ctau 100mm

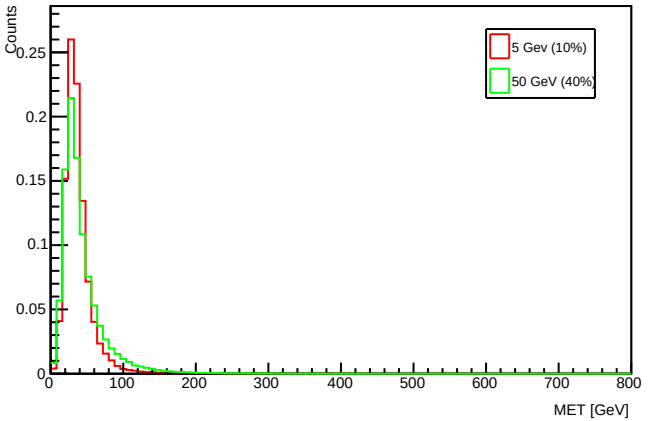
Gen 5 Gev (10%): 33019(c1:24839(75.23%[75.23%]),c2:230(0.70%[0.93%]),c3:138(0.42%[60.00%]),c4:60(0.18%[43.48%]))

Reco 5 Gev (10%): 33019(c1:18778(56.87%[56.87%]),c2:185(0.56%[0.99%]),c3:114(0.35%[61.62%]),c4:25(0.08%[21.93%]))

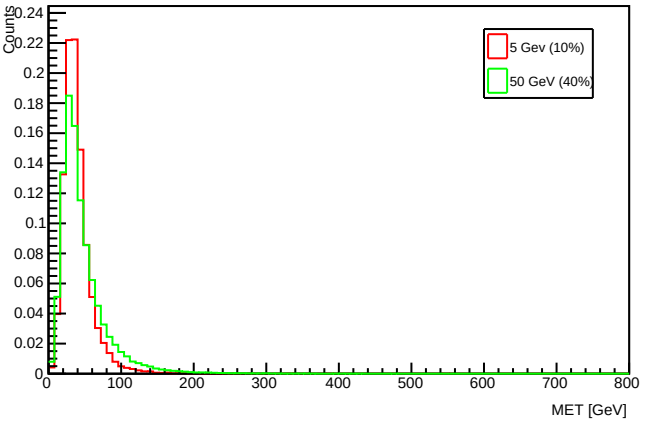
Gen 50 GeV (40%): 120683(c1:95841(79.42%[79.42%]),c2:3680(3.05%[3.84%]),c3:2610(2.16%[70.92%]),c4:1150(0.95%[44.06%]))

Reco 50 GeV (40%): 120683(c1:77197(63.97%[63.97%]),c2:3149(2.61%[4.08%]),c3:2277(1.89%[72.31%]),c4:816(0.68%[35.84%]))

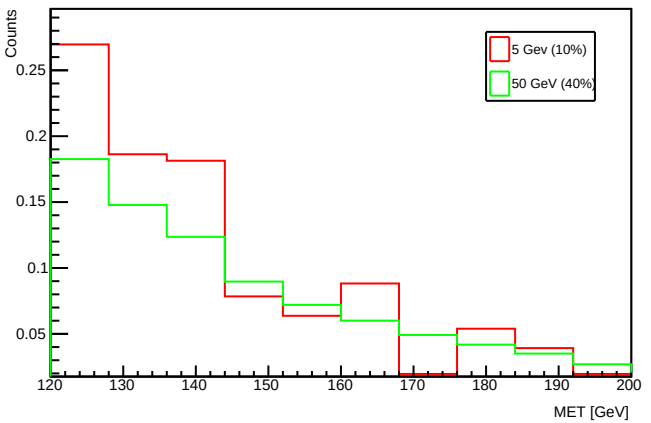
gen leading MET: no cuts



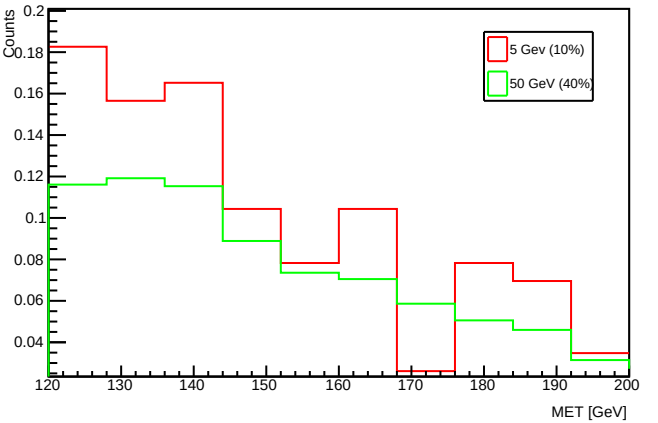
gen leading MET: n_jet >=1, j1pt > 30 GeV



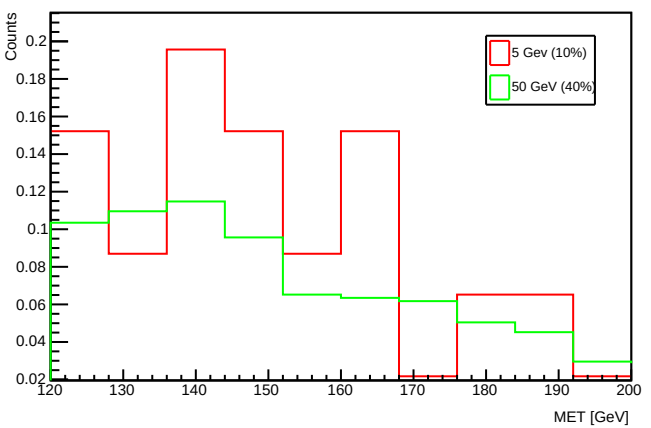
gen leading MET: MET > 120 GeV



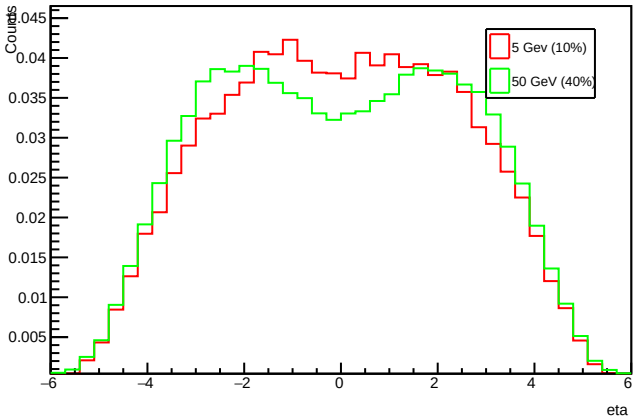
gen leading MET: j1pt >120, at most 2 jets w/ pt >30 GeV



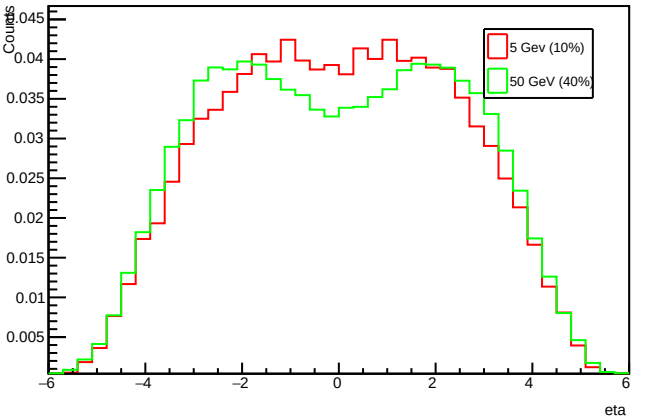
gen leading MET: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



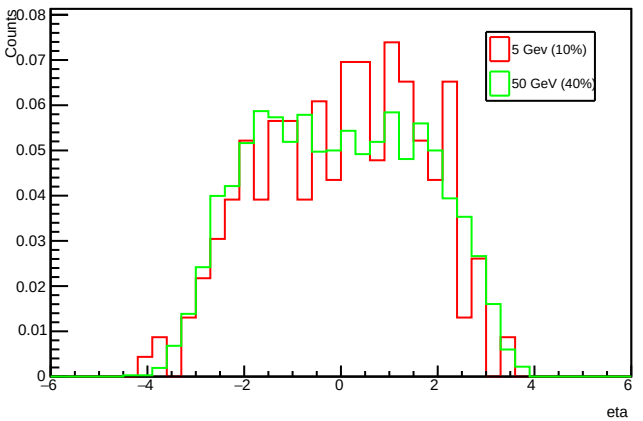
gen leading Met eta: no cuts



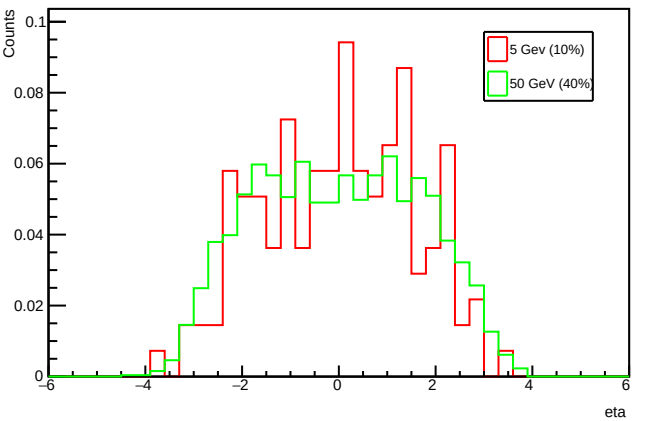
gen leading Met eta: n_jet >=1, j1pt > 30 GeV



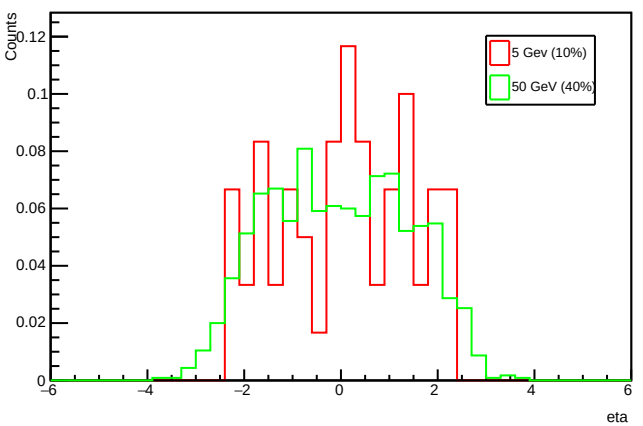
gen leading Met eta: MET > 120 GeV



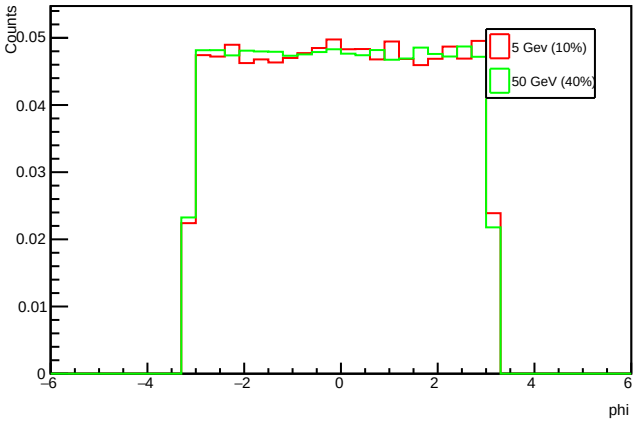
gen leading Met eta: j1pt >120, at most 2 jets w/ pt >30 GeV



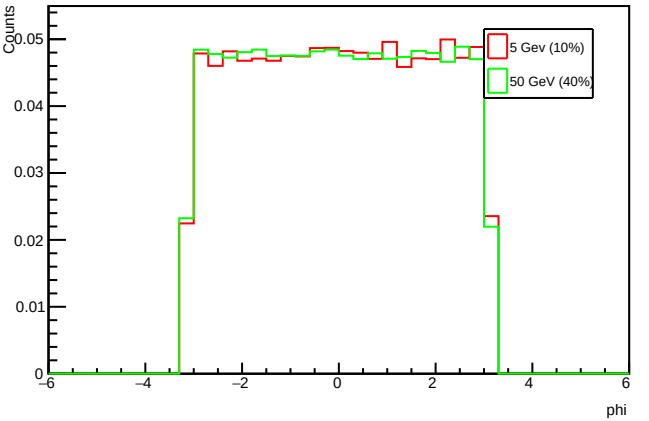
gen leading Met eta: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



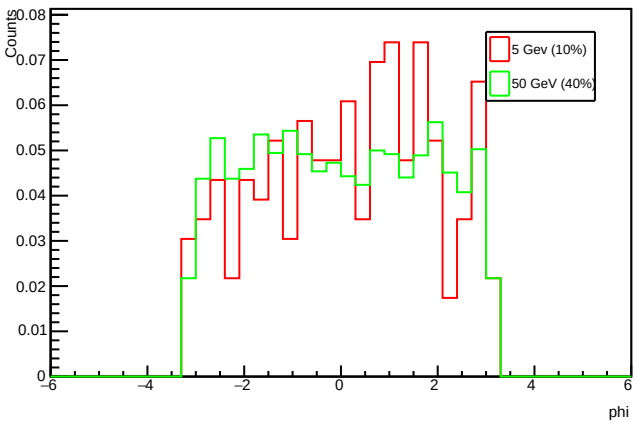
gen leading Met phi: no cuts



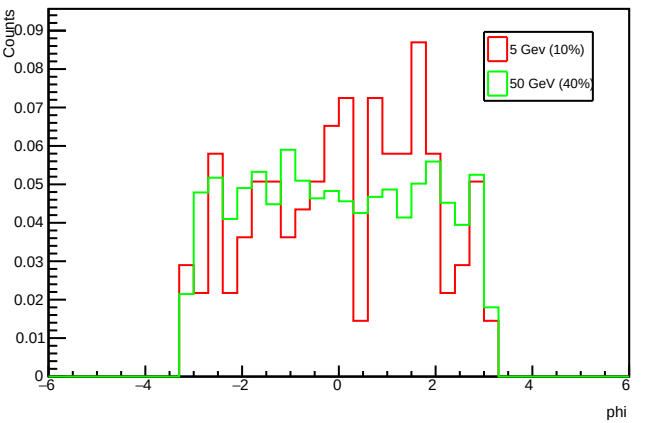
gen leading Met phi: n_jet >=1, j1pt > 30 GeV



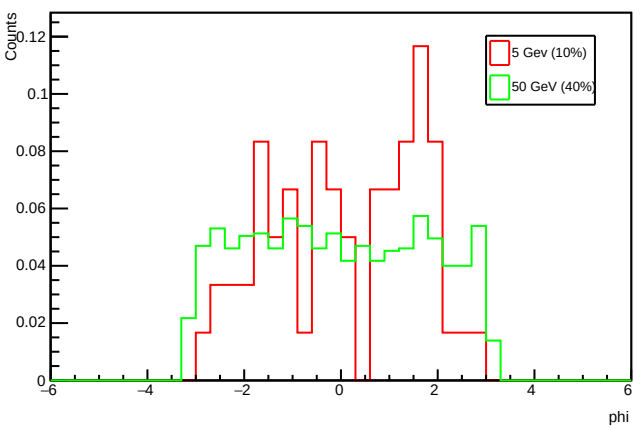
gen leading Met phi: MET > 120 GeV



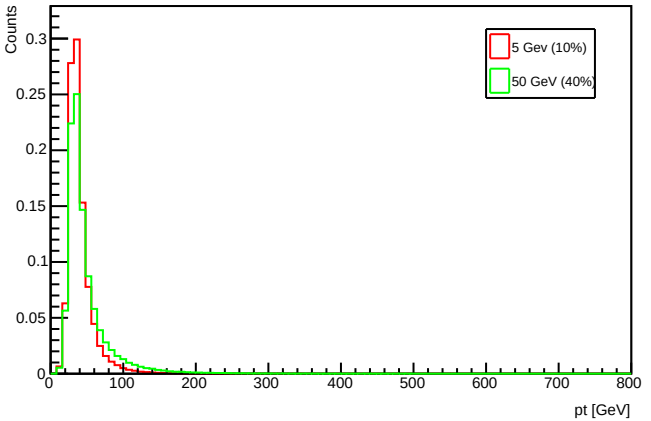
gen leading Met phi: j1pt >120, at most 2 jets w/ pt >30 GeV



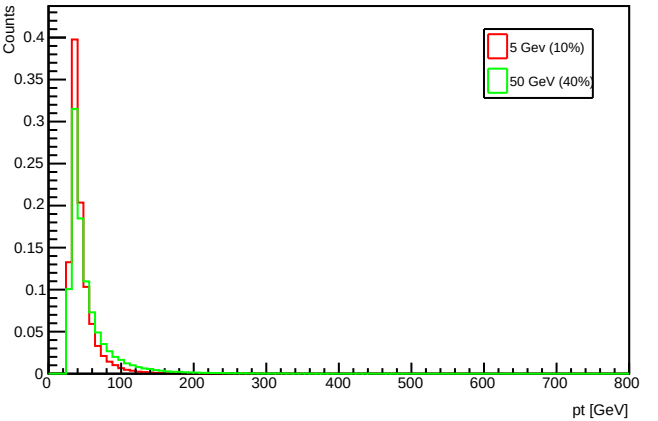
gen leading Met phi: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



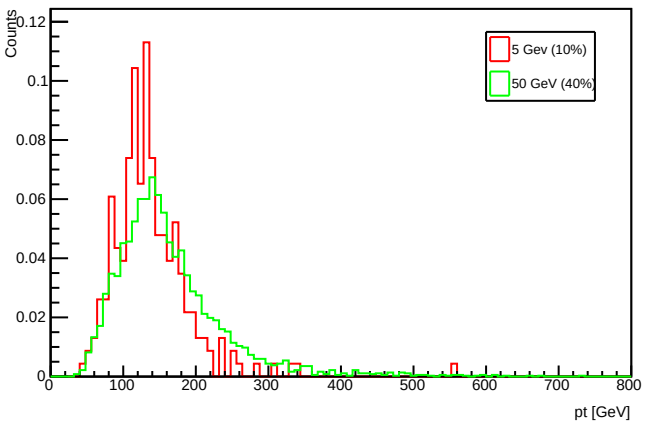
gen leading Jet pt: no cuts



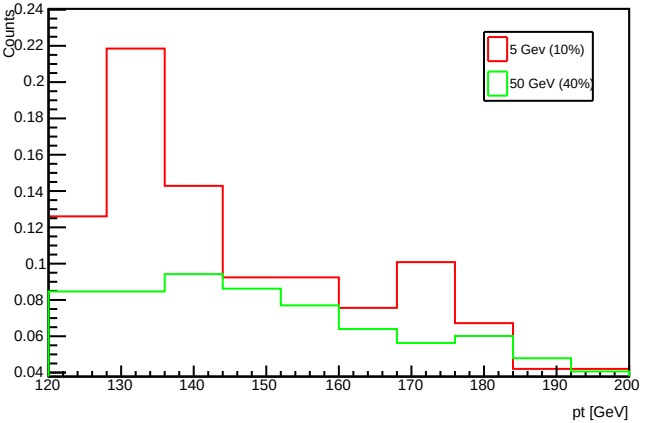
gen leading Jet pt: n_jet >=1, j1pt > 30 GeV



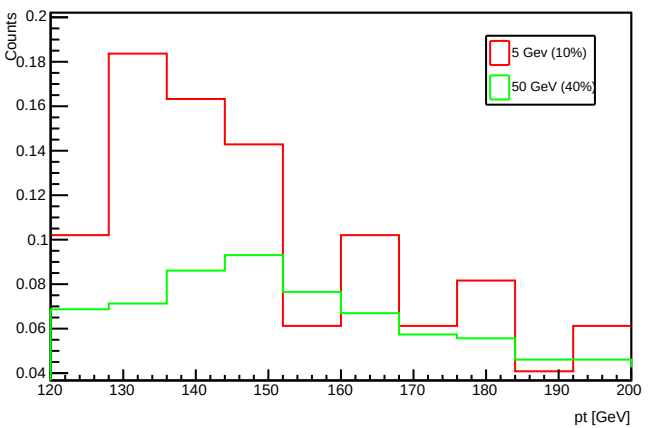
gen leading Jet pt: MET > 120 GeV



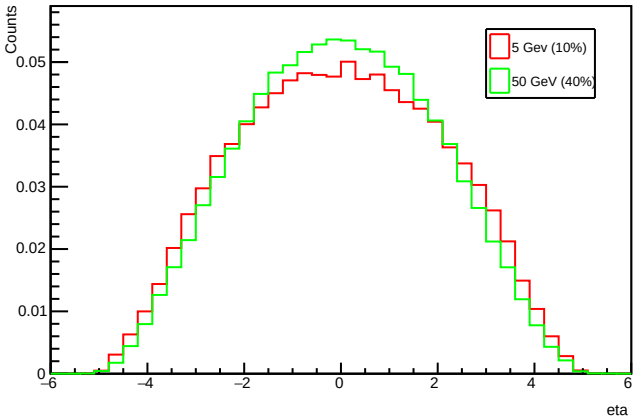
gen leading Jet pt: j1pt >120, at most 2 jets w/ pt >30 GeV



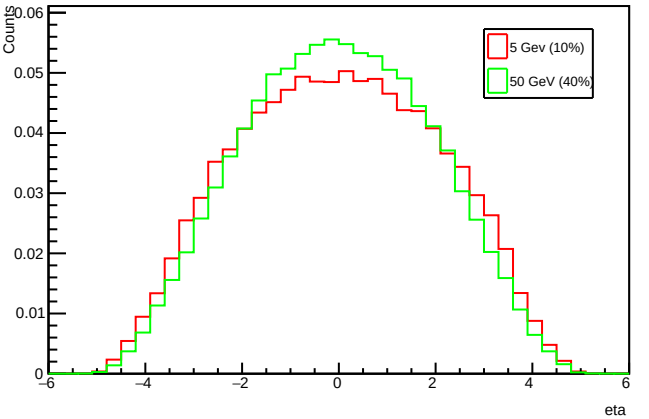
gen leading Jet pt: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



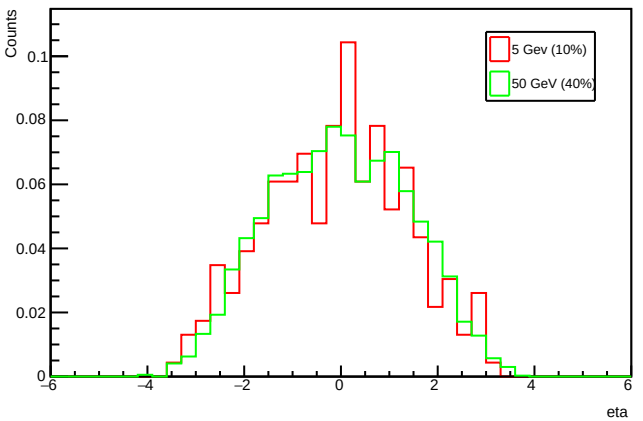
gen leading Jet eta: no cuts



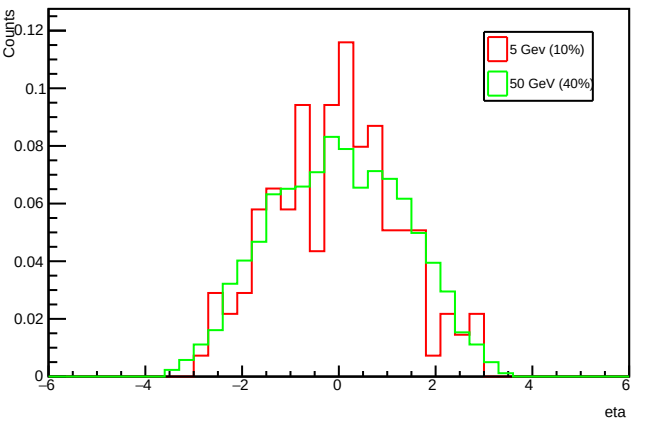
gen leading Jet eta: n_jet >=1, j1pt > 30 GeV



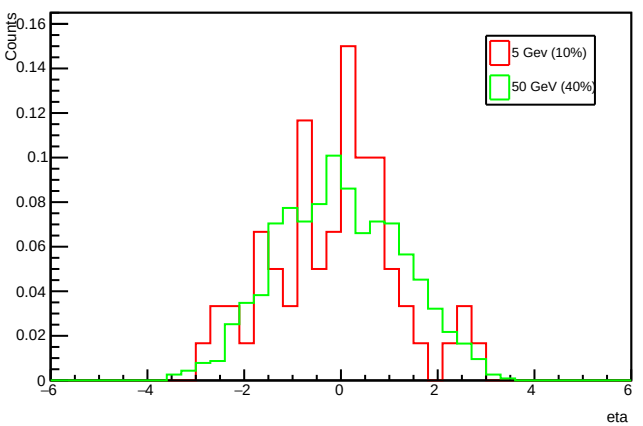
gen leading Jet eta: MET > 120 GeV



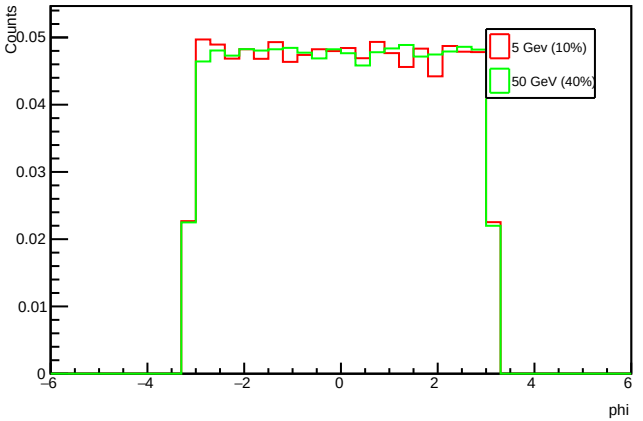
gen leading Jet eta: j1pt >120, at most 2 jets w/ pt >30 GeV



