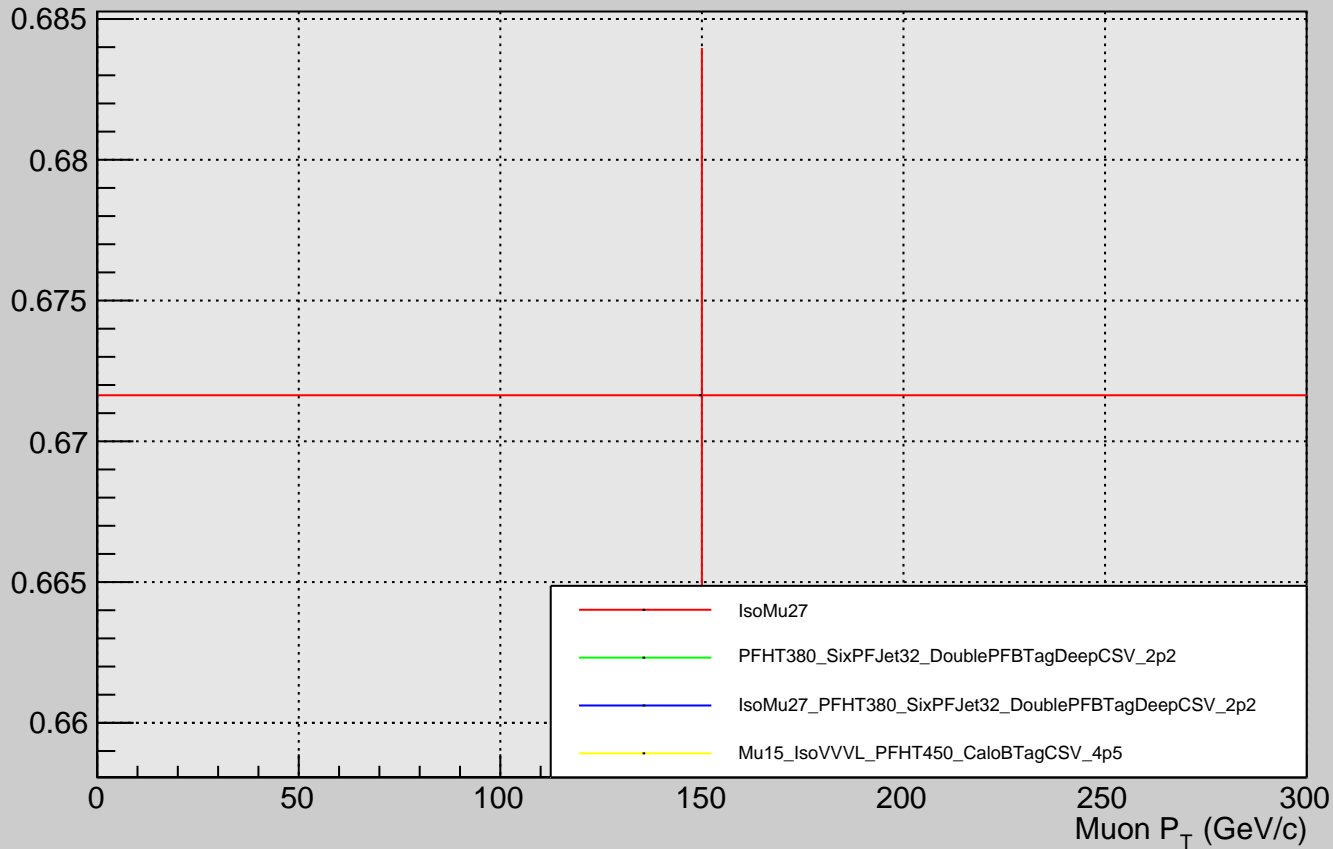
Number of Events per 1 GeV/c



