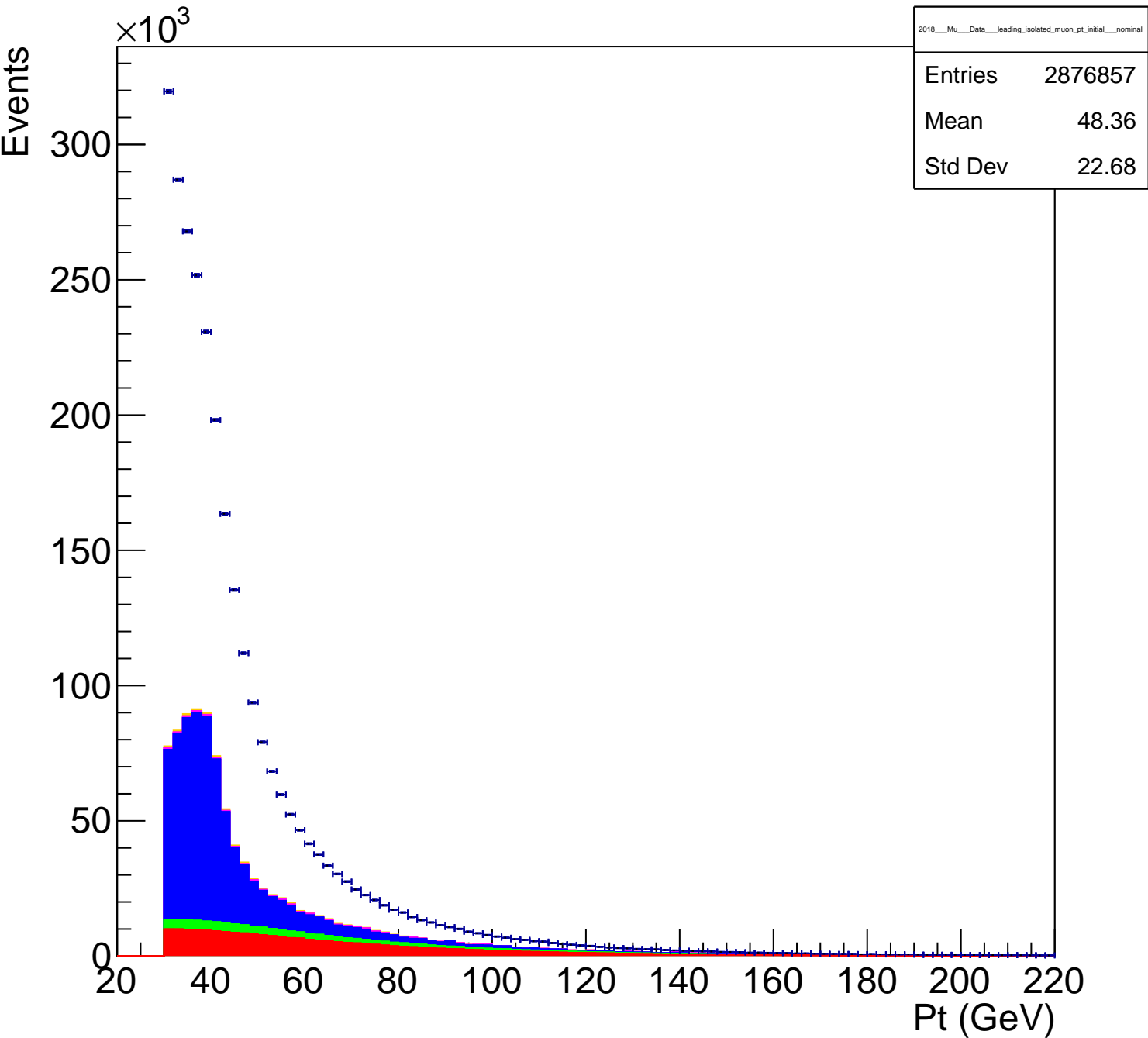
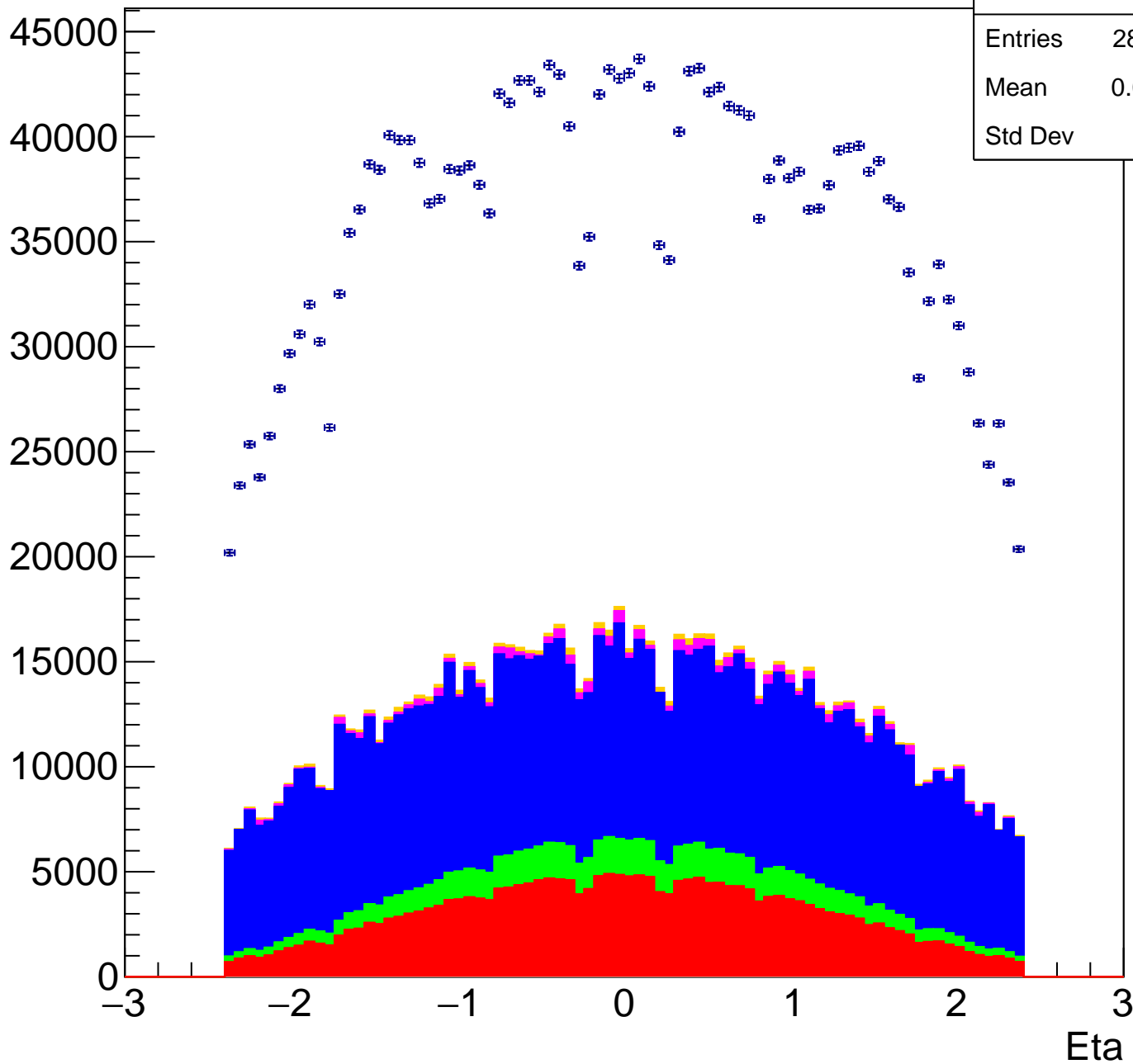


Leading Isolated Muon Transverse Momentum (One Muon, No Electrons)

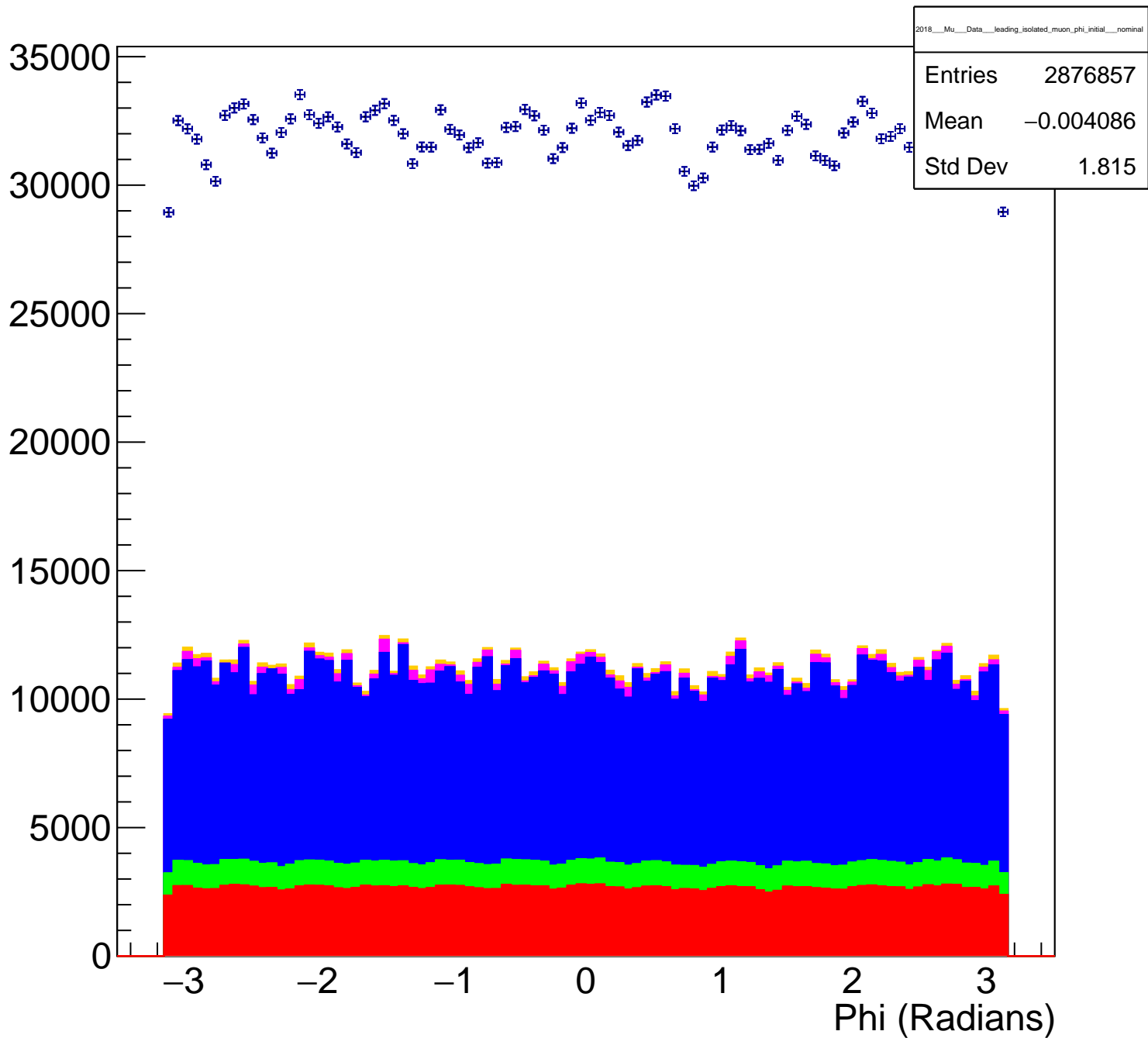


Leading Isolated Muon Pseudorapidity (One Muon, No Electrons)

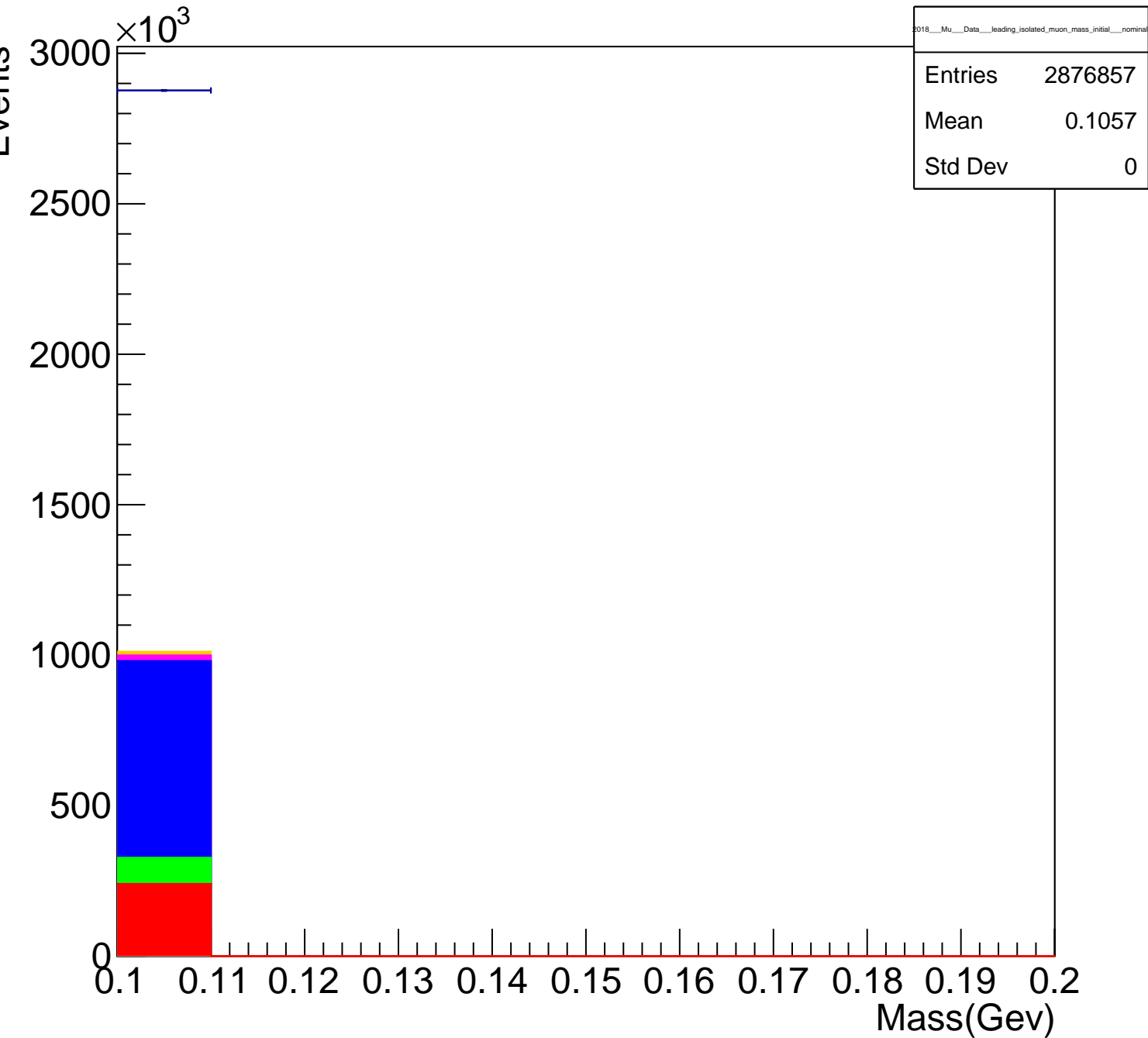
2018___Mu___Data___leading_isolated_muon_eta_initial___nominal	
Entries	2876857
Mean	0.007951
Std Dev	1.287



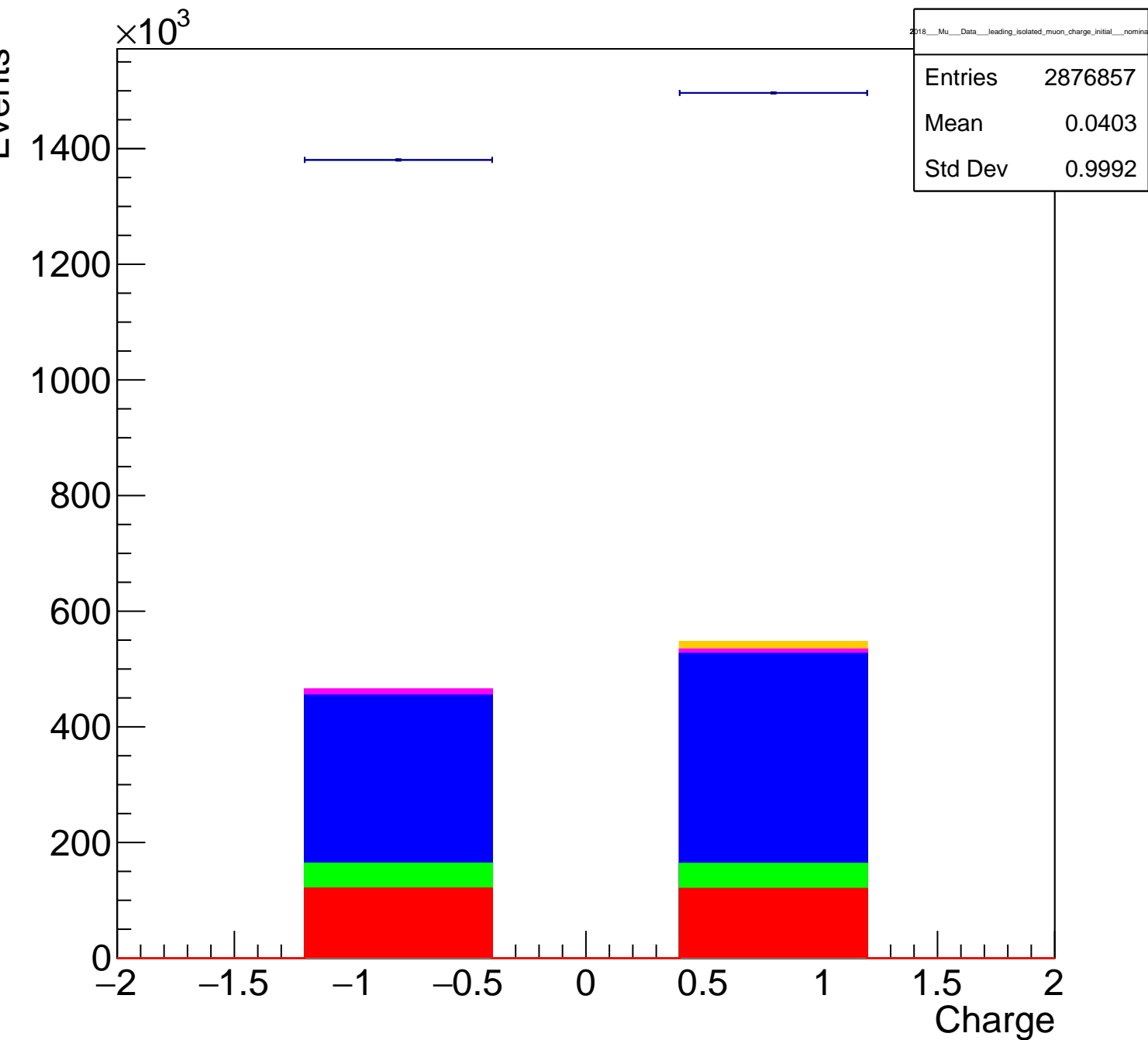
# Leading Isolated Muon Angle (One Muon, No Electrons)



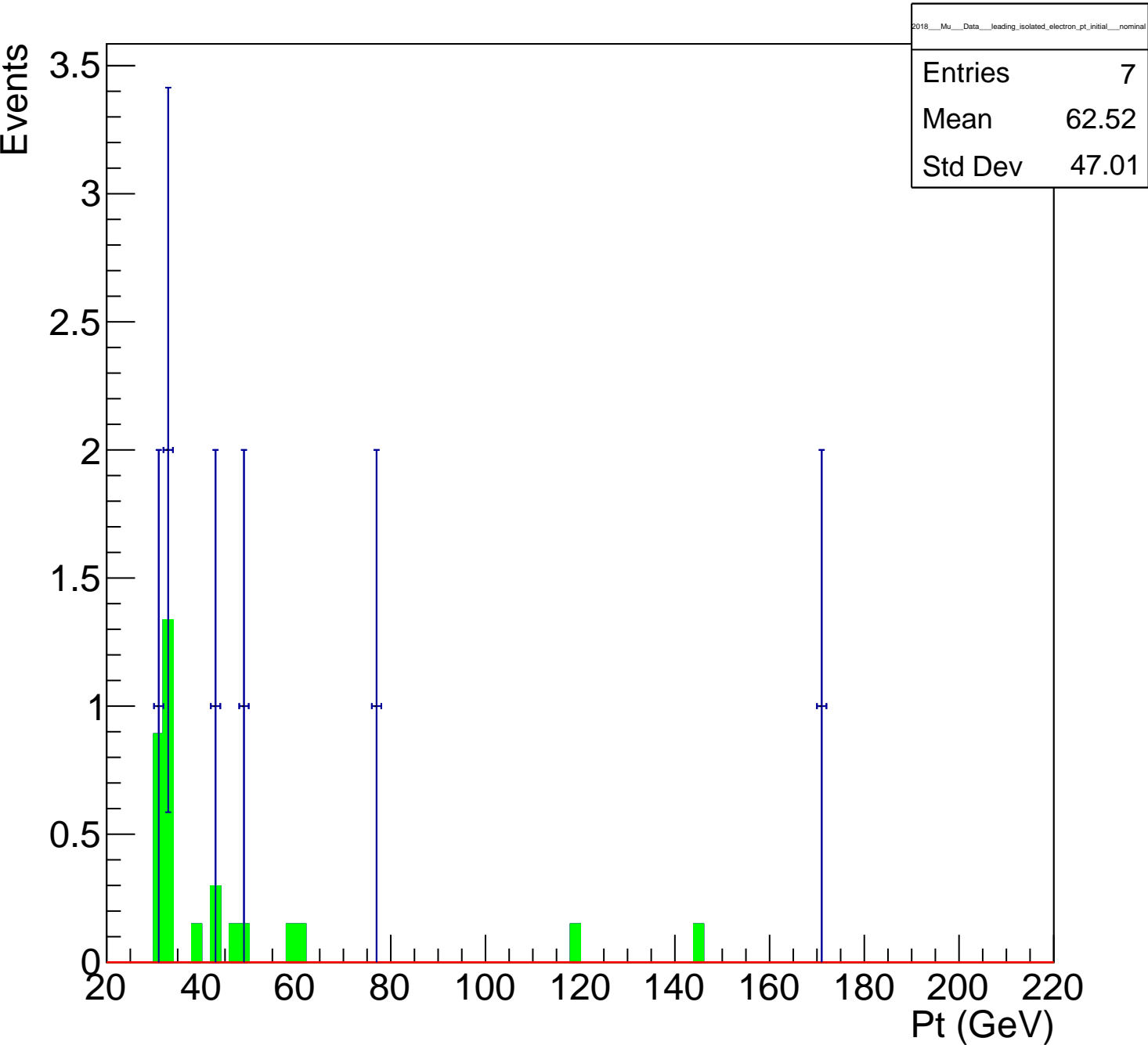
Leading Isolated Muon Mass (One Muon, No Electrons)



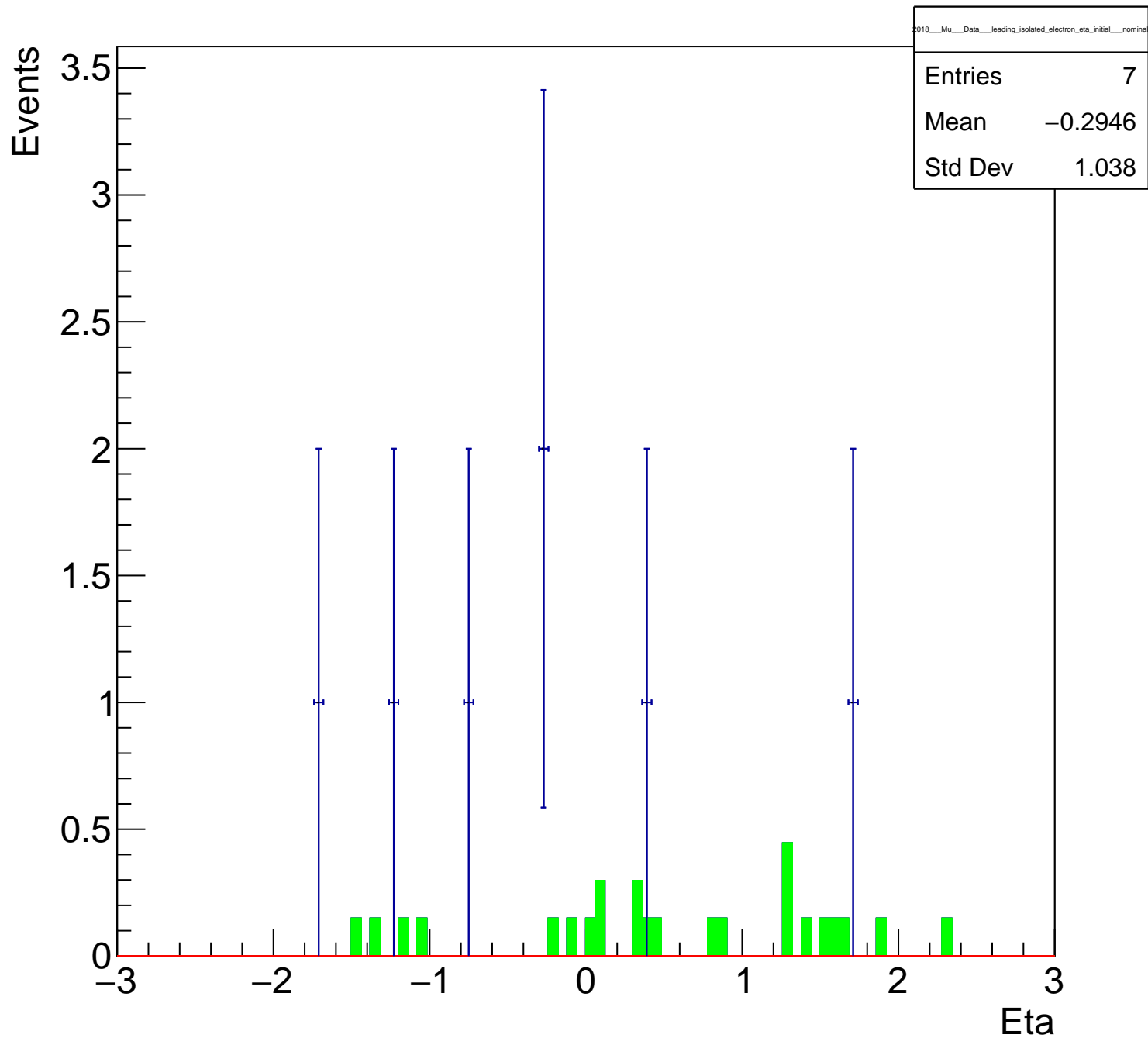
# Leading Isolated Muon Charge (One Muon, No Electrons)



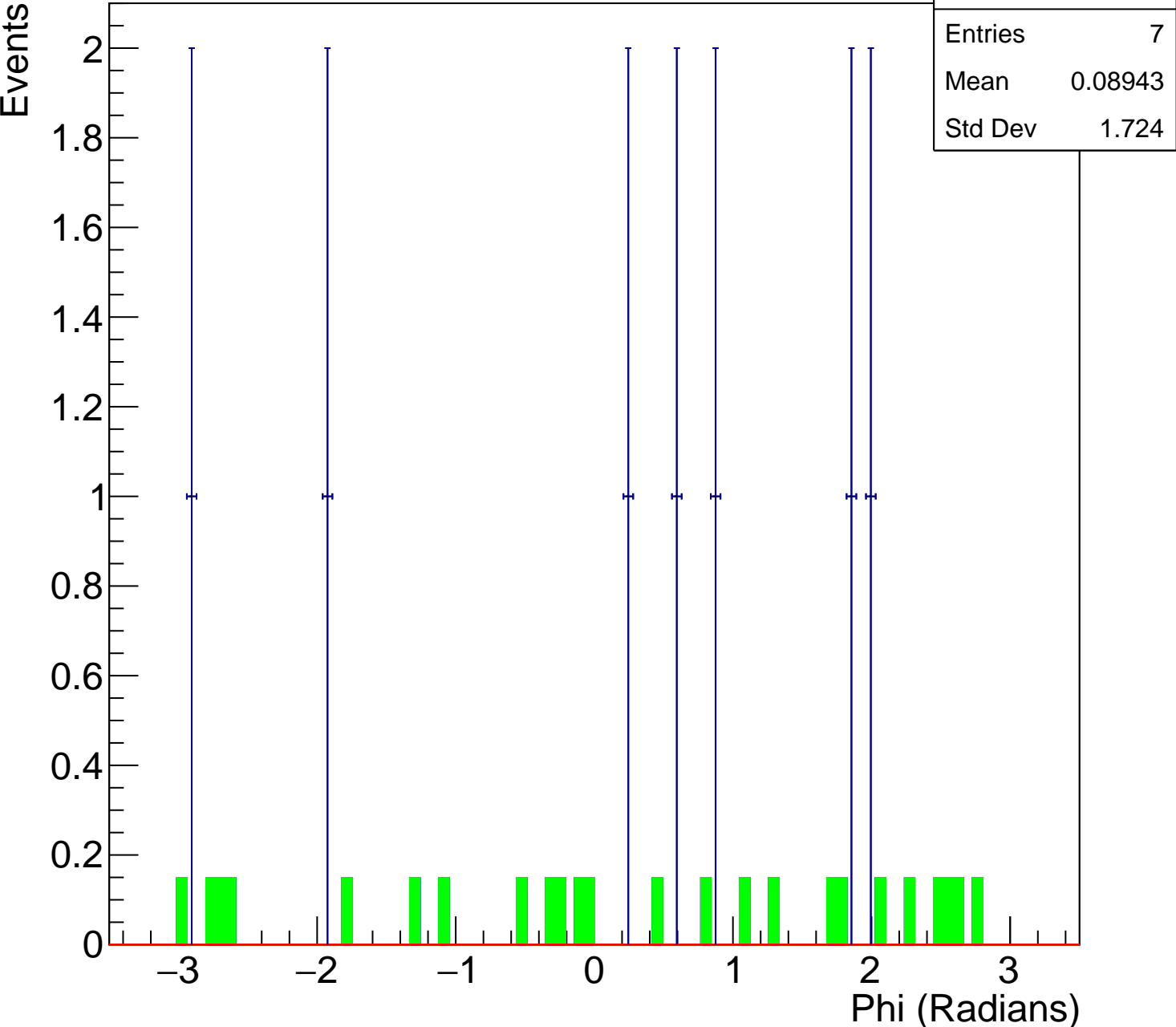
Leading Isolated Electron Transverse Momentum (One Electron, No Muons)