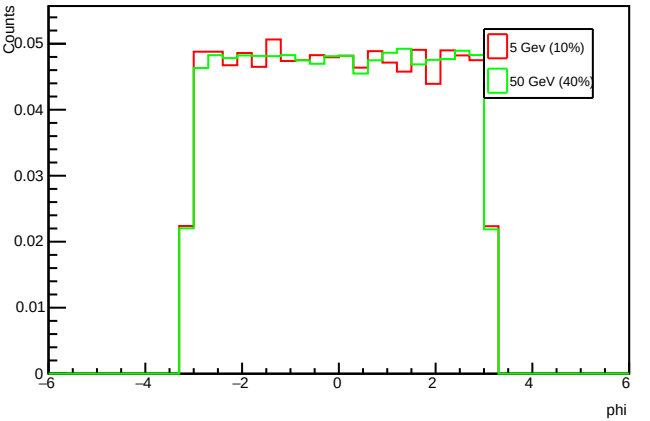
gen leading Jet eta: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



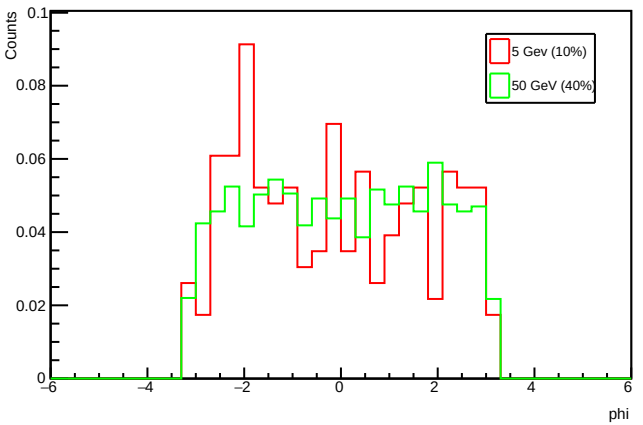
gen leading Jet phi: no cuts



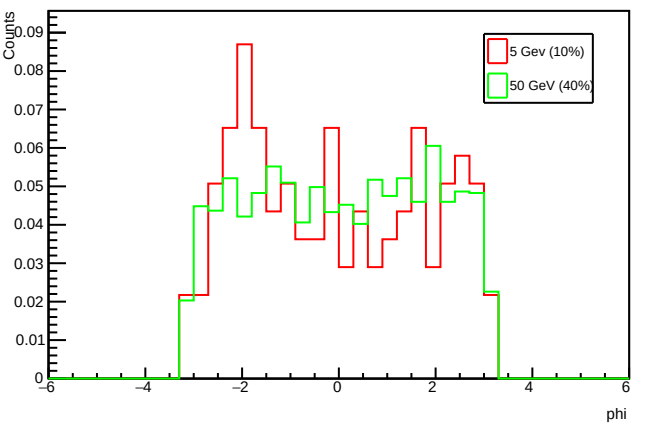
gen leading Jet phi: n_jet >=1, j1pt > 30 GeV



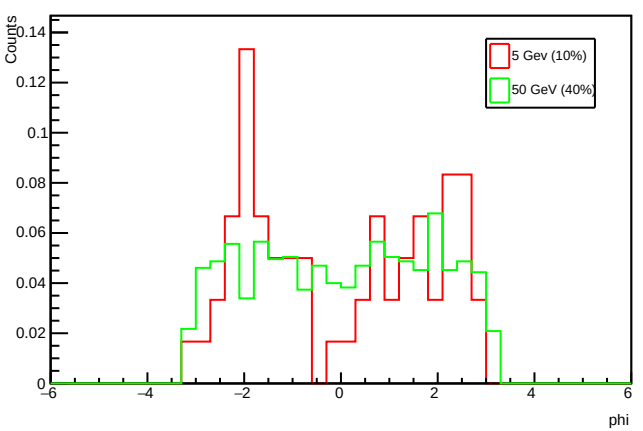
gen leading Jet phi: MET > 120 GeV



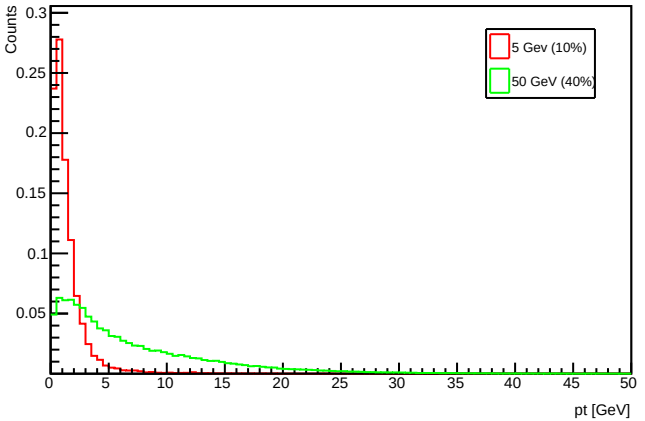
gen leading Jet phi: j1pt >120, at most 2 jets w/ pt >30 GeV



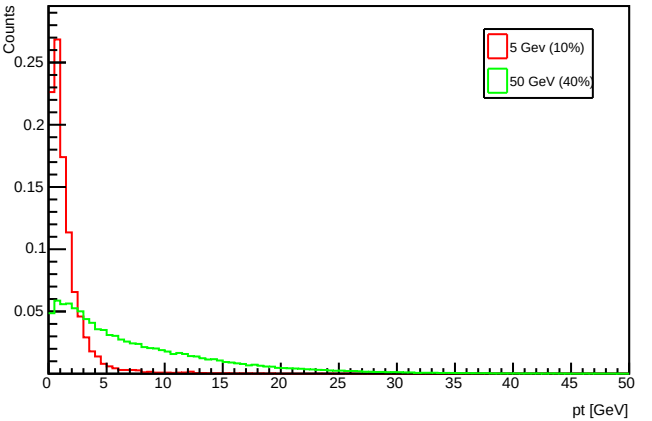
gen leading Jet phi: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



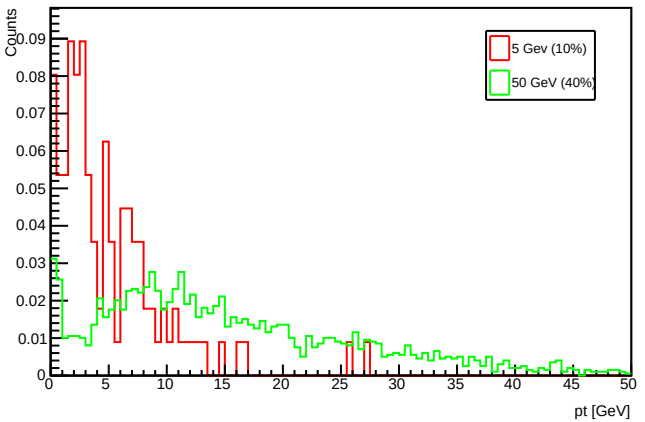
gen leading Mu pt: no cuts



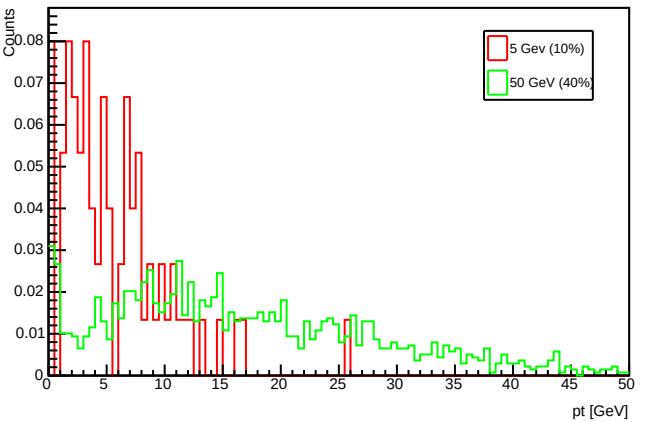
gen leading Mu pt: n_jet >=1, j1pt > 30 GeV



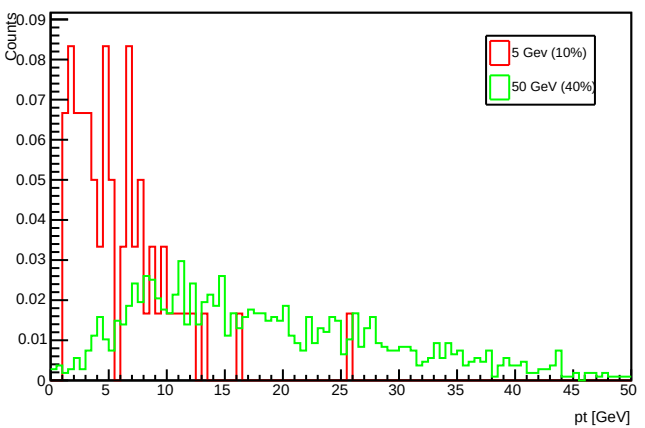
gen leading Mu pt: MET > 120 GeV



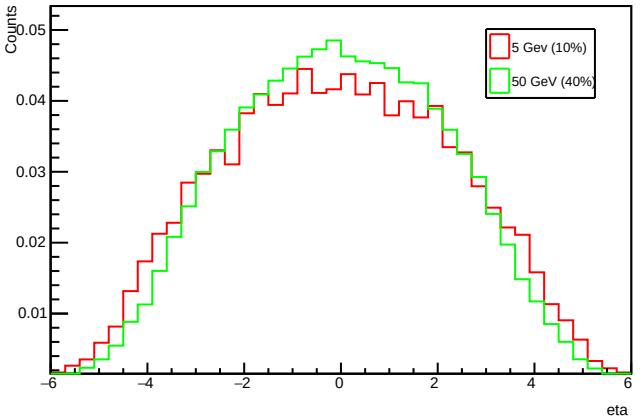
gen leading Mu pt: j1pt >120, at most 2 jets w/ pt >30 GeV



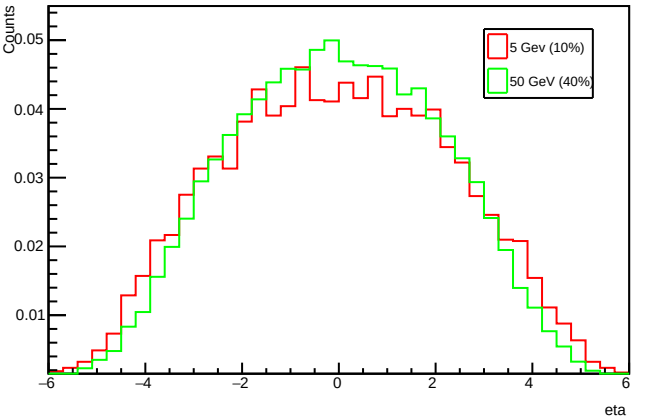
gen leading Mu pt: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



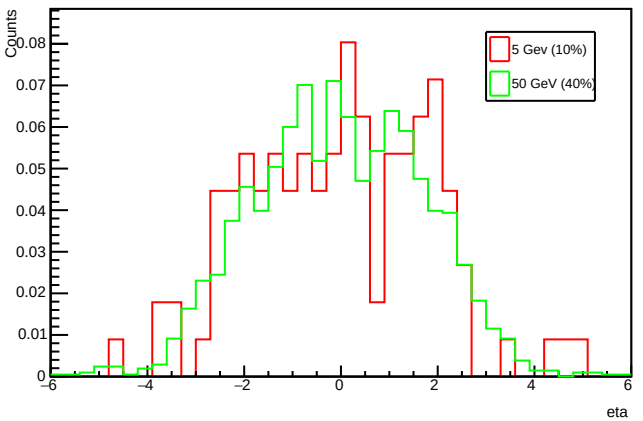
gen leading Mu eta: no cuts



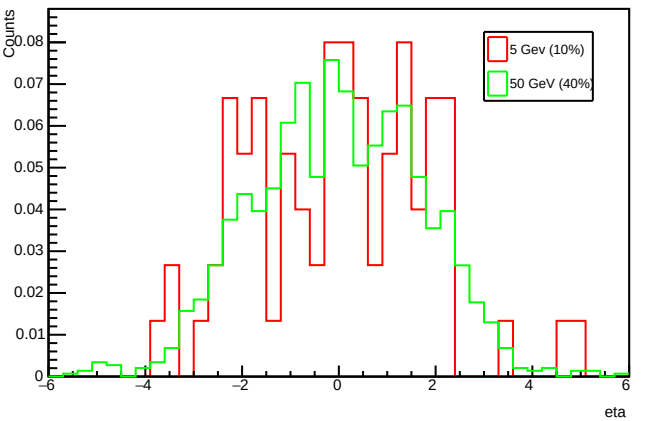
gen leading Mu eta: n_jet >=1, j1pt > 30 GeV



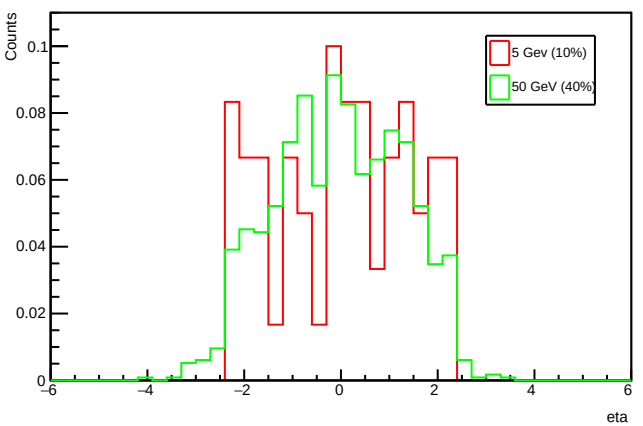
gen leading Mu eta: MET > 120 GeV



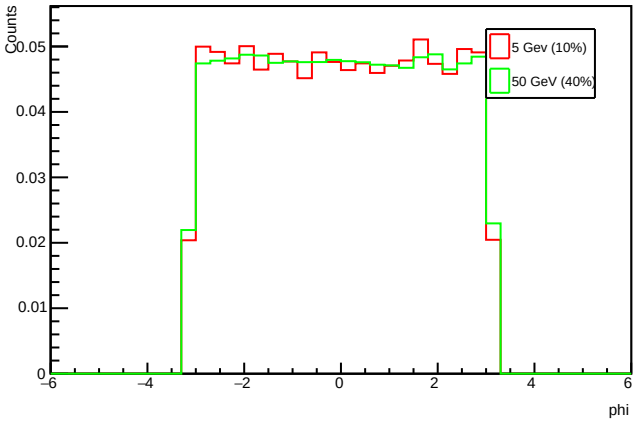
gen leading Mu eta: j1pt >120, at most 2 jets w/ pt >30 GeV



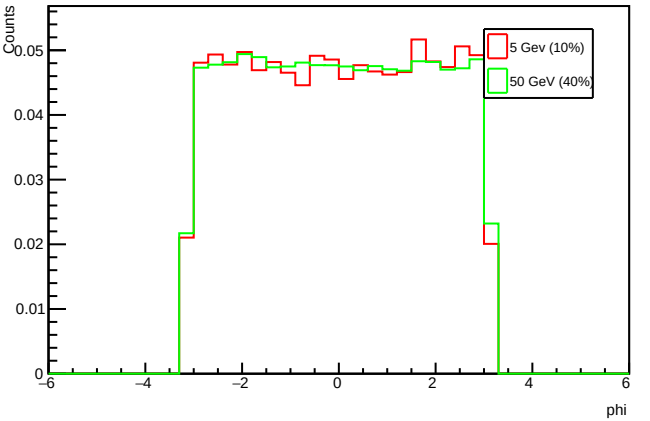
gen leading Mu eta: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



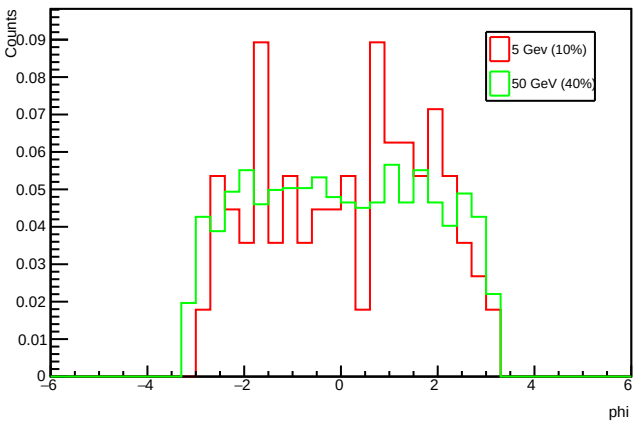
gen leading Mu phi: no cuts



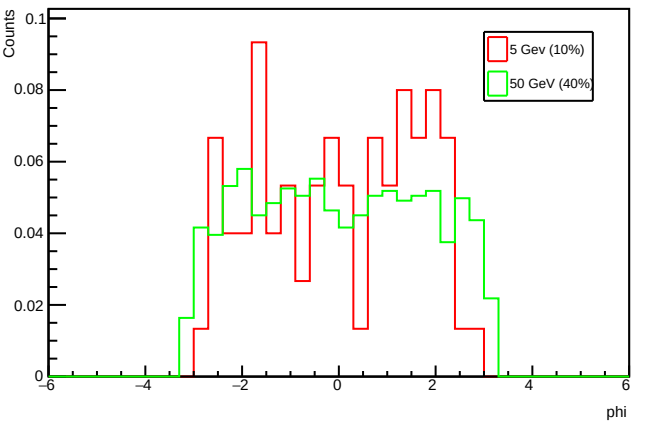
gen leading Mu phi: n_jet >=1, j1pt > 30 GeV



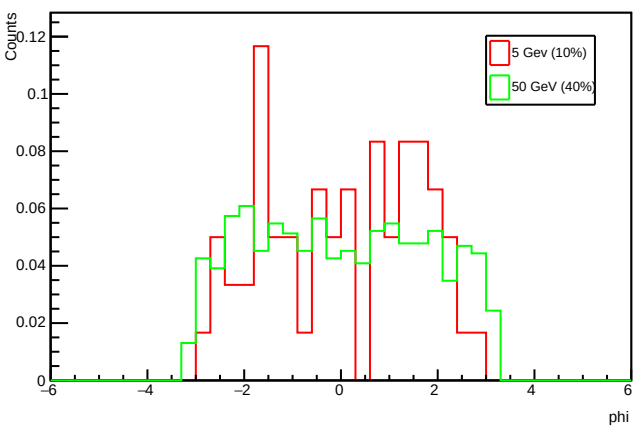
gen leading Mu phi: MET > 120 GeV



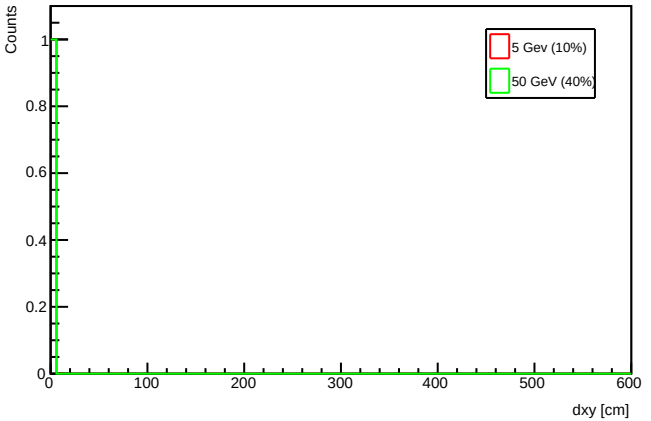
gen leading Mu phi: j1pt >120, at most 2 jets w/ pt >30 GeV



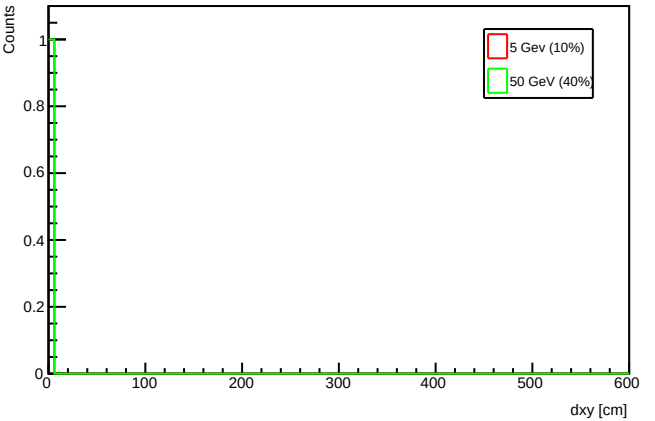
gen leading Mu phi: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



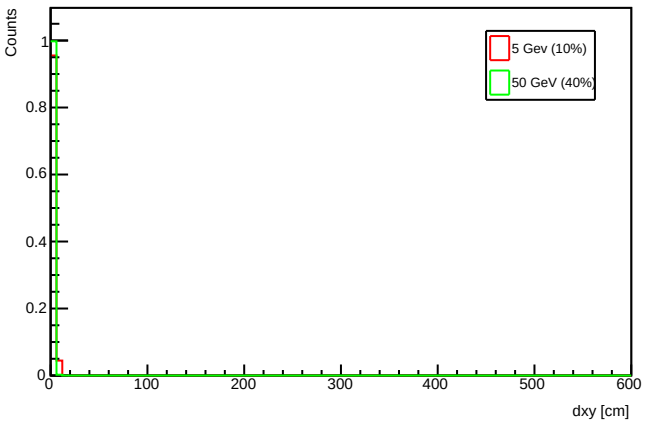
gen leading Mu vxy: no cuts



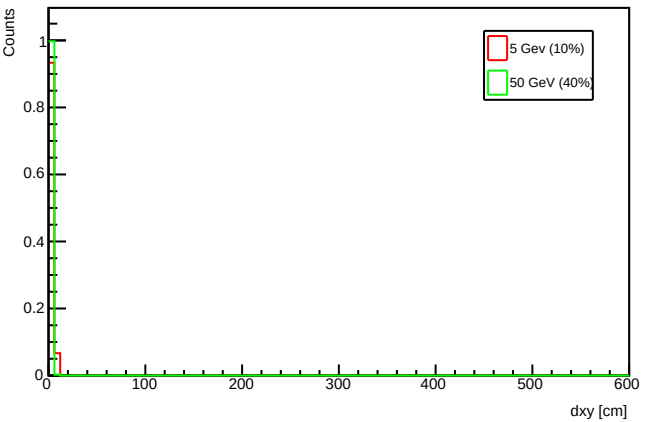
gen leading Mu vxy: n_jet >=1, j1pt > 30 GeV



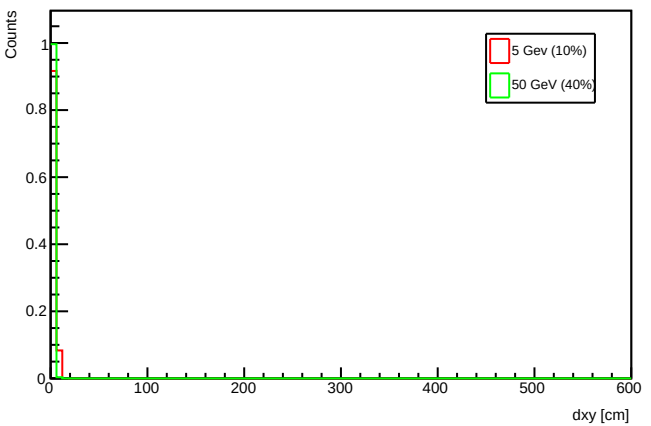
gen leading Mu vxy: MET > 120 GeV



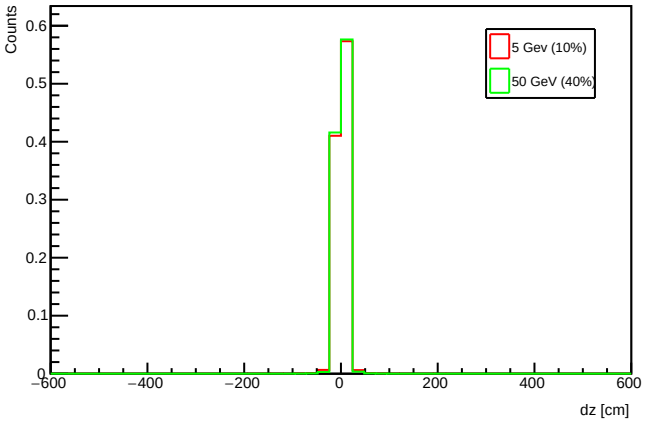
gen leading Mu vxy: j1pt >120, at most 2 jets w/ pt >30 GeV