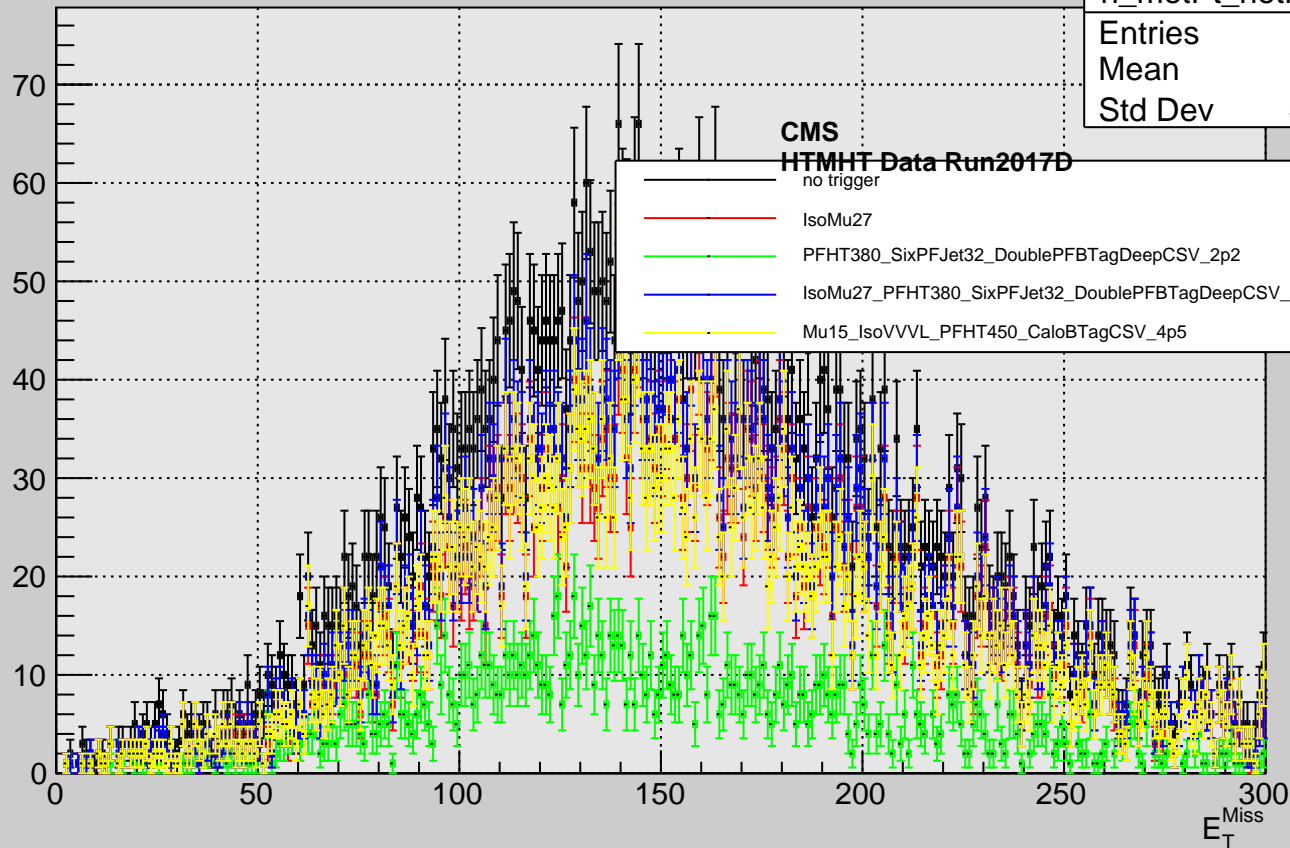
h_muonPt_notrigger	
Entries	7461
Mean	63.07
Std Dev	51.17