# Leading Isolated Electron Pseudorapidity (One Electron, No Muons)



Leading Isolated Electron Angle (One Electron, No Muons)





# Leading Isolated Electron Mass (One Electron, No Muons)

Events

1

0.8

0.6

0.4

0.2

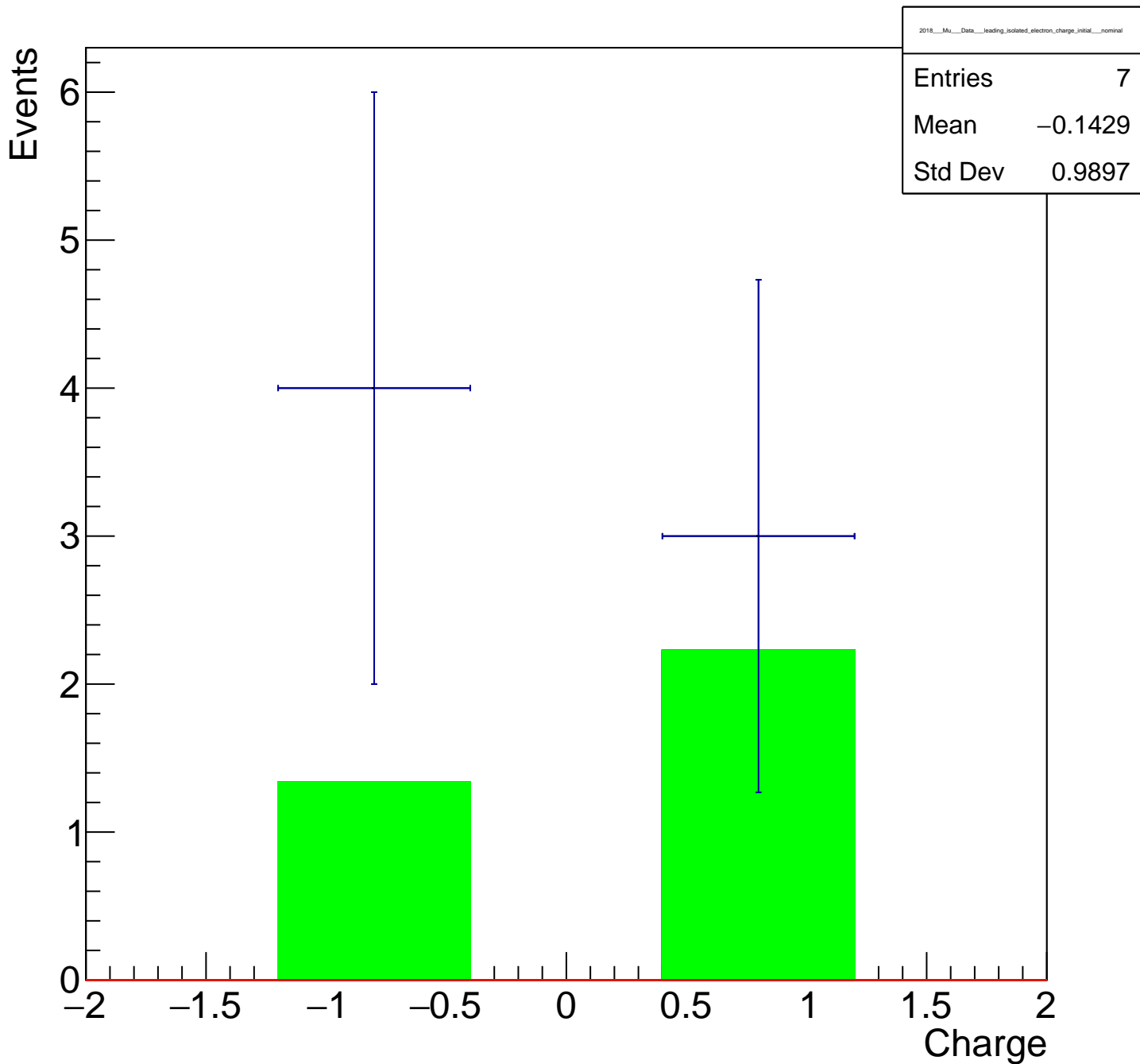
0

0.00010.00020.00030.00040.00050.00060.00070.00080.00090.001

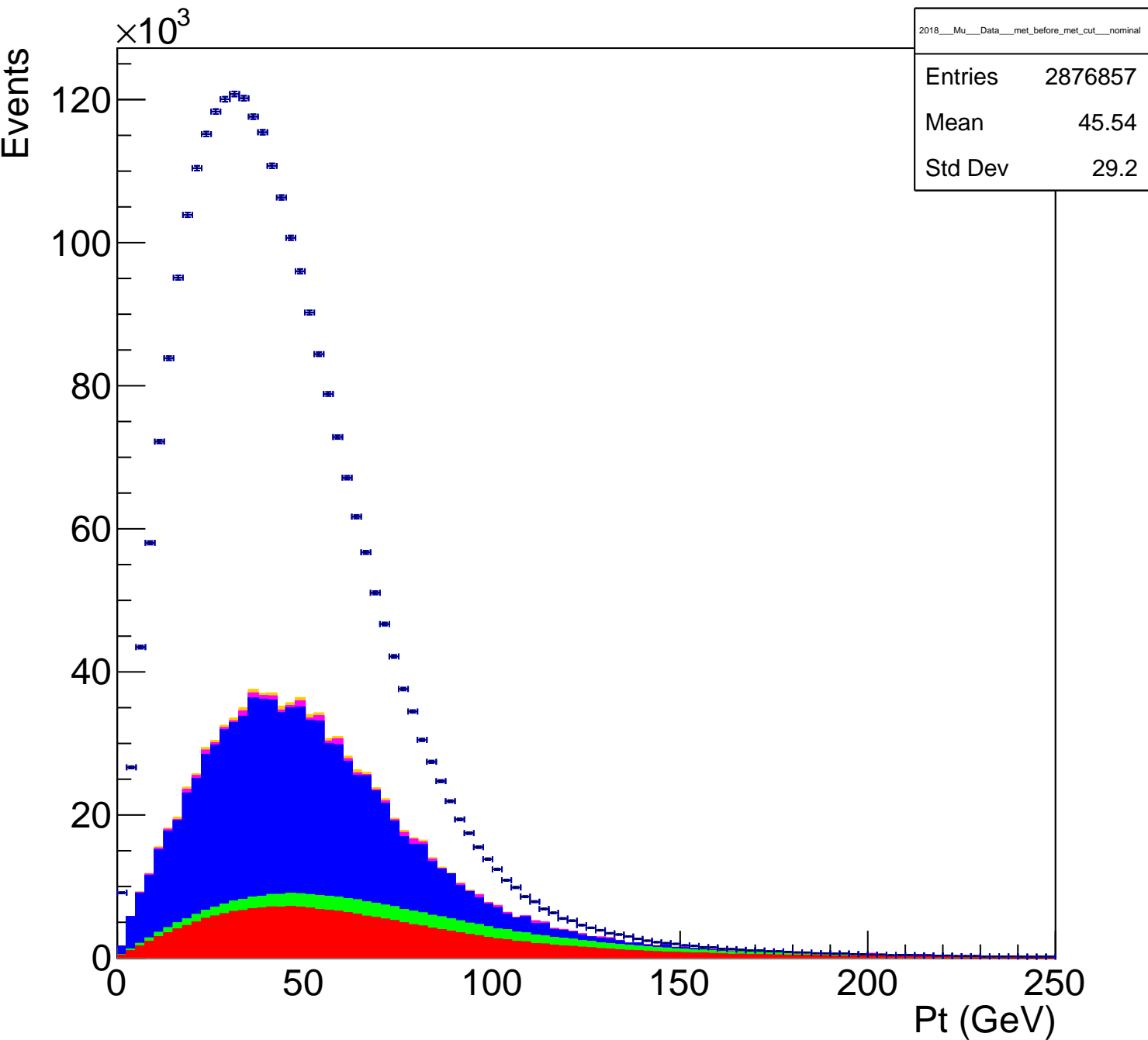
Mass(Gev)

2018_Mu_Data_leading_isolated_electron_mass_initial__nominal	
Entries	7
Mean	0
Std Dev	0

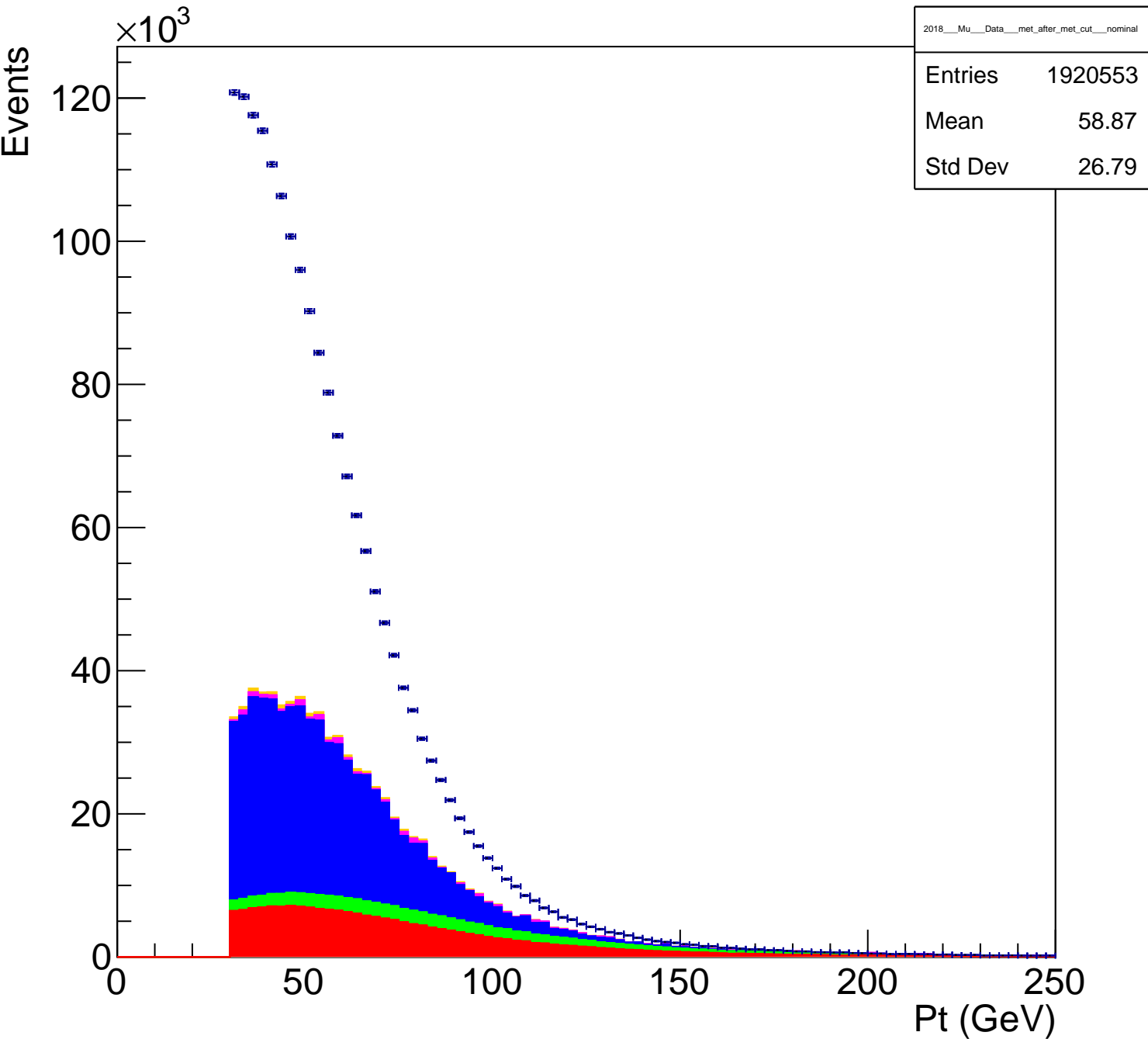
# Leading Isolated Electron Charge (One Electron, No Muons)



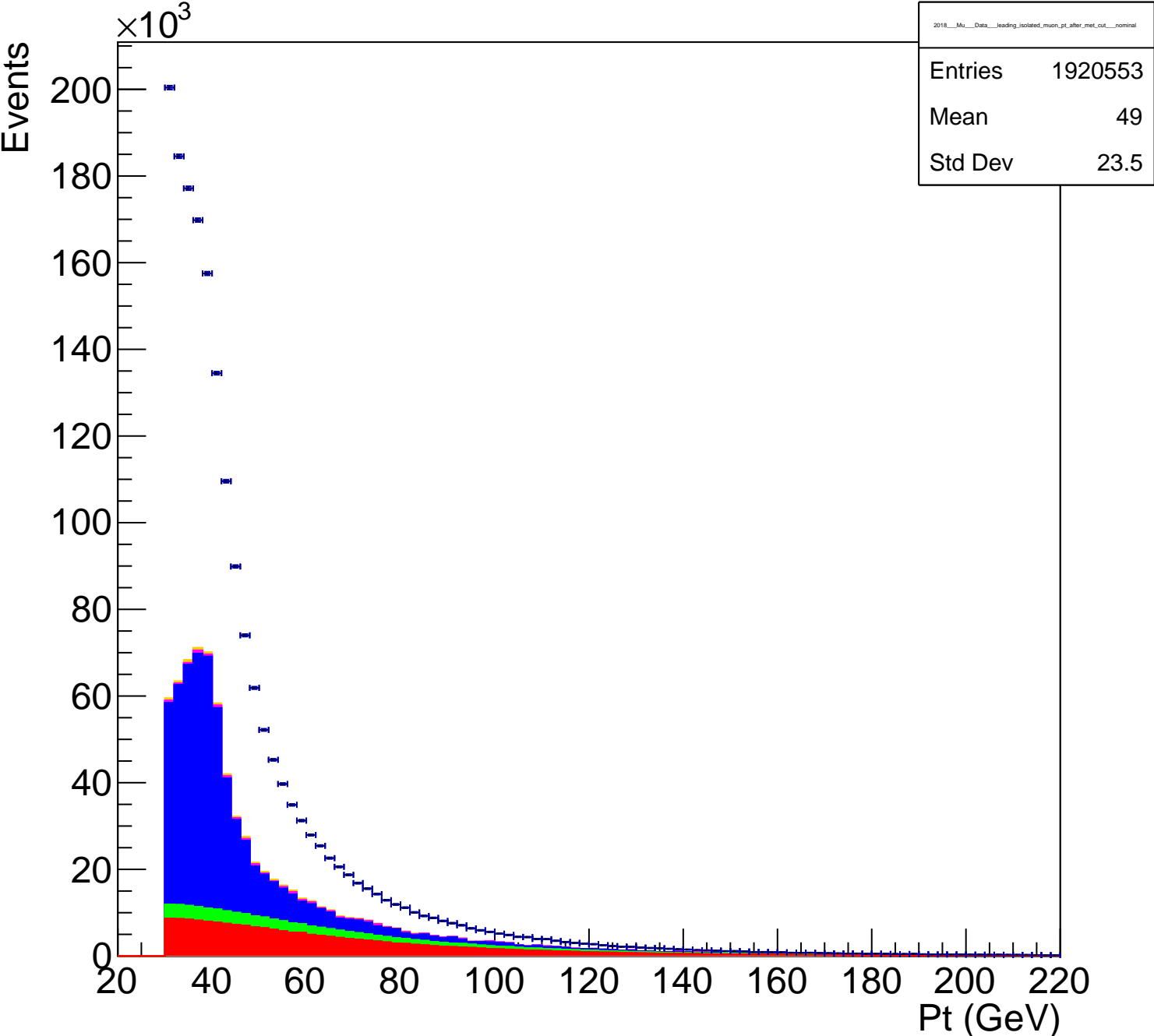
# MET Before MET Cut



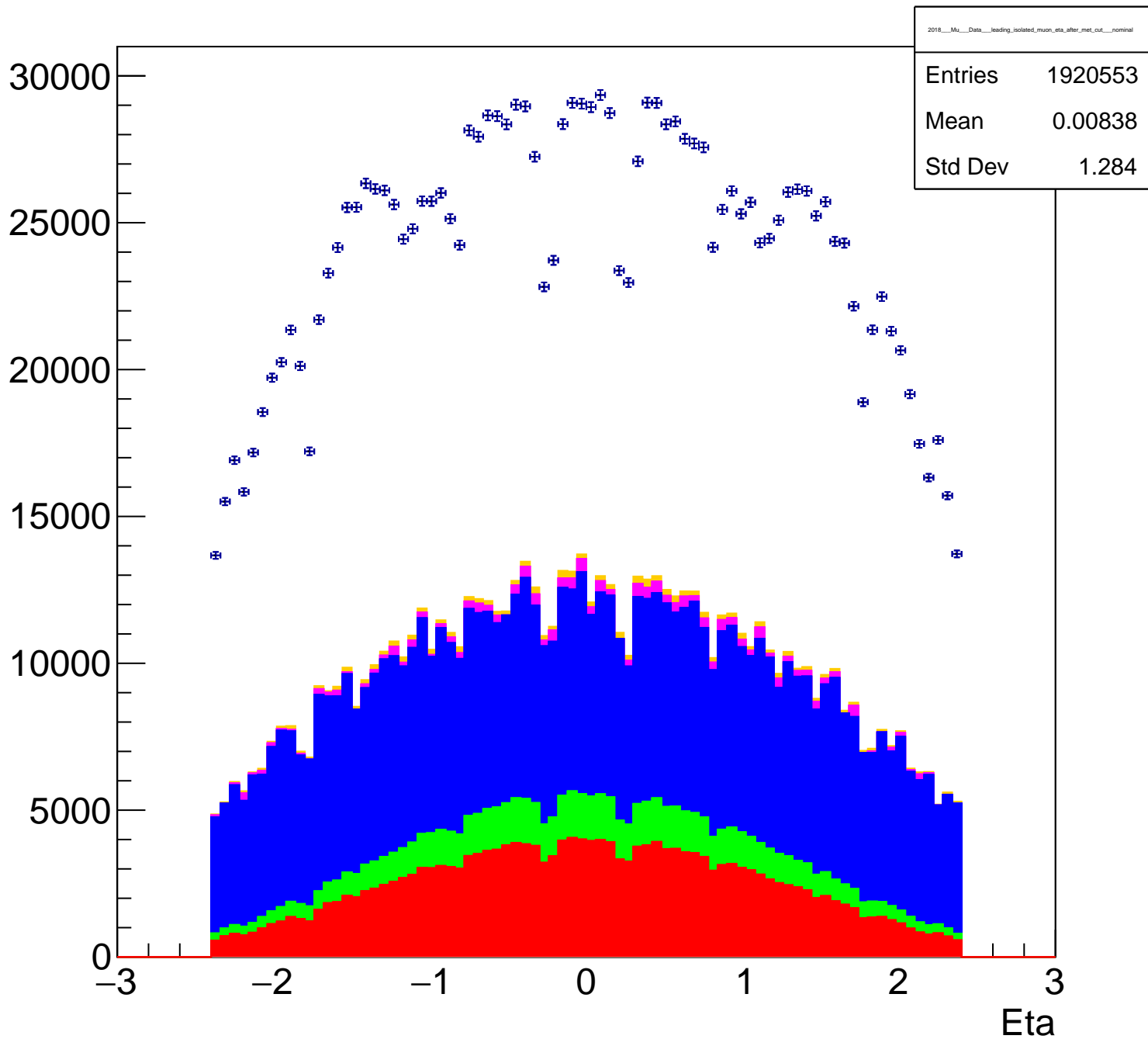
# MET After MET Cut



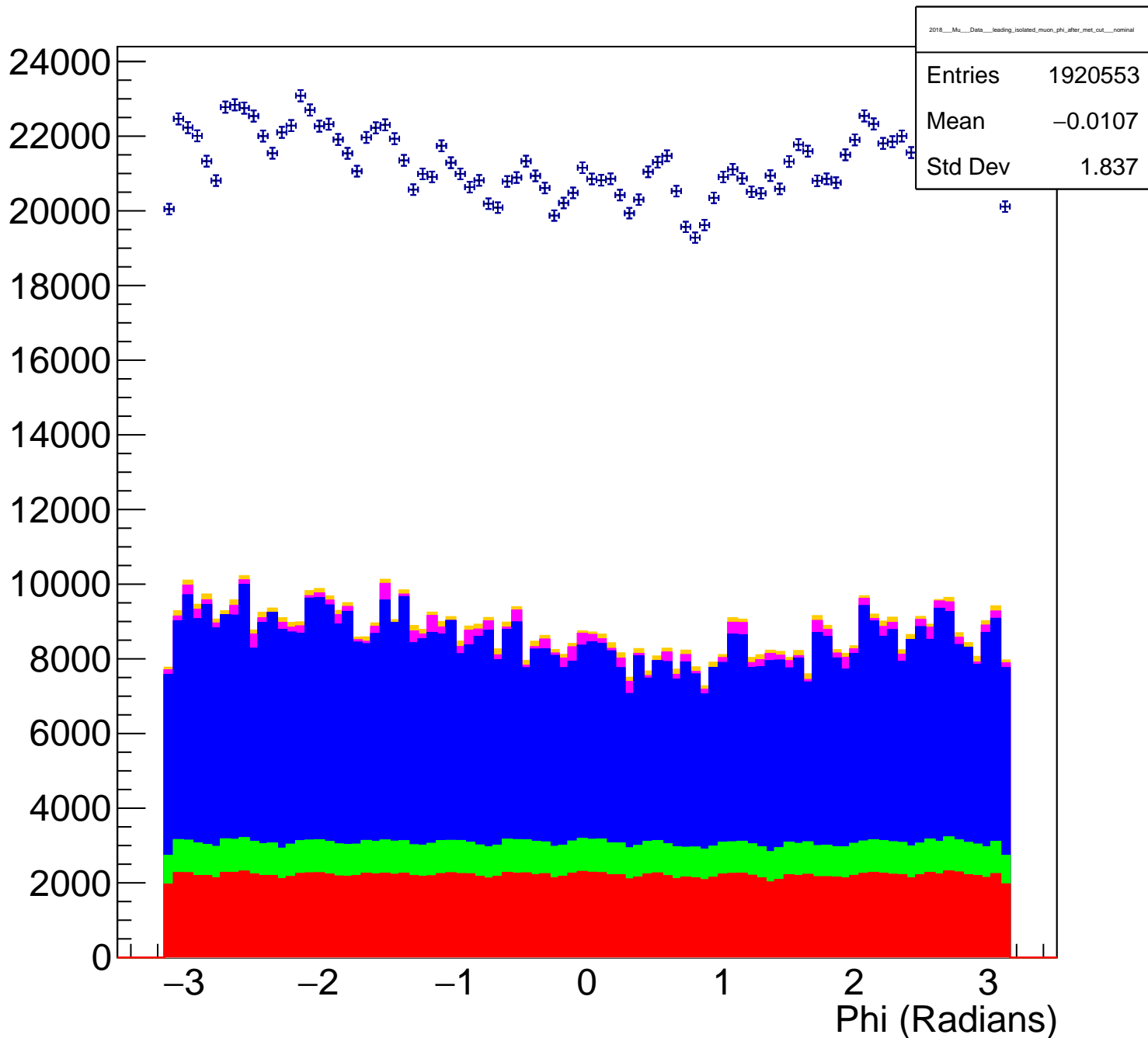
Leading Isolated Muon Transverse Momentum After MET Cut



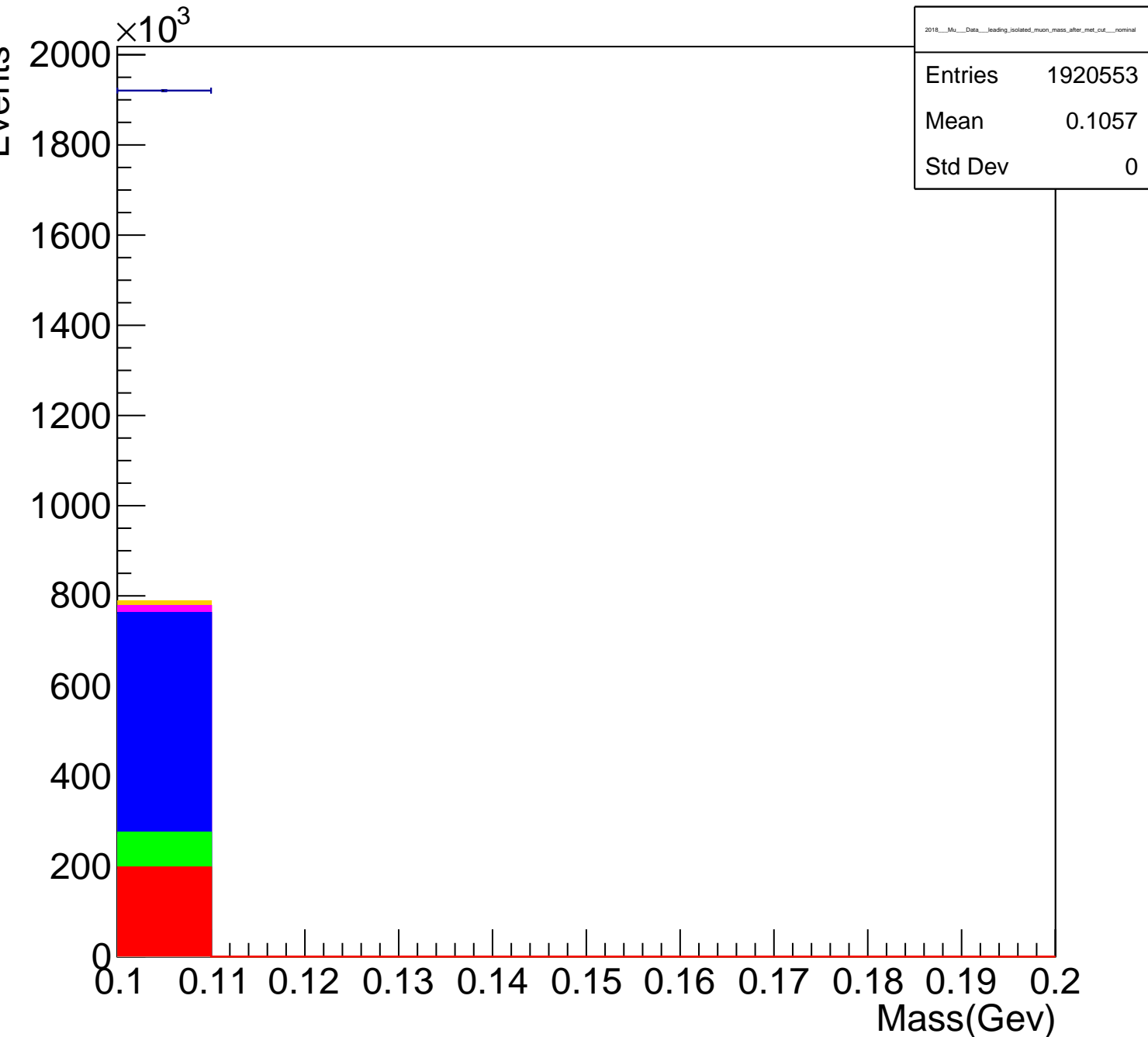
# Leading Isolated Muon Pseudorapidity After MET Cut