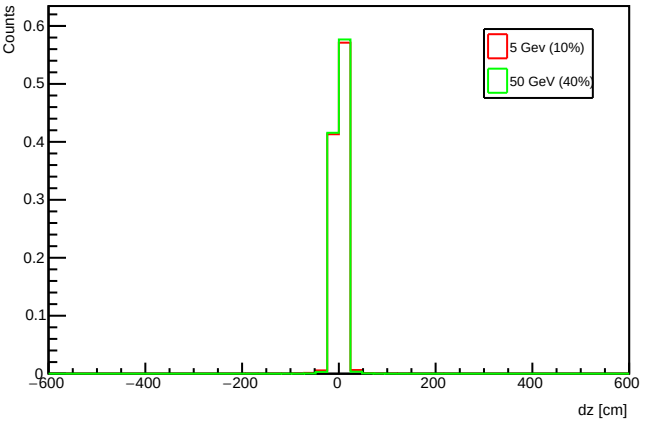
gen leading Mu vxy: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



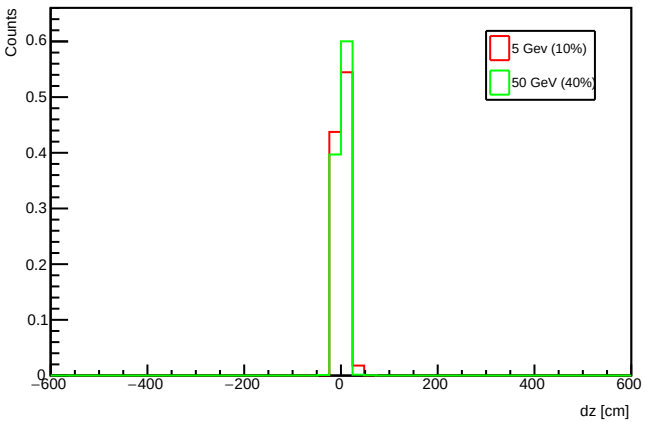
gen leading Mu vz: no cuts



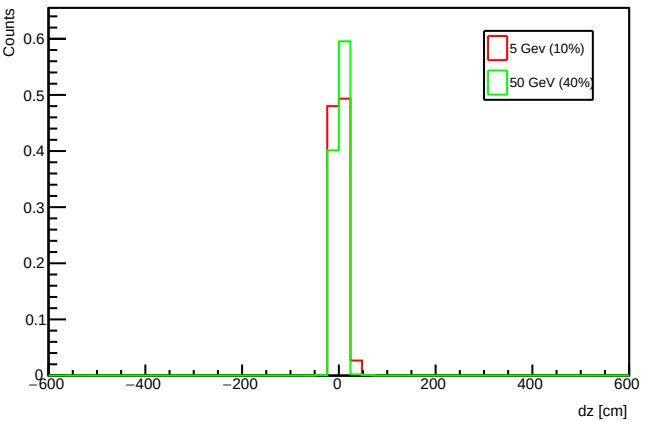
gen leading Mu vz: n_jet >=1, j1pt > 30 GeV



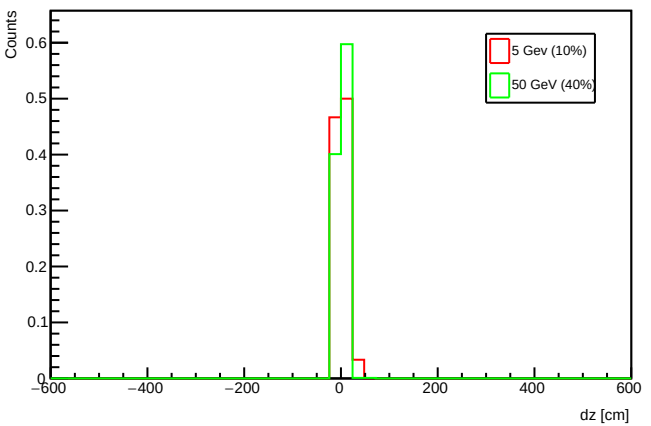
gen leading Mu vz: MET > 120 GeV



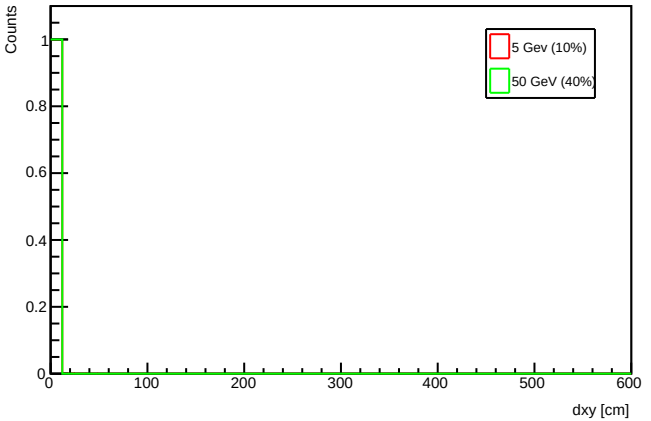
gen leading Mu vz: j1pt >120, at most 2 jets w/ pt >30 GeV



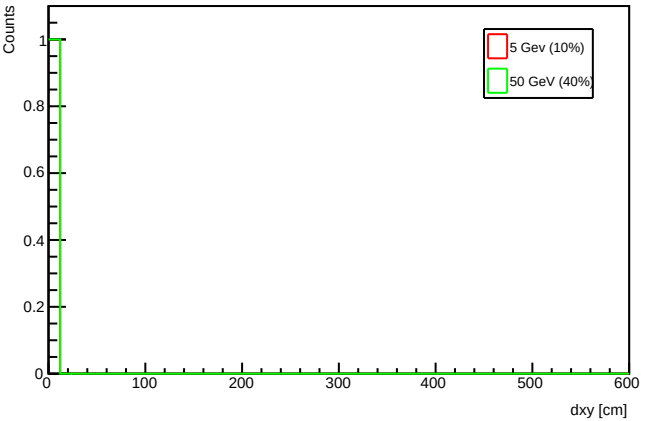
gen leading Mu vz: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



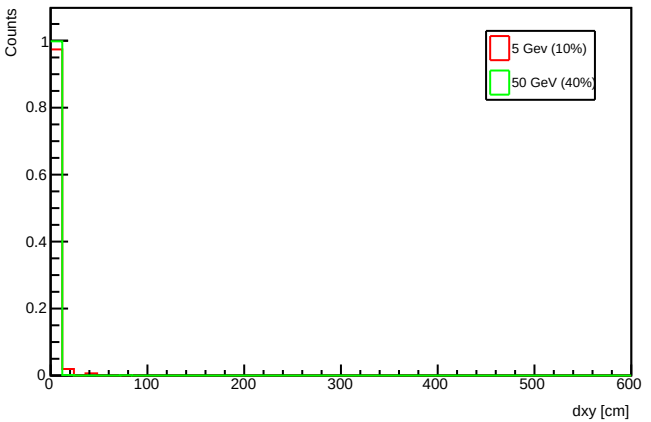
gen all Mu vxy: no cuts



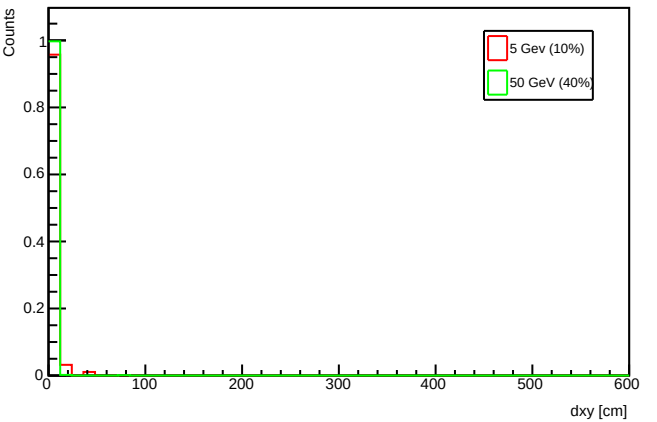
gen all Mu vxy: n_jet >=1, j1pt > 30 GeV



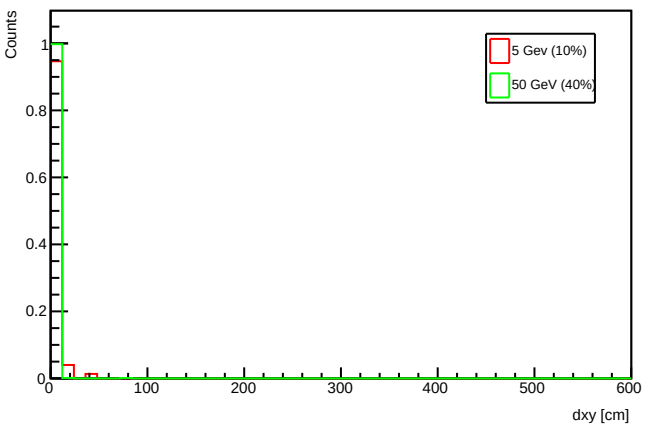
gen all Mu vxy: MET > 120 GeV



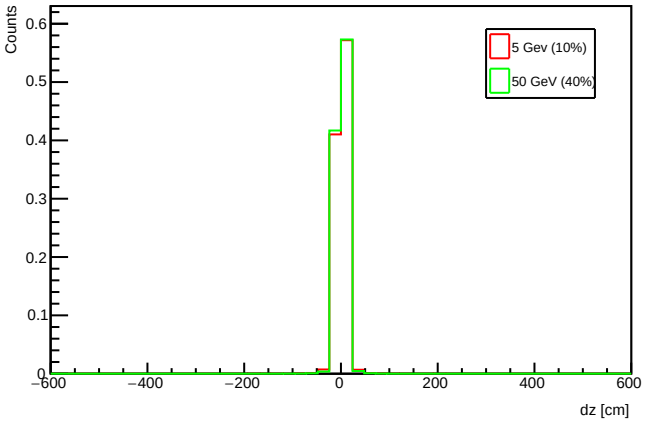
gen all Mu vxy: j1pt >120, at most 2 jets w/ pt >30 GeV



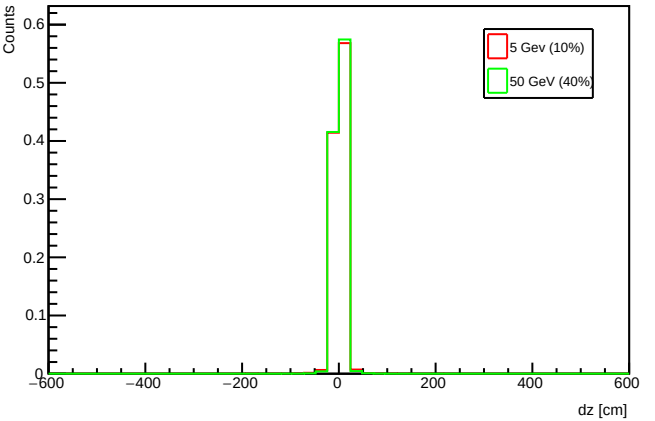
gen all Mu vxy: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



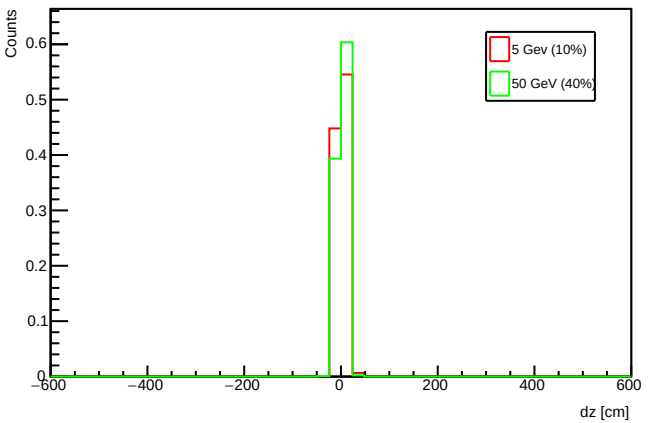
gen all Mu vz: no cuts



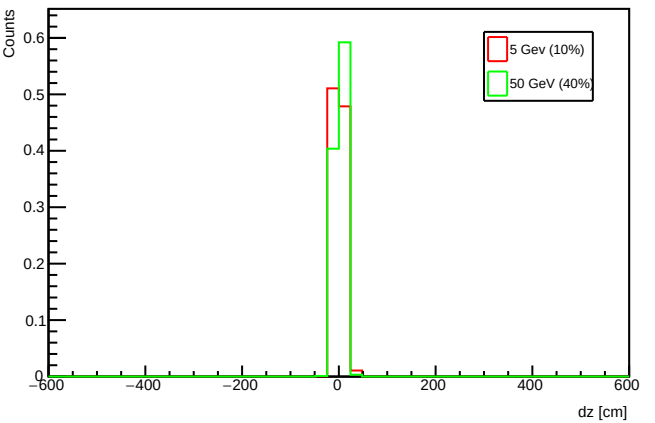
gen all Mu vz: n_jet >=1, j1pt > 30 GeV



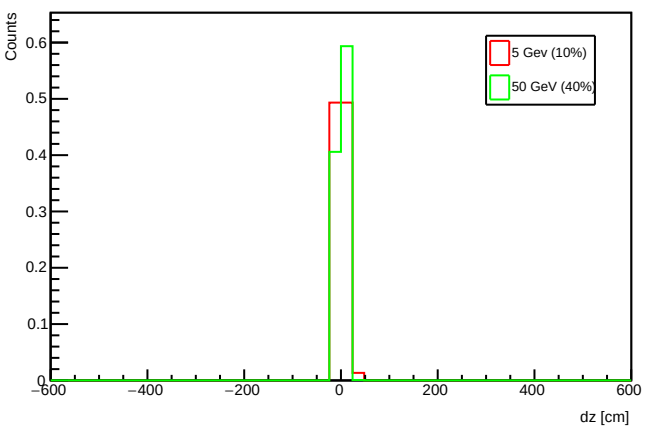
gen all Mu vz: MET > 120 GeV



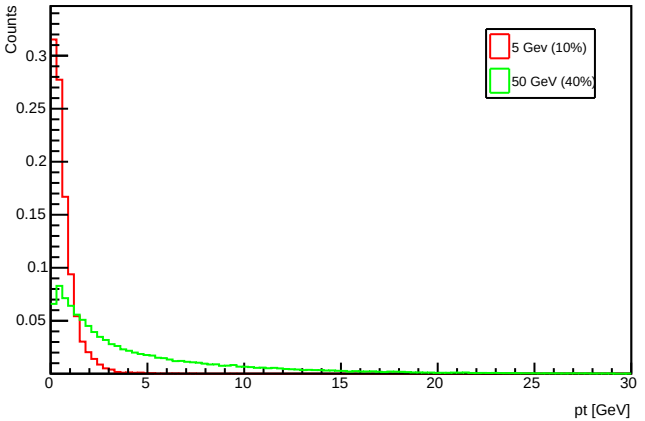
gen all Mu vz: j1pt >120, at most 2 jets w/ pt >30 GeV



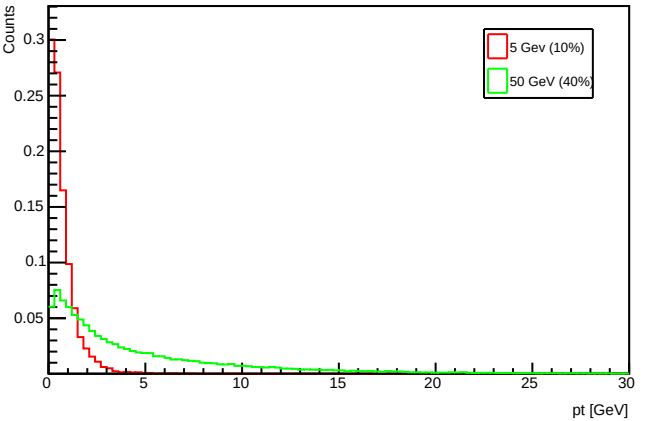
gen all Mu vz: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



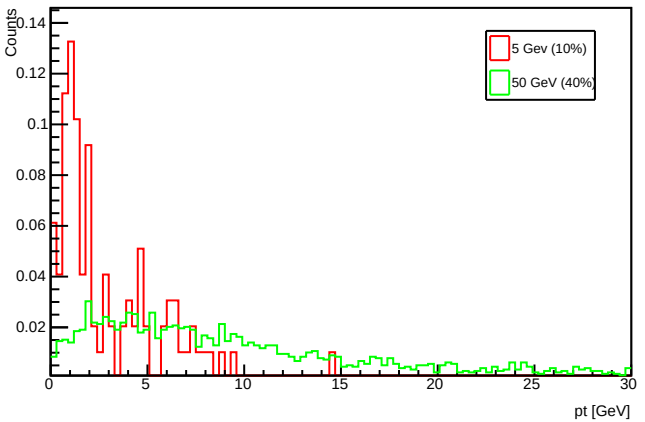
gen subleading Mu pt: no cuts



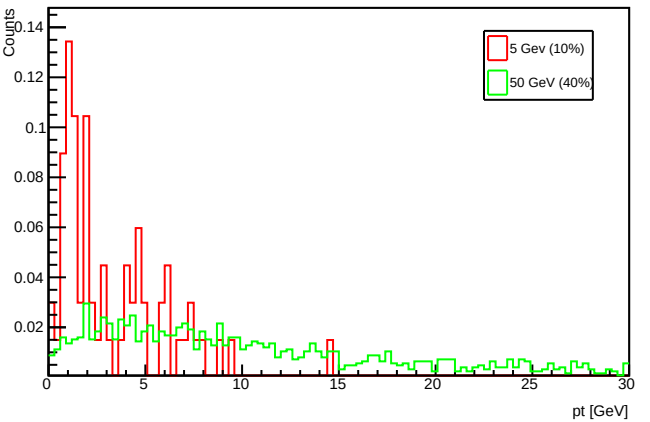
gen subleading Mu pt: n_jet >=1, j1pt > 30 GeV



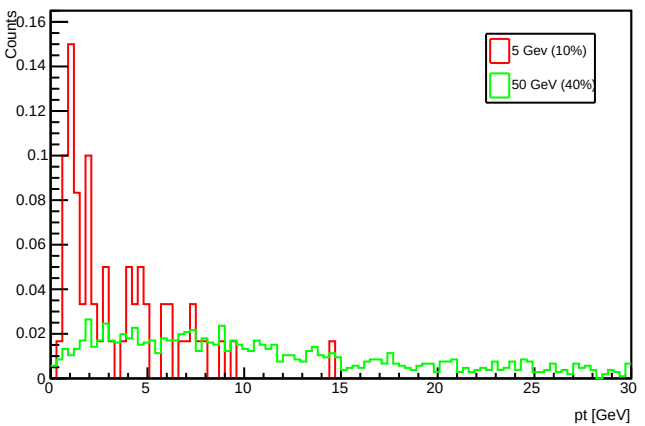
gen subleading Mu pt: MET > 120 GeV



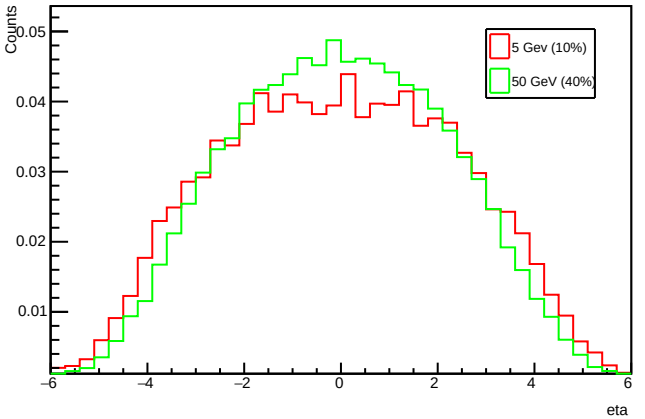
gen subleading Mu pt: j1pt >120, at most 2 jets w/ pt >30 GeV



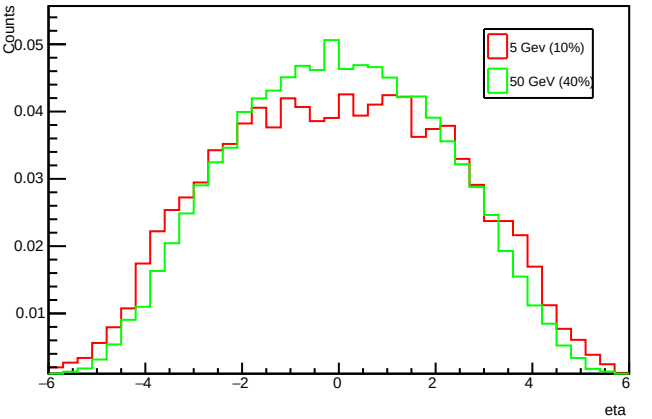
gen subleading Mu pt: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



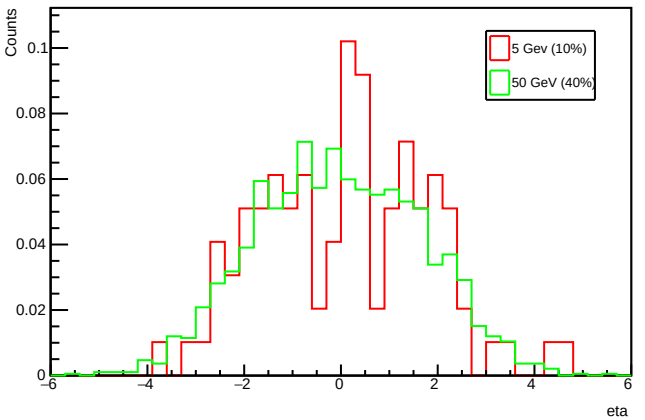
gen subleading Mu eta: no cuts



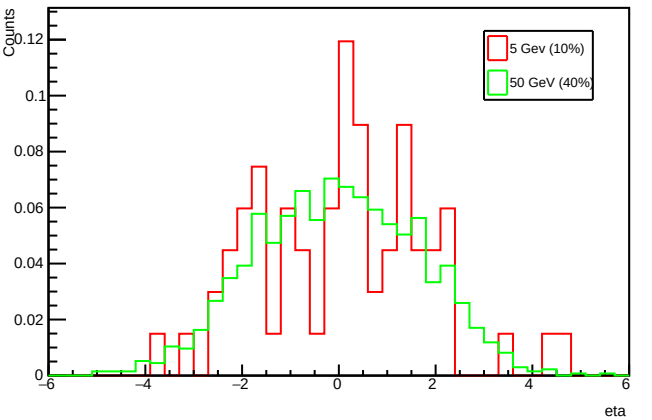
gen subleading Mu eta: n_jet >=1, j1pt > 30 GeV



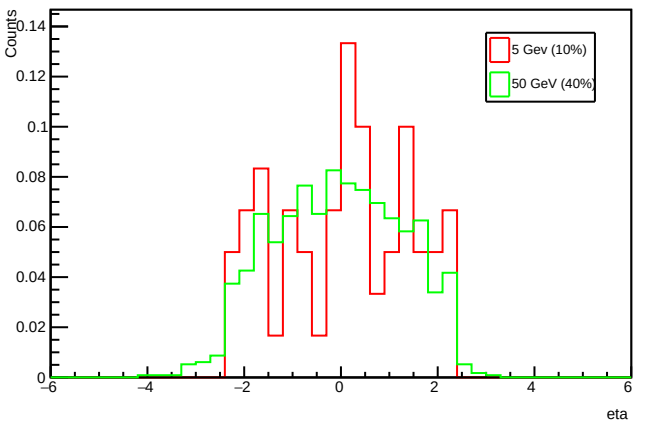
gen subleading Mu eta: MET > 120 GeV



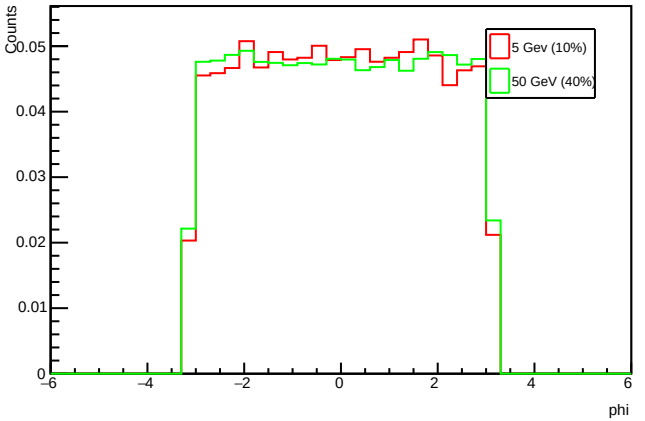
gen subleading Mu eta: j1pt >120, at most 2 jets w/ pt >30 GeV