Trigger Efficiency per 300.00 GeV/c



Number of Events per 1 GeV/c

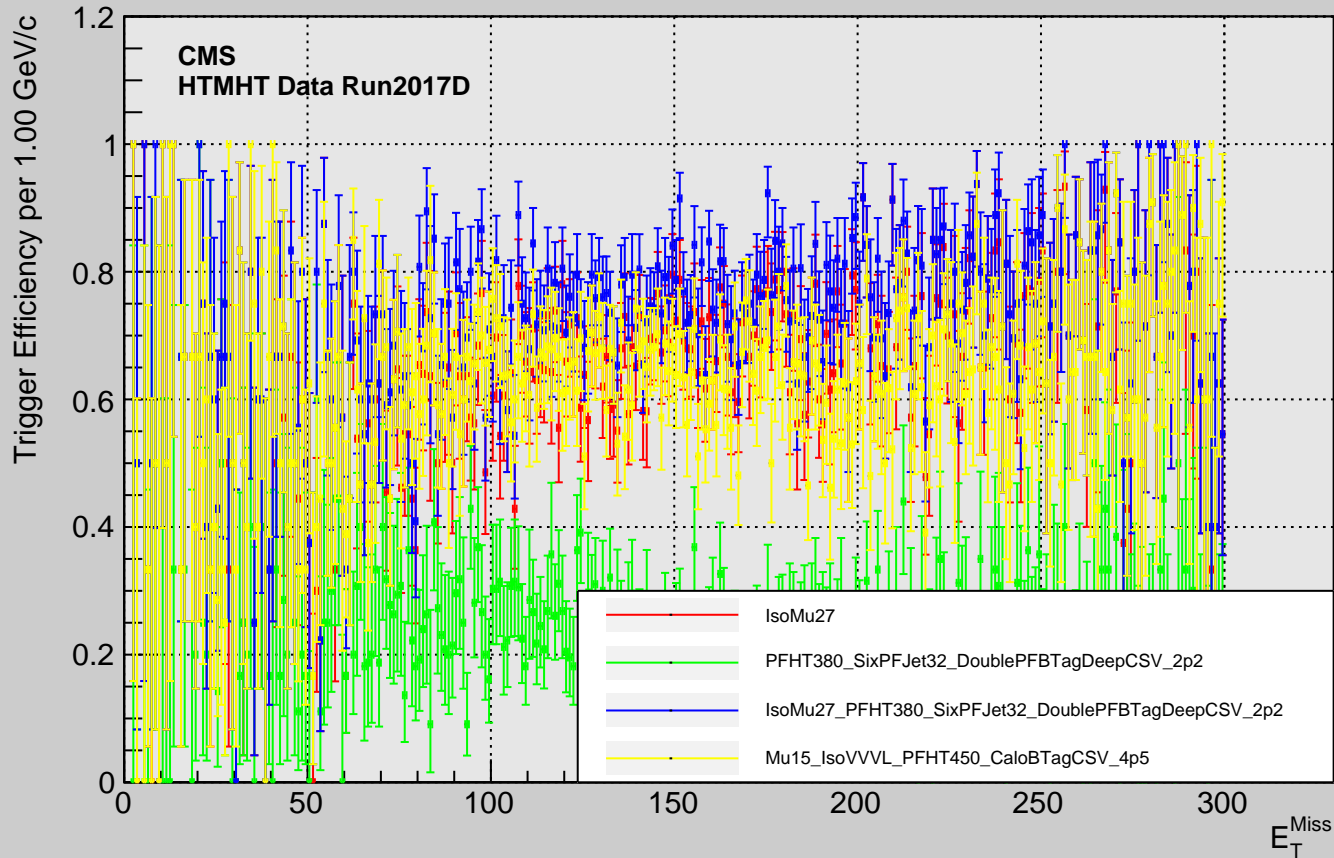


h\_metPt\_notrigger

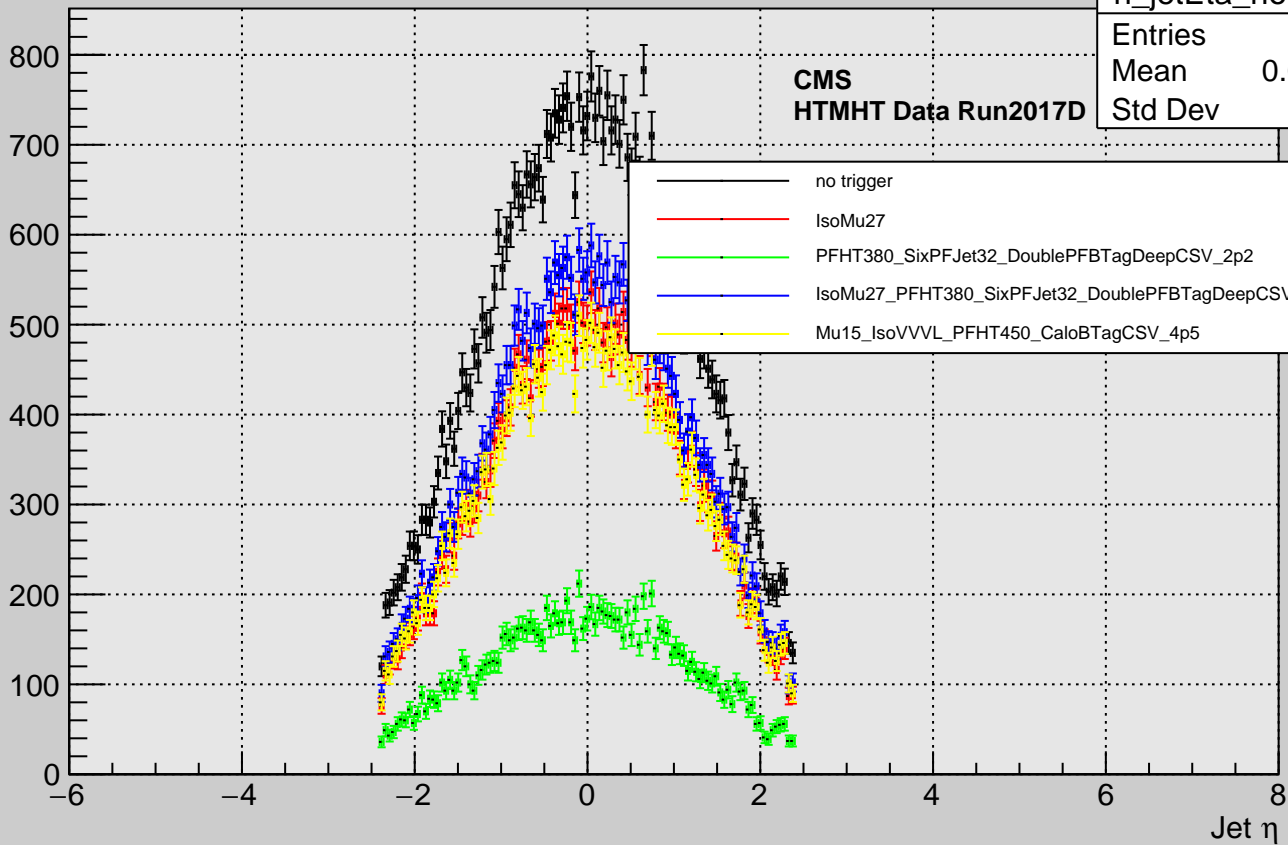