# Leading Isolated Muon Angle After MET Cut

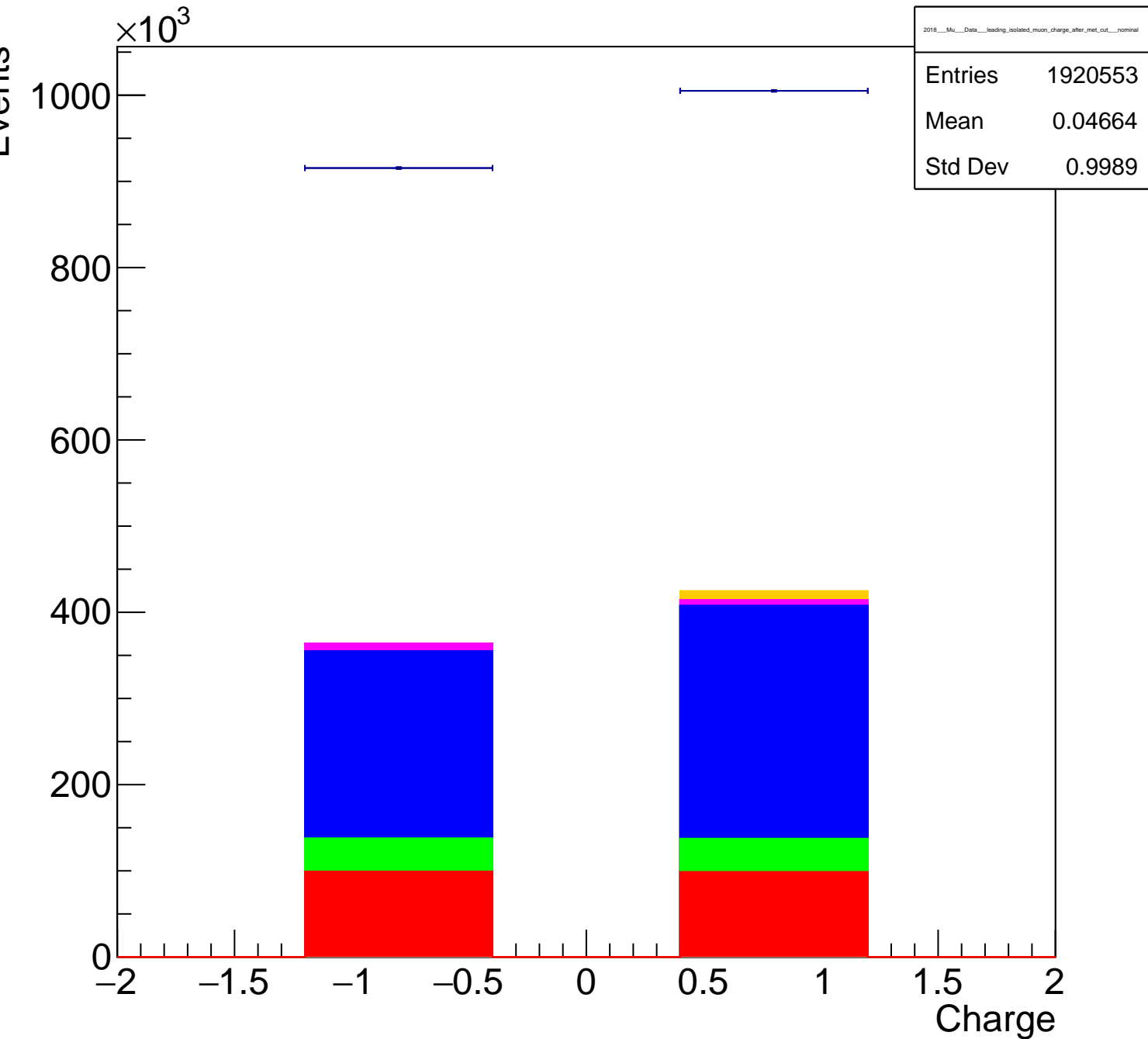


# Leading Isolated Muon Mass After MET Cut

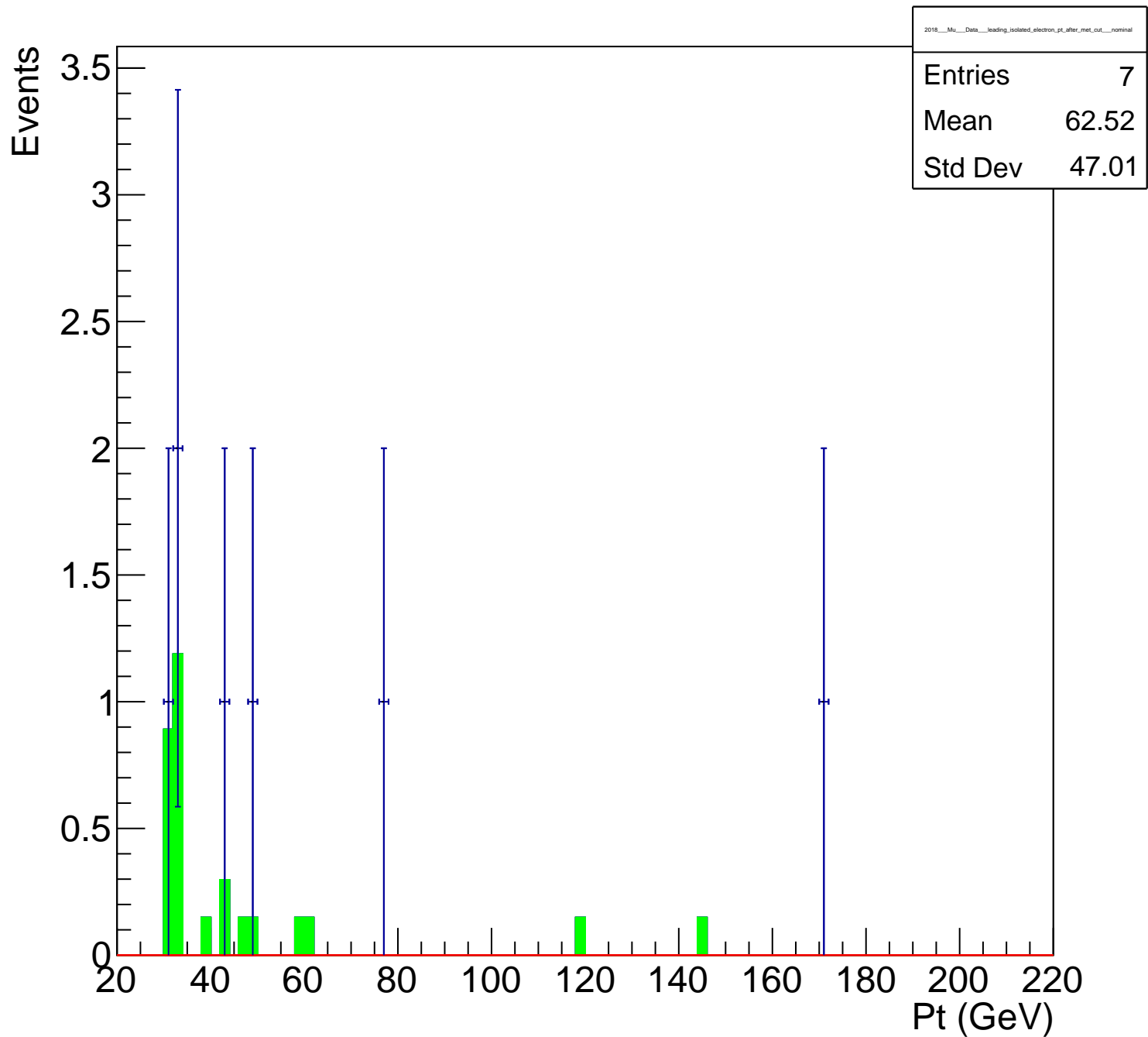




# Leading Isolated Muon Charge After MET Cut



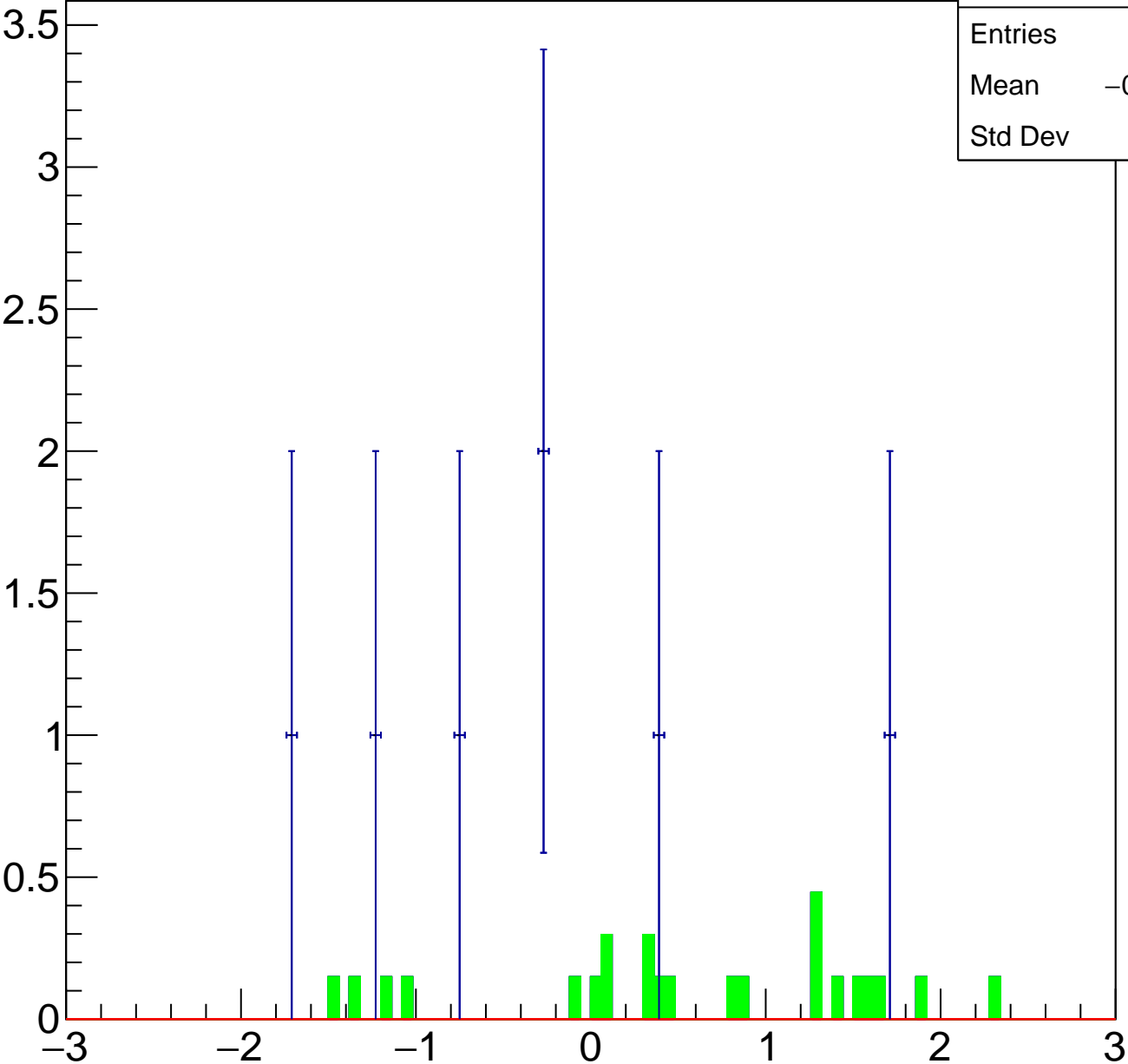
# Leading Isolated Electron Transverse Momentum After MET Cut



# Leading Isolated Electron Pseudorapidity After MET Cut

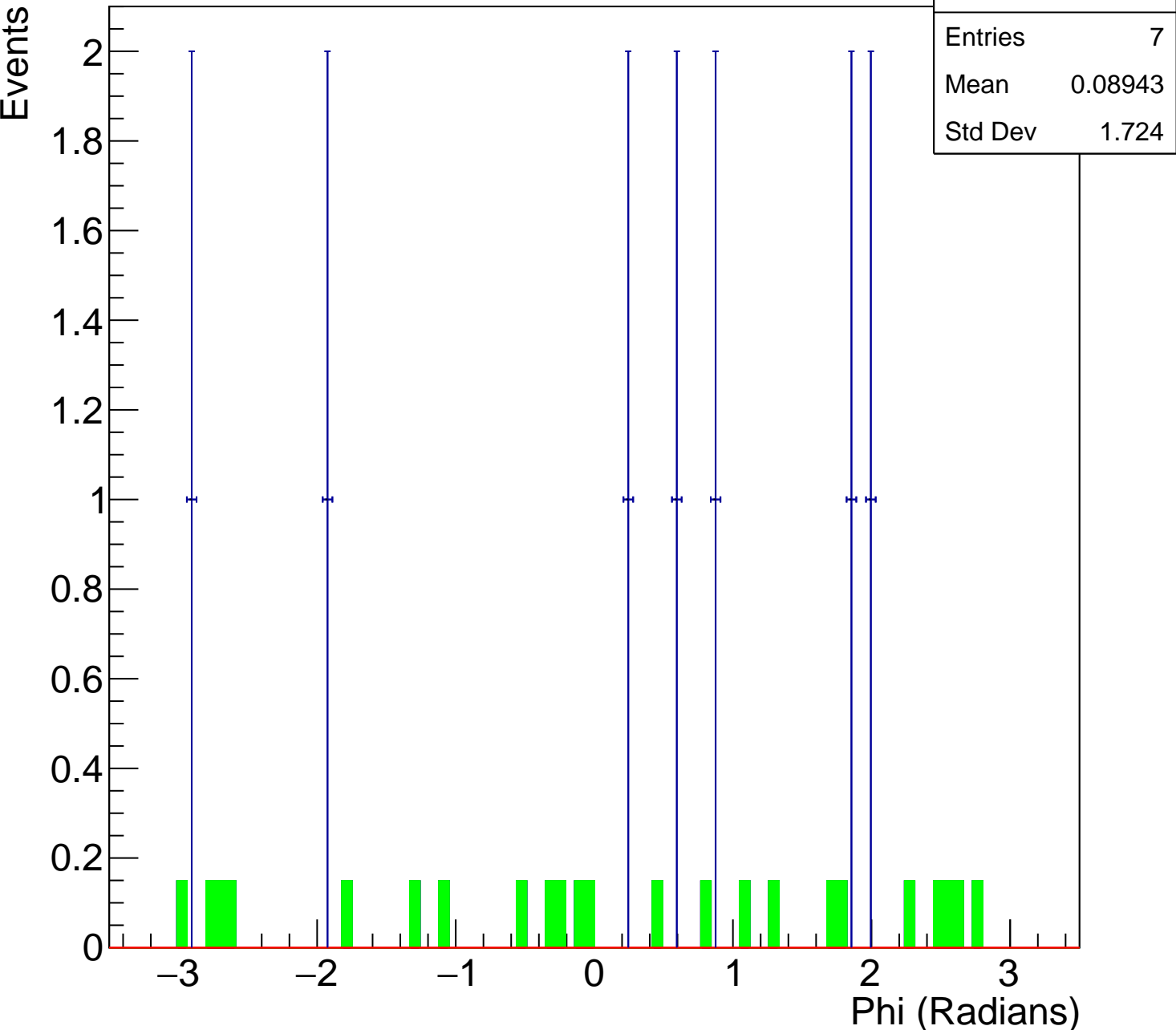
2018_Mu_Data_leading_isolated_electron_eta_after_met_cut_nominal	
Entries	7
Mean	-0.2946
Std Dev	1.038

Events



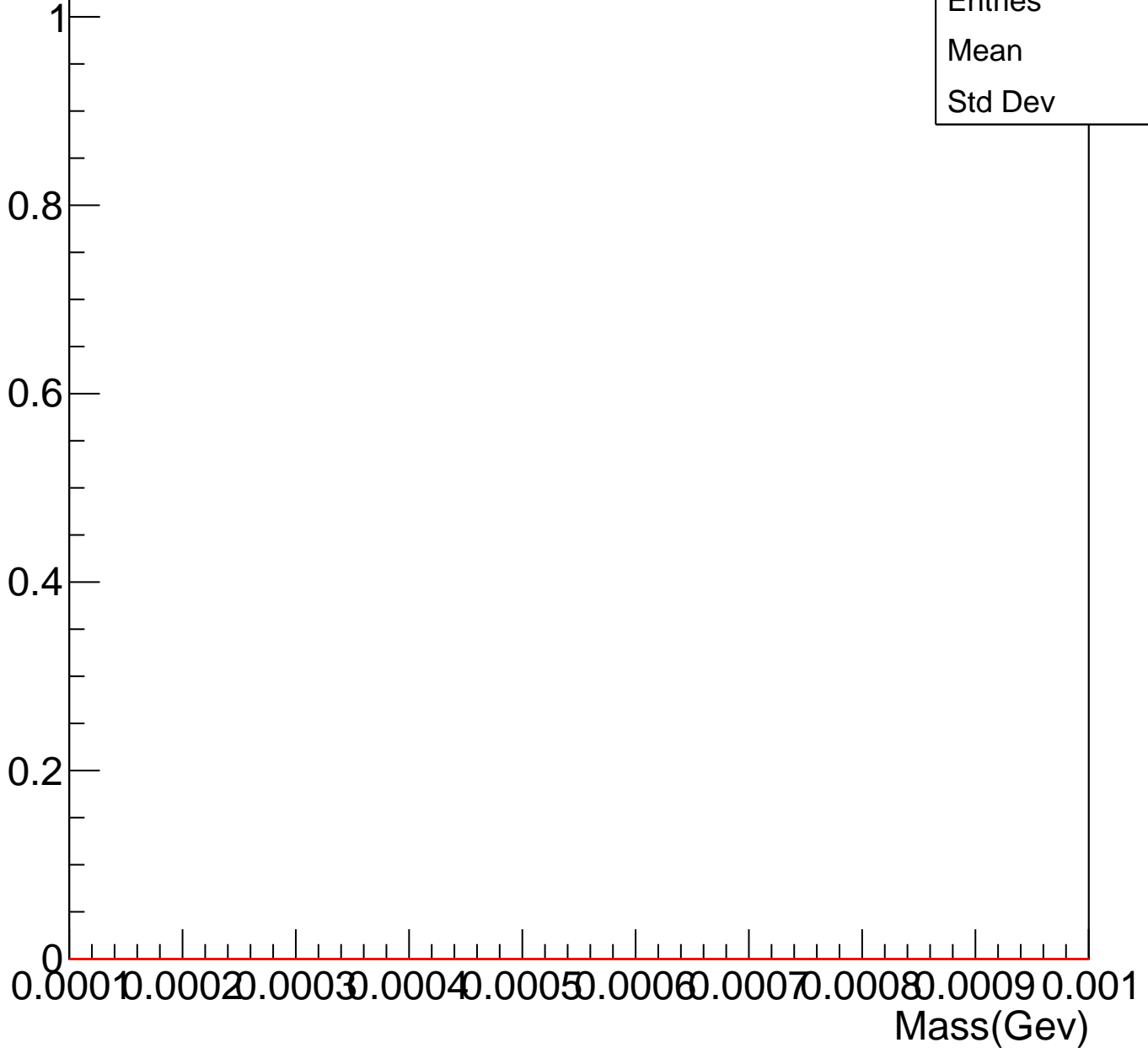
Eta

# Leading Isolated Electron Angle After MET Cut

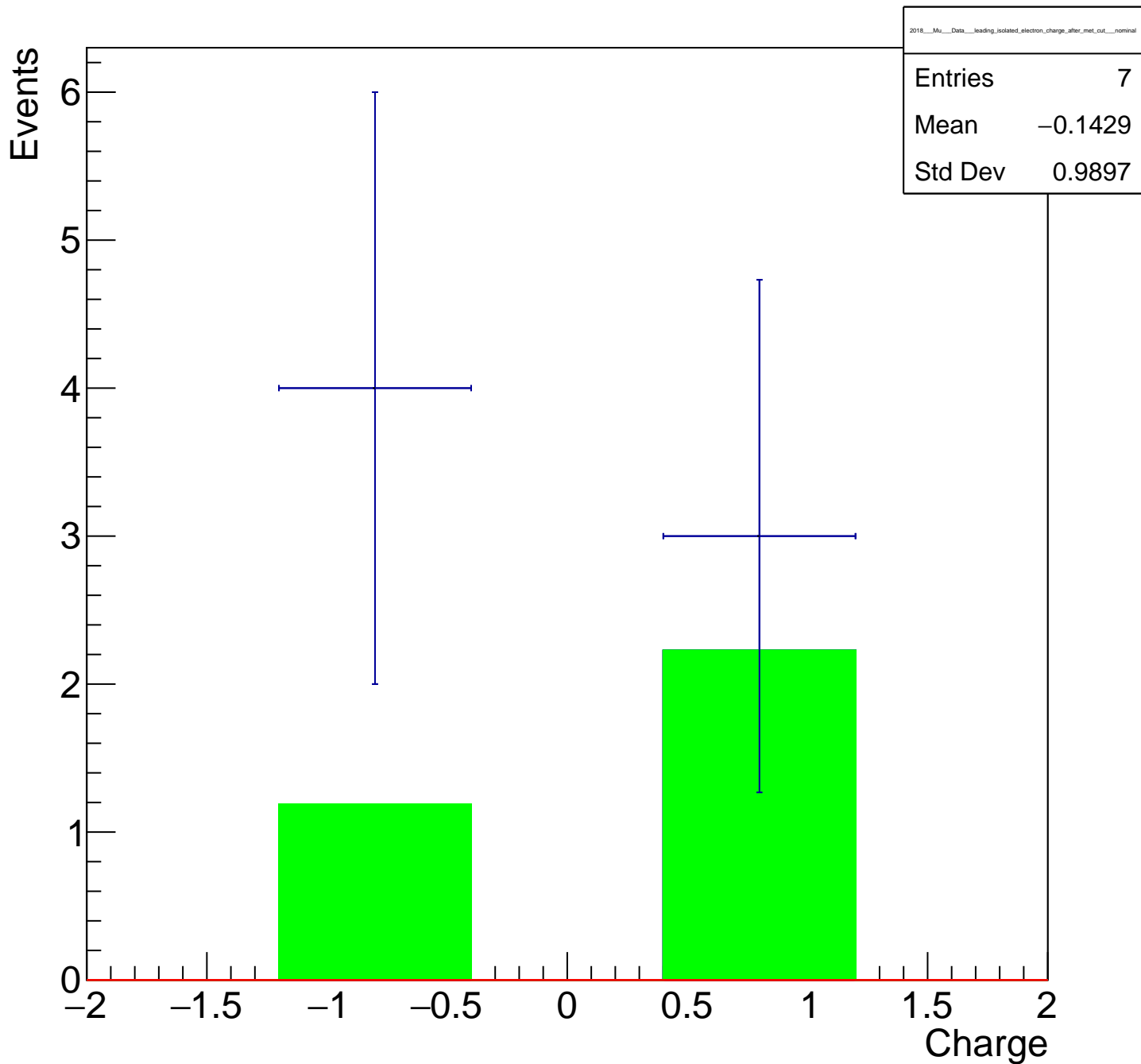


# Leading Isolated Electron Mass After MET Cut

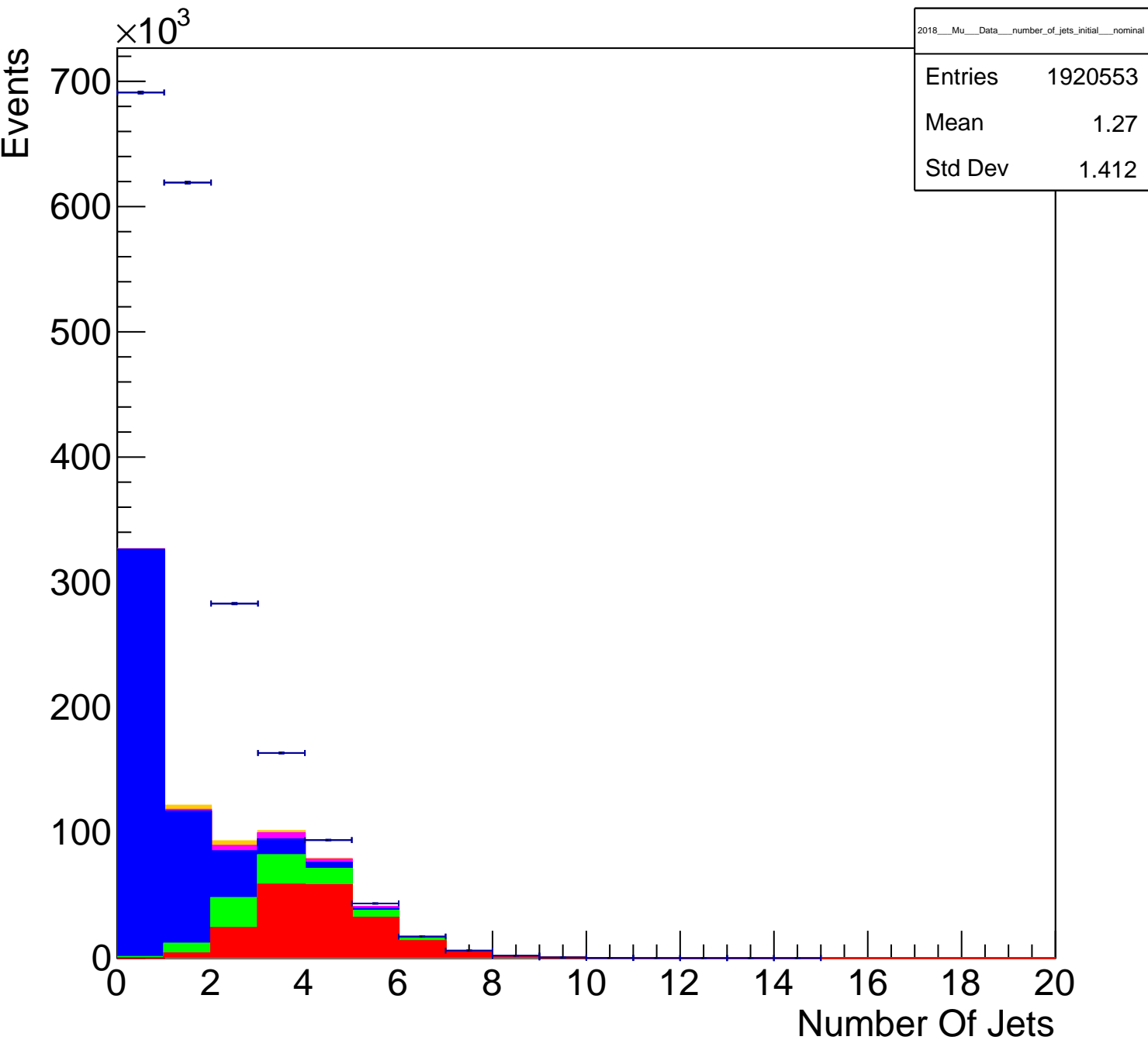
Events



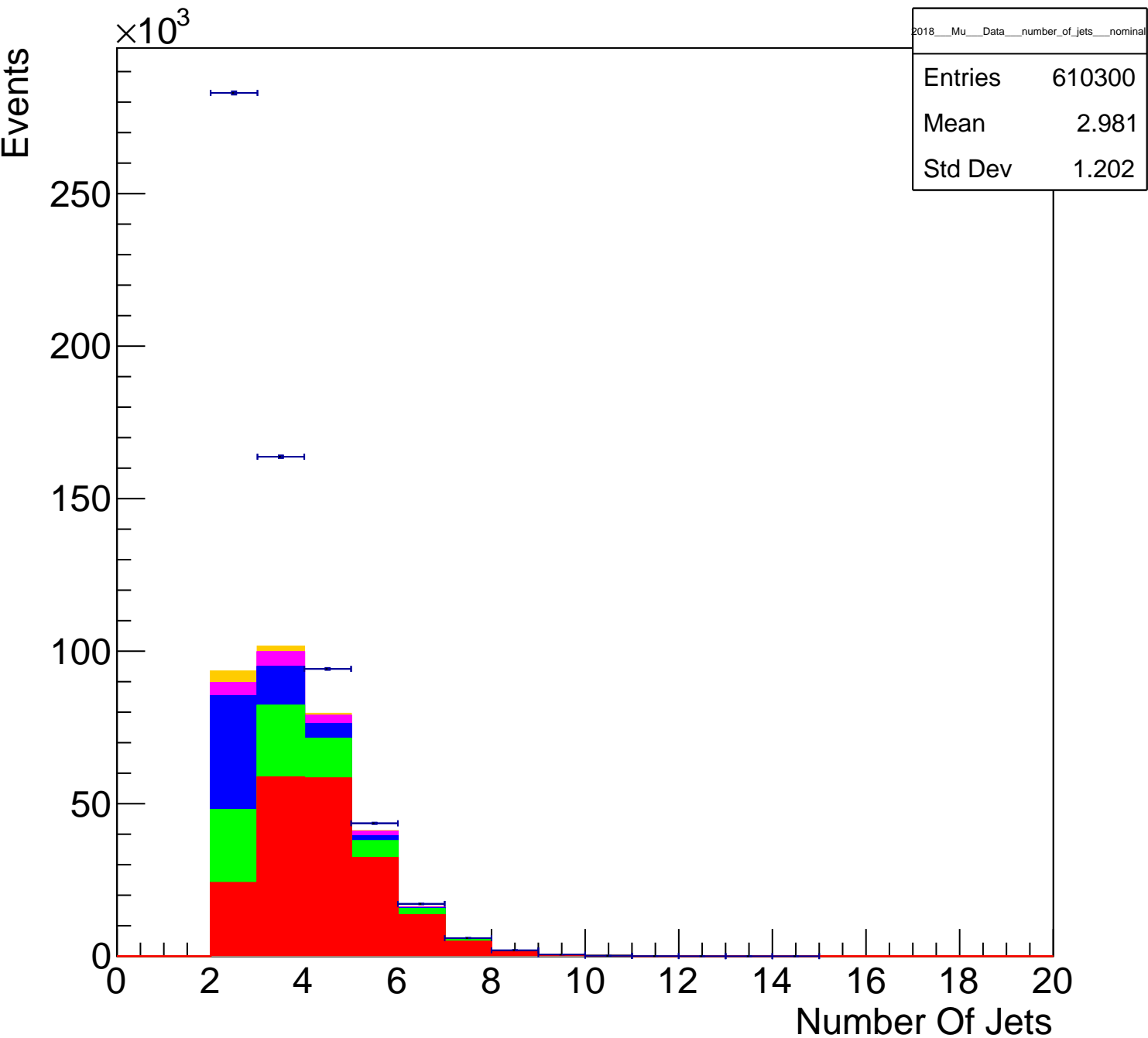
# Leading Isolated Electron Charge After MET Cut