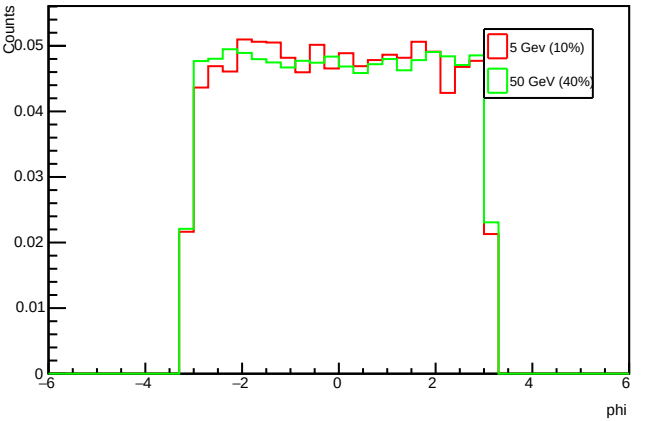
gen subleading Mu eta: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



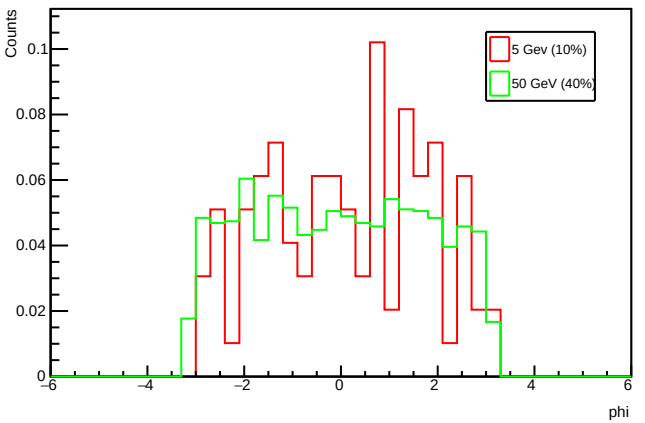
gen subleading Mu phi: no cuts



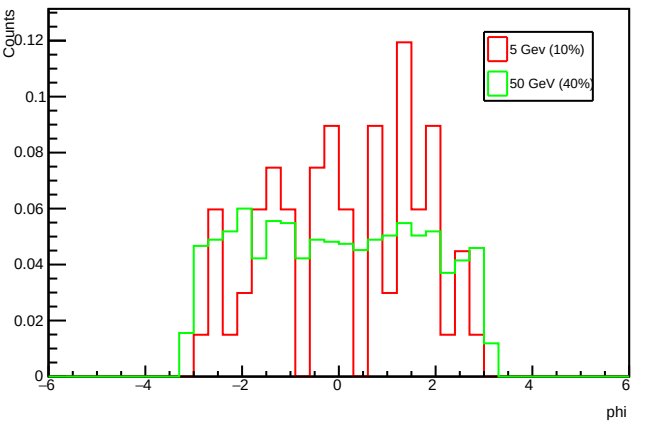
gen subleading Mu phi: n_jet >=1, j1pt > 30 GeV



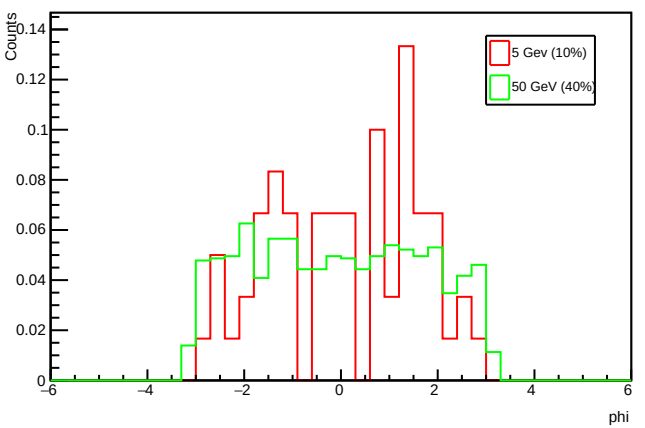
gen subleading Mu phi: MET > 120 GeV



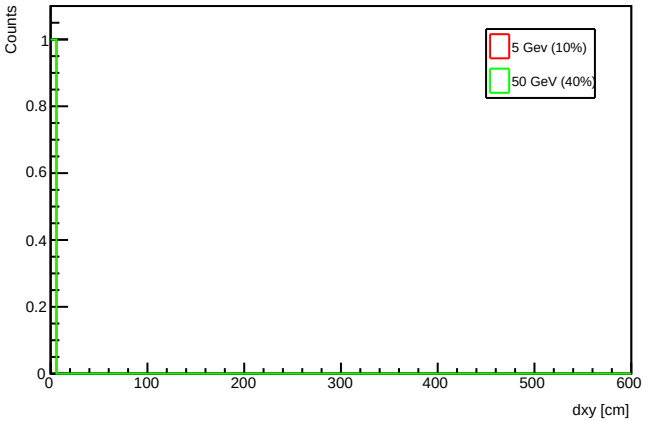
gen subleading Mu phi: j1pt >120, at most 2 jets w/ pt >30 GeV



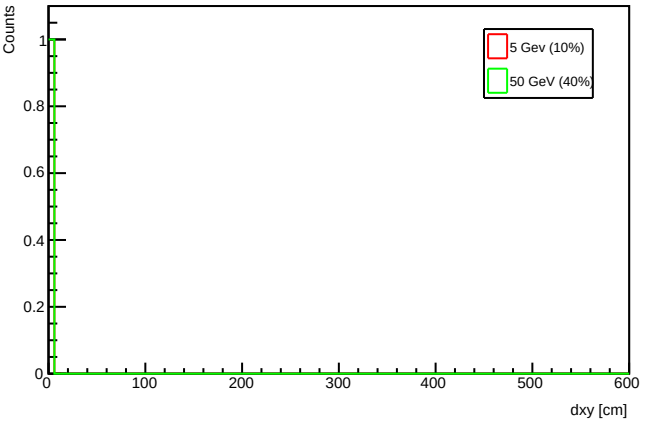
gen subleading Mu phi: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



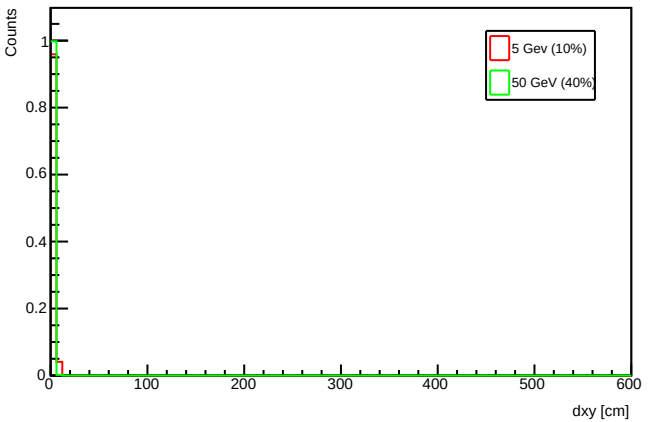
gen subleading Mu vxy: no cuts



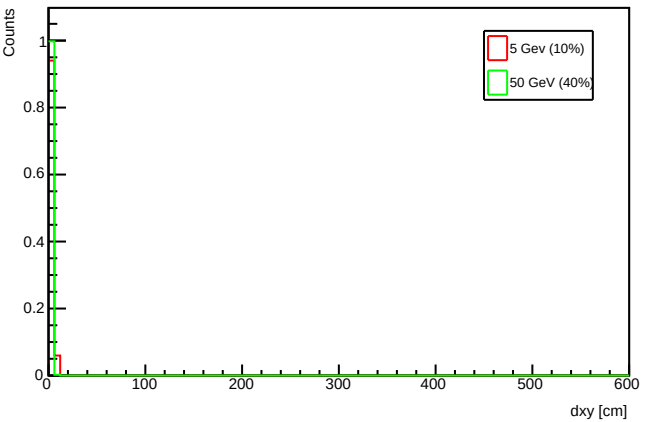
gen subleading Mu vxy: n_jet >=1, j1pt > 30 GeV



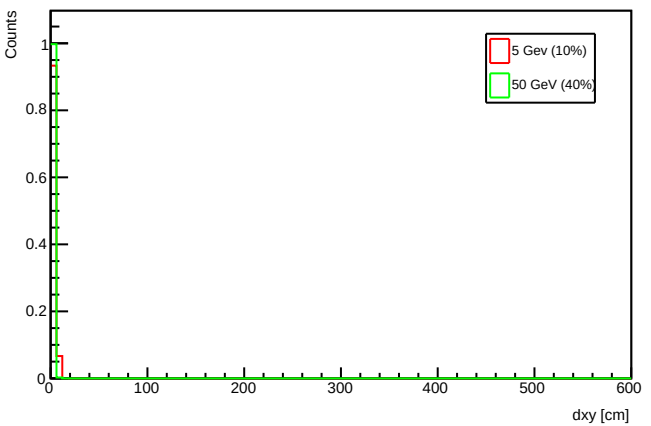
gen subleading Mu vxy: MET > 120 GeV



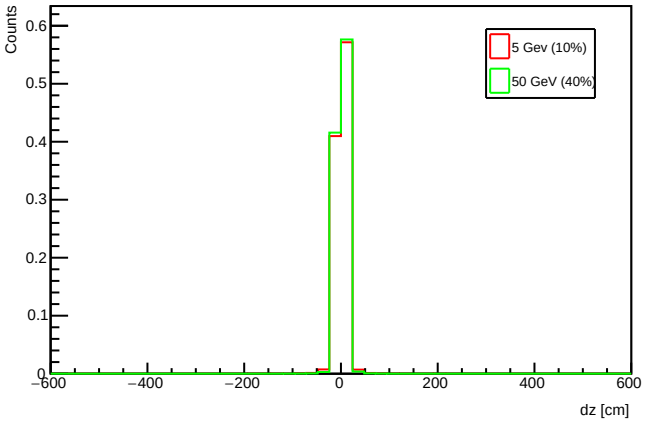
gen subleading Mu vxy: j1pt >120, at most 2 jets w/ pt >30 GeV



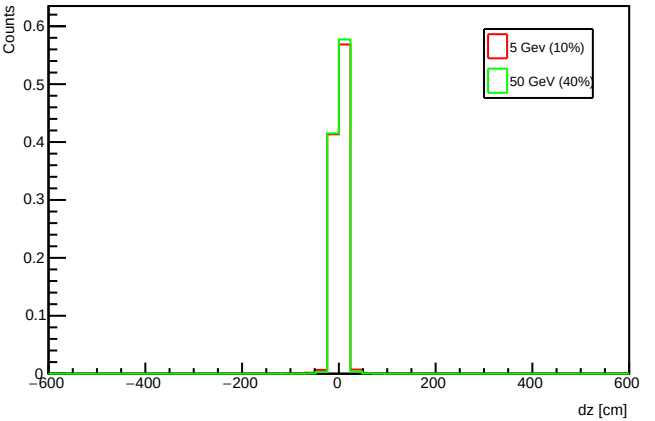
gen subleading Mu vxy: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



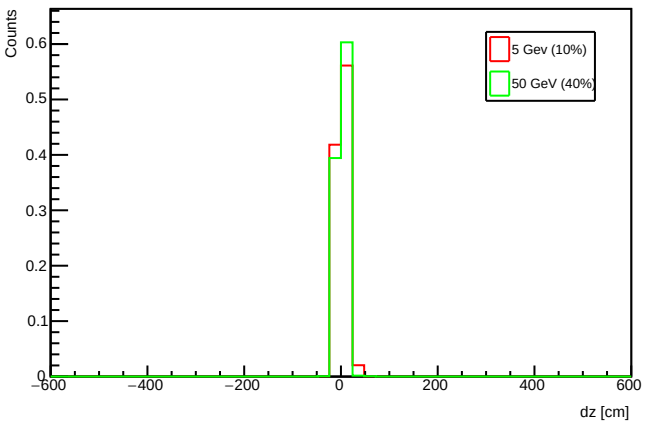
gen subleading Mu vz: no cuts



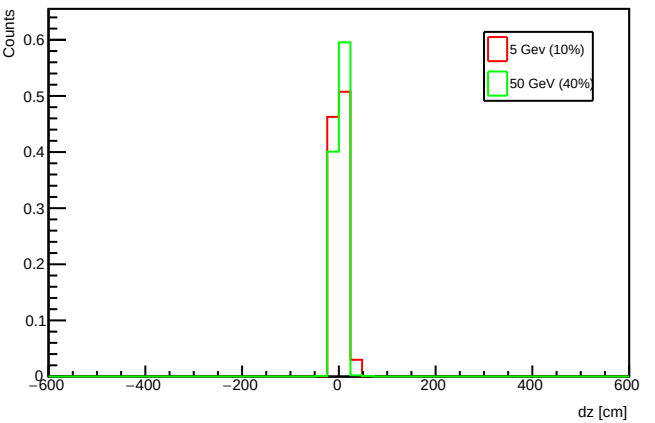
gen subleading Mu vz: n_jet >=1, j1pt > 30 GeV



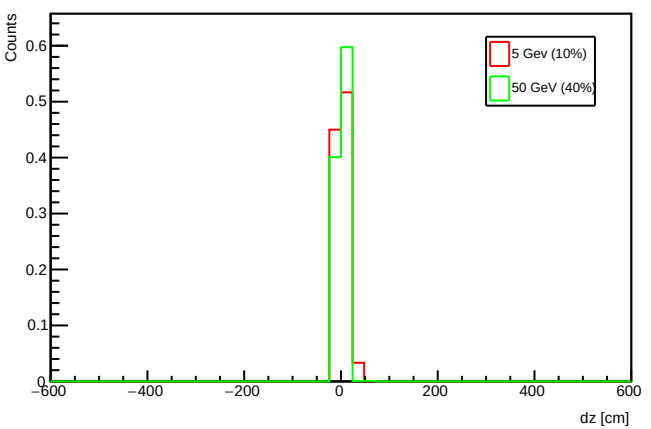
gen subleading Mu vz: MET > 120 GeV



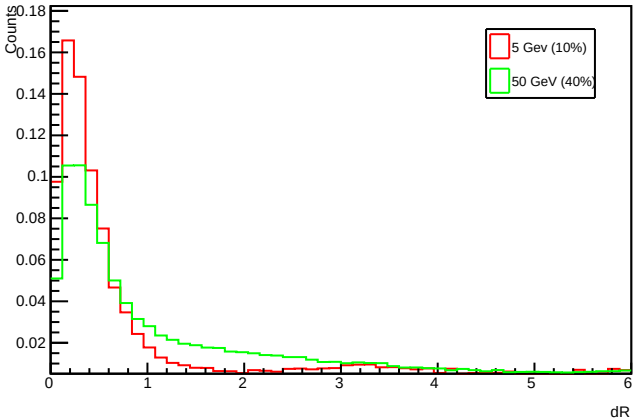
gen subleading Mu vz: j1pt >120, at most 2 jets w/ pt >30 GeV



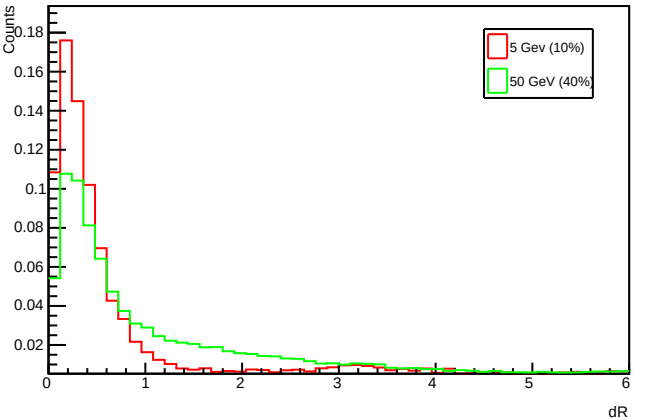
gen subleading Mu vz: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



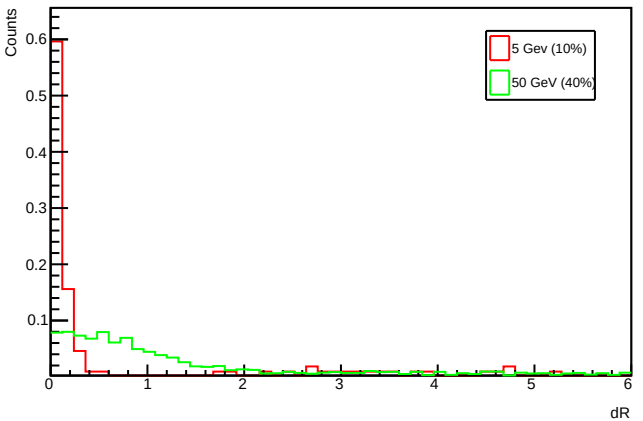
dR: gen leading mu and subleading mu: no cuts



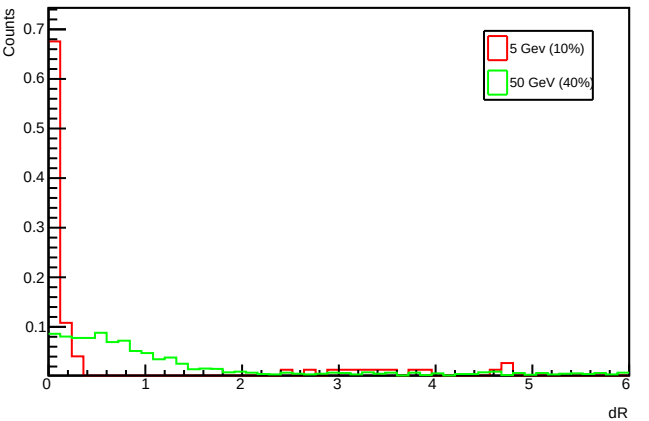
dR: gen leading mu and subleading mu: n_jet >=1, j1pt > 30 GeV



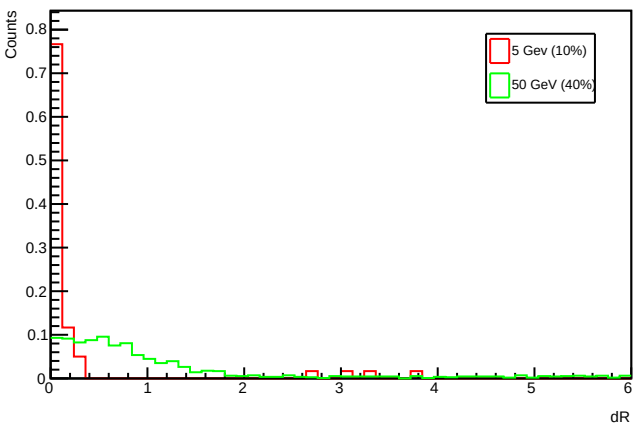
dR: gen leading mu and subleading mu: MET > 120 GeV



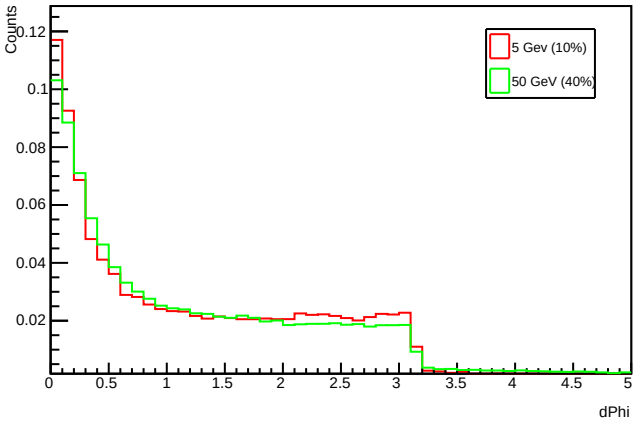
dR: gen leading mu and subleading mu: j1pt >120, at most 2 jets w/ pt >30 GeV



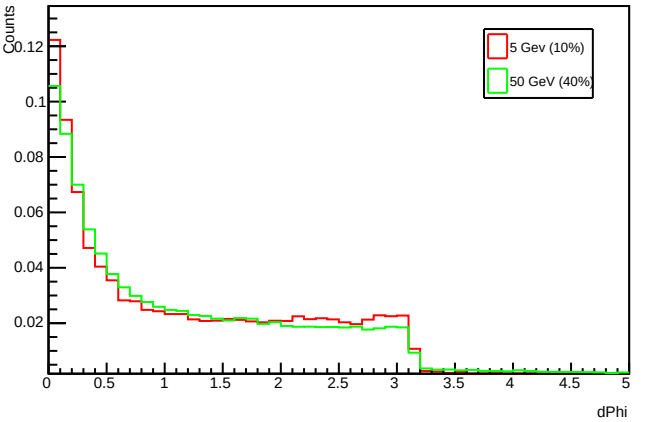
dR: gen leading mu and subleading mu: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



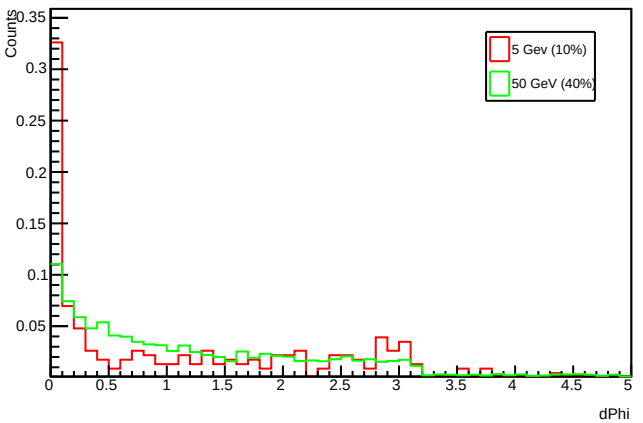
dPhi: gen MET and leading mu: no cuts



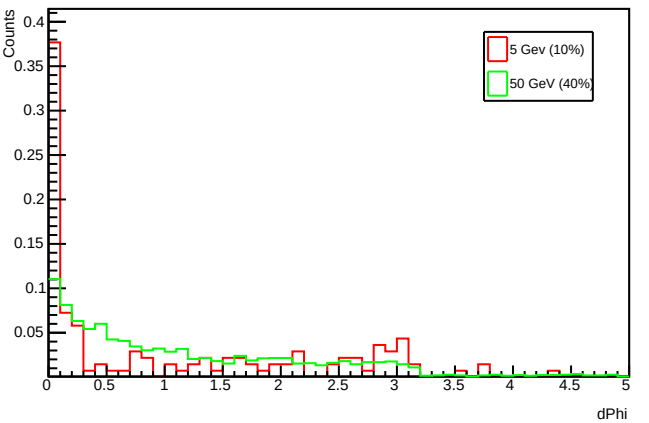
dPhi: gen MET and leading mu: n_jet >=1, j1pt > 30 GeV



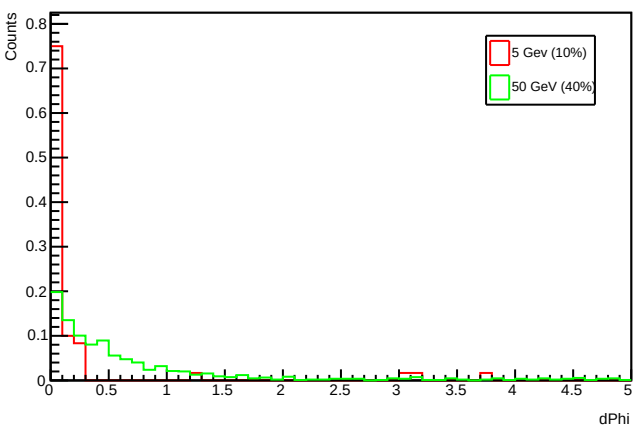
dPhi: gen MET and leading mu: MET > 120 GeV



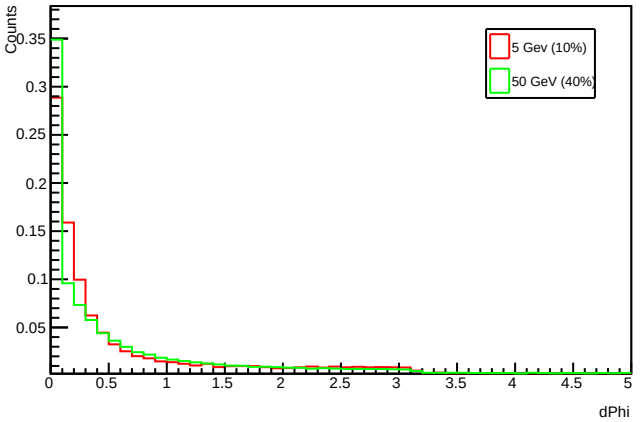
dPhi: gen MET and leading mu: j1pt >120, at most 2 jets w/ pt >30 GeV



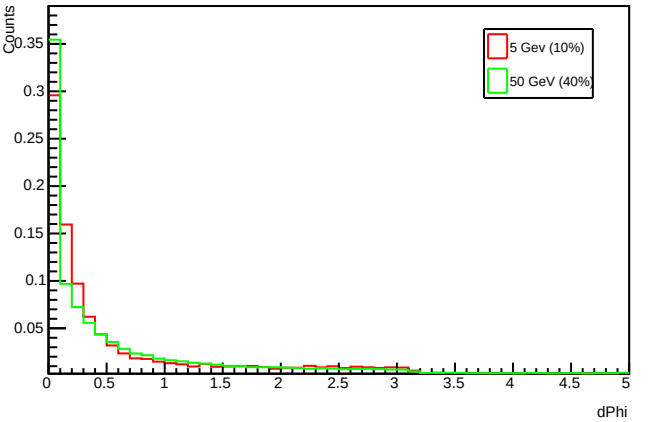
dPhi: gen MET and leading mu: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