Entries 7461

Mean 156.2

Std Dev 57.25

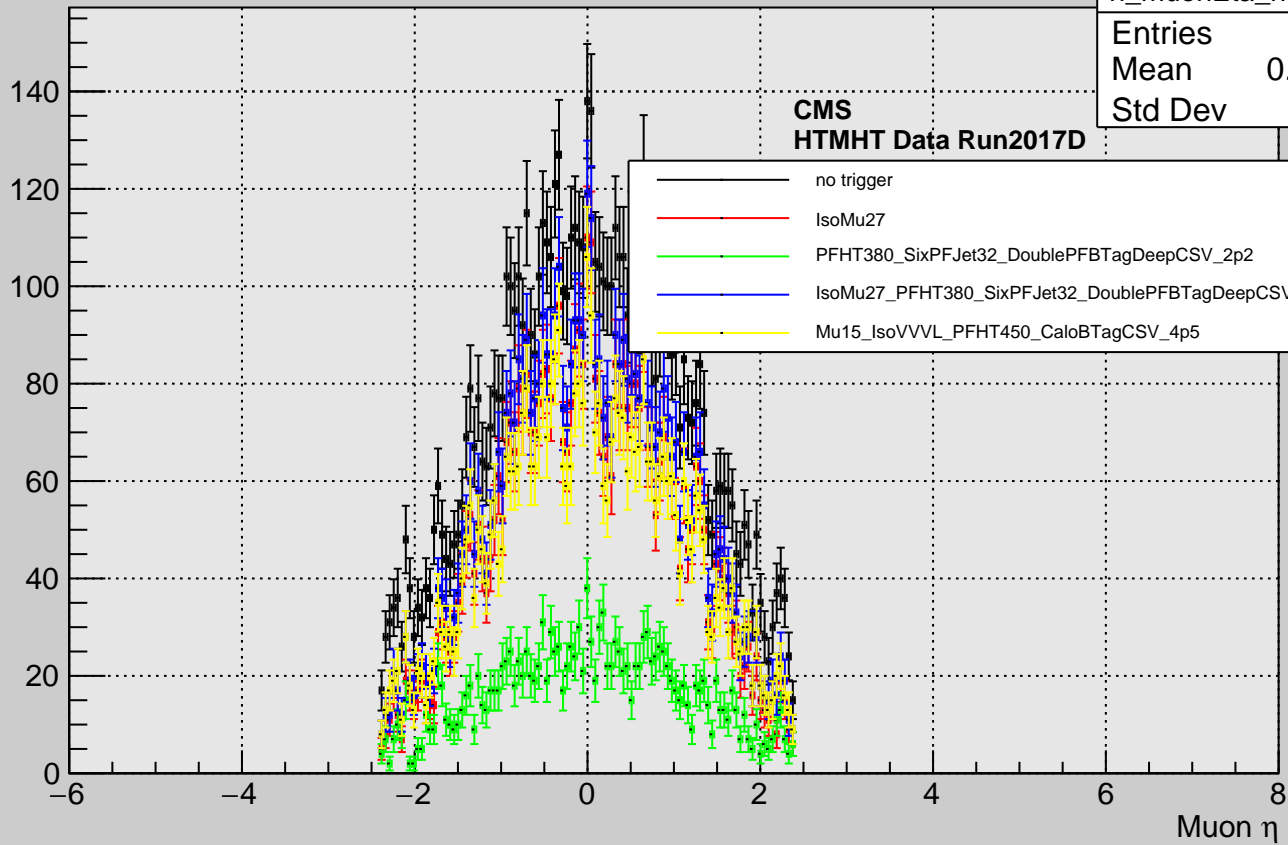


Number of Events per  $\delta\eta = 0.046$