# Number of Jets Before Jet Cut



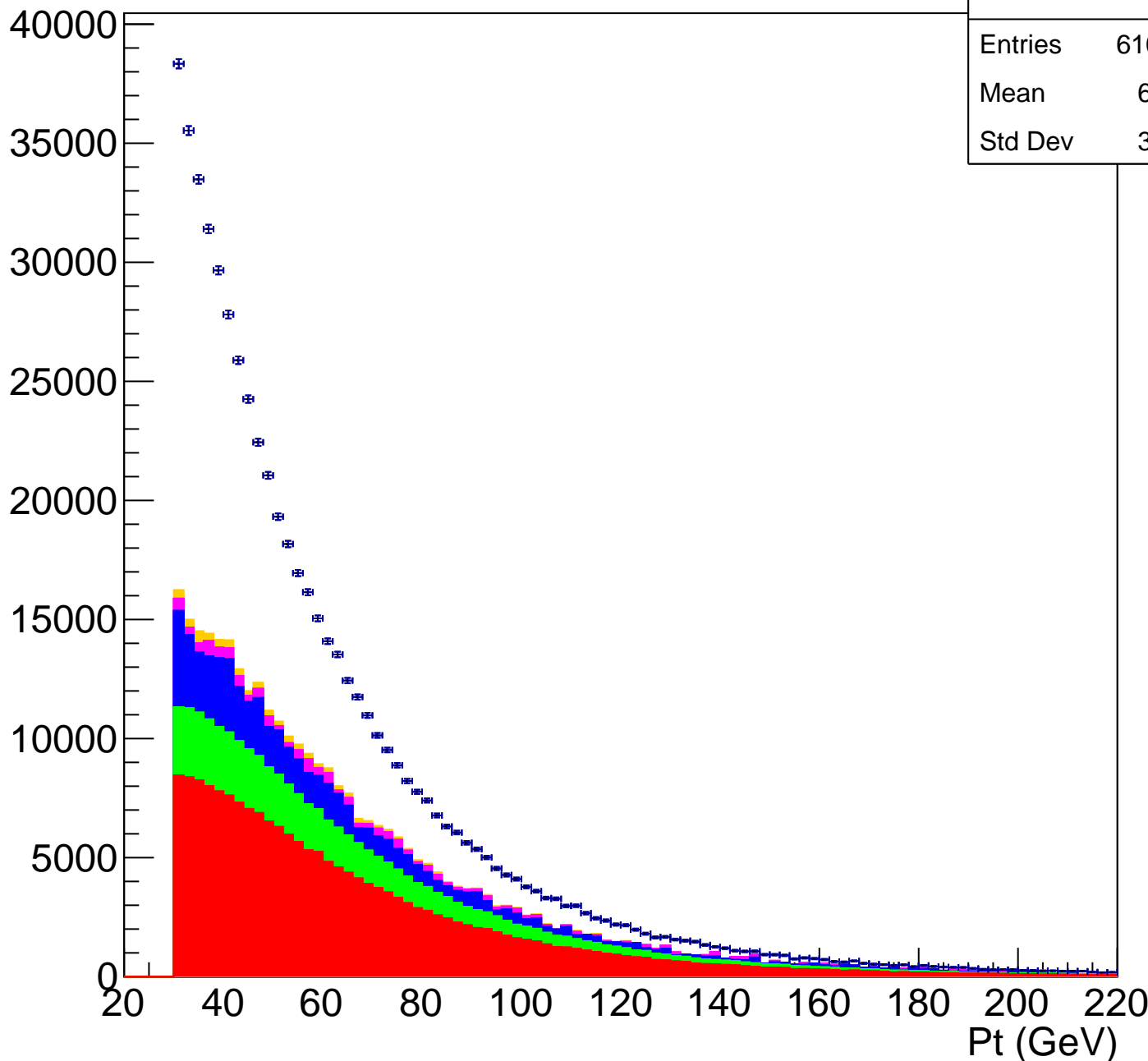
# Number Of Jets



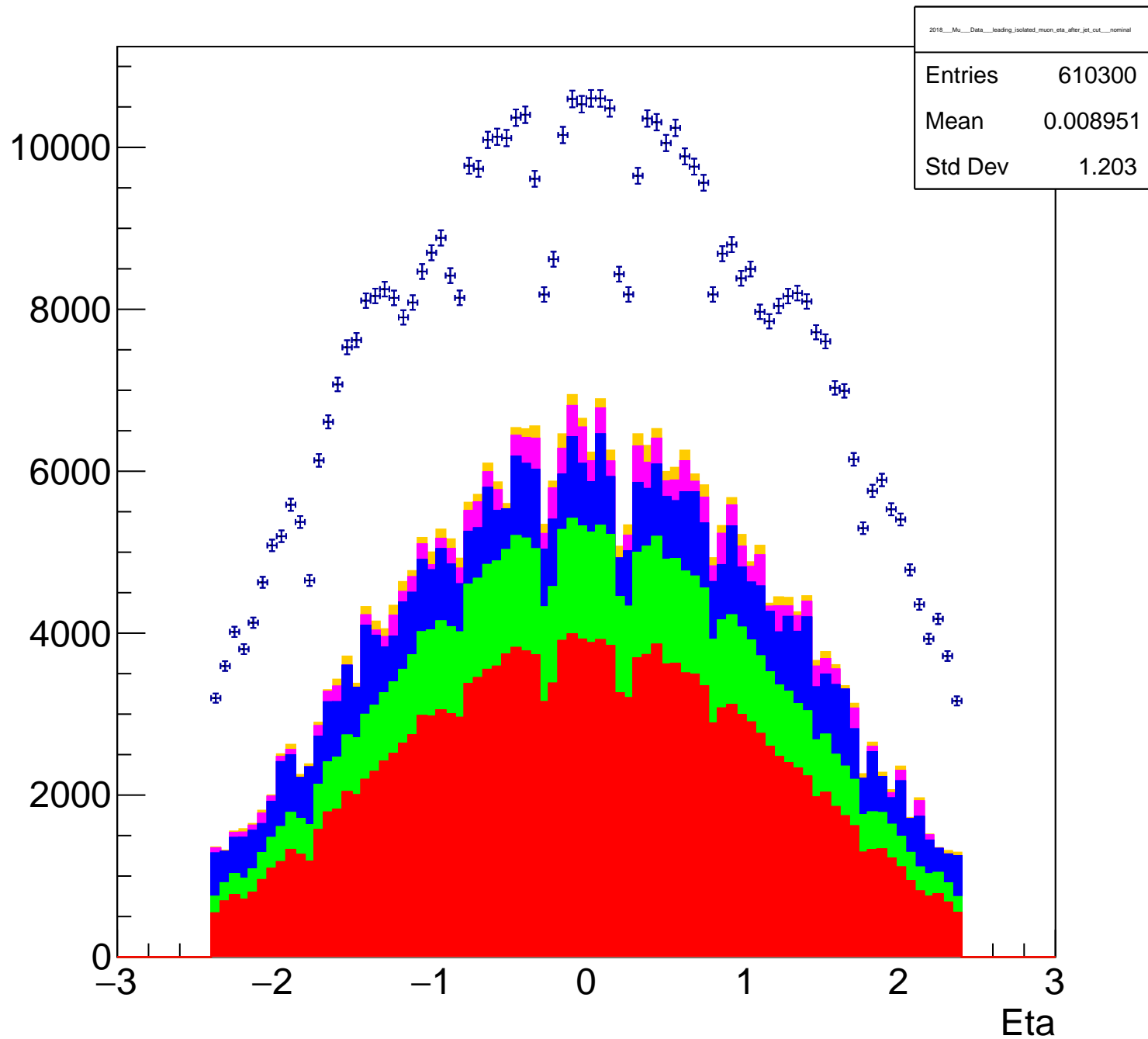


Leading Isolated Muon Transverse Momentum After Jet Cut

2018_Mu_Data_leading_isolated_muon_pt_after_jet_cut_nominal	
Entries	610300
Mean	61.39
Std Dev	31.62

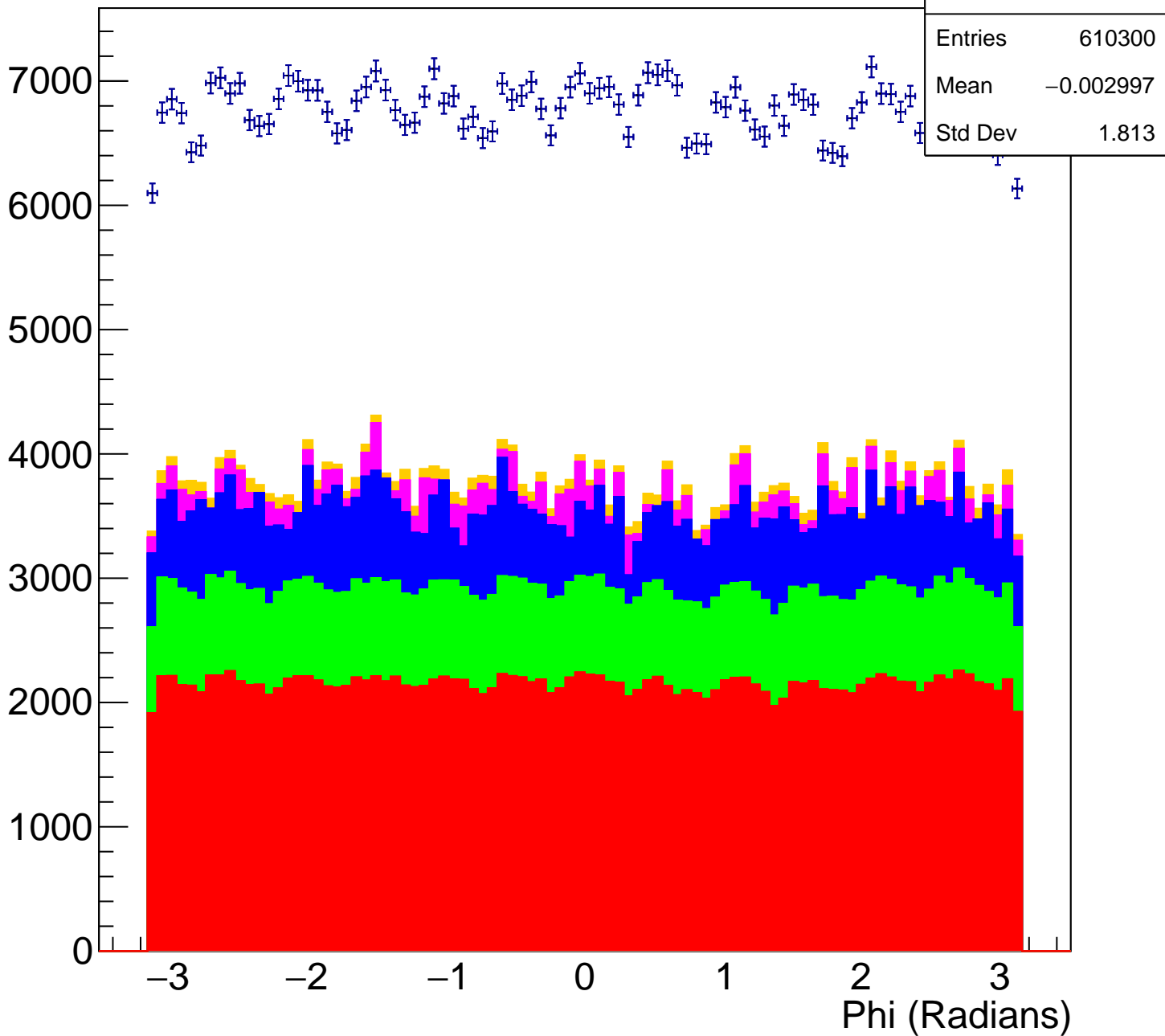


# Leading Isolated Muon Pseudorapidity After Jet Cut

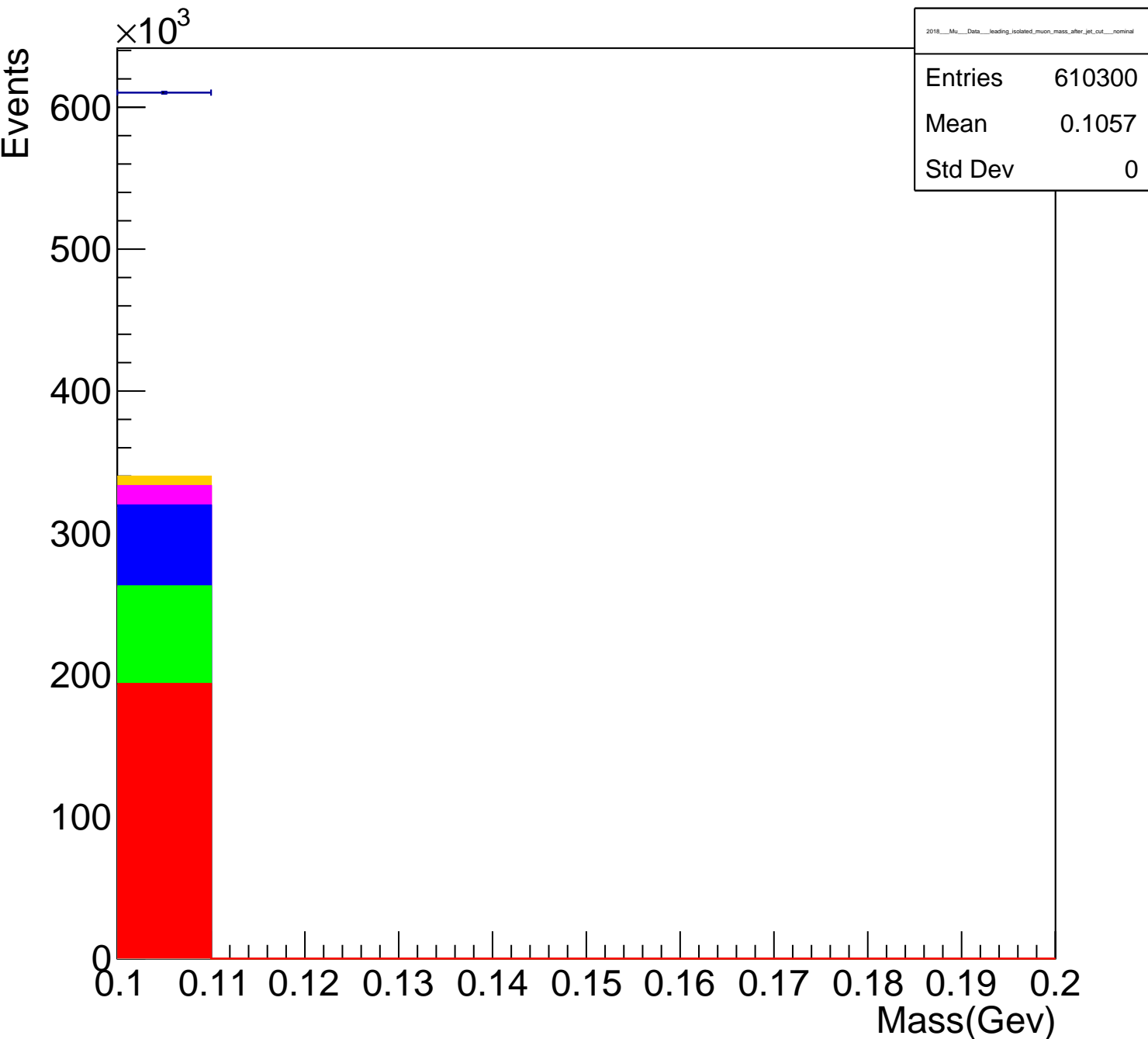


# Leading Isolated Muon Angle After Jet Cut

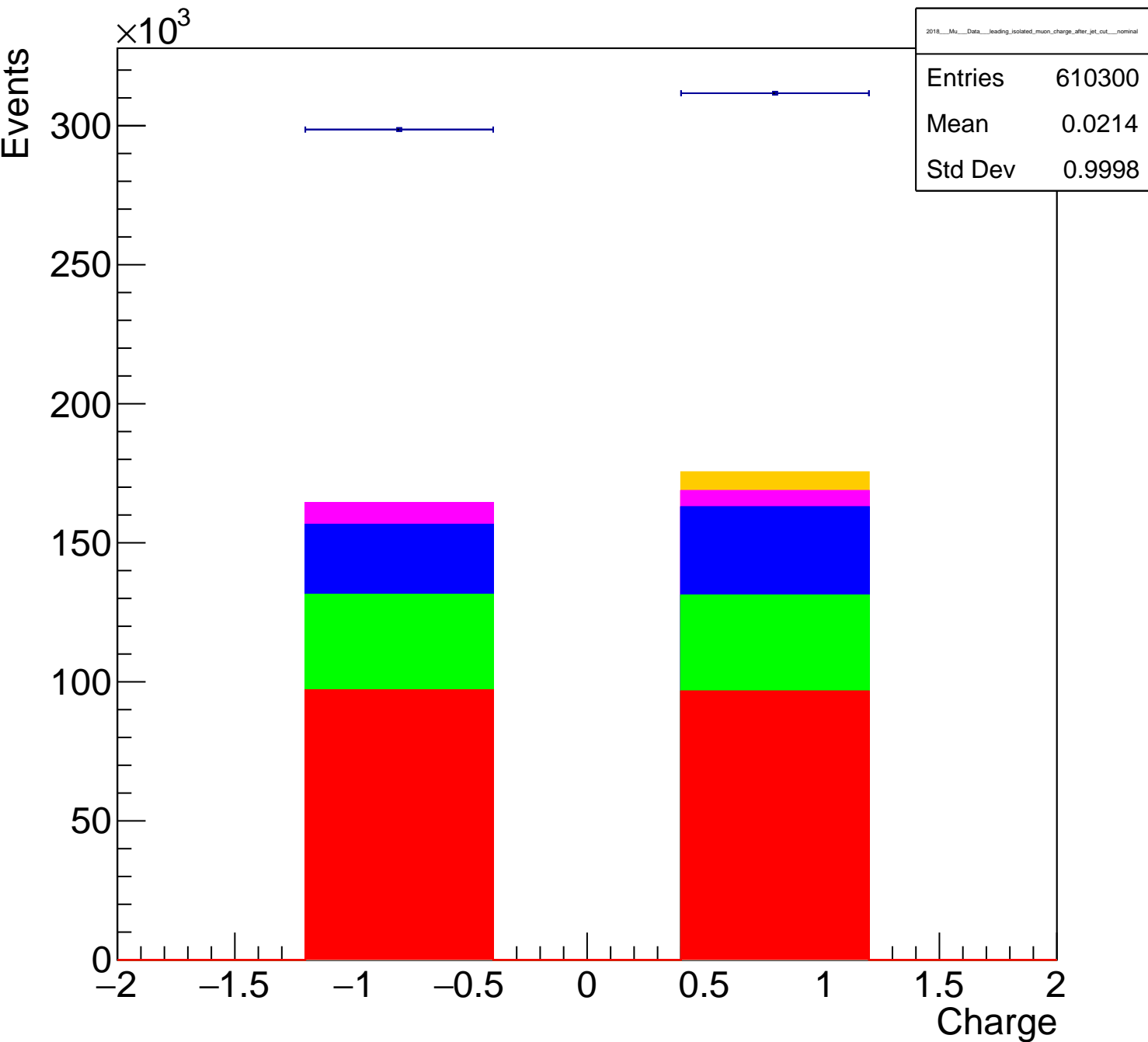
Events



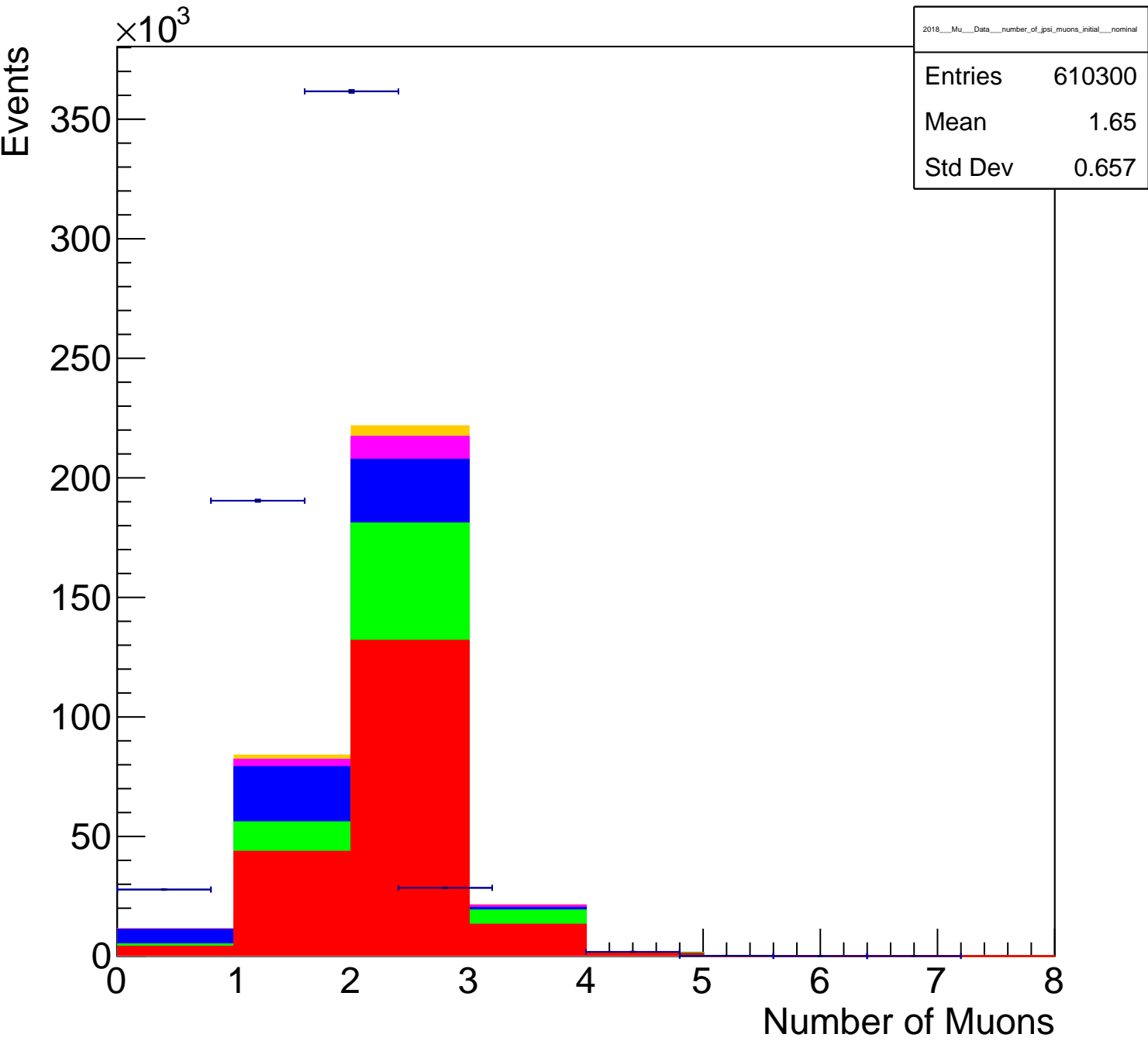
# Leading Isolated Muon Mass After Jet Cut



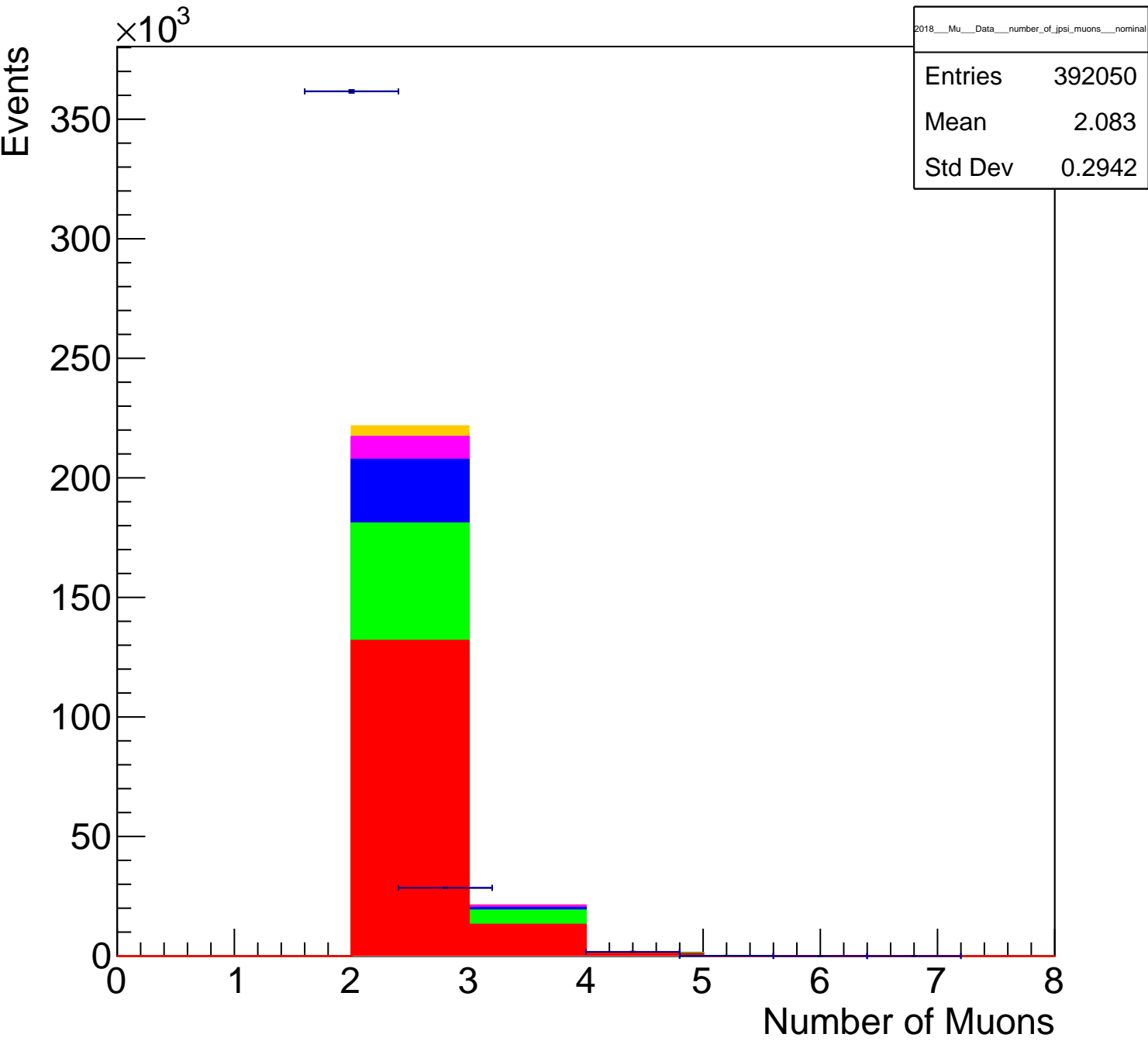
# Leading Isolated Muon Charge After Jet Cut