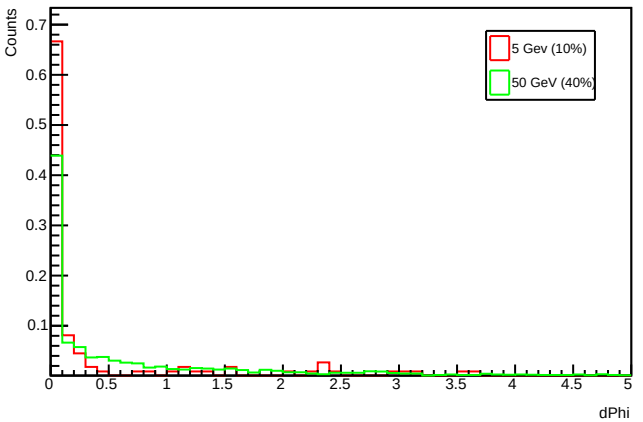
dPhi: gen leading mu and subleading mu: no cuts



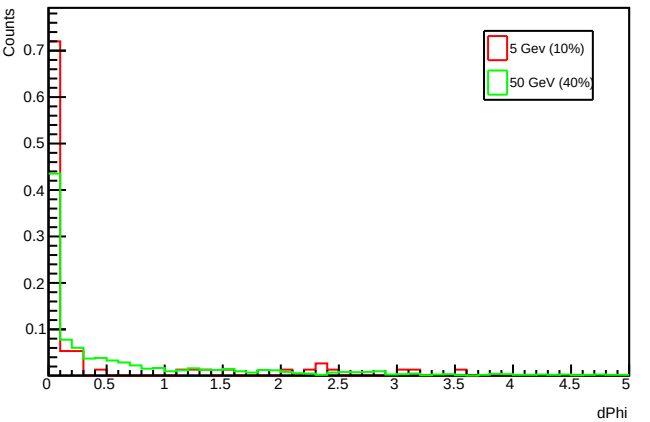
dPhi: gen leading mu and subleading mu: n_jet >=1, j1pt > 30 GeV



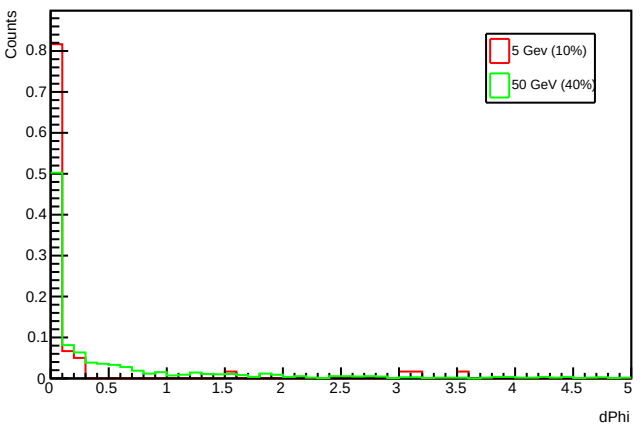
dPhi: gen leading mu and subleading mu: MET > 120 GeV



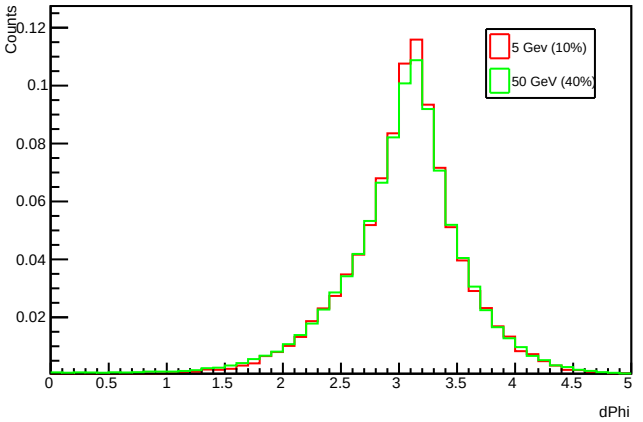
dPhi: gen leading mu and subleading mu: j1pt >120, at most 2 jets w/ pt >30 GeV



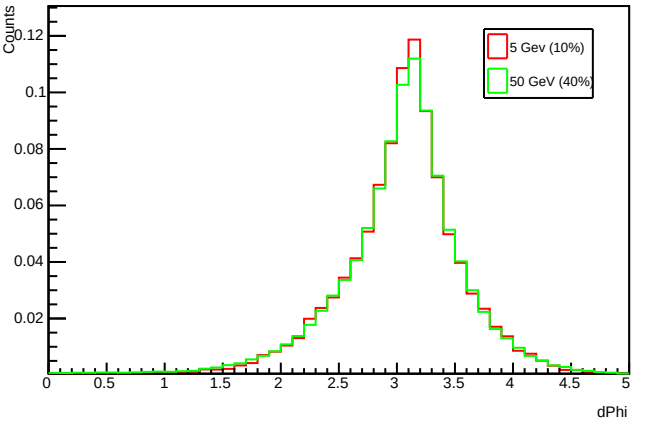
dPhi: gen leading mu and subleading mu: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



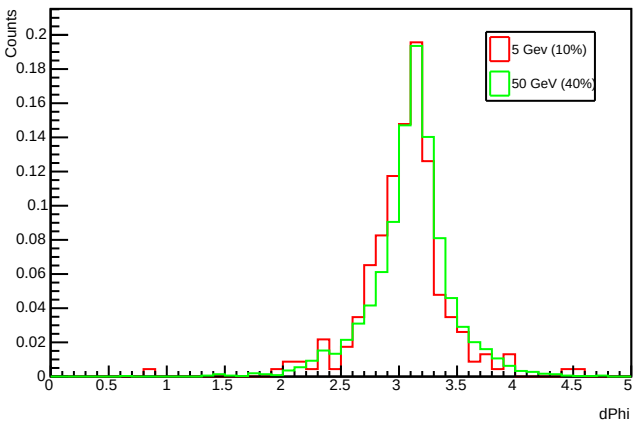
dPhi: gen MET and leading jet: no cuts



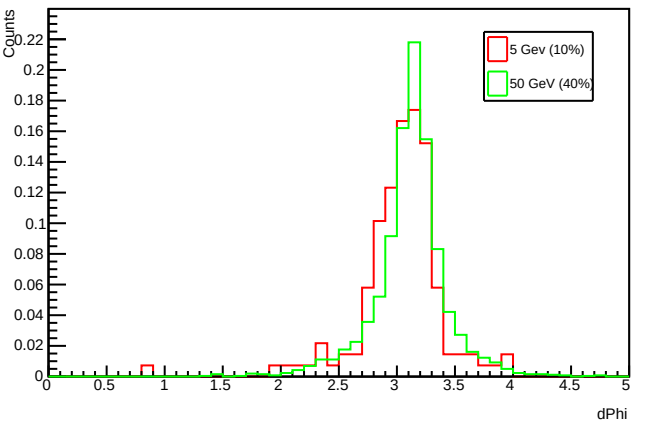
dPhi: gen MET and leading jet: n_jet >=1, j1pt > 30 GeV



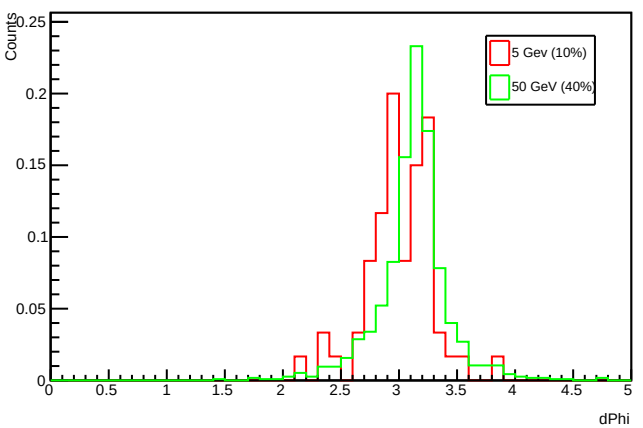
dPhi: gen MET and leading jet: MET > 120 GeV



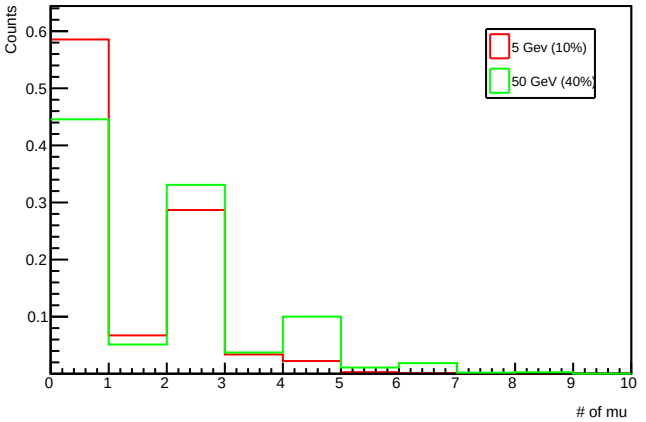
dPhi: gen MET and leading jet: j1pt >120, at most 2 jets w/ pt >30 GeV



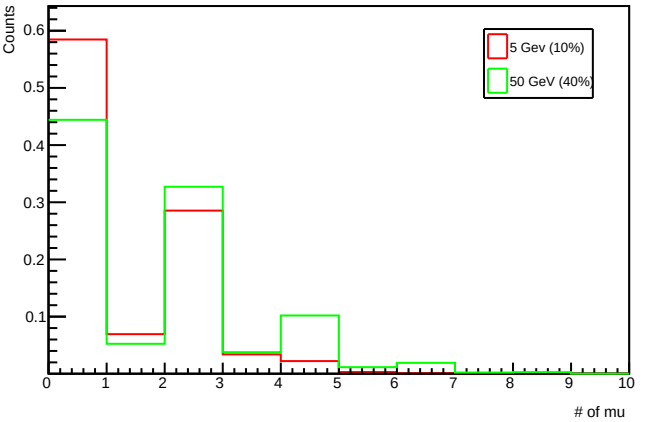
dPhi: gen MET and leading jet: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



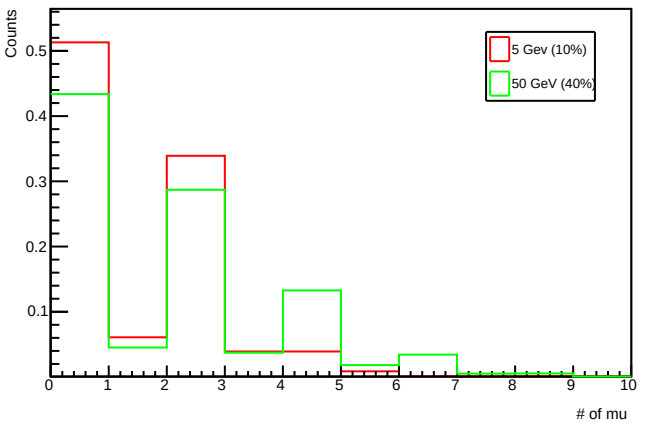
gen number of mu: no cuts



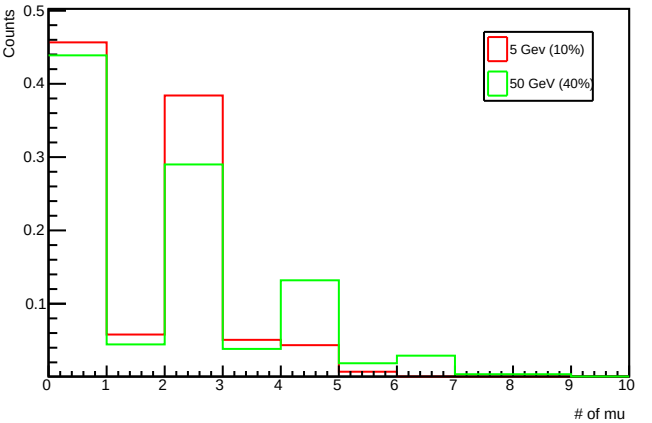
gen number of mu: n_jet >=1, j1pt > 30 GeV



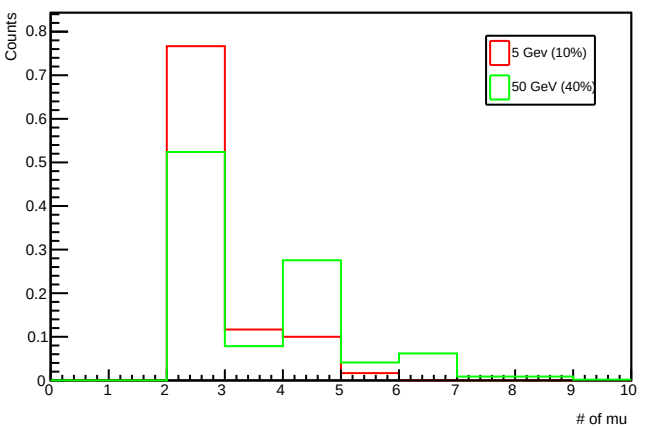
gen number of mu: MET > 120 GeV



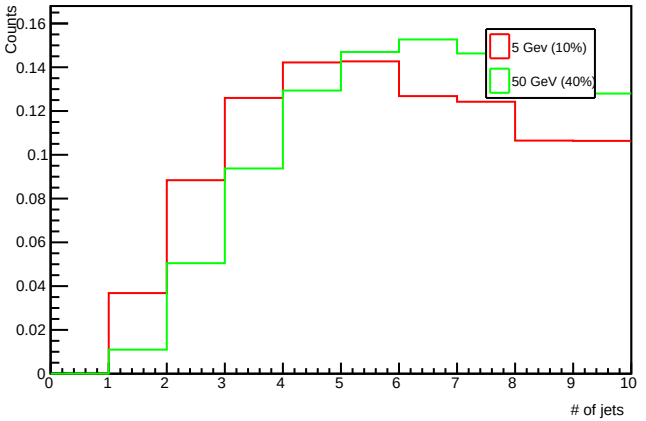
gen number of mu: j1pt >120, at most 2 jets w/ pt >30 GeV



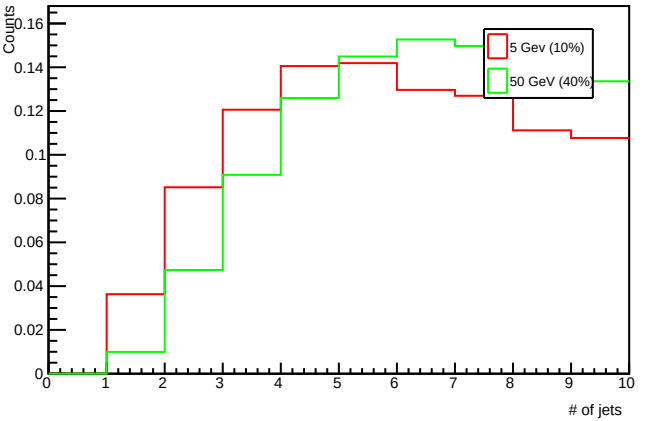
gen number of mu: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



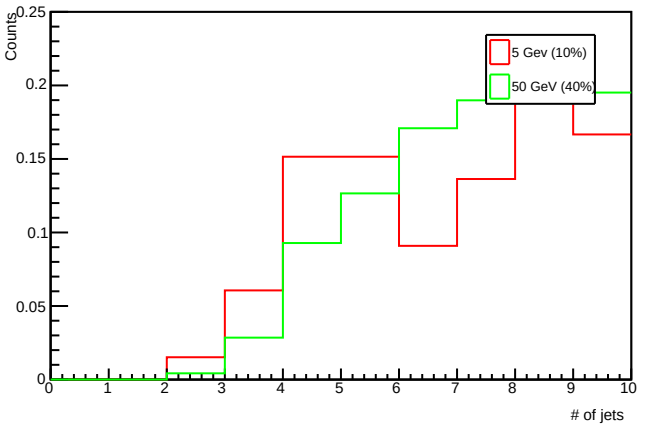
gen number of jets: no cuts



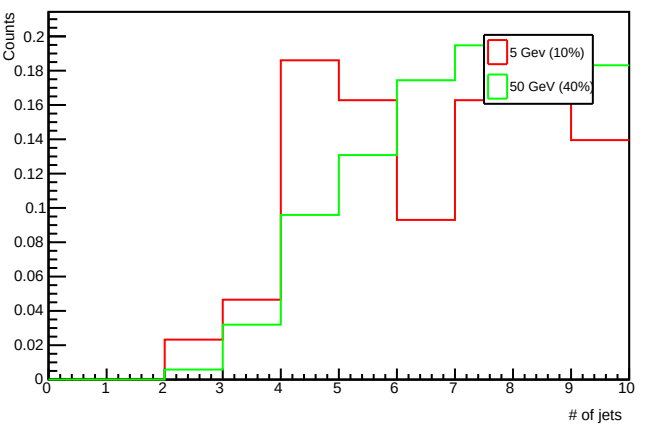
gen number of jets: n_jet >=1, j1pt > 30 GeV



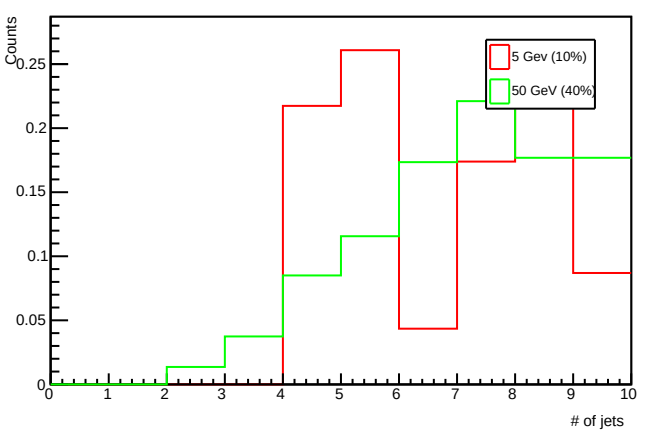
gen number of jets: MET > 120 GeV



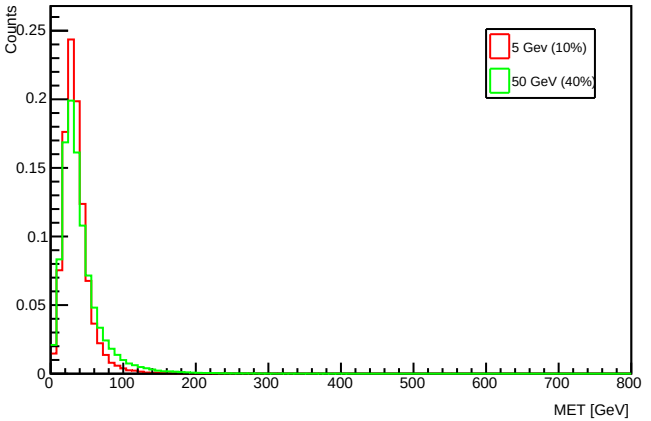
gen number of jets: j1pt >120, at most 2 jets w/ pt >30 GeV



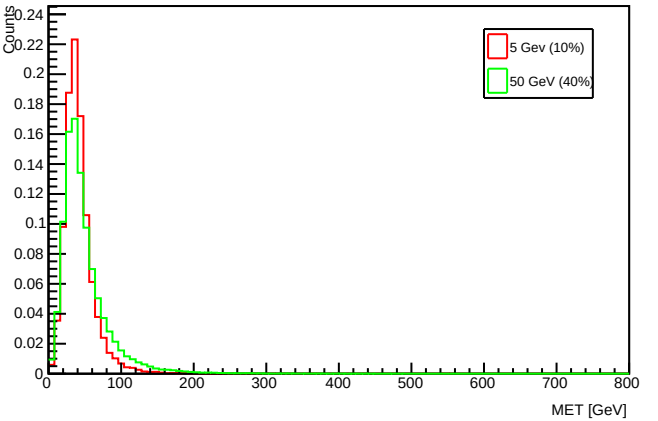
gen number of jets: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



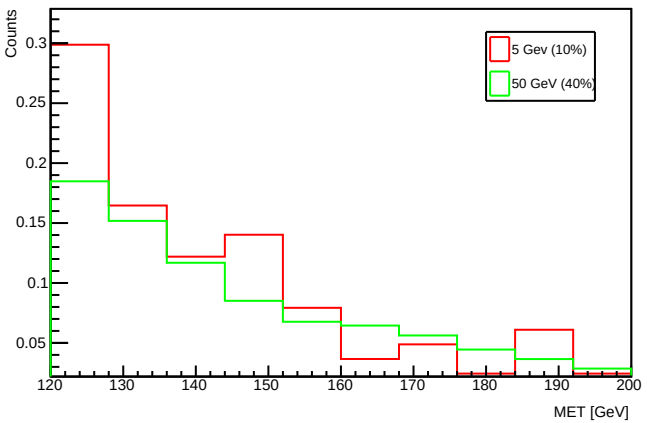
reco leading MET: no cuts



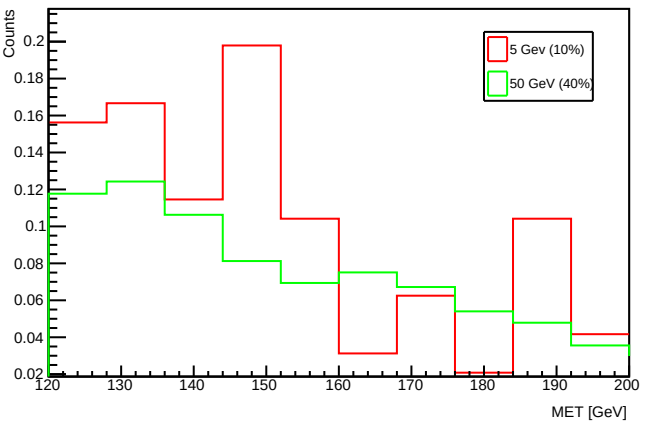
reco leading MET: n_jet >=1, j1pt > 30 GeV



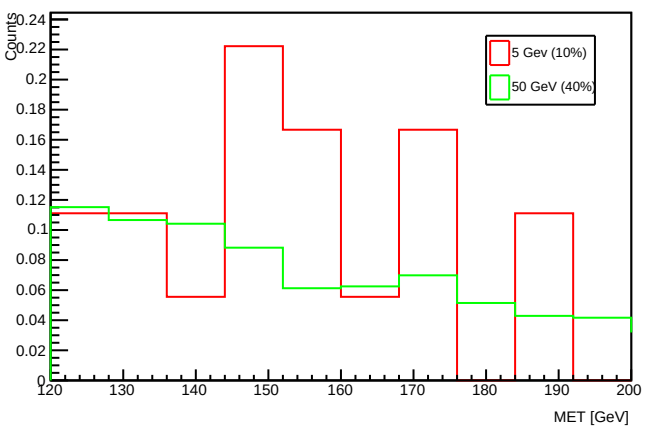
reco leading MET: MET > 120 GeV



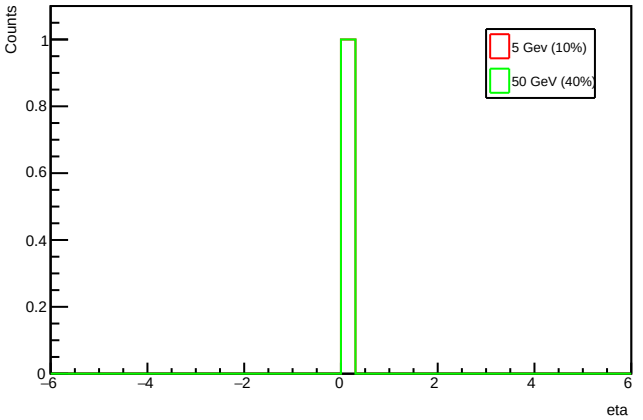
reco leading MET: j1pt >120, at most 2 jets w/ pt >30 GeV



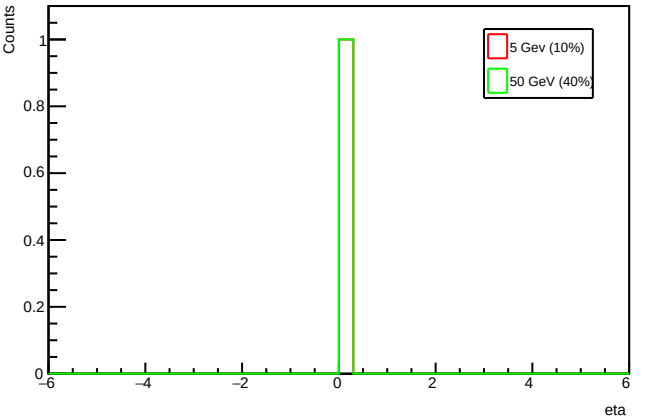
reco leading MET: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