h_jetEta_notrigger	
Entries	50280
Mean	0.003121
Std Dev	1.121

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

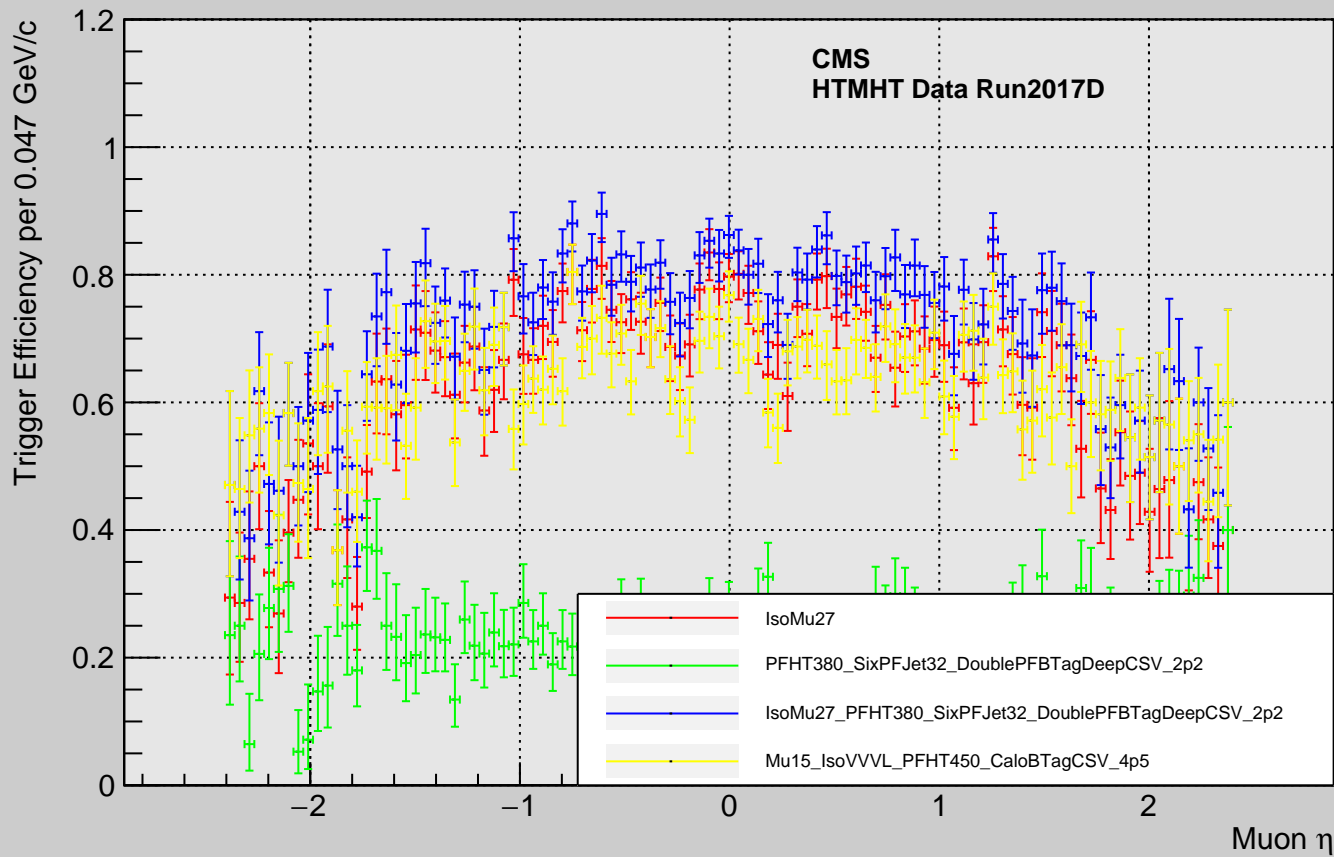