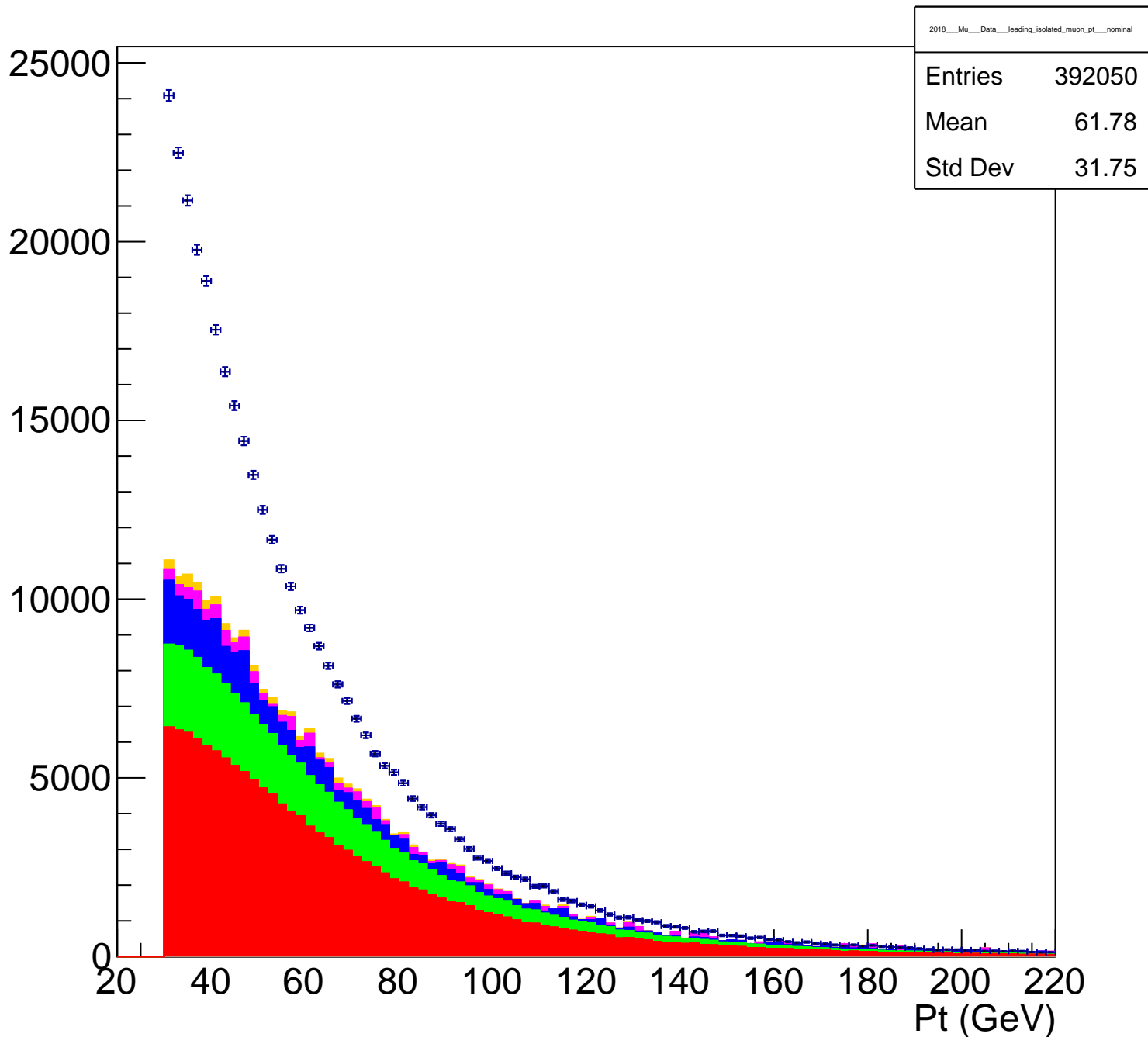
# Number of JPsi Muons Before JPsi Muon Cut



# Number of JPsi Muons



# Leading Isolated Muon Transverse Momentum





# Leading Isolated Muon Pseudorapidity

Events

7000  
6000  
5000  
4000  
3000  
2000  
1000  
0

-3

-2

-1

0

1

2

3

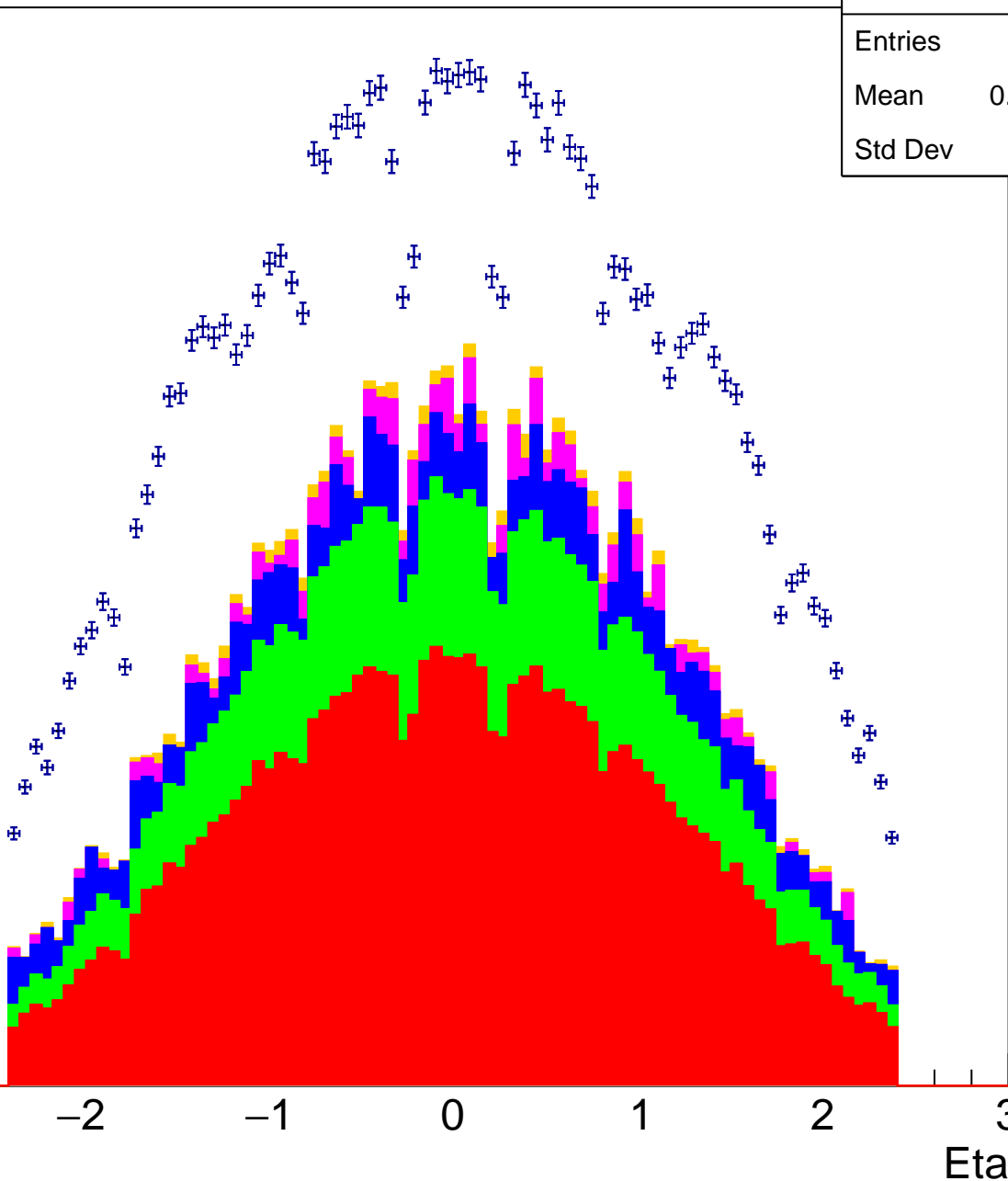
Eta

2018\_Mu\_Data\_leading\_isolated\_muon\_eta\_nominal

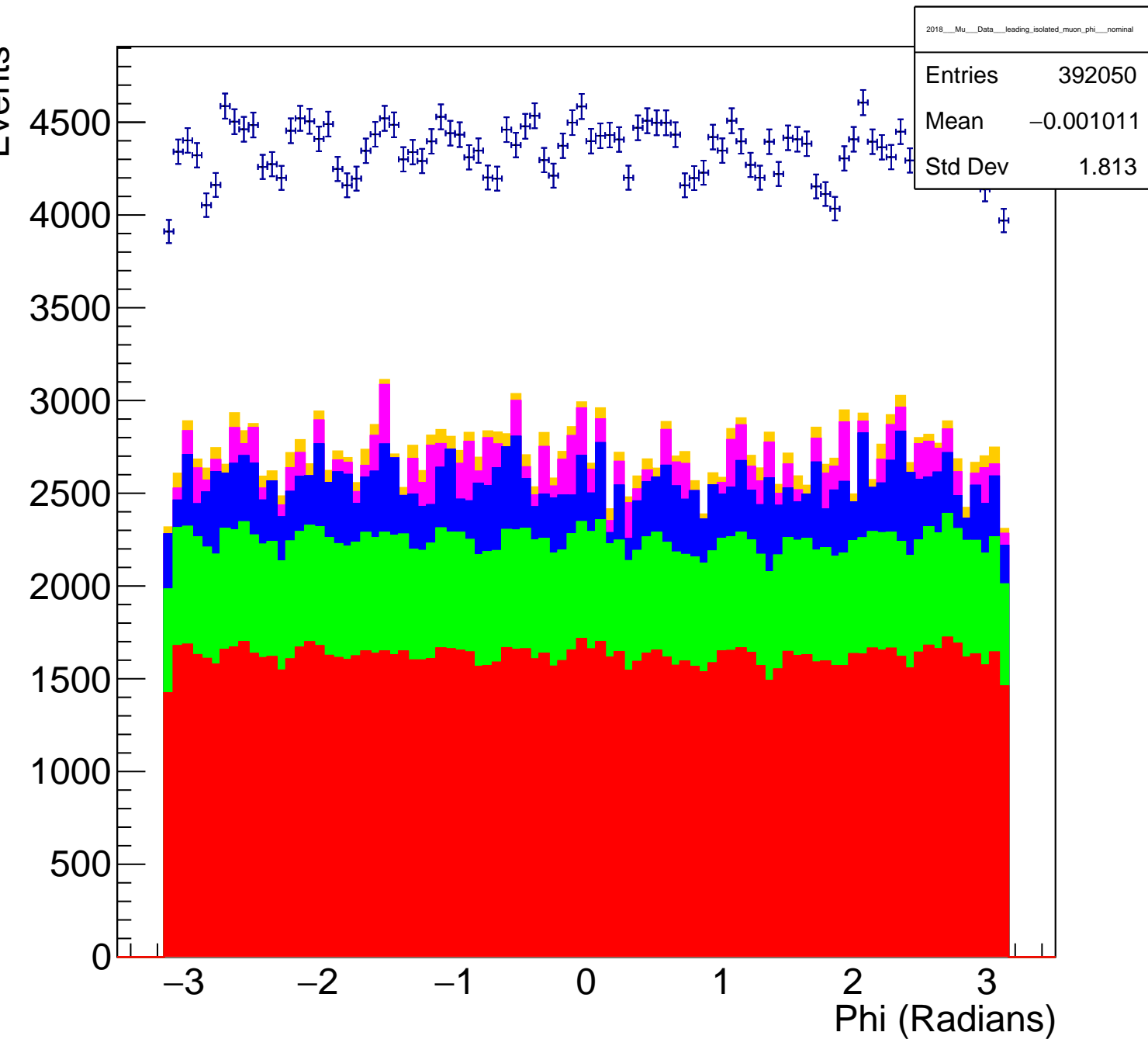
Entries 392050

Mean 0.006202

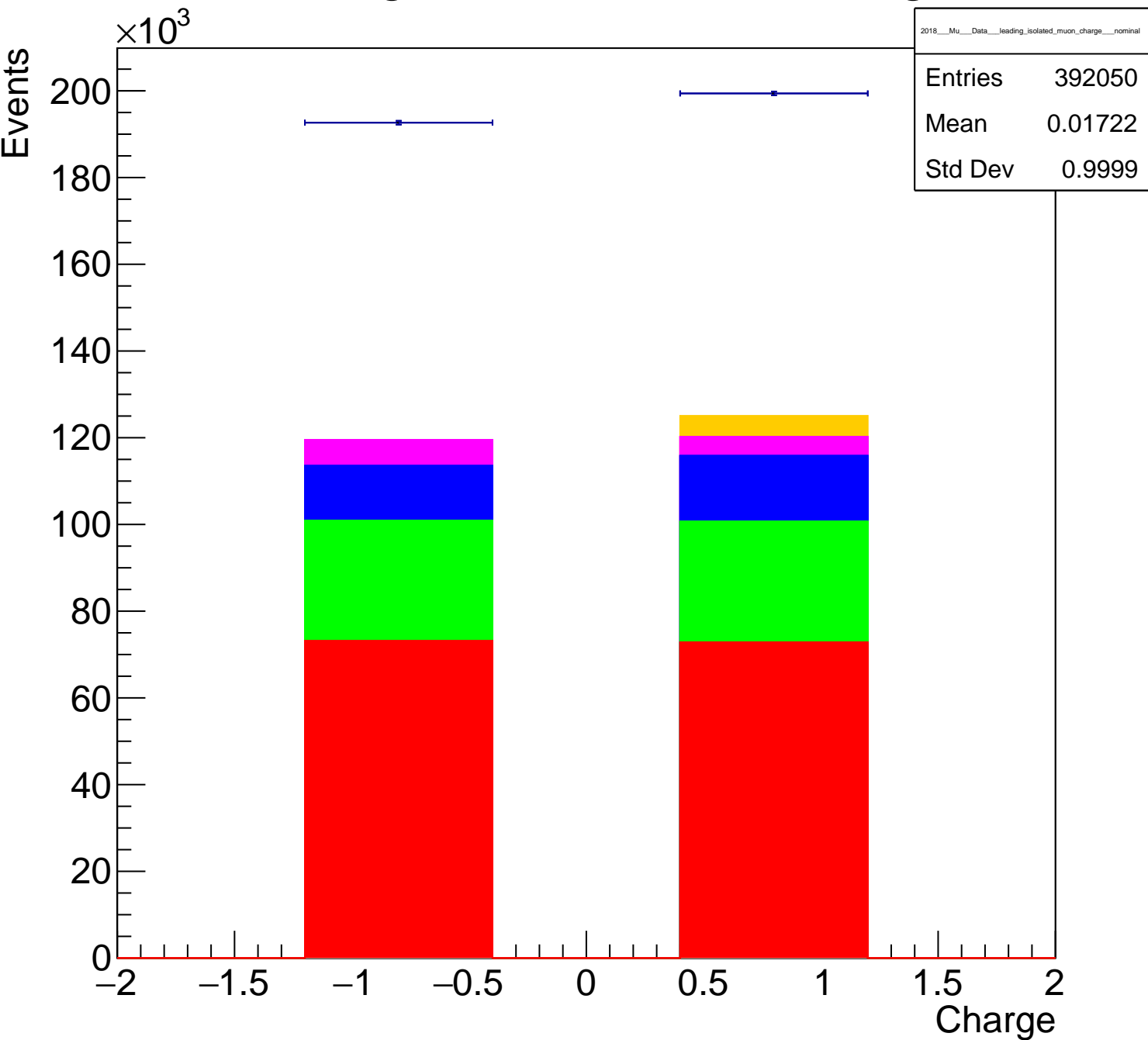
Std Dev 1.178



# Leading Isolated Muon Angle



# Leading Isolated Muon Charge



# Jet Transverse Momentum for Leading Jet

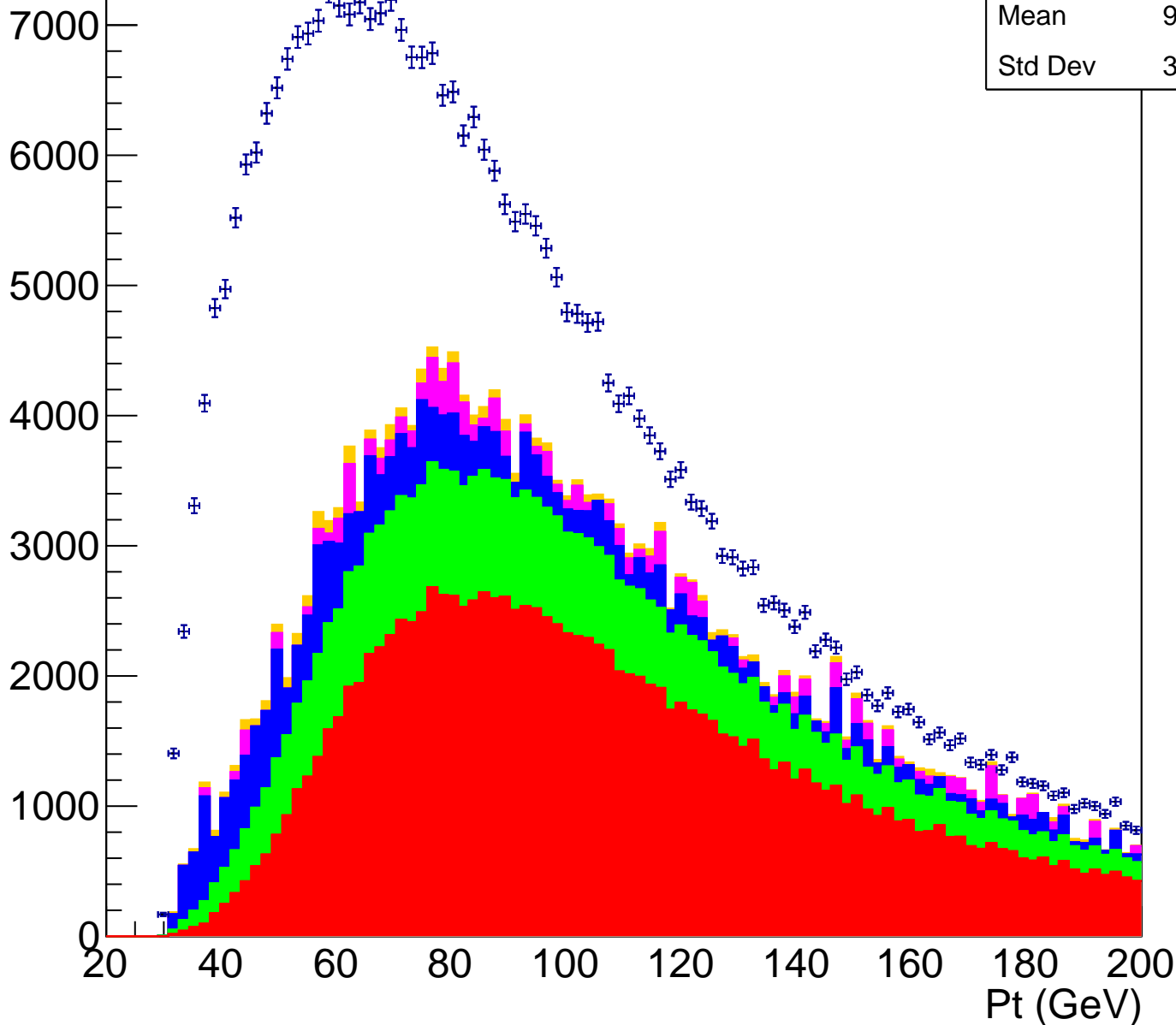
Events

2018\_\_Mu\_\_Data\_\_jet1\_pt\_\_nominal

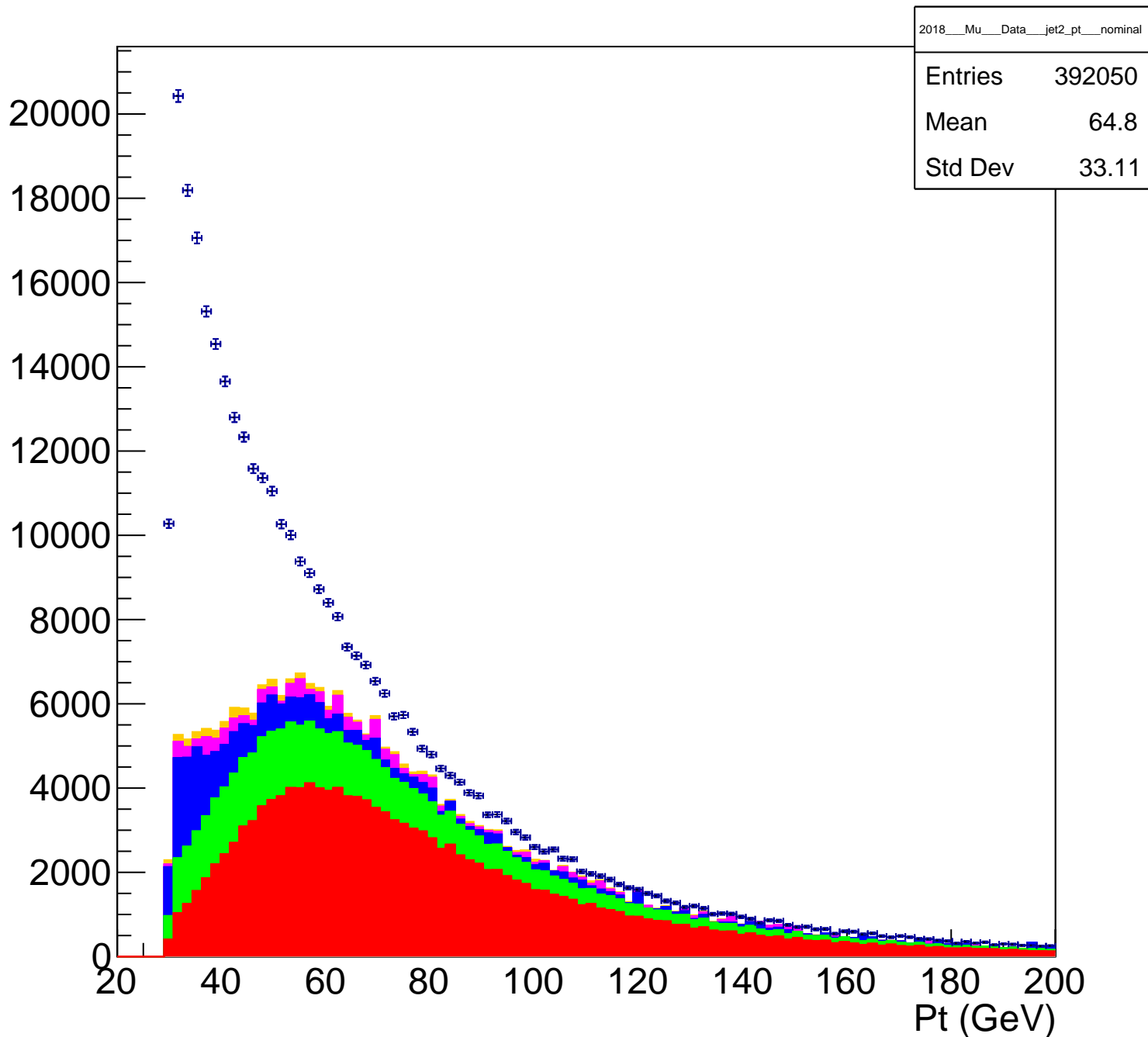
Entries 392050

Mean 91.68

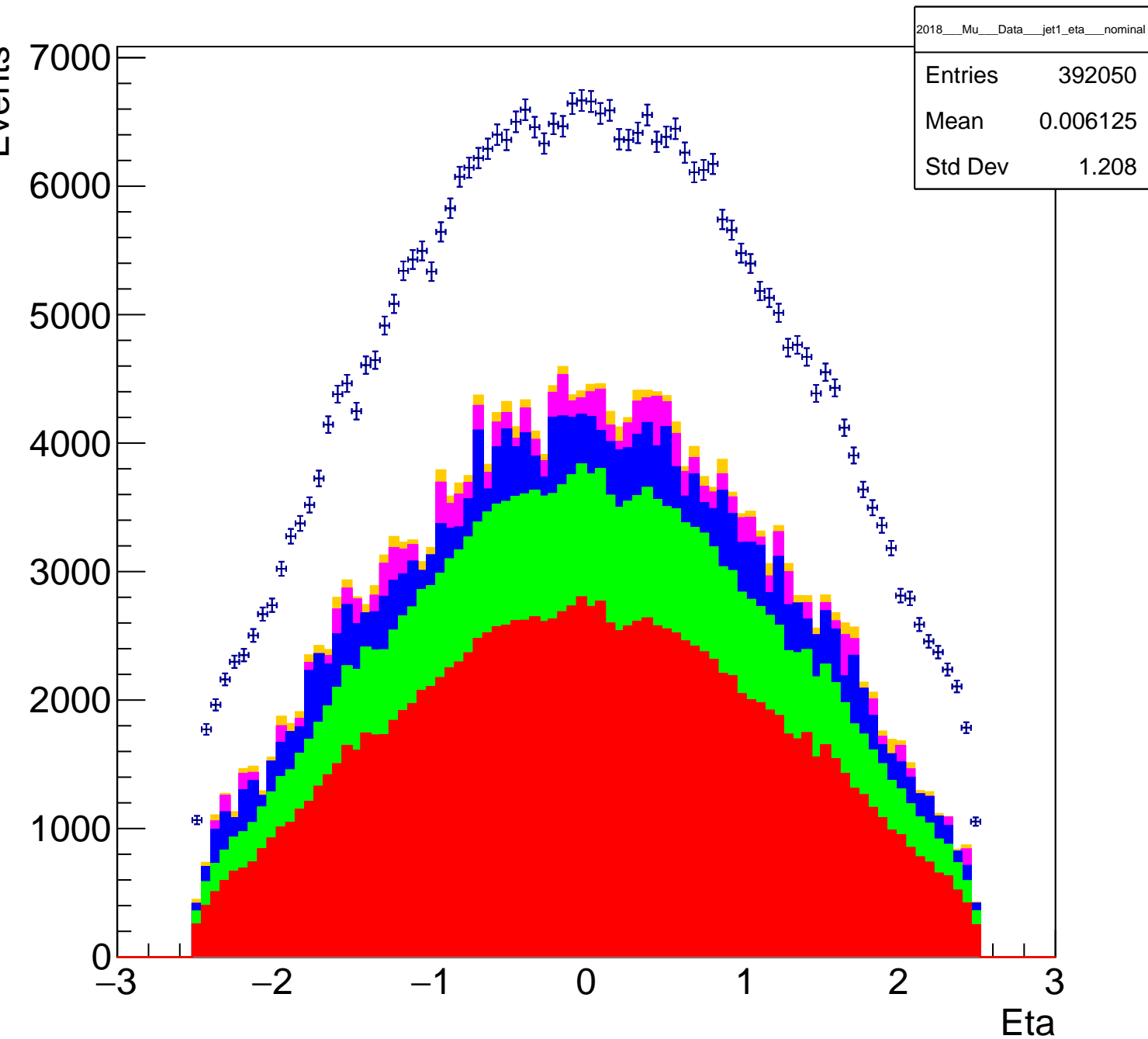
Std Dev 39.59



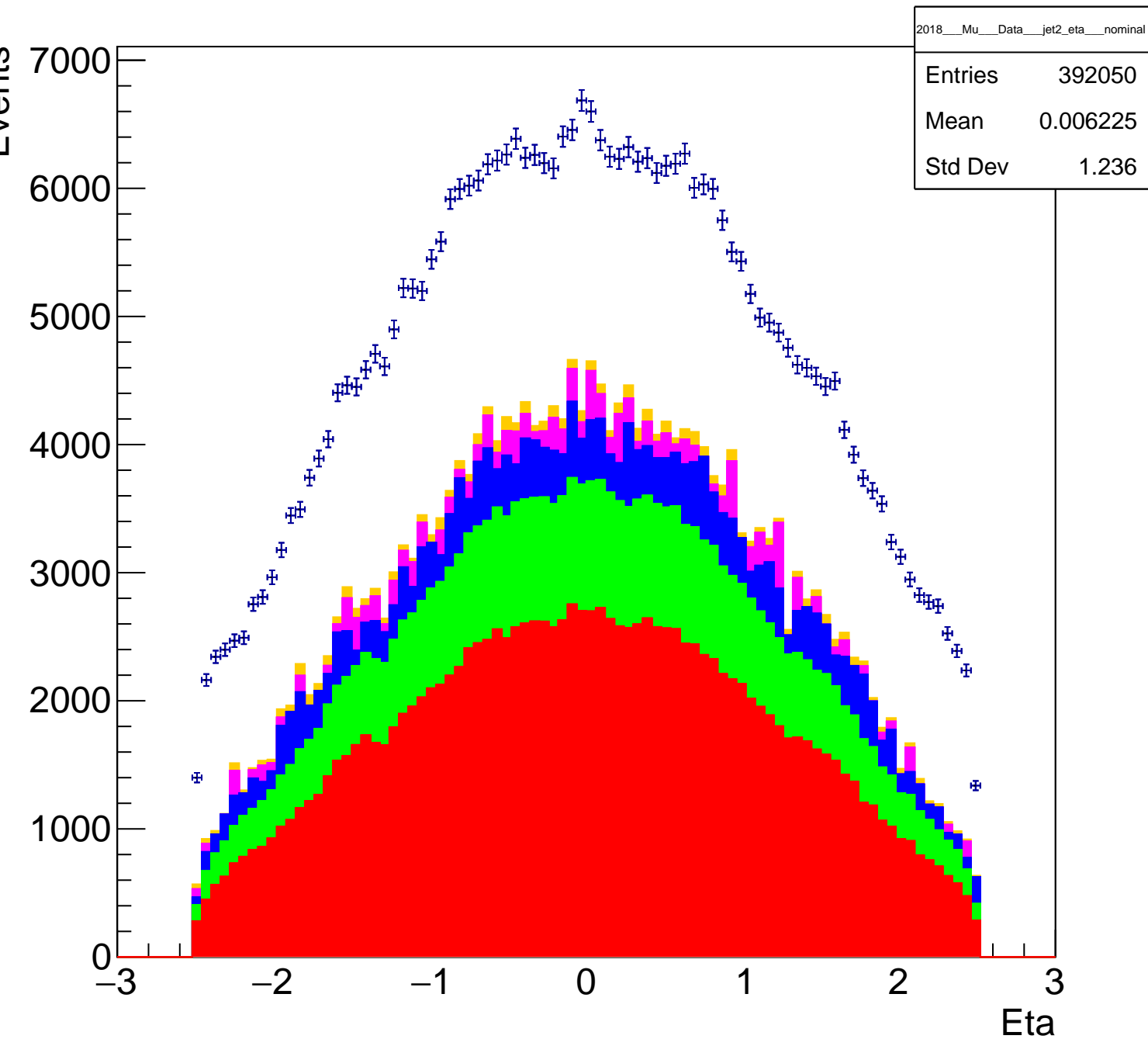
# Jet Transverse Momentum for Subleading Jet