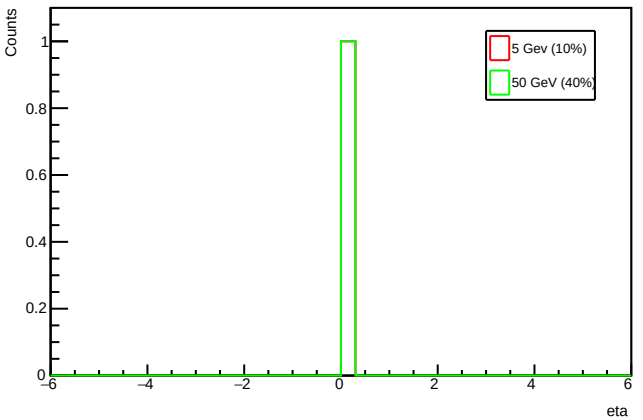
reco leading Met eta: no cuts



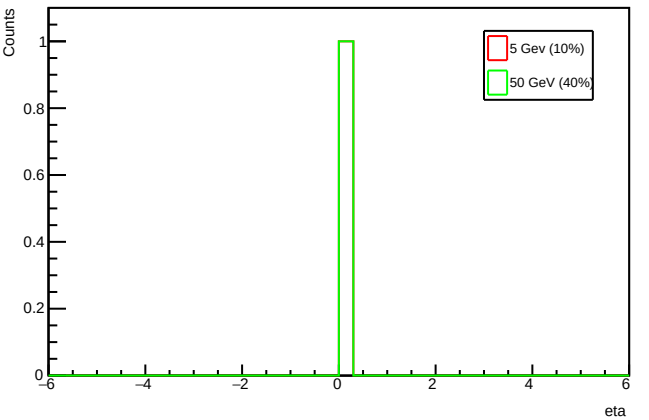
reco leading Met eta: n_jet >=1, j1pt > 30 GeV



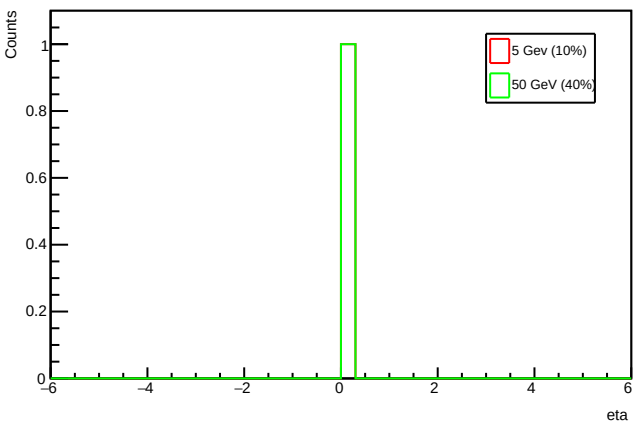
reco leading Met eta: MET > 120 GeV



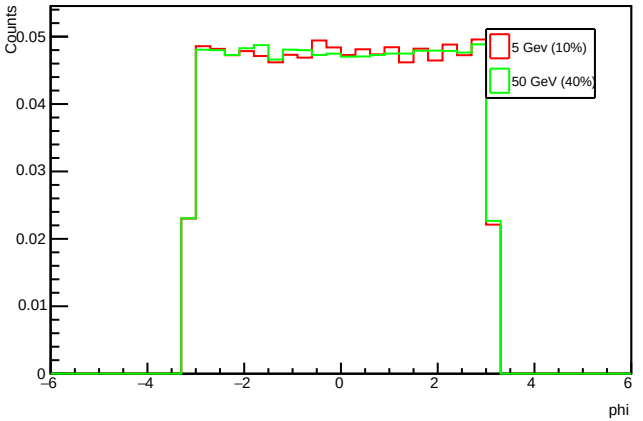
reco leading Met eta: j1pt >120, at most 2 jets w/ pt >30 GeV



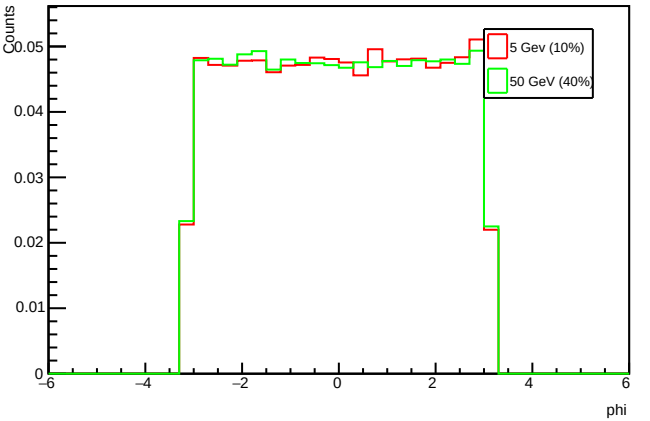
reco leading Met eta: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



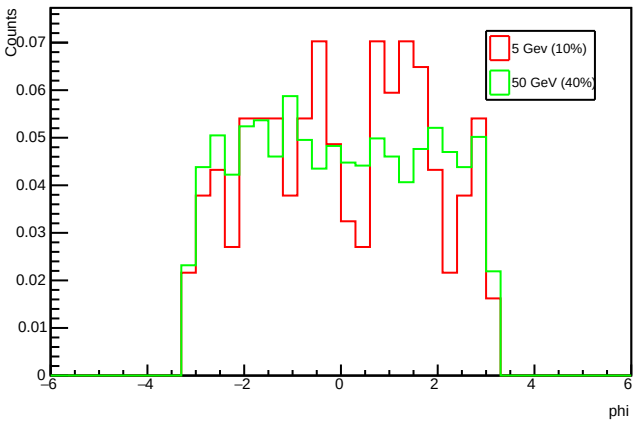
reco leading Met phi: no cuts



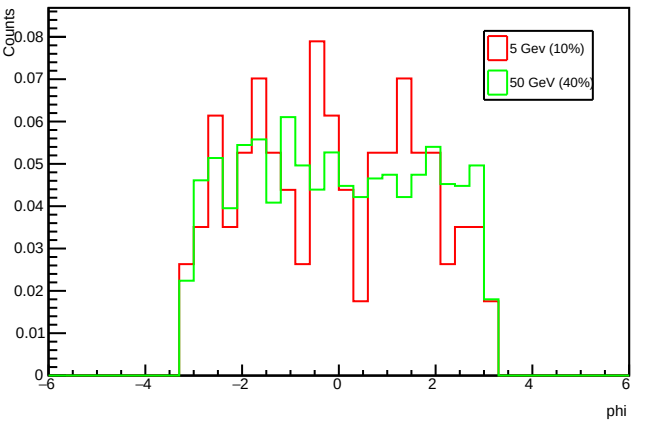
reco leading Met phi: n_jet >=1, j1pt > 30 GeV



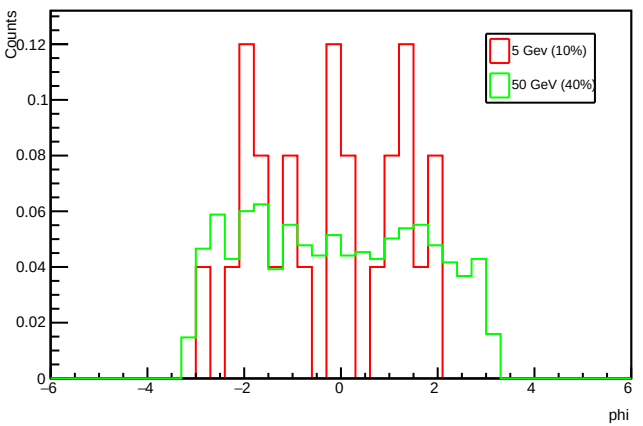
reco leading Met phi: MET > 120 GeV



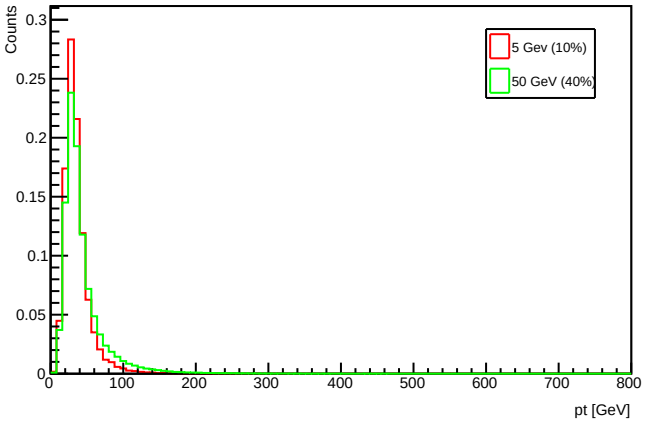
reco leading Met phi: j1pt >120, at most 2 jets w/ pt >30 GeV



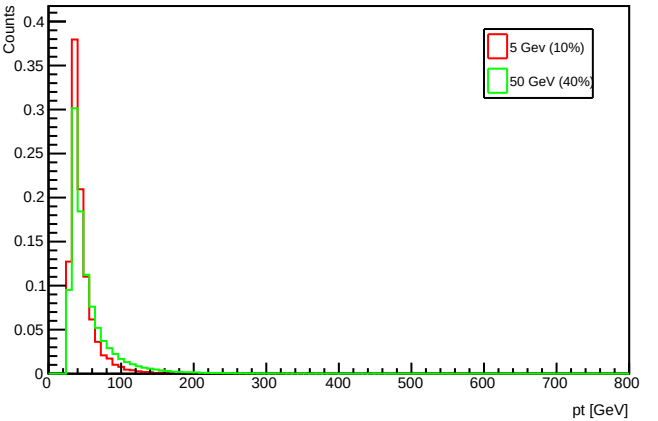
reco leading Met phi: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



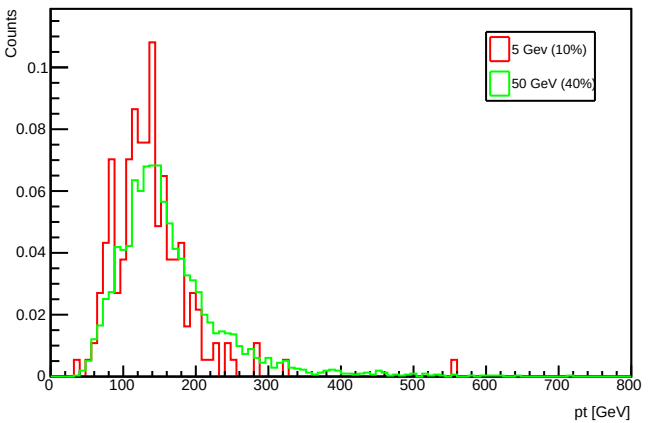
reco leading Jet pt: no cuts



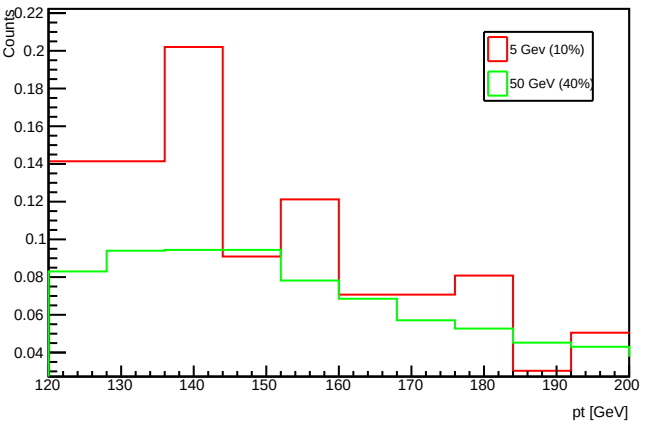
reco leading Jet pt: n_jet >=1, j1pt > 30 GeV



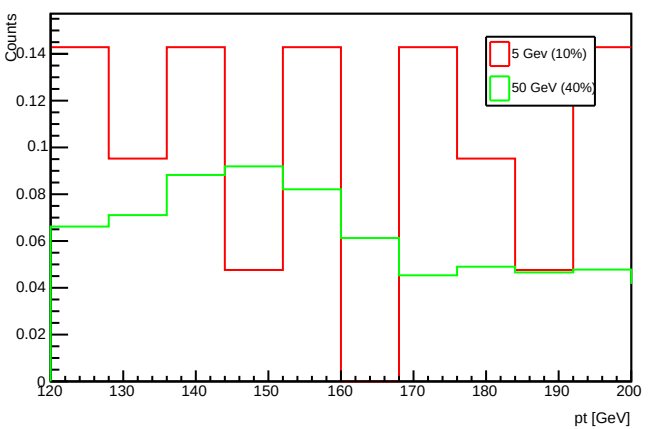
reco leading Jet pt: MET > 120 GeV



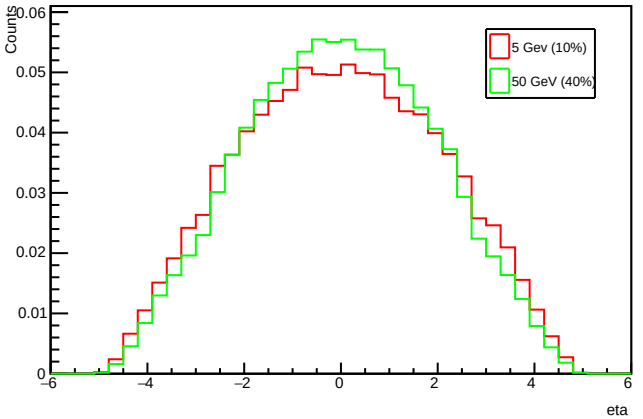
reco leading Jet pt: j1pt >120, at most 2 jets w/ pt >30 GeV



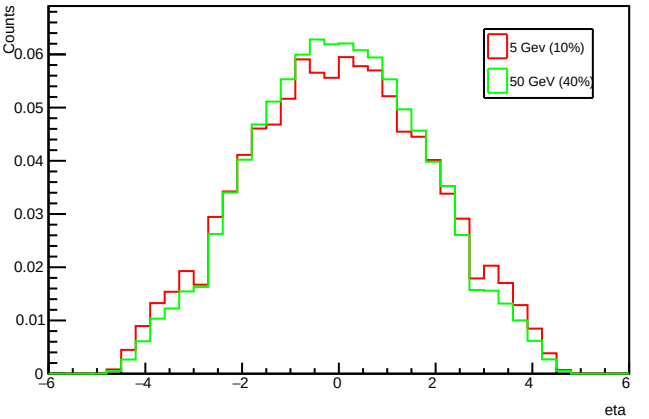
reco leading Jet pt: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



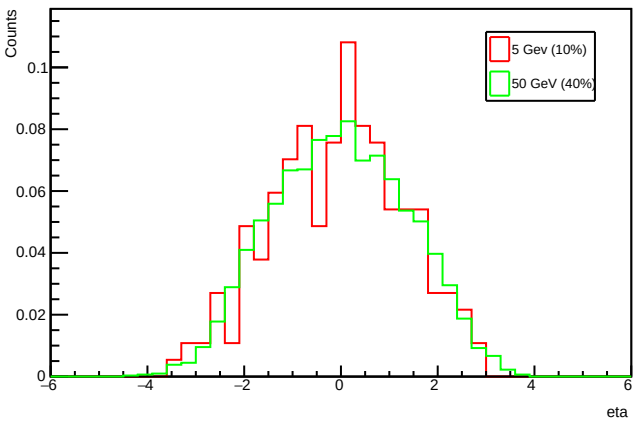
reco leading Jet eta: no cuts



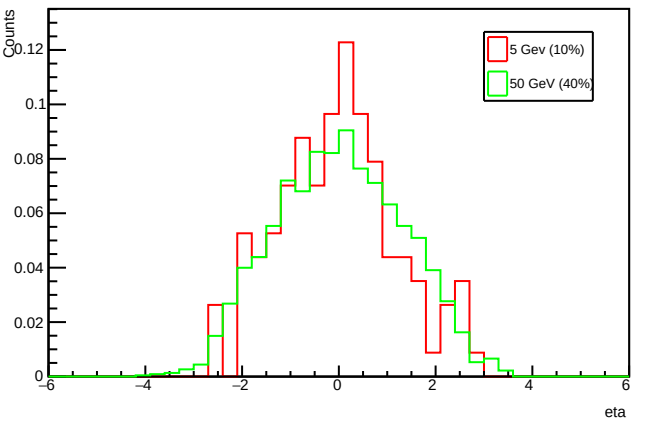
reco leading Jet eta: n_jet >=1, j1pt > 30 GeV



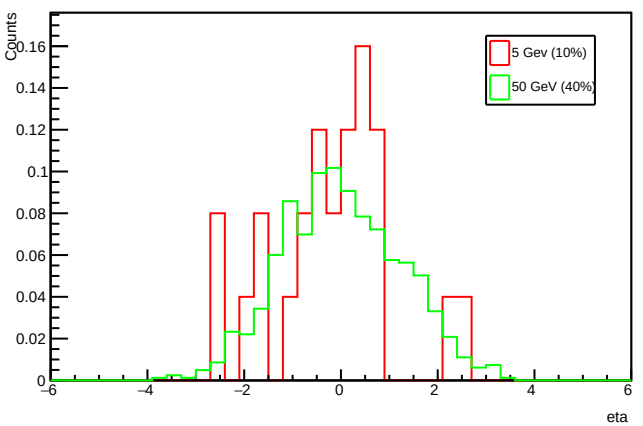
reco leading Jet eta: MET > 120 GeV



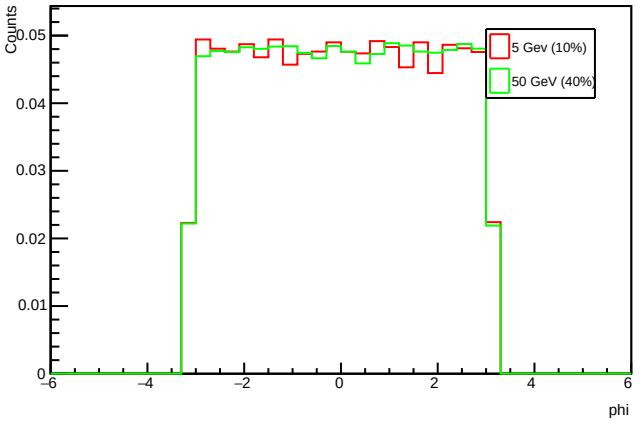
reco leading Jet eta: j1pt >120, at most 2 jets w/ pt >30 GeV



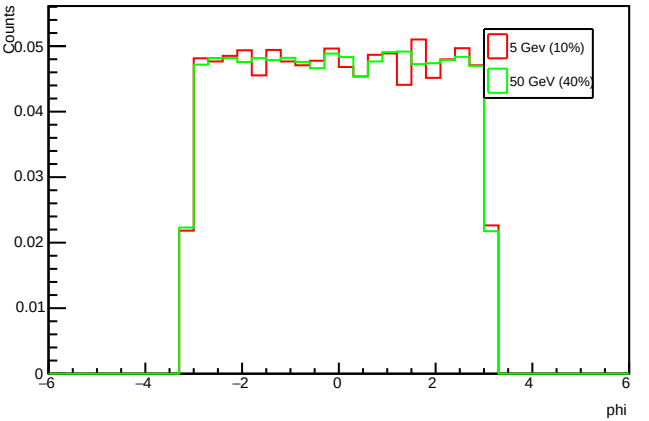
reco leading Jet eta: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



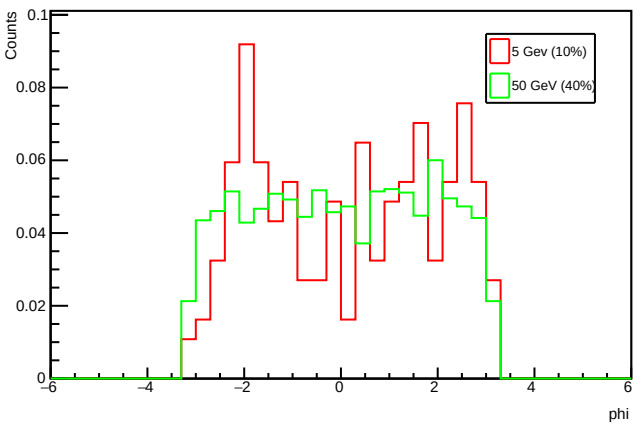
reco leading Jet phi: no cuts



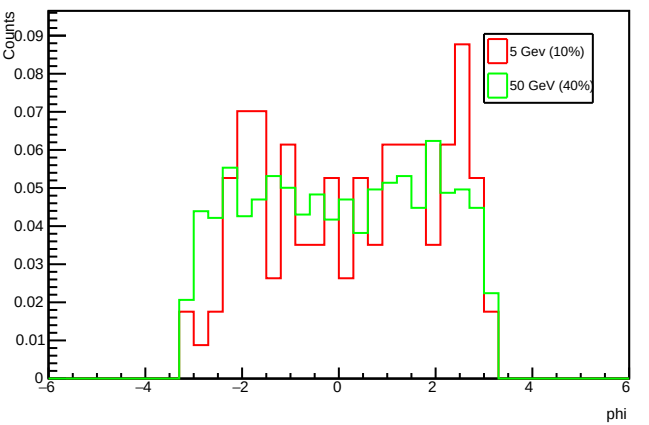
reco leading Jet phi: n_jet >=1, j1pt > 30 GeV



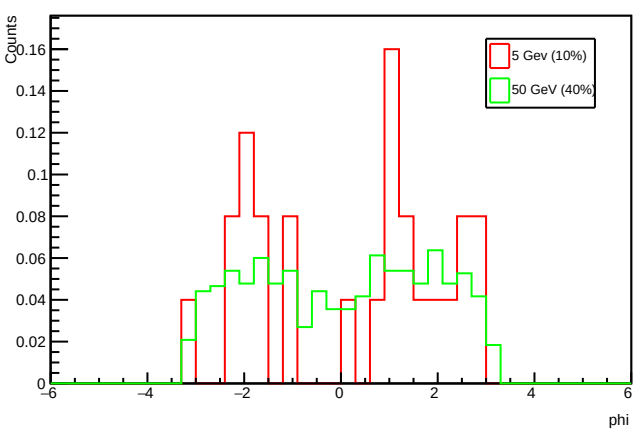
reco leading Jet phi: MET > 120 GeV



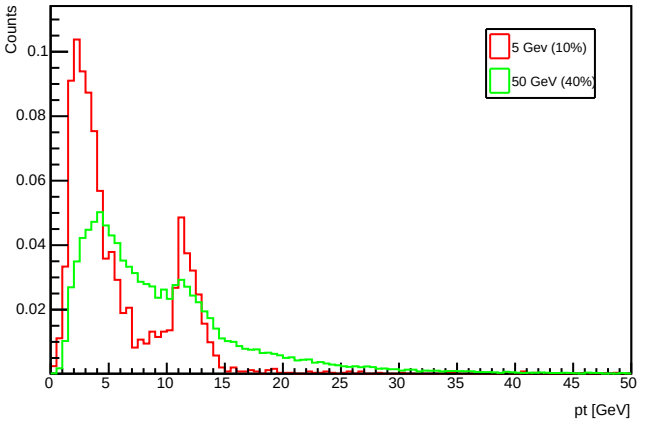
reco leading Jet phi: j1pt >120, at most 2 jets w/ pt >30 GeV



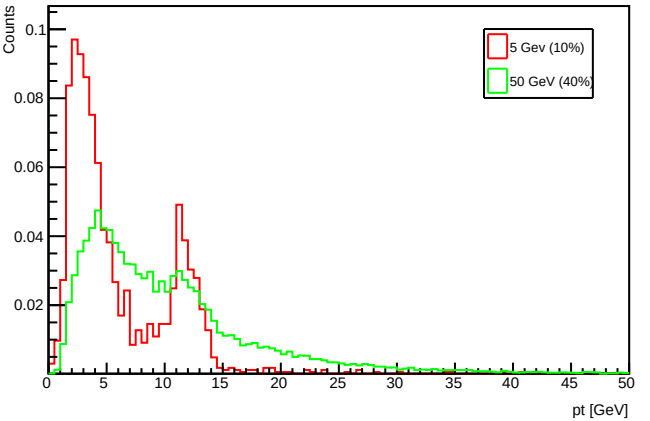
reco leading Jet phi: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



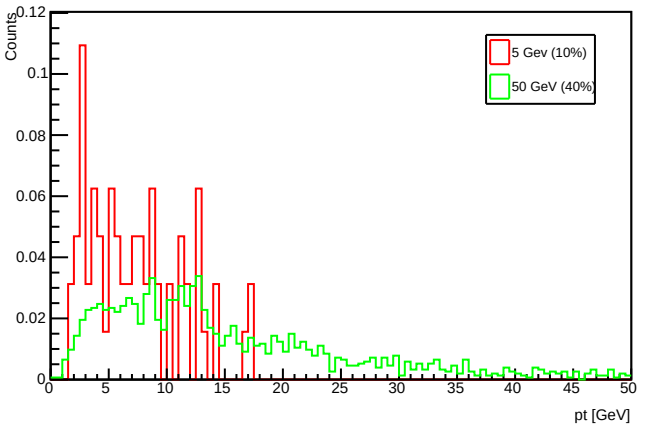
reco leading Mu pt: no cuts



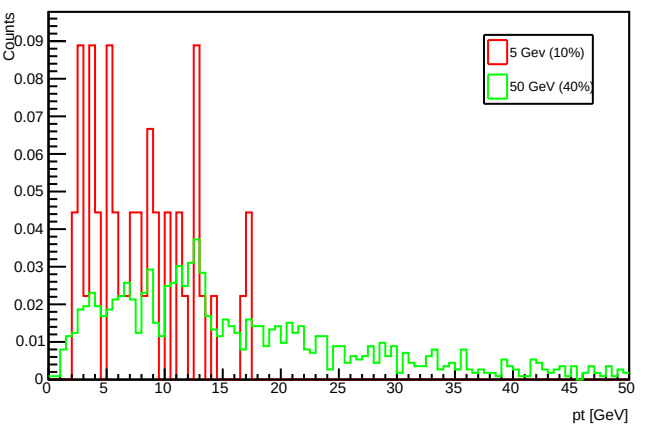
reco leading Mu pt: n_jet >=1, j1pt > 30 GeV