h\_muonEta\_notrigger

Entries 7461

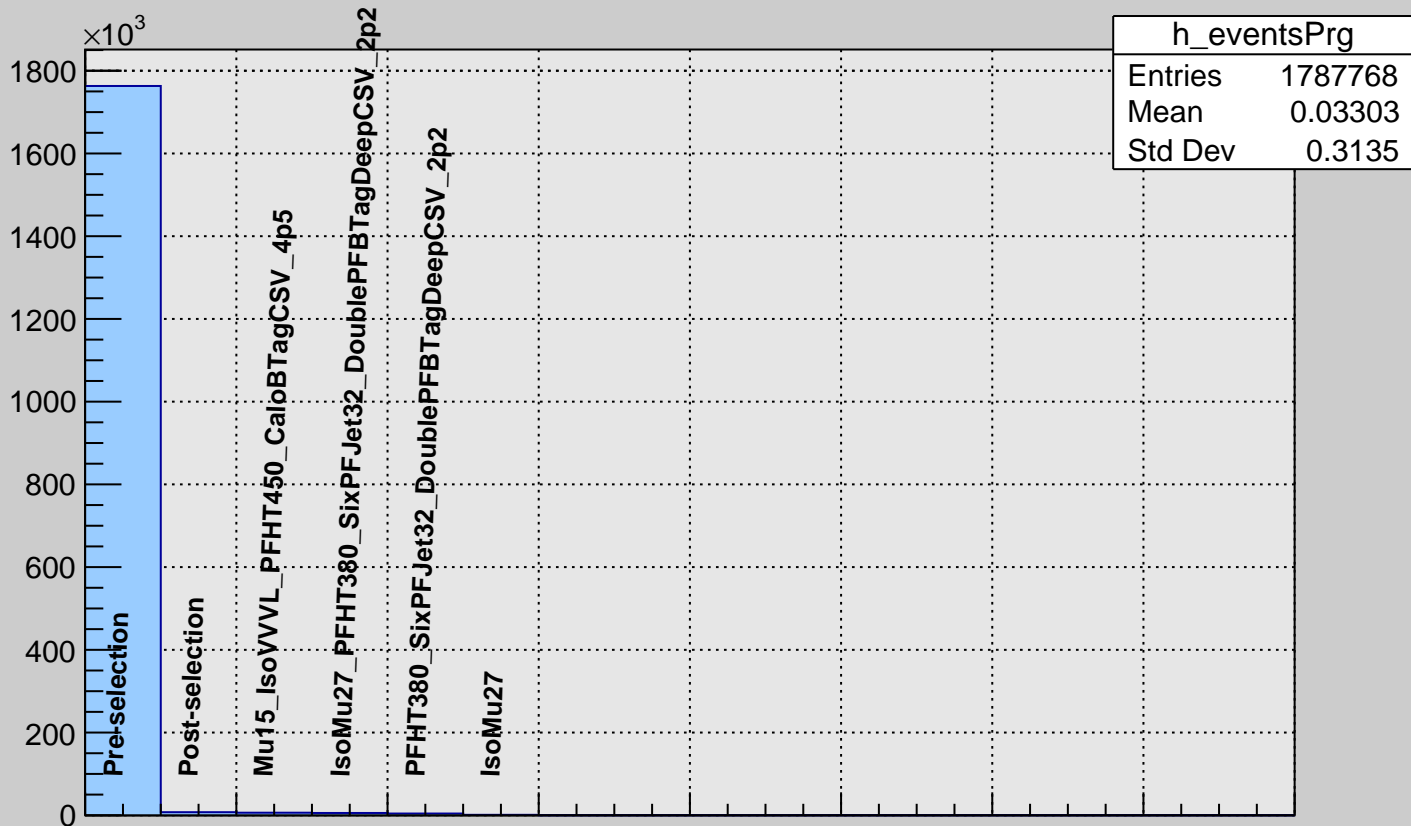
Mean 0.00838

Std Dev 1.114





Total Number of Accepted Events



Cuts and Triggers