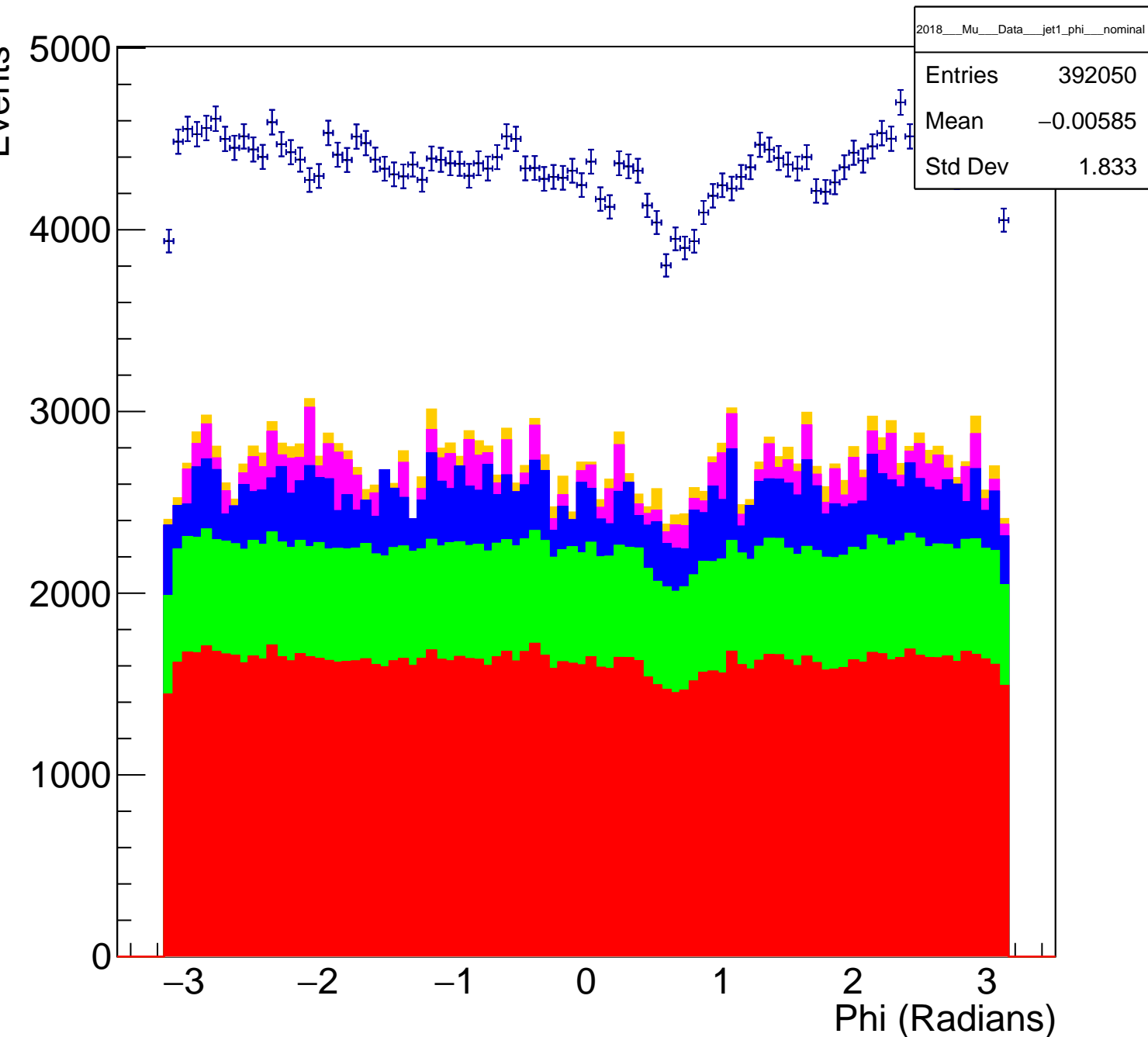
# Jet Pseudorapidity for Leading Jet



# Jet Pseudorapidity for Subleading Jet

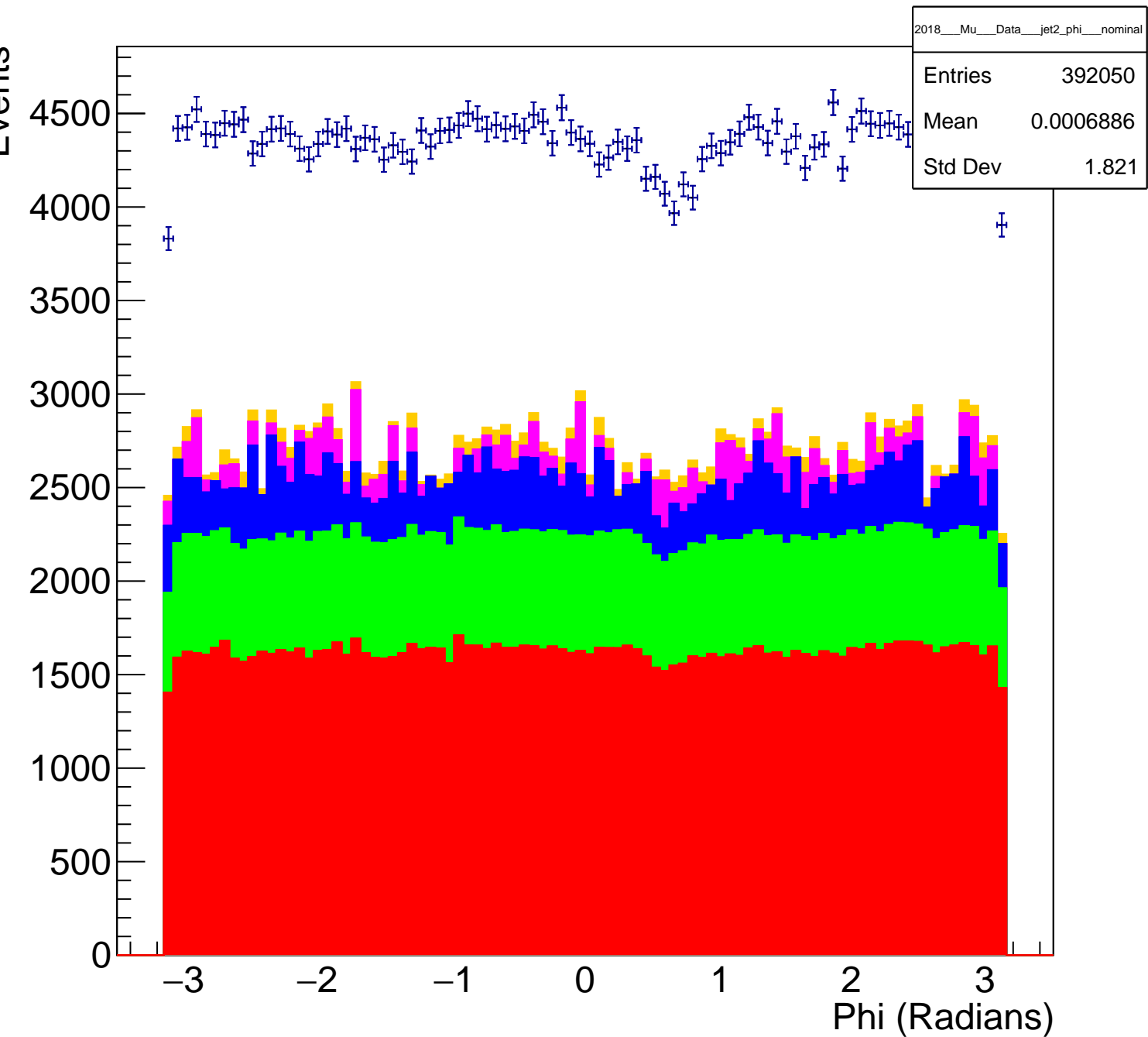


# Jet Angle for Leading Jet





# Jet Angle for Subleading Jet



# Transverse Mass

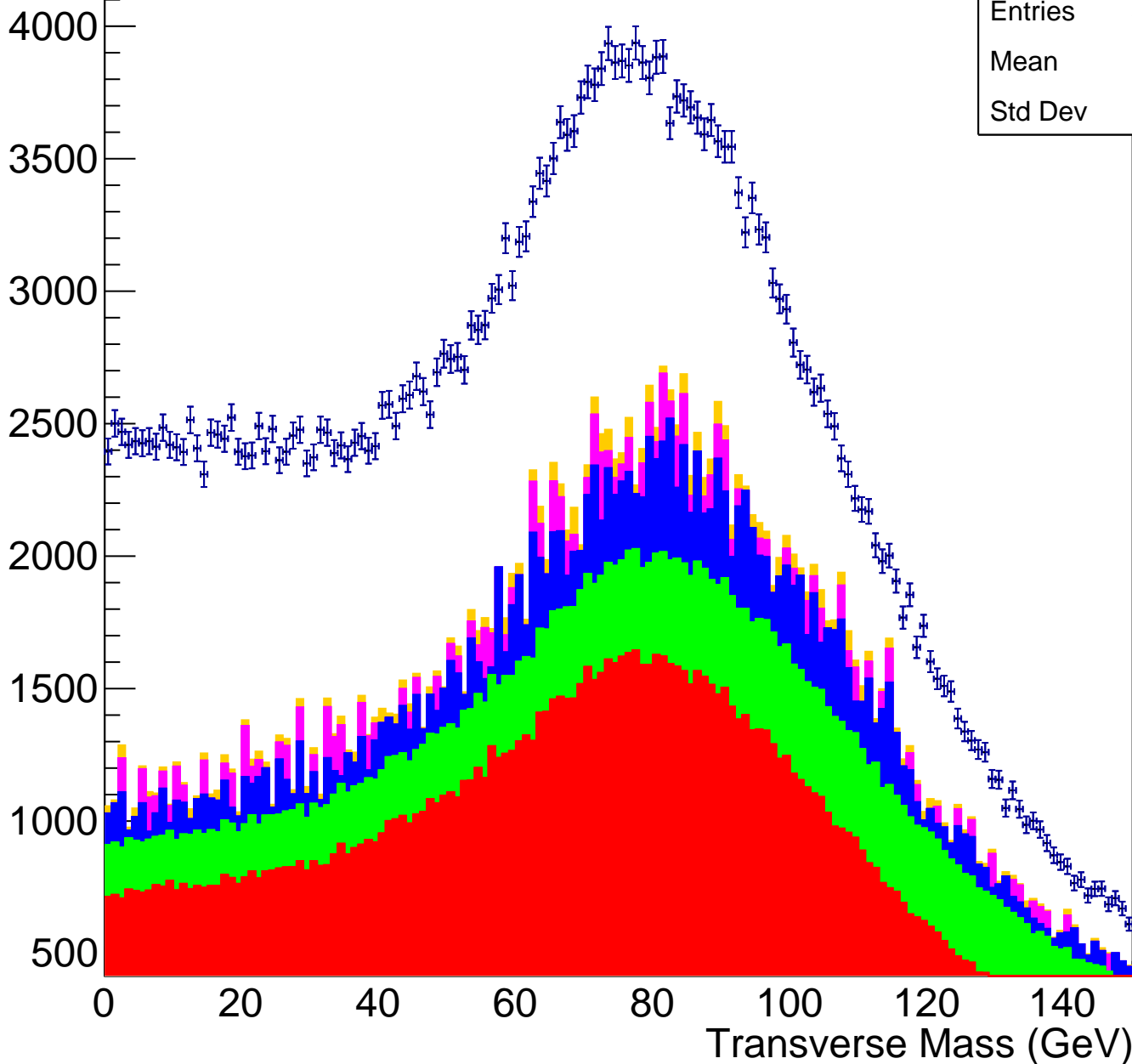
Events

2018\_\_Mu\_\_Data\_\_transverse\_mass\_\_nominal

Entries 392050

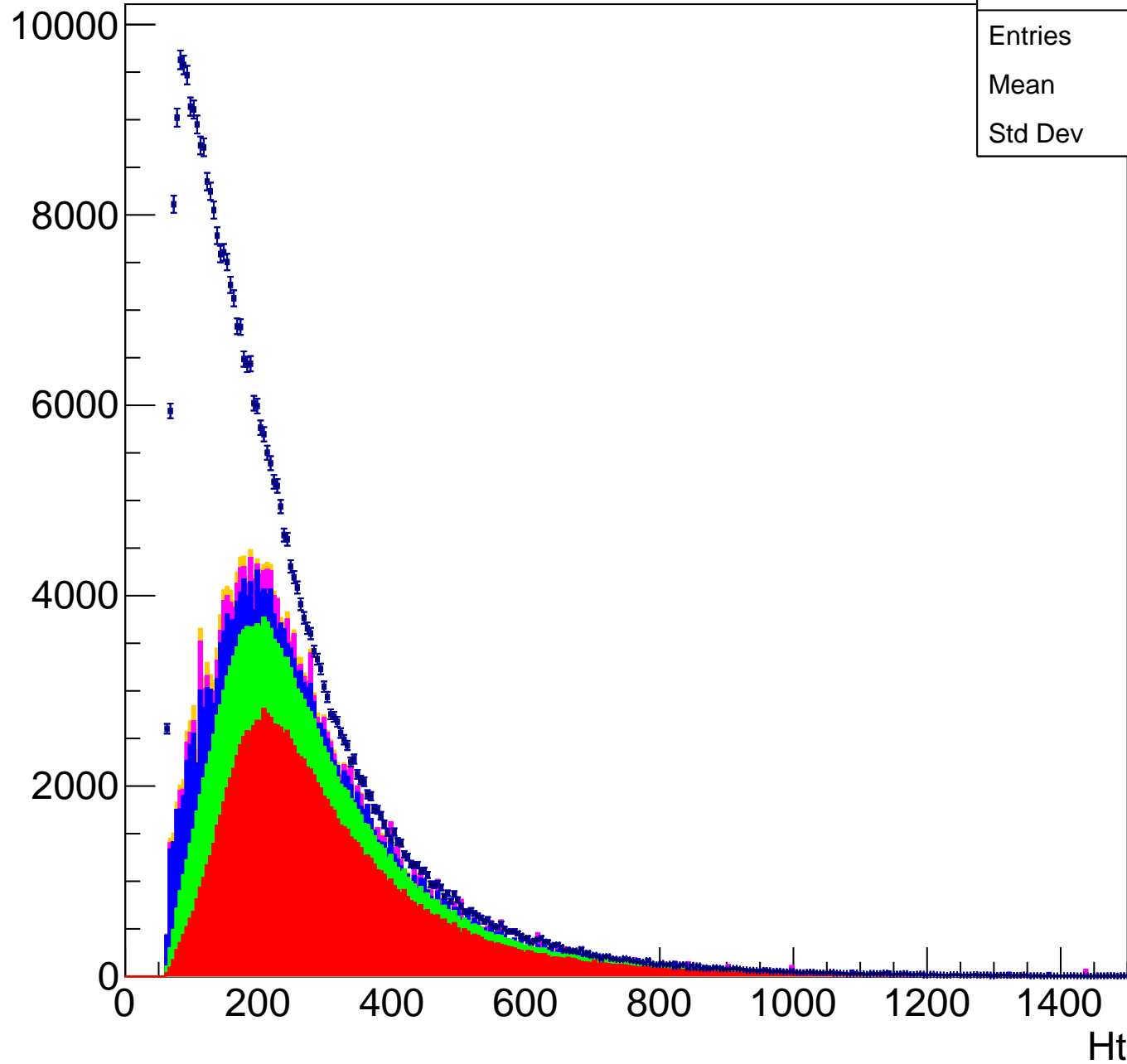
Mean 67.67

Std Dev 36.81

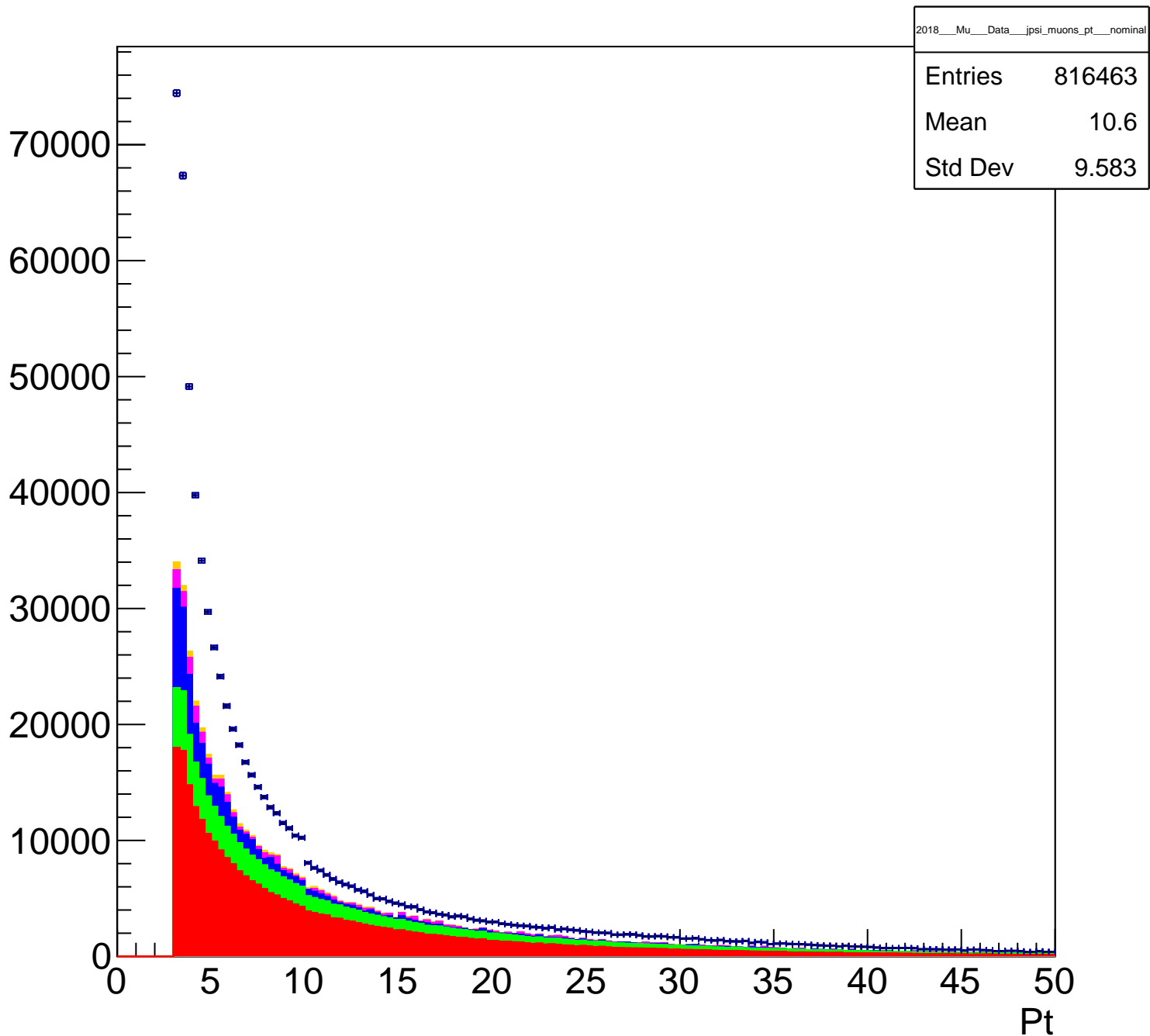


# Ht

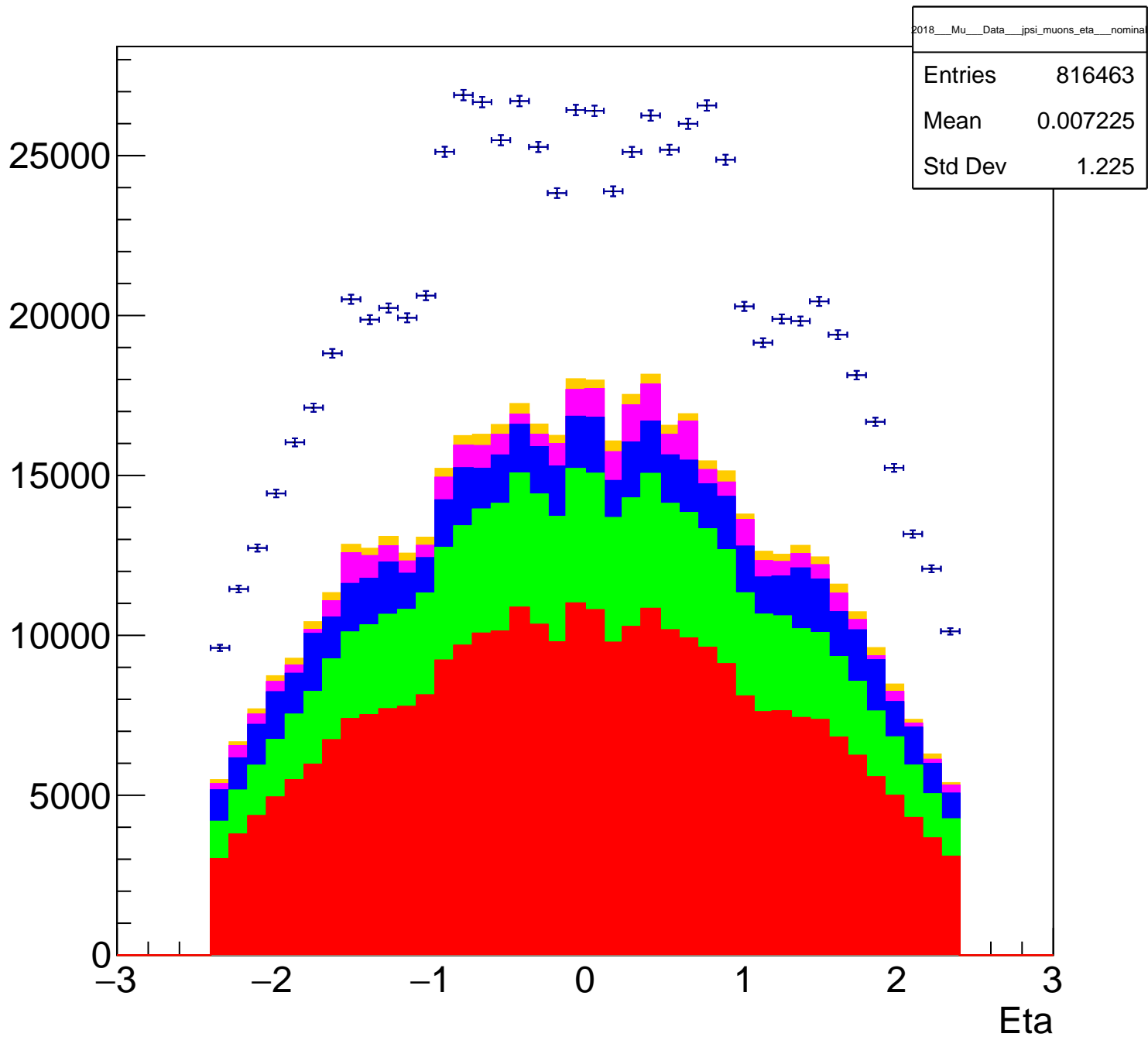
2018__Mu__Data__ht__nominal	
Entries	392050
Mean	231.9
Std Dev	163.9