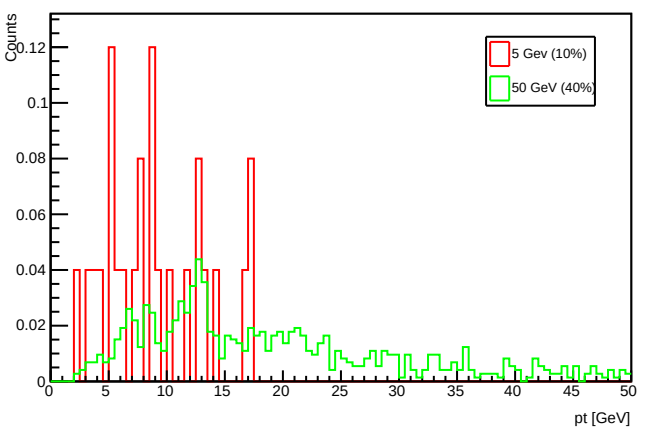
reco leading Mu pt: MET > 120 GeV



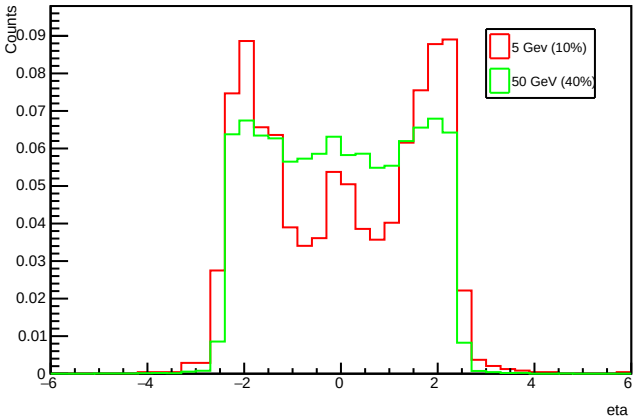
reco leading Mu pt: j1pt >120, at most 2 jets w/ pt >30 GeV



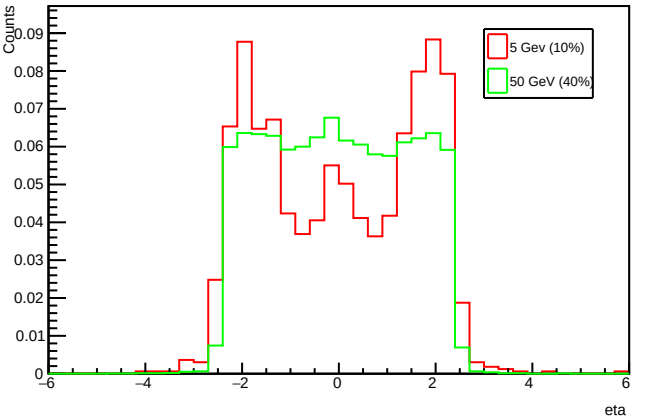
reco leading Mu pt: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



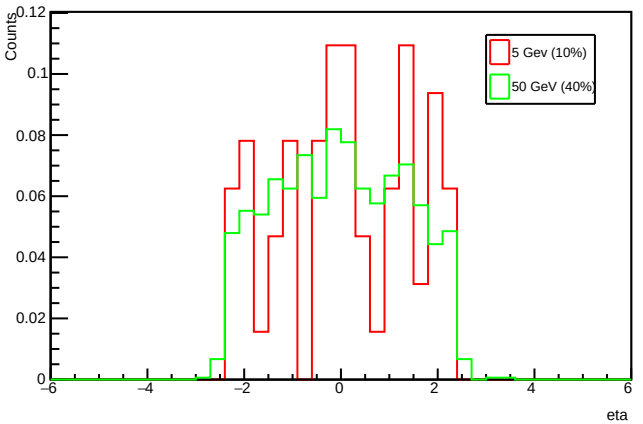
reco leading Mu eta: no cuts



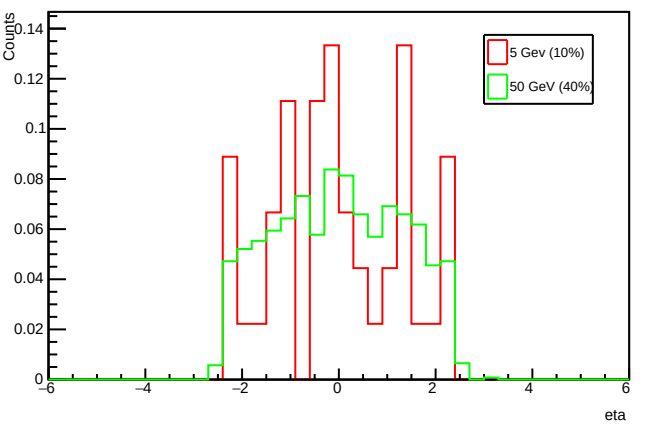
reco leading Mu eta: n_jet >=1, j1pt > 30 GeV



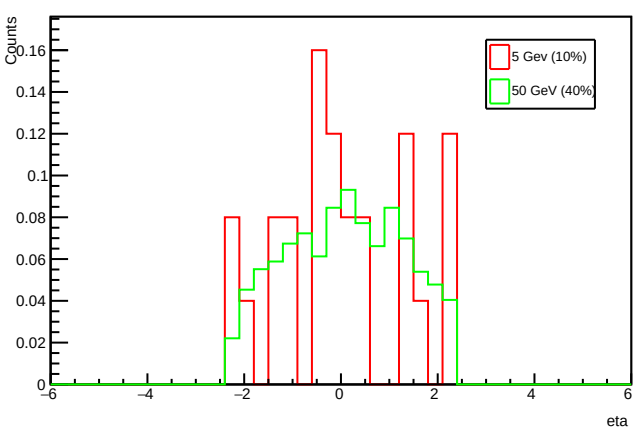
reco leading Mu eta: MET > 120 GeV



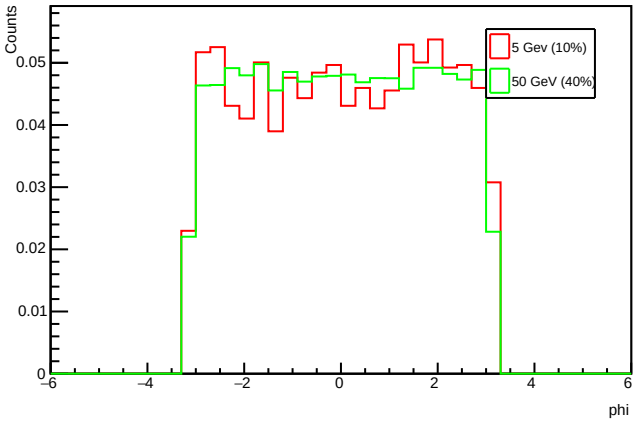
reco leading Mu eta: j1pt >120, at most 2 jets w/ pt >30 GeV



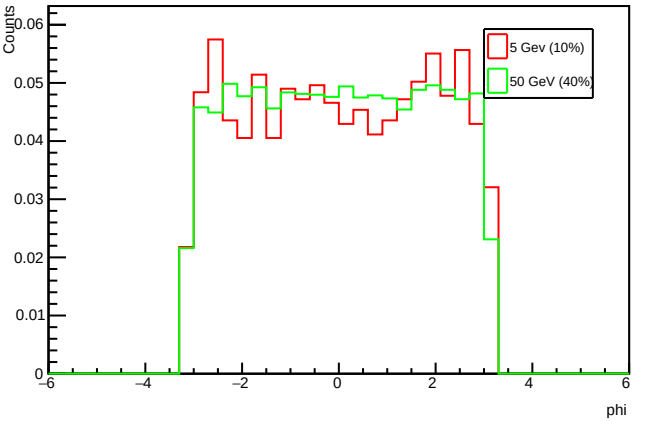
reco leading Mu eta: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



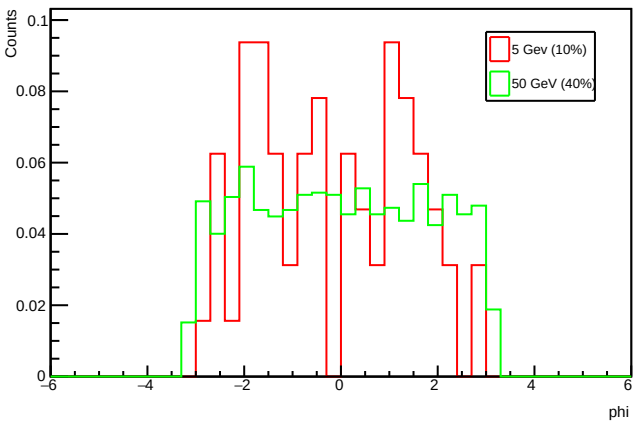
reco leading Mu phi: no cuts



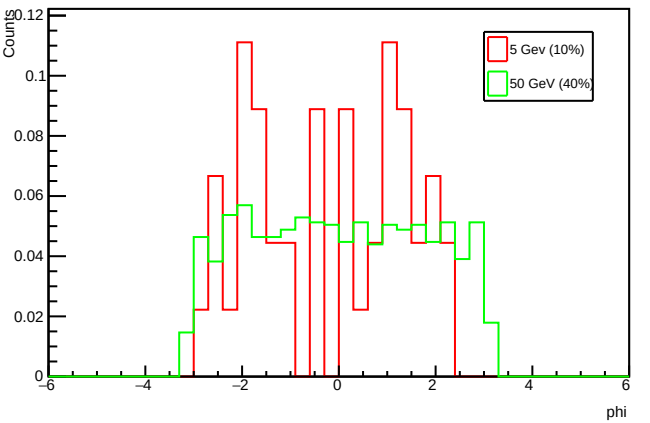
reco leading Mu phi: n_jet >=1, j1pt > 30 GeV



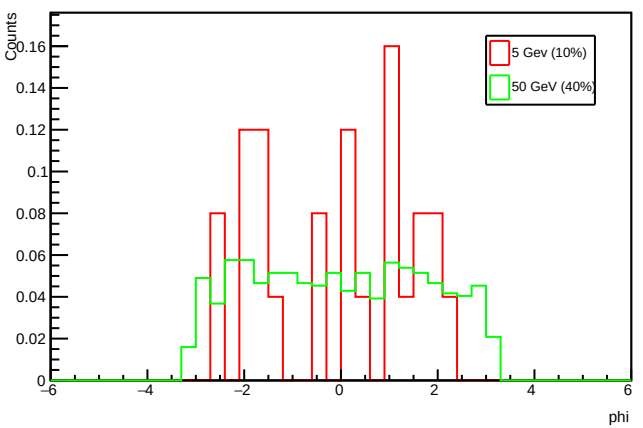
reco leading Mu phi: MET > 120 GeV



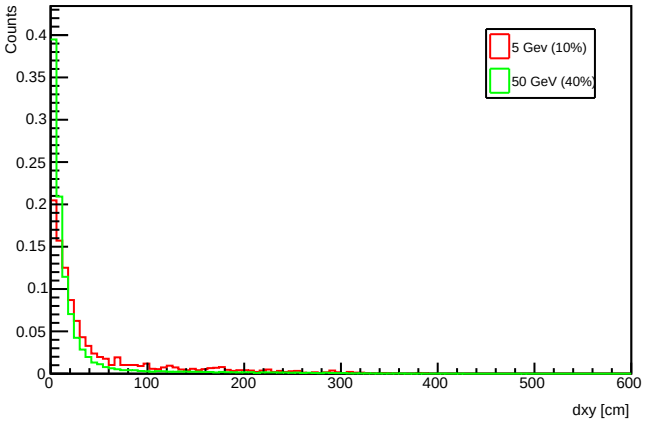
reco leading Mu phi: j1pt >120, at most 2 jets w/ pt >30 GeV



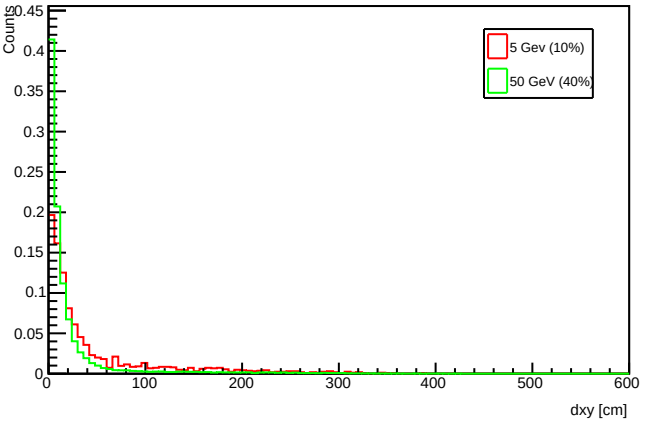
reco leading Mu phi: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



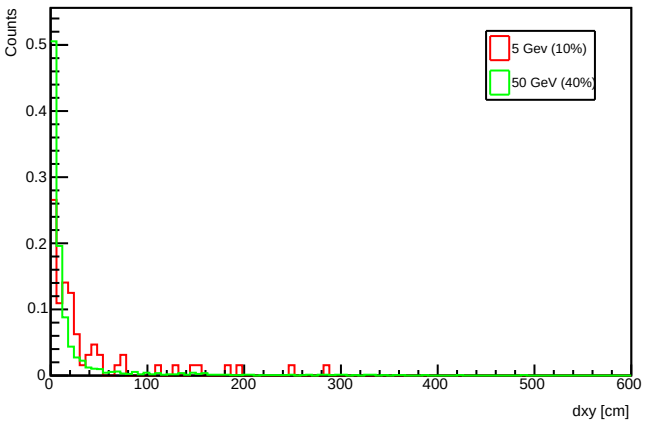
reco leading Mu vxy: no cuts



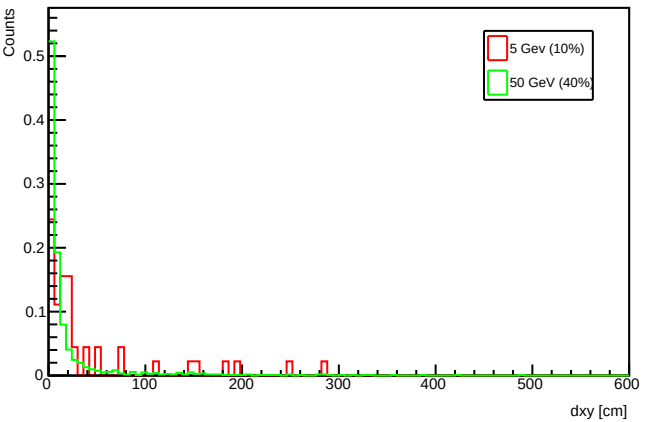
reco leading Mu vxy: n_jet >=1, j1pt > 30 GeV



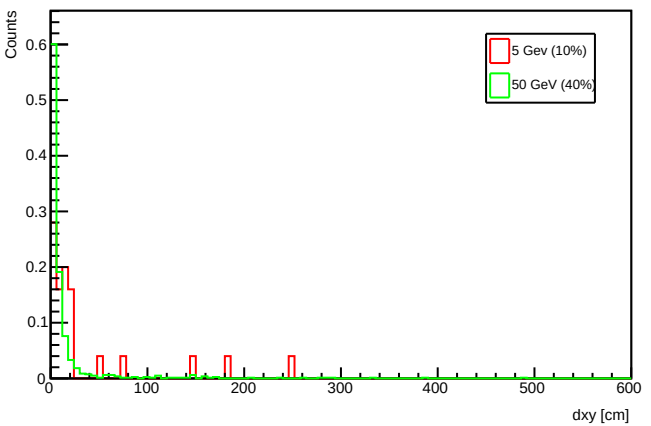
reco leading Mu vxy: MET > 120 GeV



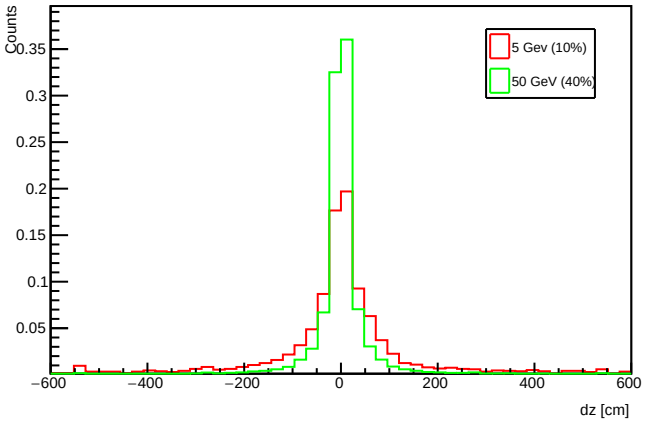
reco leading Mu vxy: j1pt >120, at most 2 jets w/ pt >30 GeV



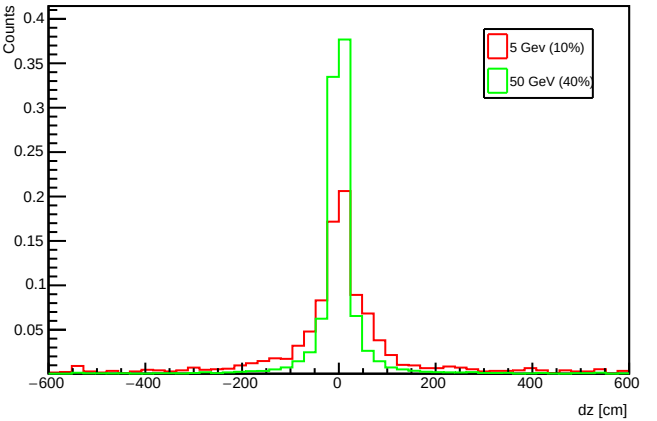
reco leading Mu vxy: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



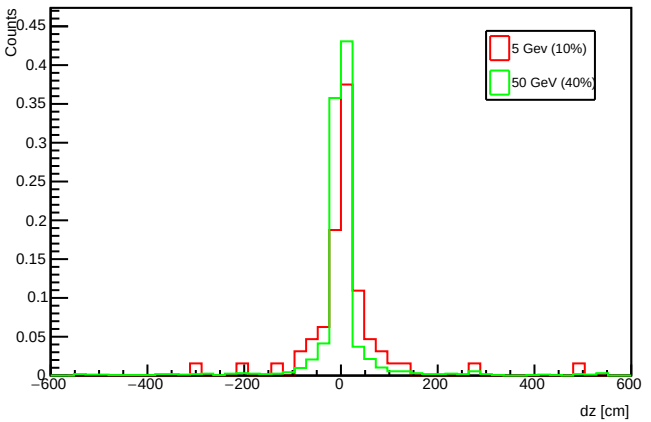
reco leading Mu vz: no cuts



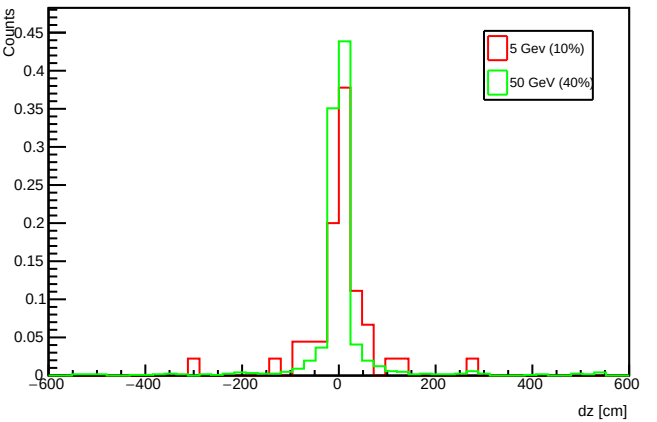
reco leading Mu vz: n_jet >=1, j1pt > 30 GeV



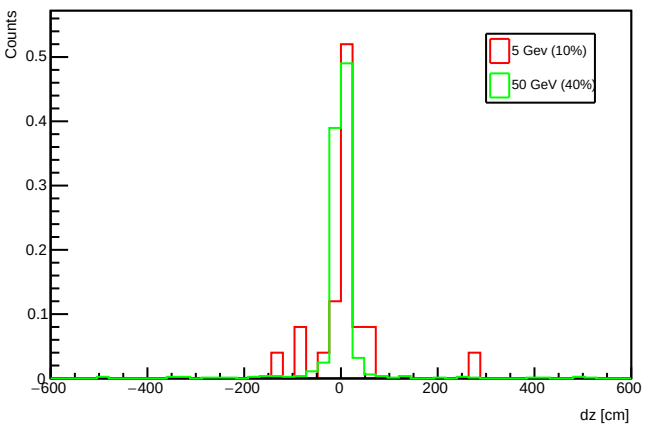
reco leading Mu vz: MET > 120 GeV



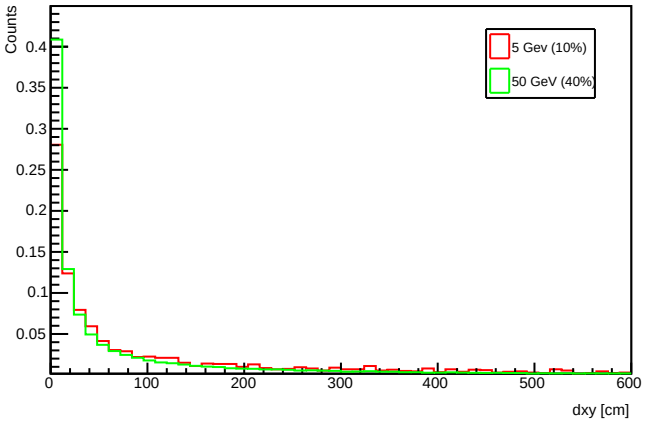
reco leading Mu vz: j1pt >120, at most 2 jets w/ pt >30 GeV



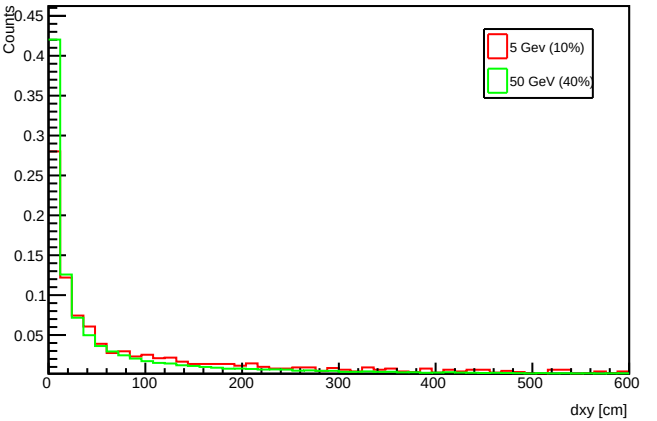
reco leading Mu vz: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



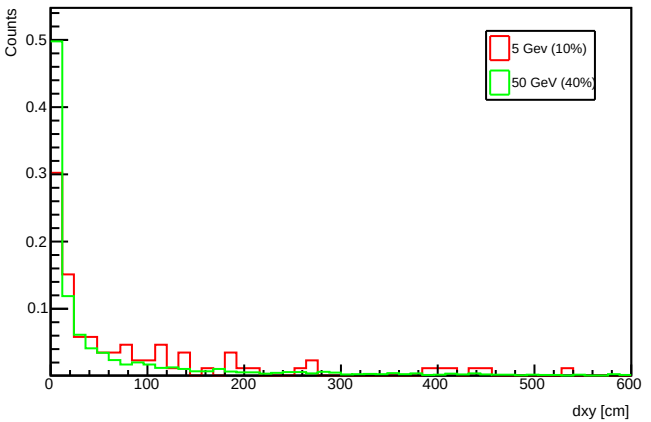
reco all Mu vxy: no cuts



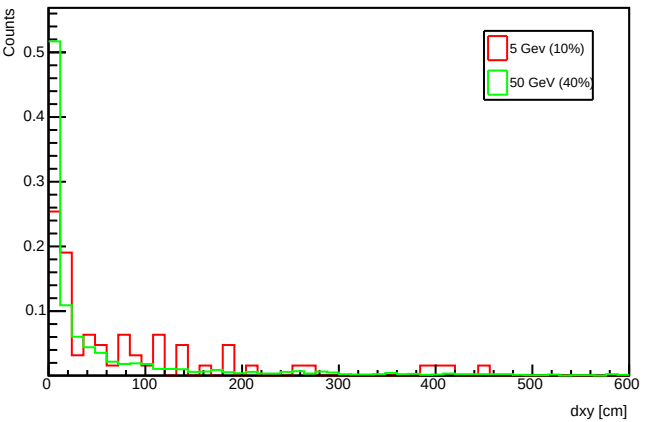
reco all Mu vxy: n_jet >=1, j1pt > 30 GeV