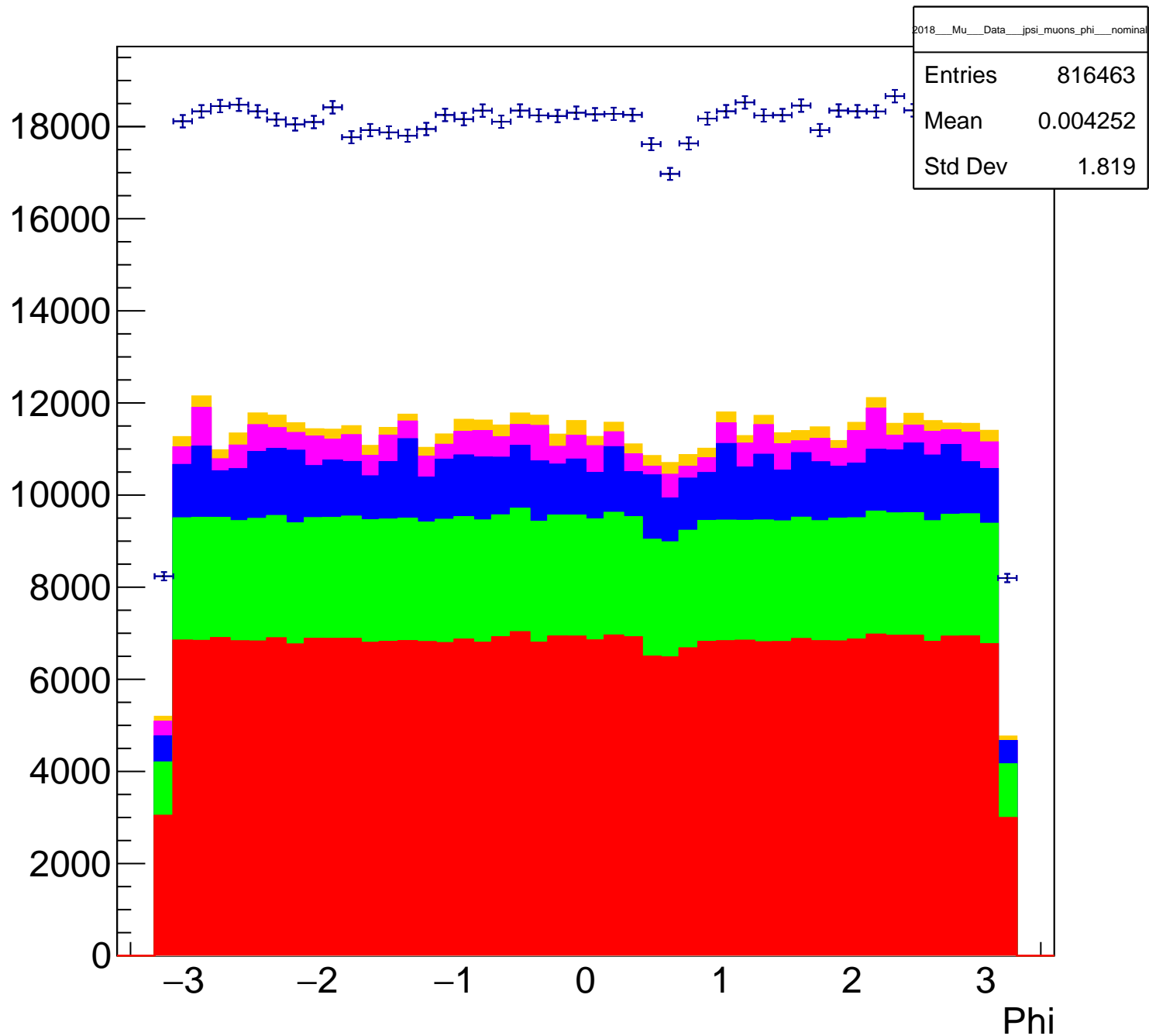
# Transverse Momentum for JPsi Muons



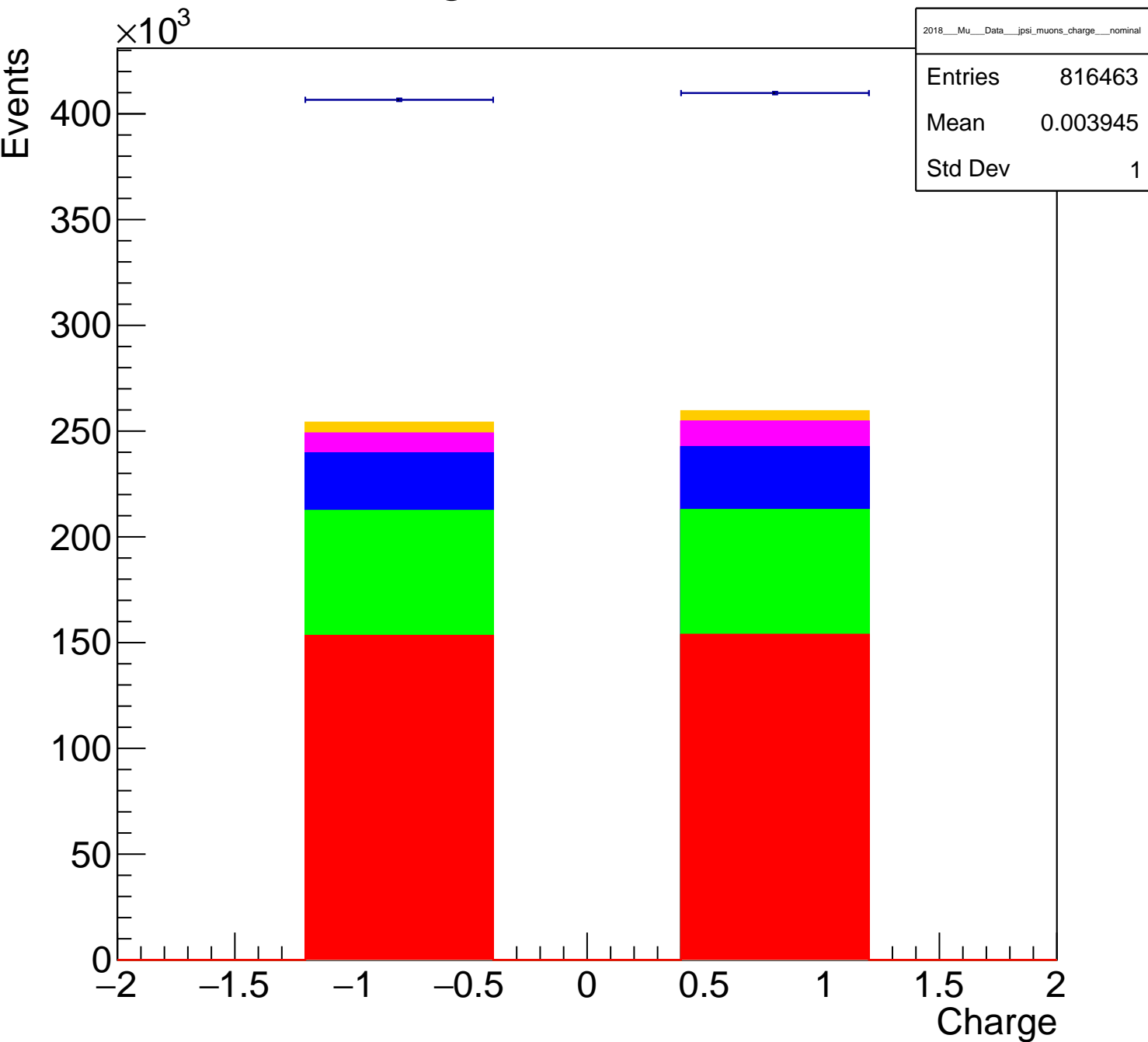
# Pseudorapidity for JPsi Muons



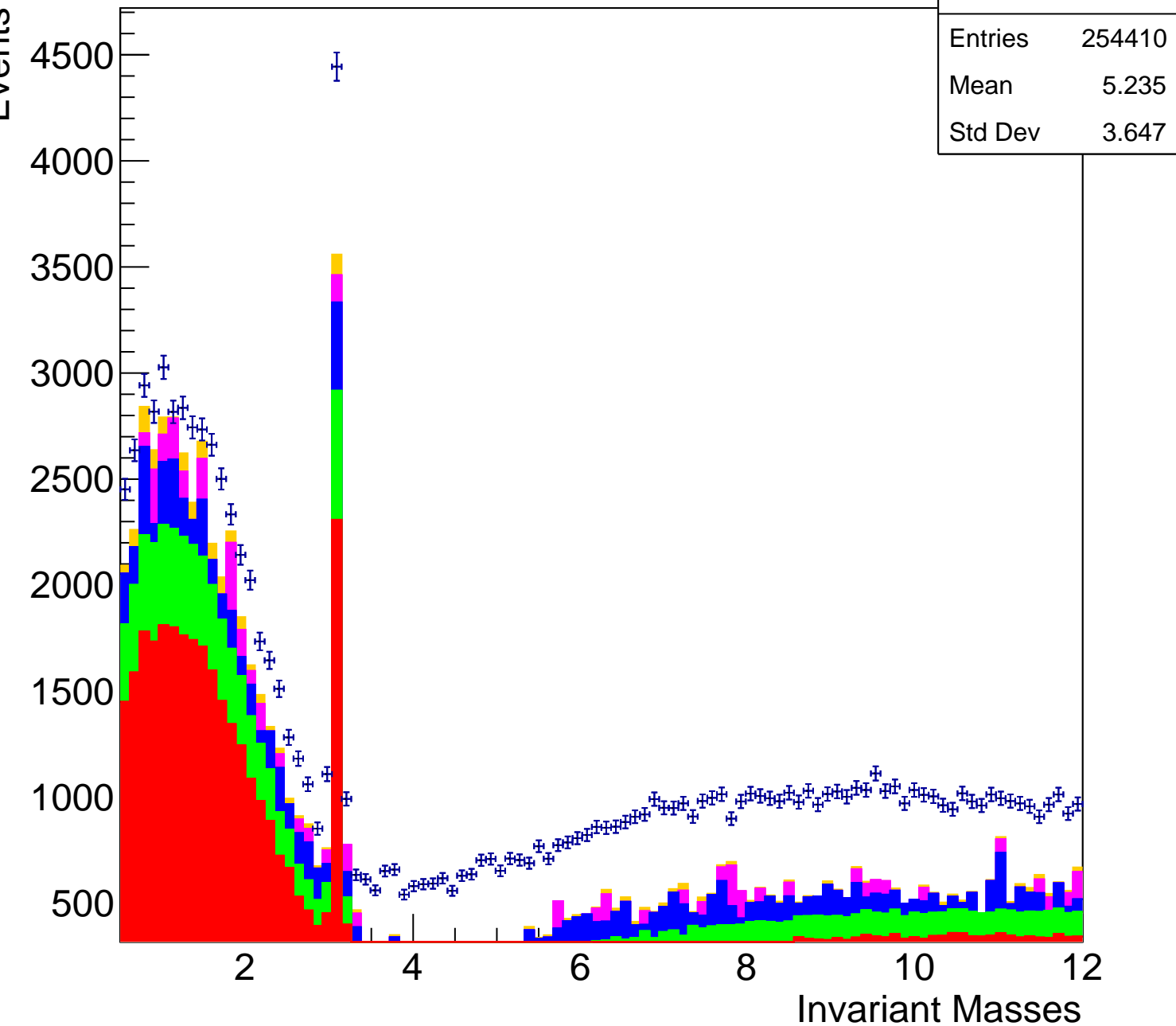
# Angle for JPsi Muons



# Charge of JPsi Muons



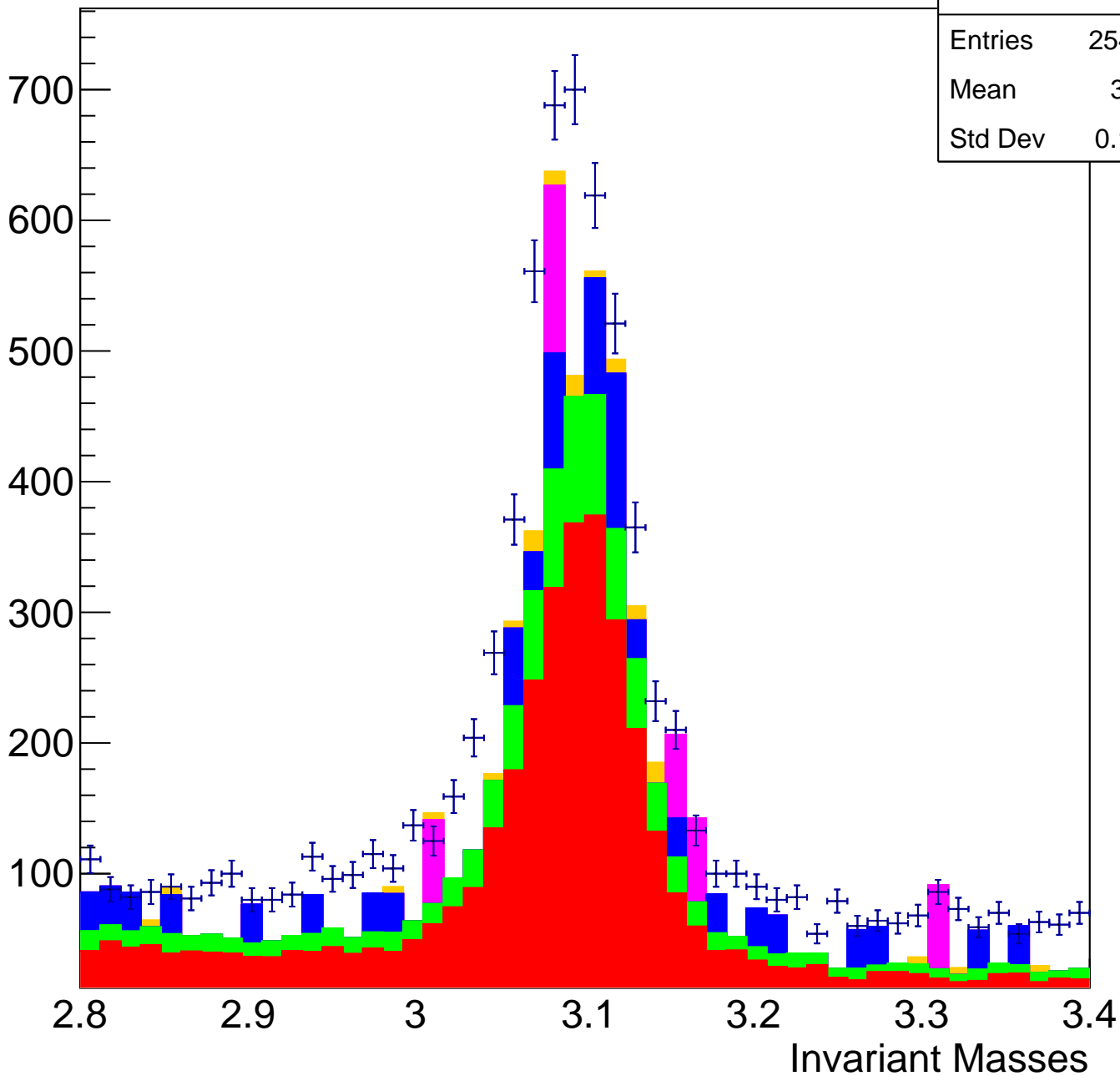
Invariant Masses for J/Psi Candidate Muons (Oppositely Charged)





# Invariant Masses for J/Psi Candidate Muons (Oppositely Charged)

Events

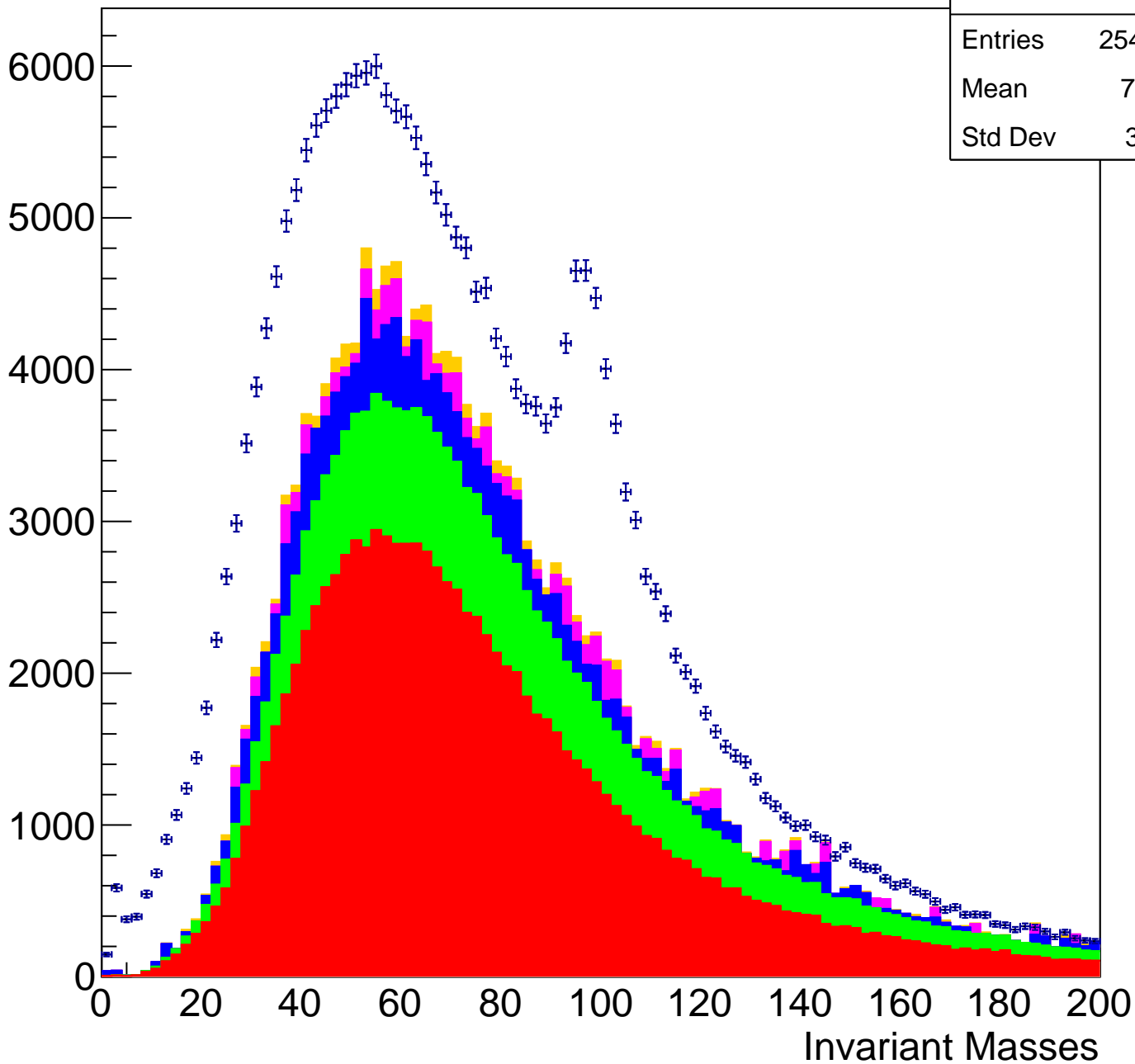


# Invariant Masses for J/Psi Candidate And Isolated Muons

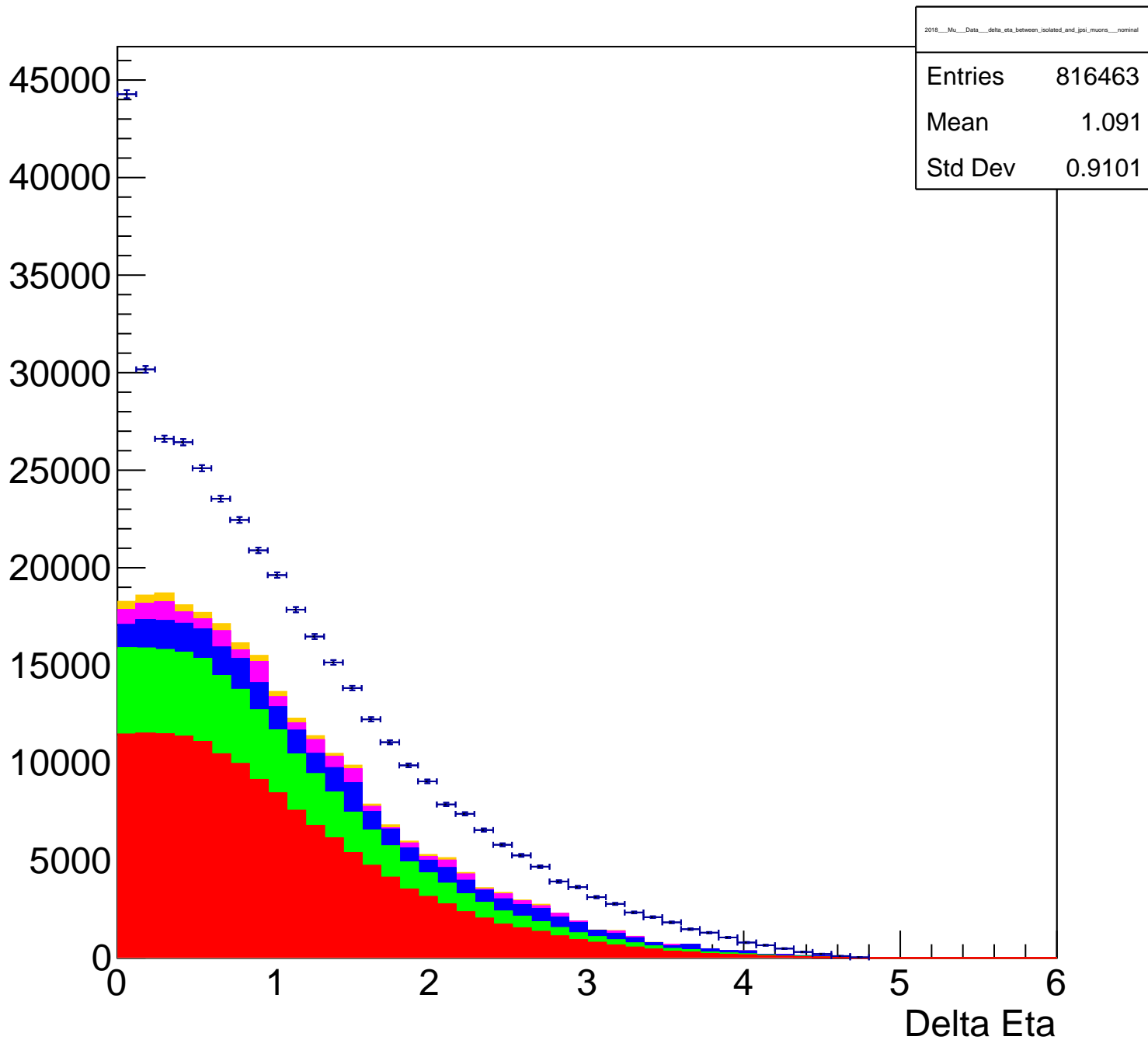
Events

2018\_Mu\_Data\_invariant\_mass\_psi\_and\_isolated\_muons\_nominal

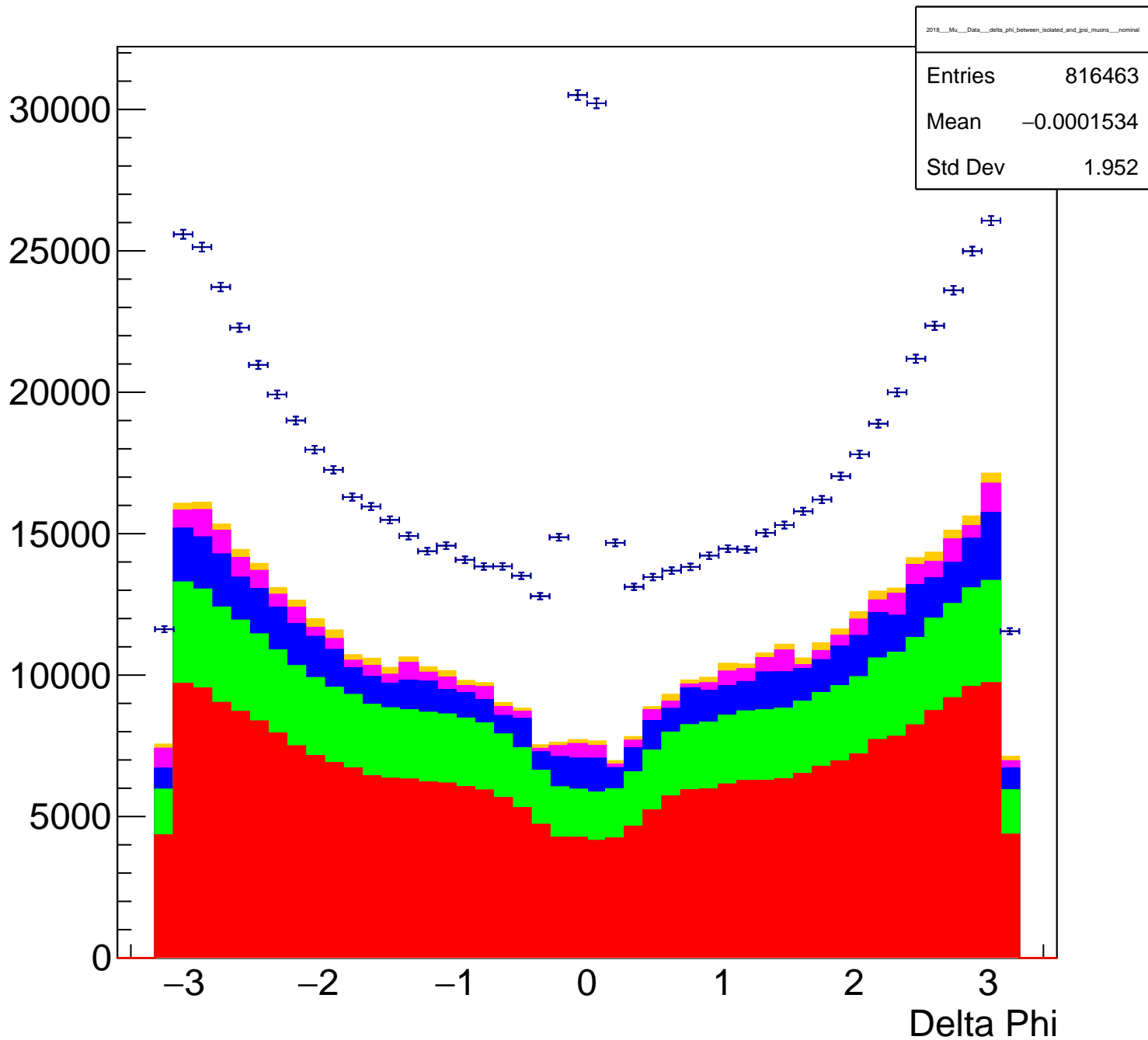
Entries	254410
Mean	74.59
Std Dev	37.21



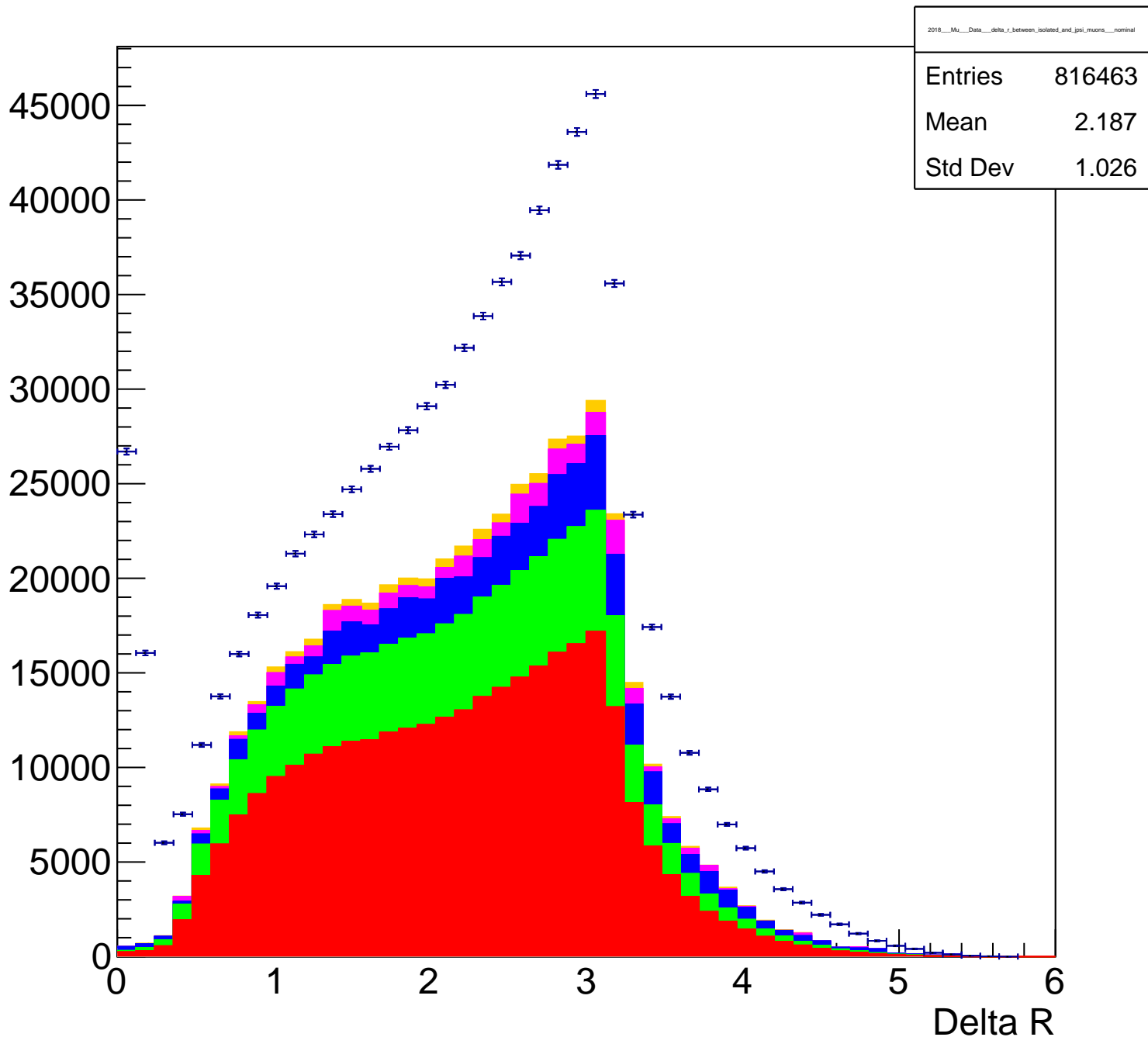
# Delta Eta for Isolated Muon - JPsi Muons



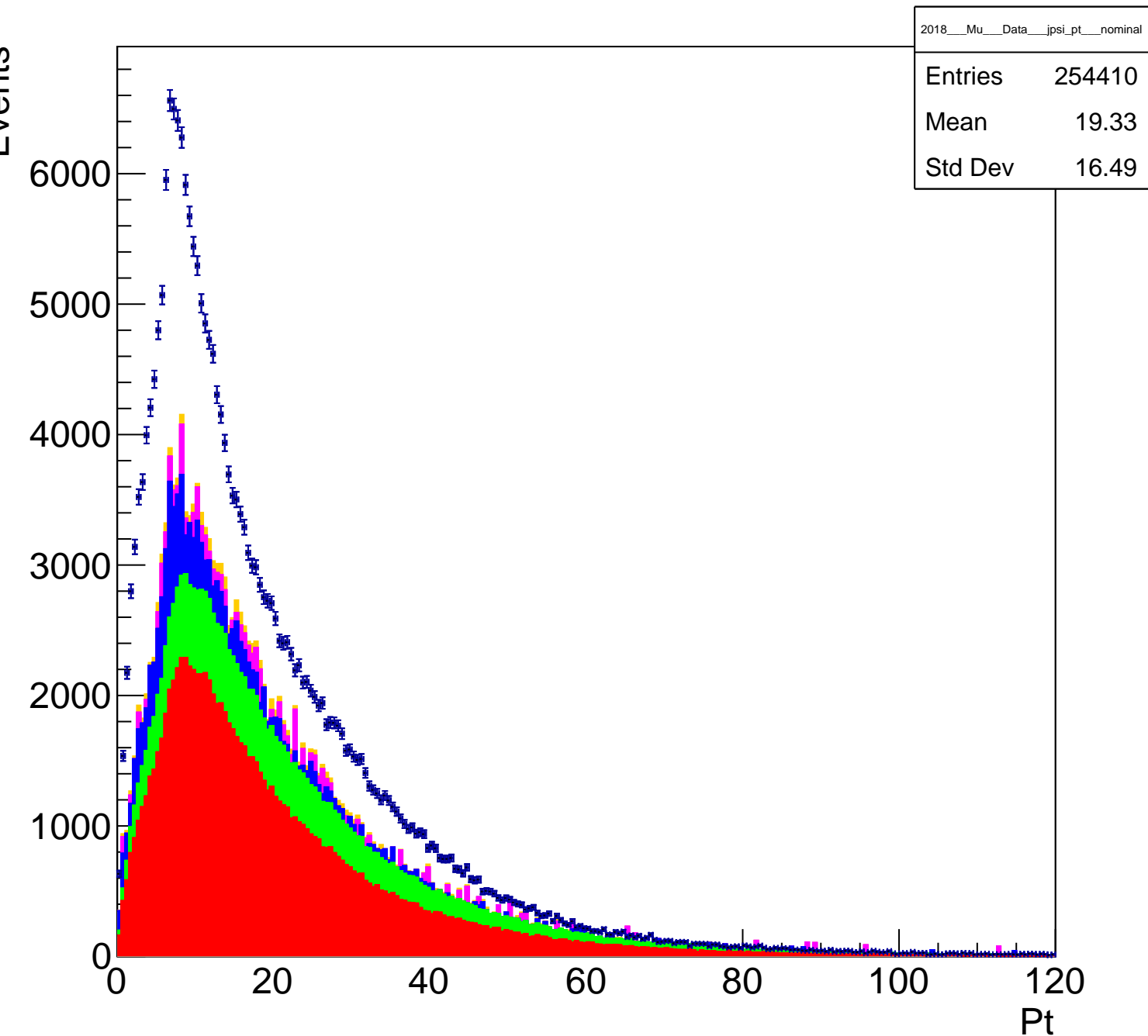
# Delta Phi for Isolated Muon - JPsi Muons



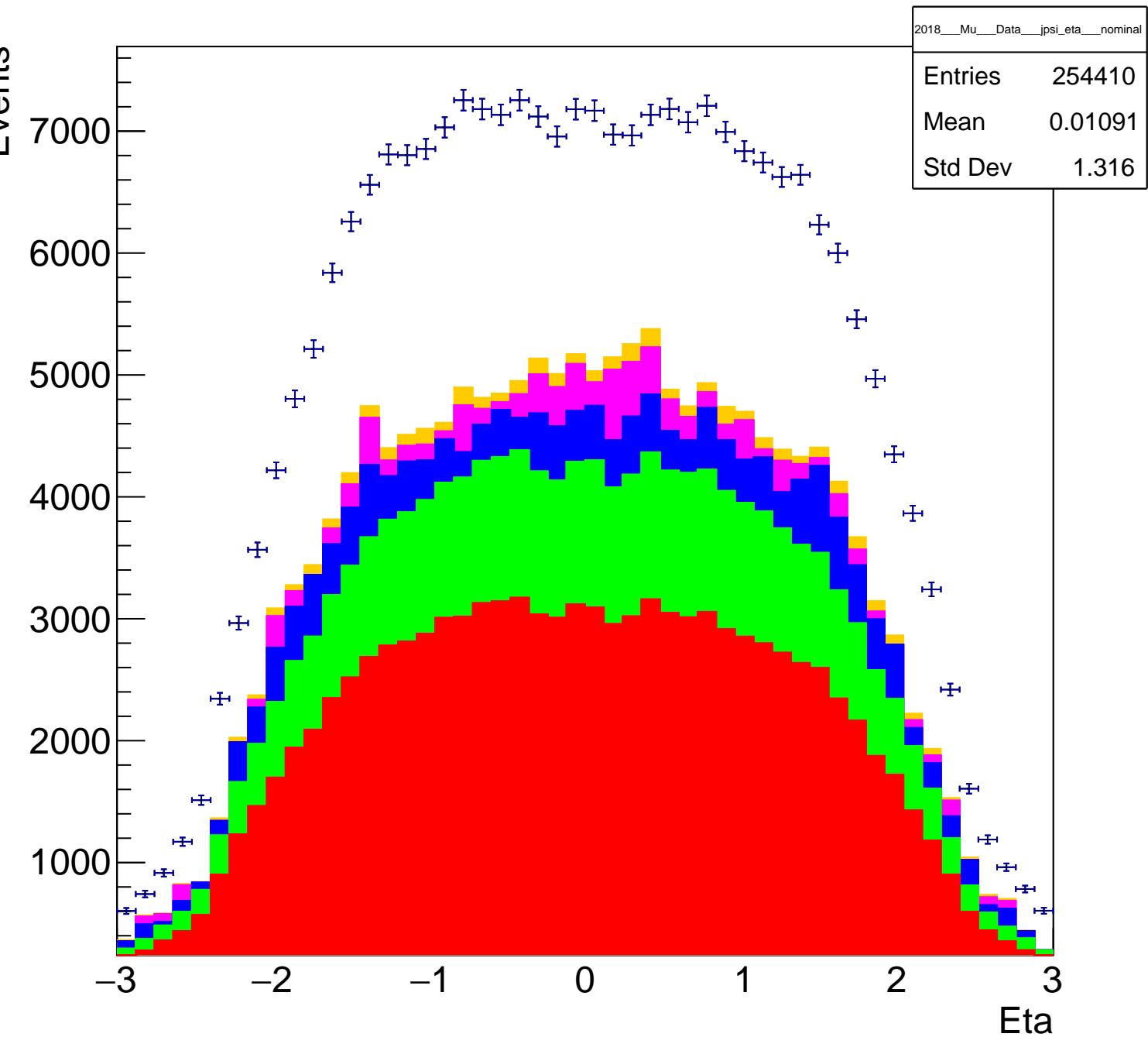
# Delta R for Isolated and JPsi Muons



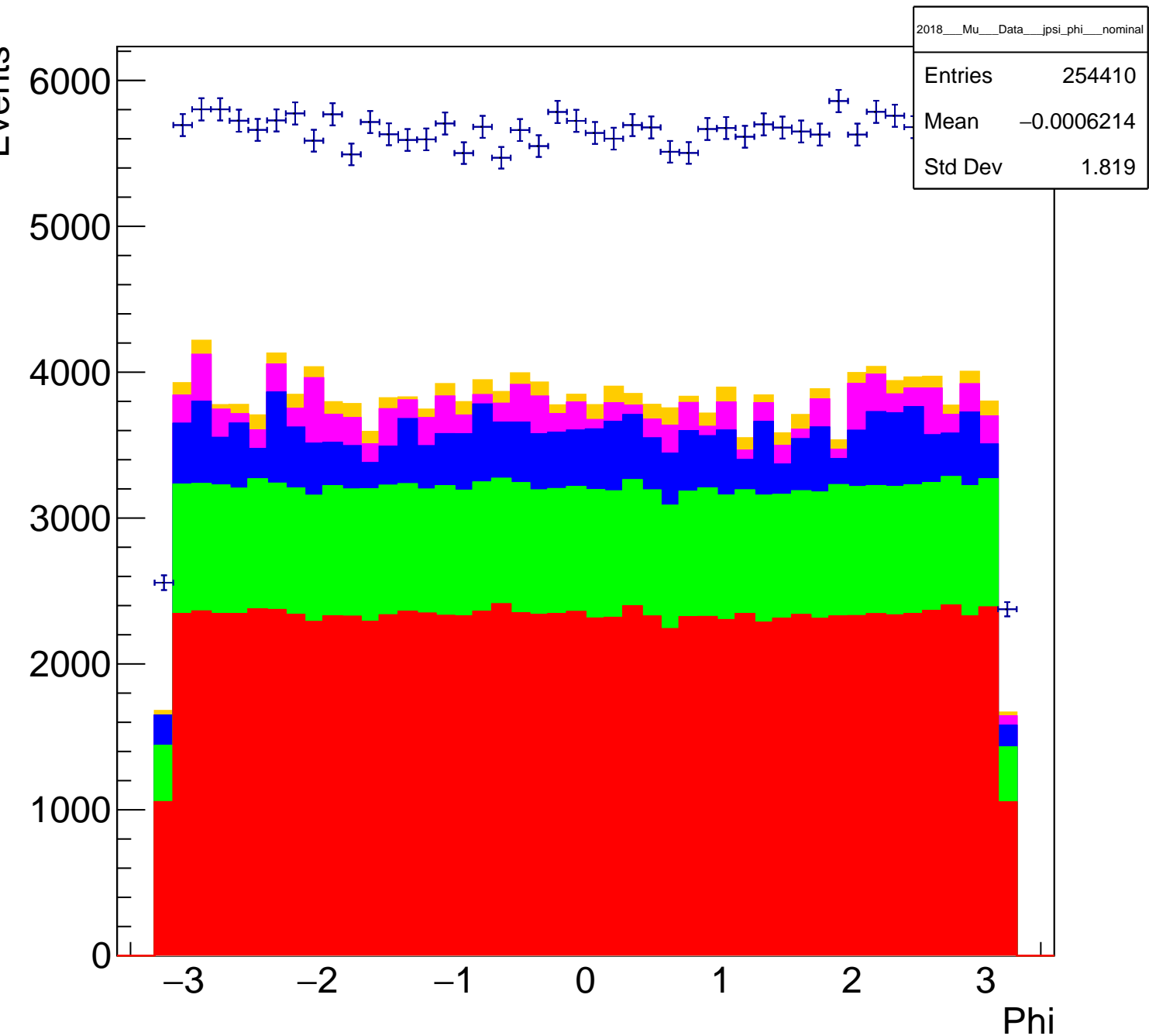
# Transverse Momentum for JPsi



# Pseudorapidity for JPsi

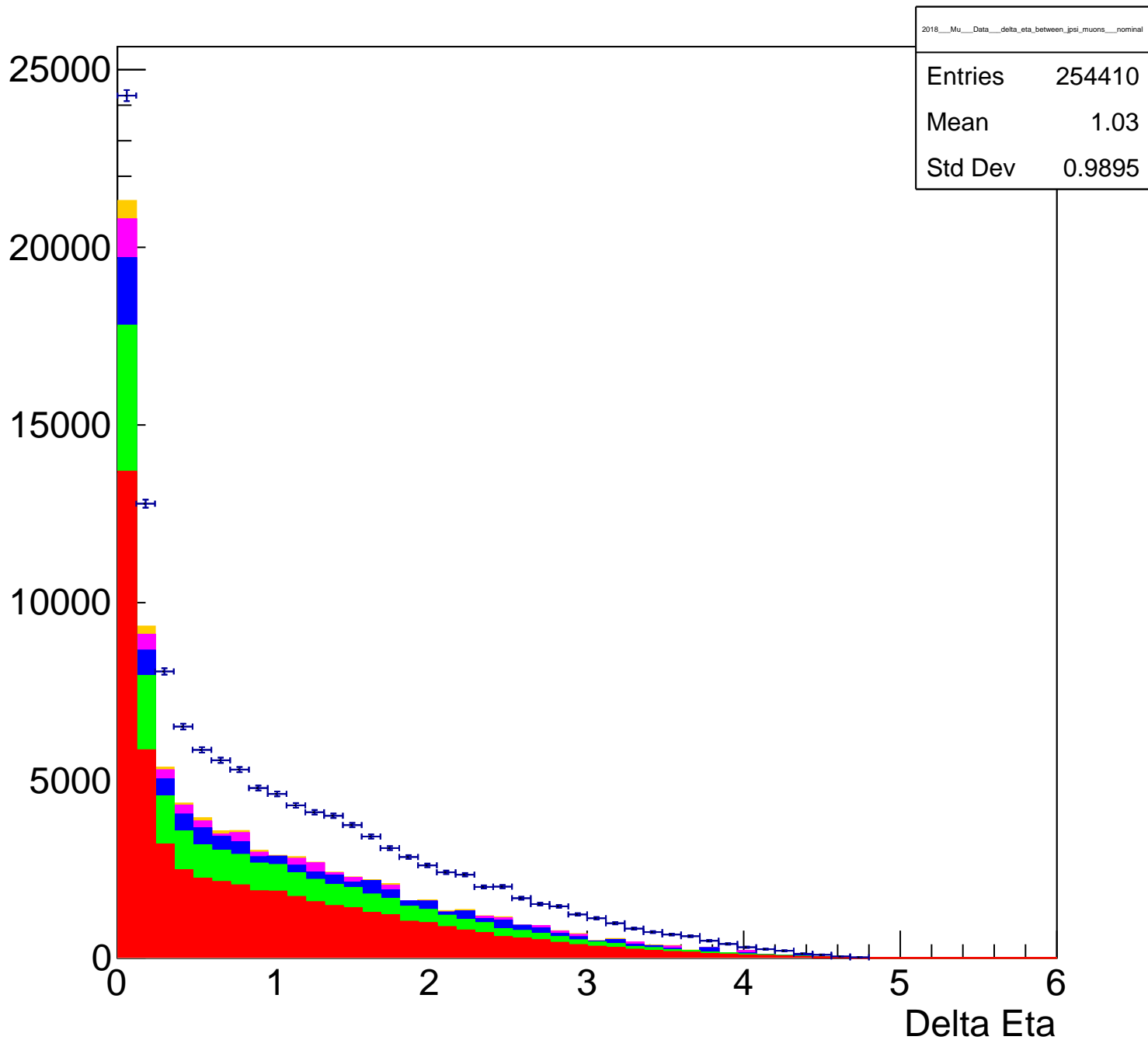


# Angle for JPsi

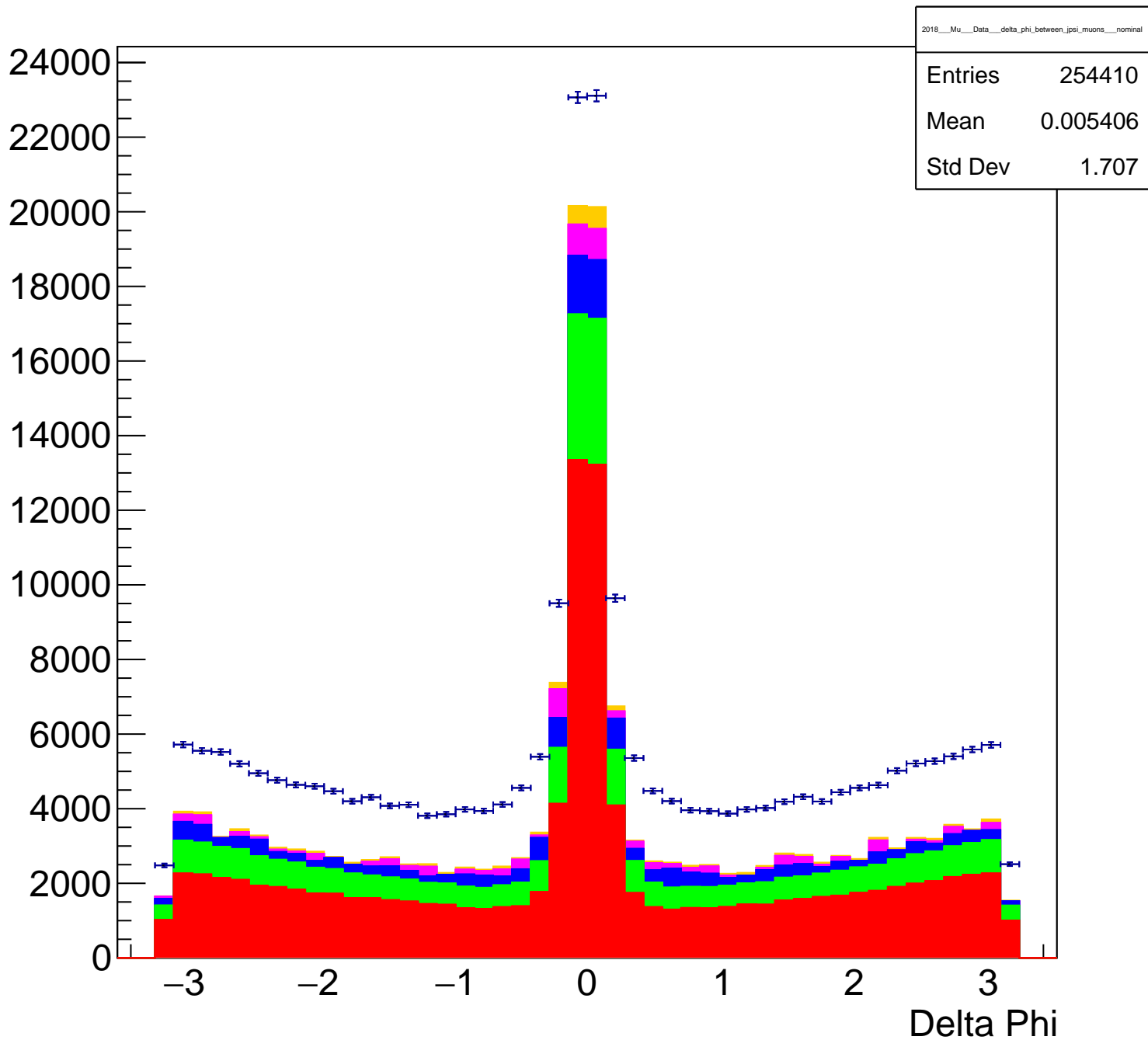




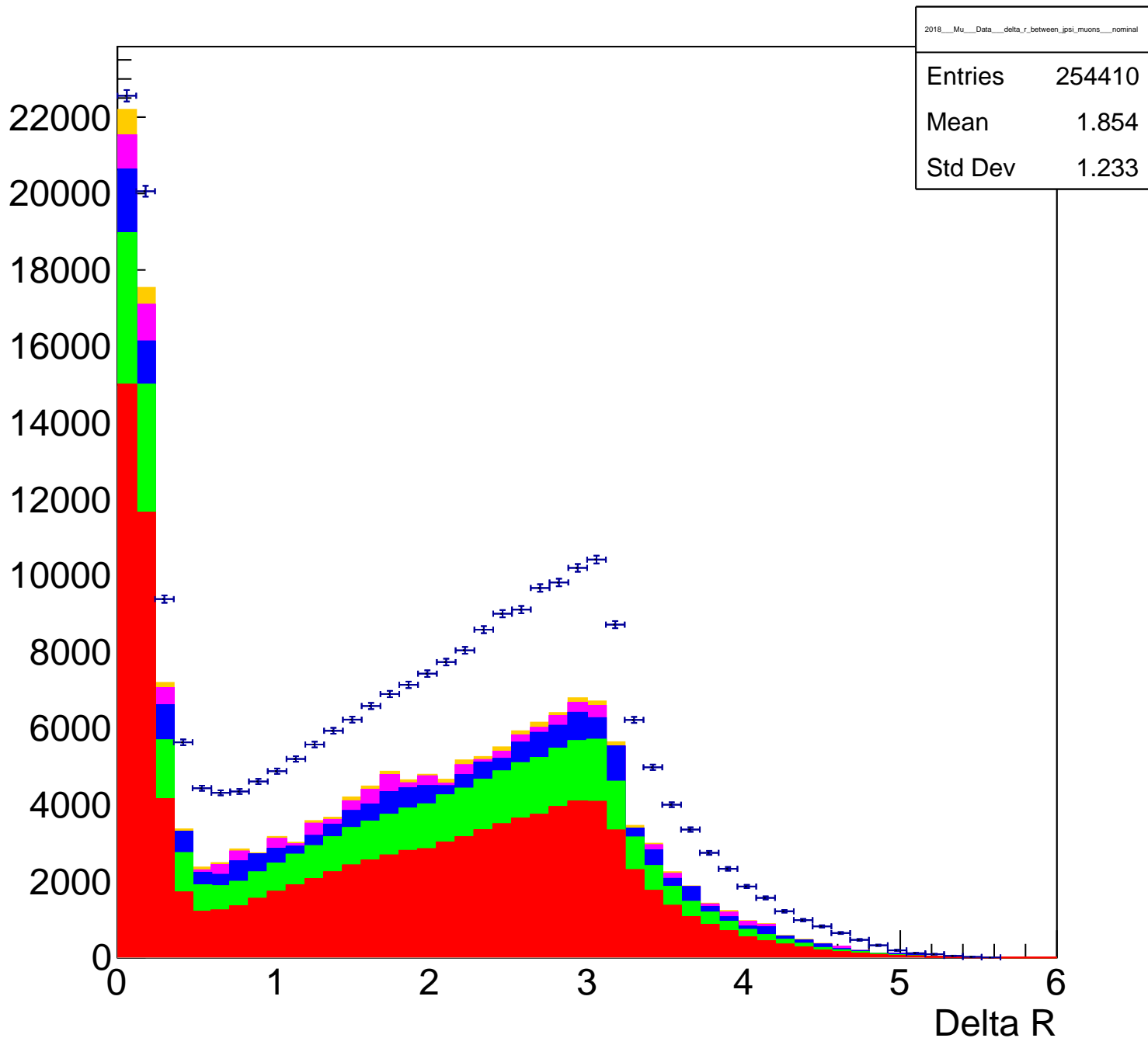
# Delta Eta for JPsi Muons



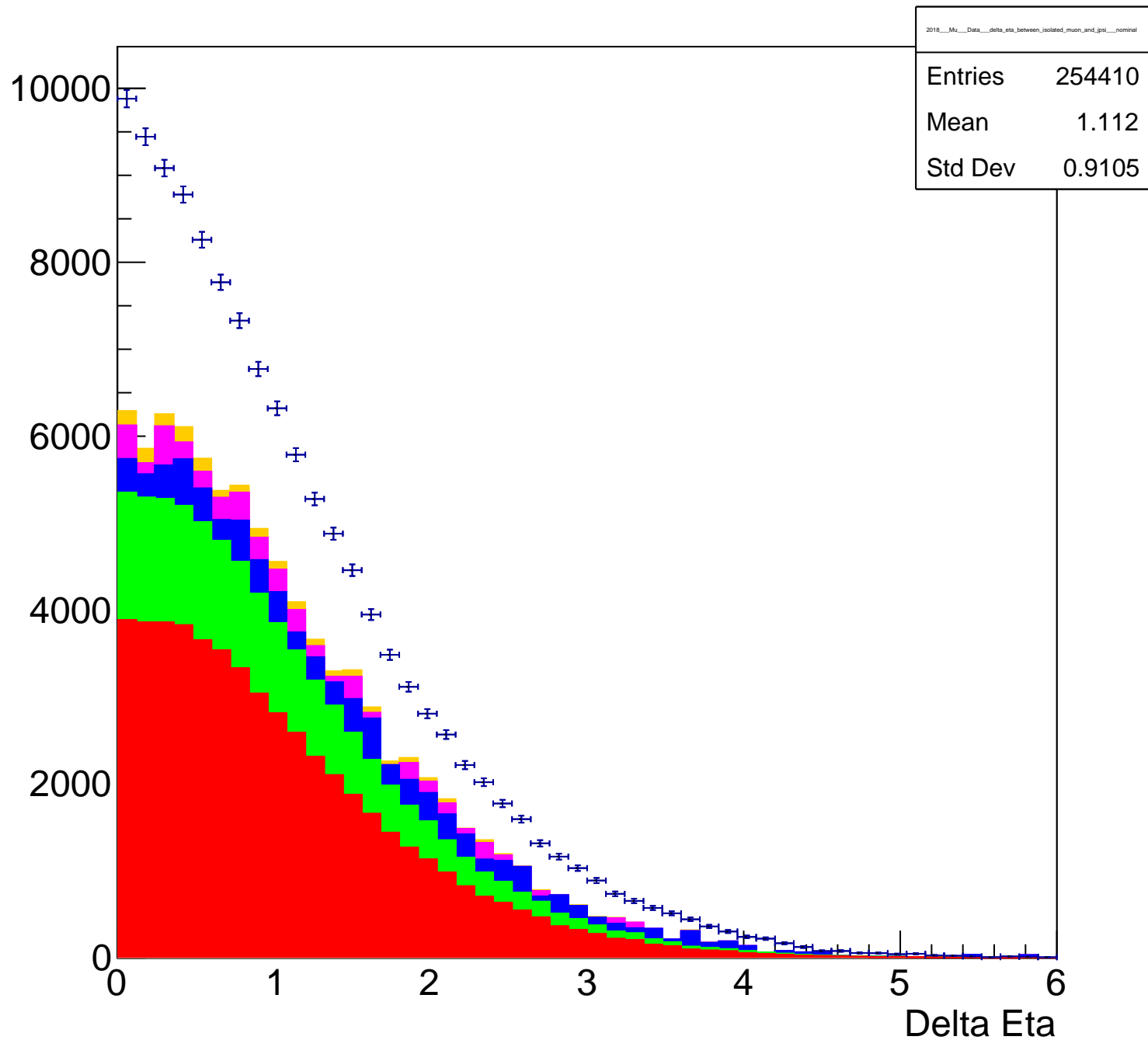
# Delta Phi for JPsi Muons



# Delta R for JPsi Muons



# Delta Eta for Isolated Muon And JPsi



# Delta Phi for Isolated Muon And JPsi

Events

9000  
8000  
7000  
6000  
5000  
4000  
3000  
2000  
1000  
0

2018_Mu_Data_delta_phi_between_isolated_muon_and_jpsi_nominal	
Entries	254410
Mean	-0.009716
Std Dev	2.007

-3

-2

-1

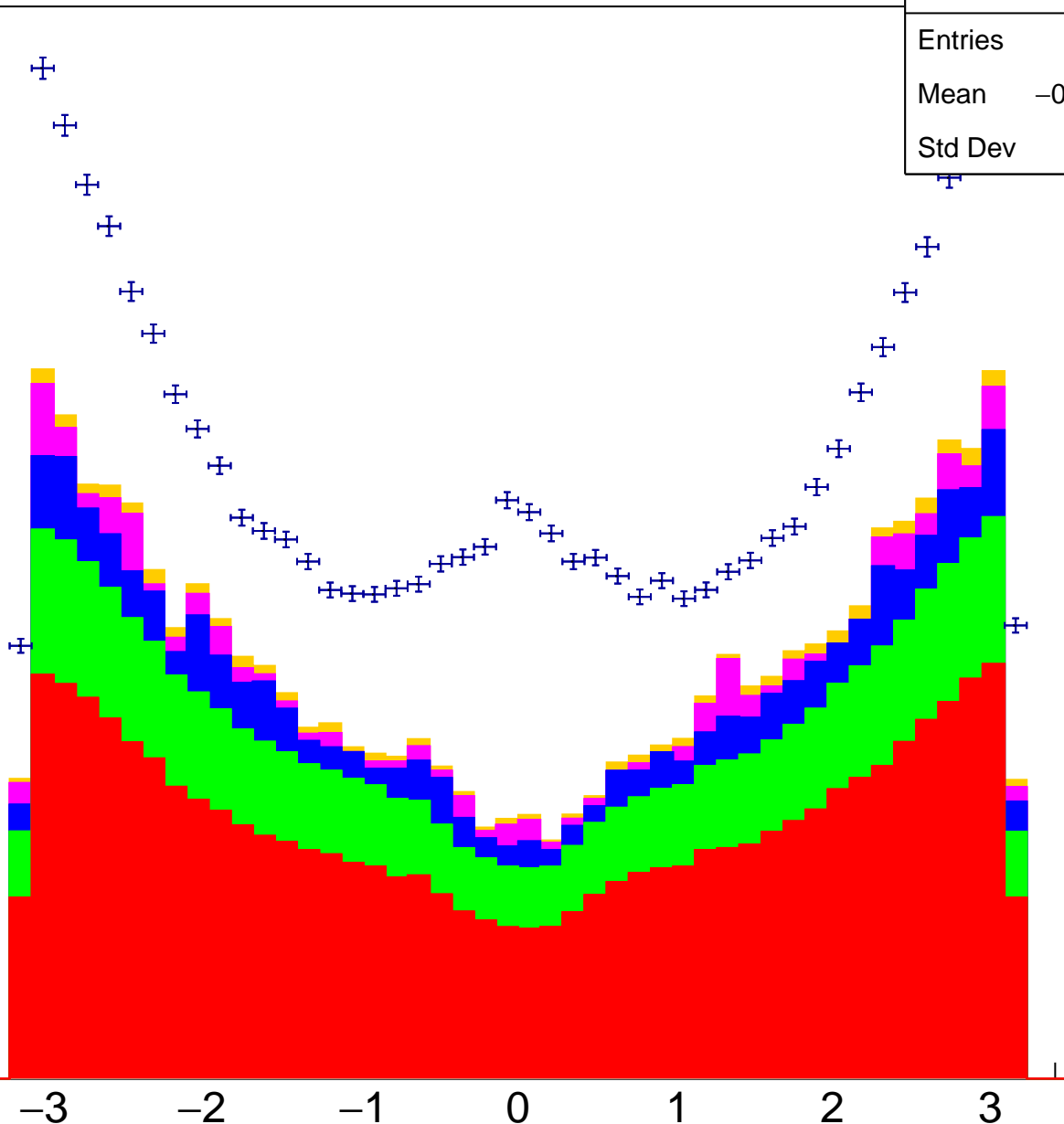
0

1

2

3

Delta Phi



# Delta R for Isolated Muon And JPsi