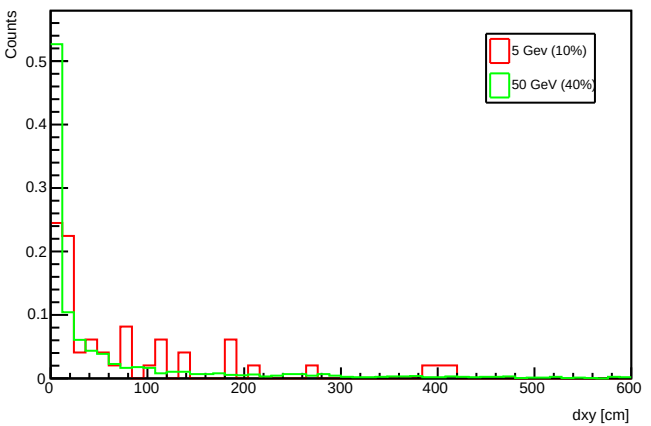
reco all Mu vxy: MET > 120 GeV



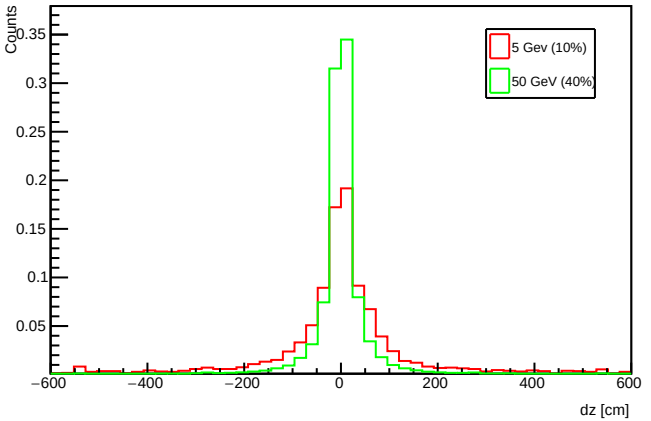
reco all Mu vxy: j1pt >120, at most 2 jets w/ pt >30 GeV



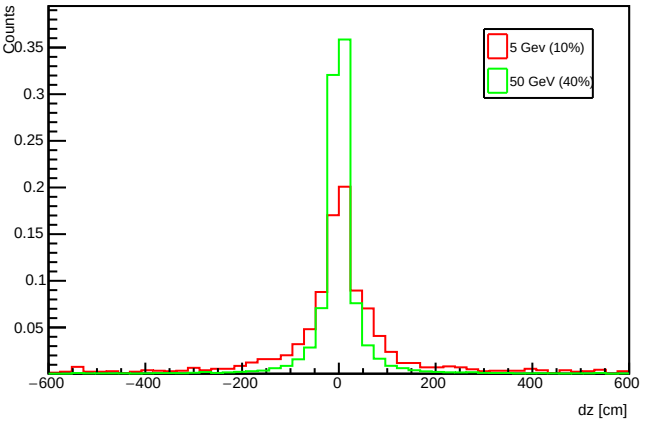
reco all Mu vxy: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



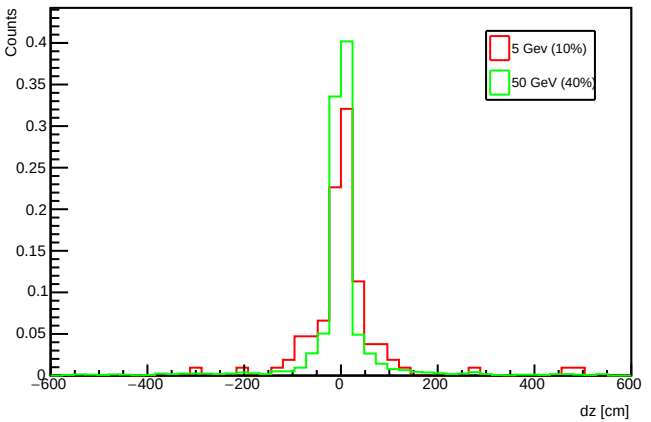
reco all Mu vz: no cuts



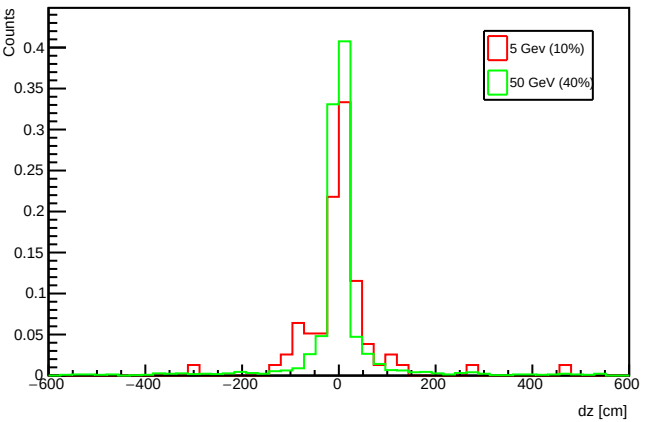
reco all Mu vz: n_jet >=1, j1pt > 30 GeV



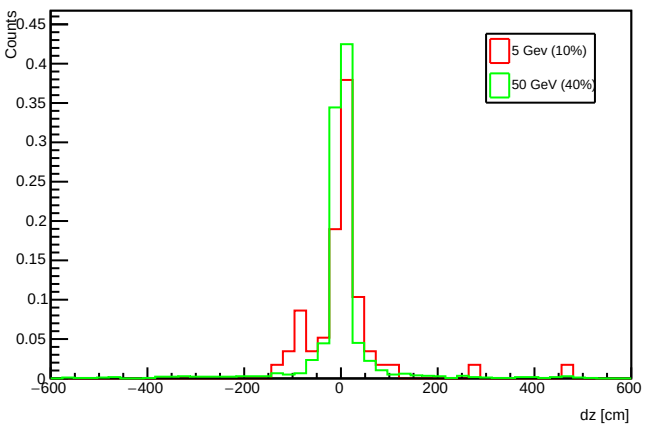
reco all Mu vz: MET > 120 GeV



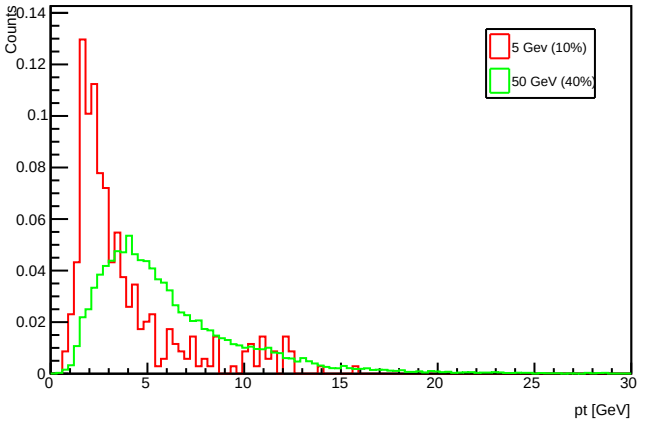
reco all Mu vz: j1pt >120, at most 2 jets w/ pt >30 GeV



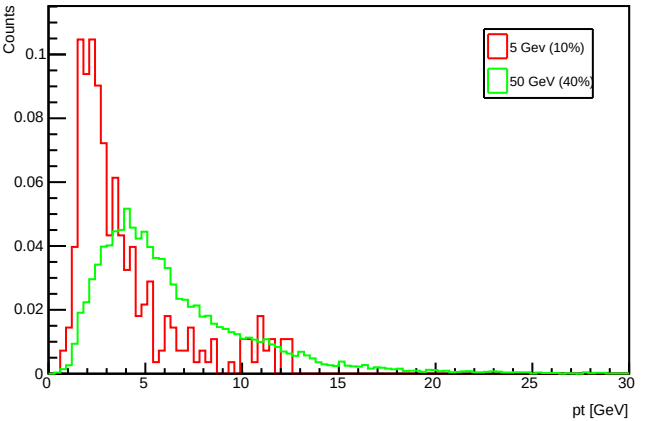
reco all Mu vz: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



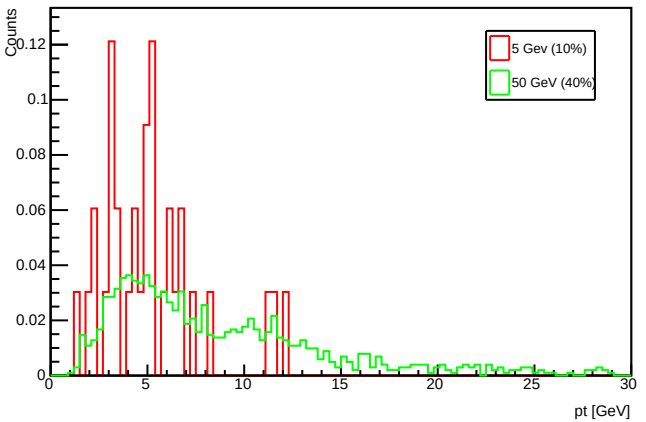
reco subleading Mu pt: no cuts



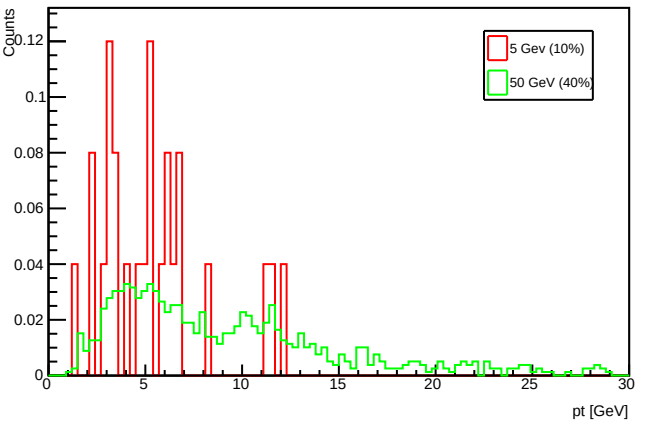
reco subleading Mu pt: n_jet >=1, j1pt > 30 GeV



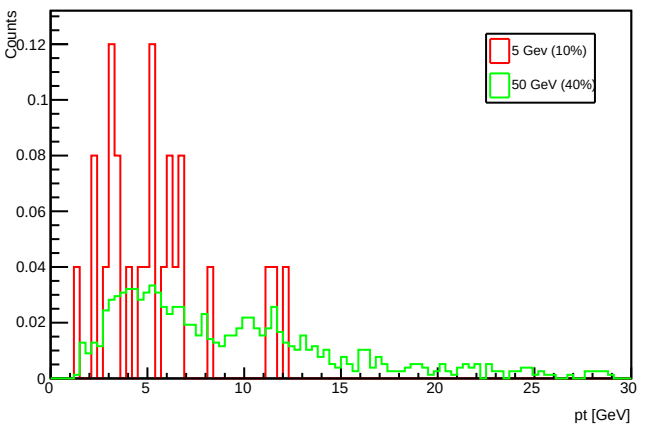
reco subleading Mu pt: MET > 120 GeV



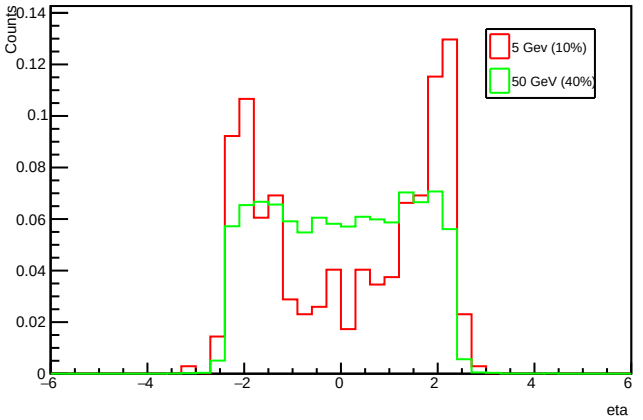
reco subleading Mu pt: j1pt >120, at most 2 jets w/ pt >30 GeV



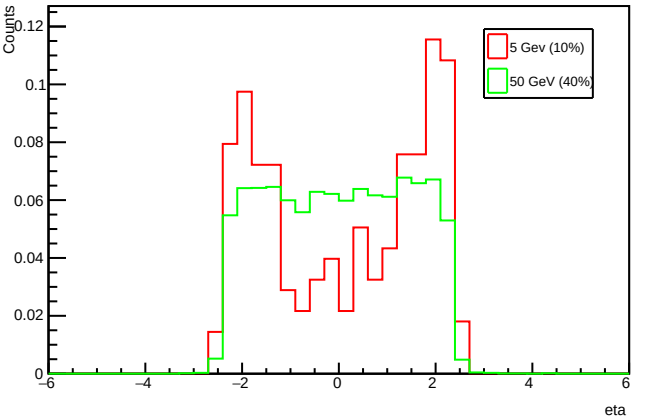
reco subleading Mu pt: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



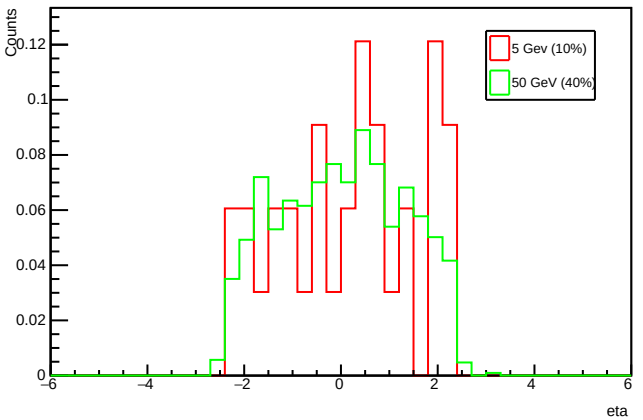
reco subleading Mu eta: no cuts



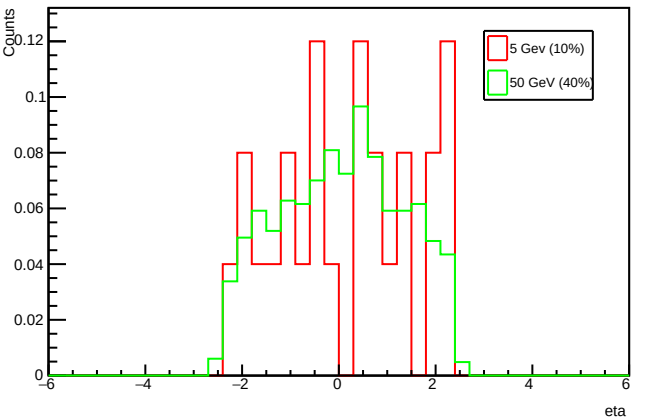
reco subleading Mu eta: n_jet >=1, j1pt > 30 GeV



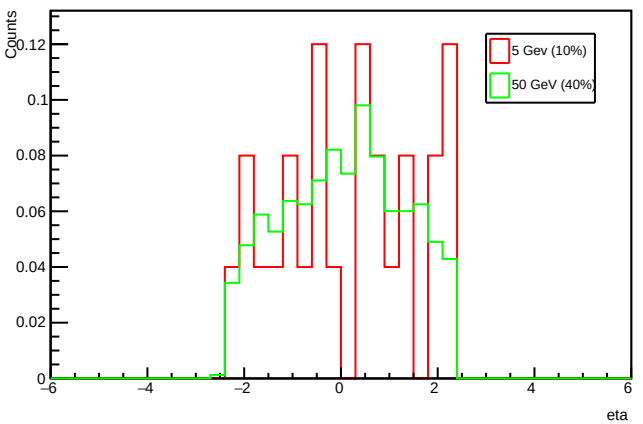
reco subleading Mu eta: MET > 120 GeV



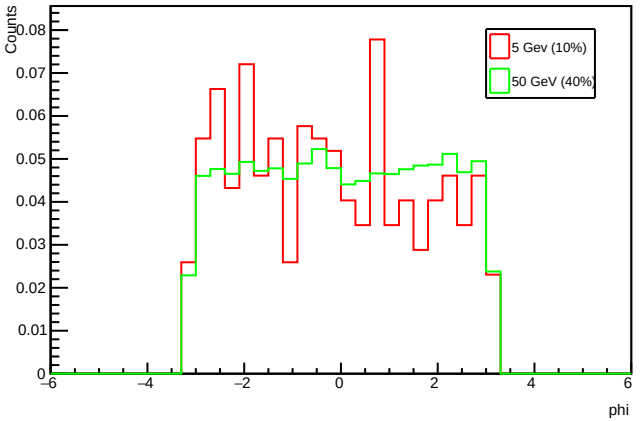
reco subleading Mu eta: j1pt >120, at most 2 jets w/ pt >30 GeV



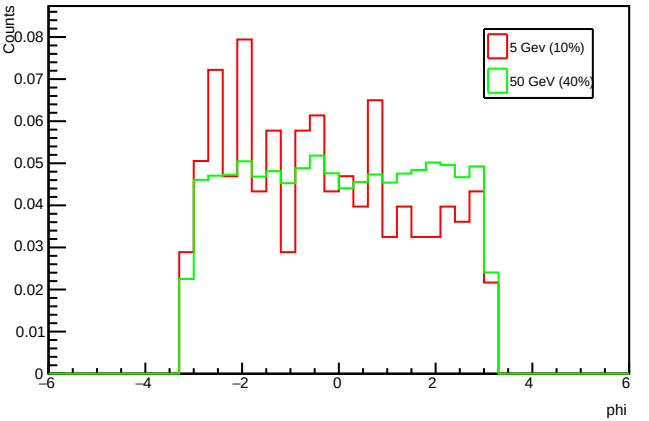
reco subleading Mu eta: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



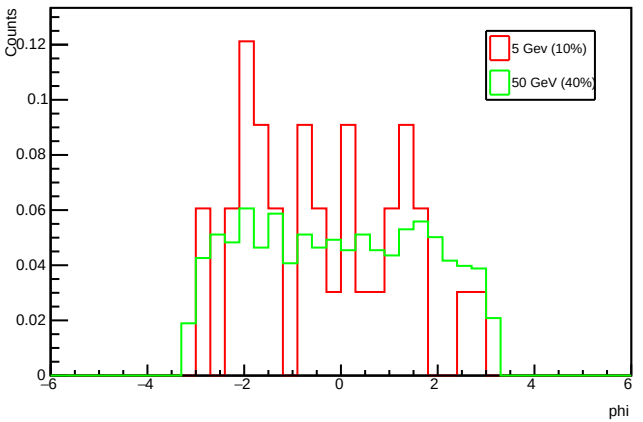
reco subleading Mu phi: no cuts



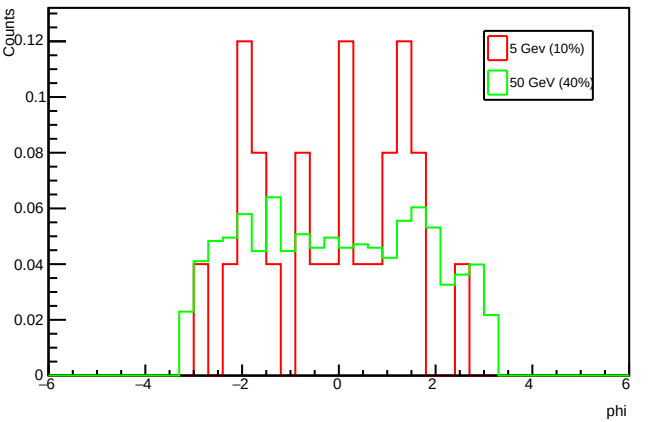
reco subleading Mu phi: n_jet >=1, j1pt > 30 GeV



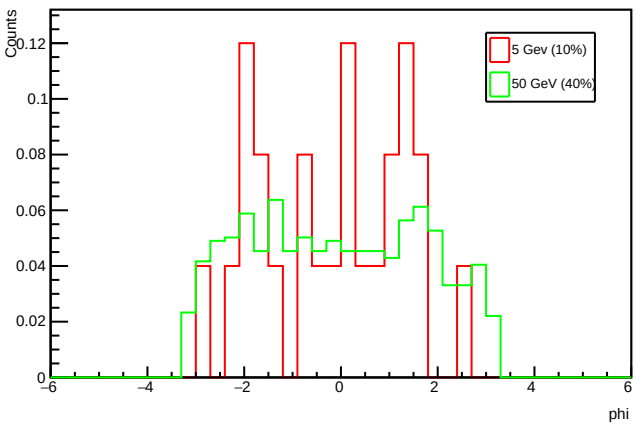
reco subleading Mu phi: MET > 120 GeV



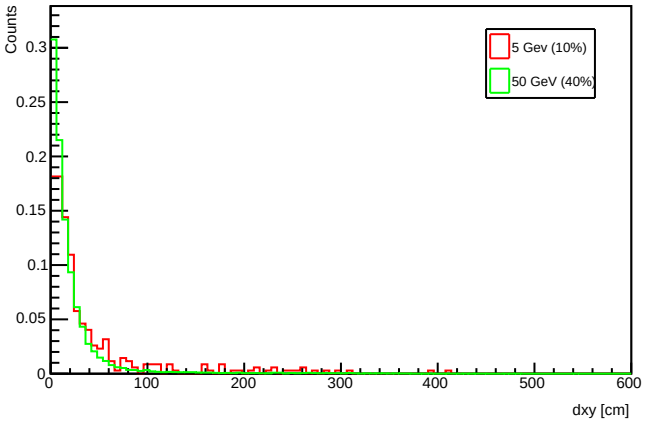
reco subleading Mu phi: j1pt >120, at most 2 jets w/ pt >30 GeV



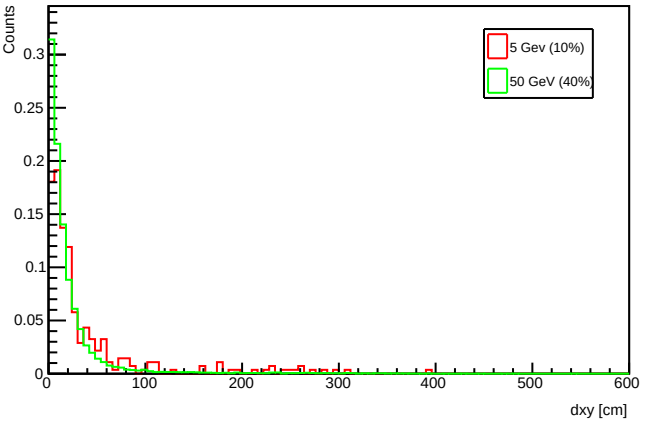
reco subleading Mu phi: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



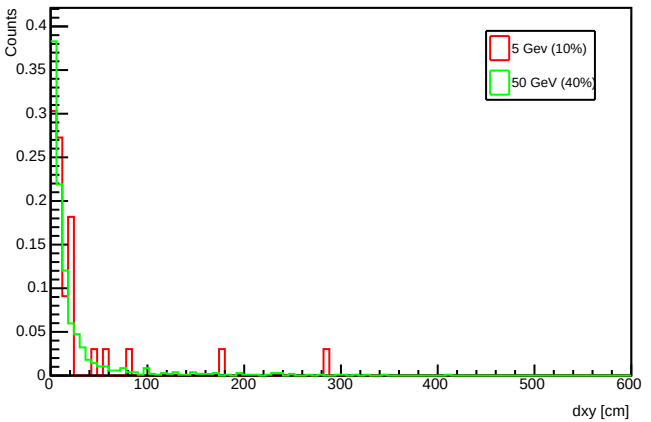
reco subleading Mu vxy: no cuts



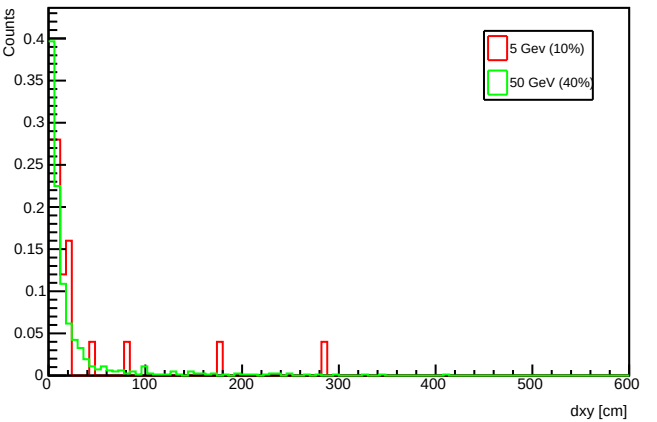
reco subleading Mu vxy: n_jet >=1, j1pt > 30 GeV



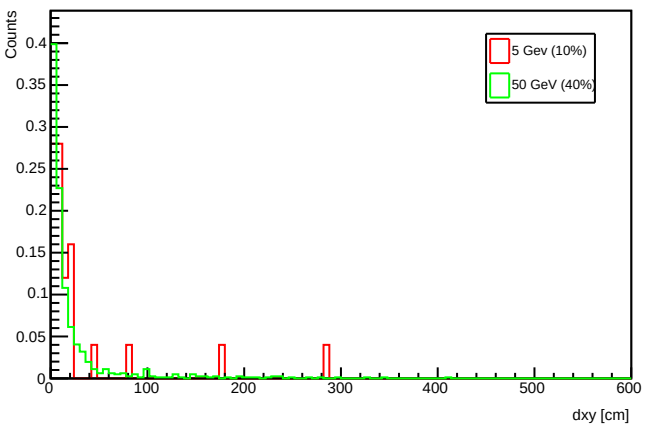
reco subleading Mu vxy: MET > 120 GeV



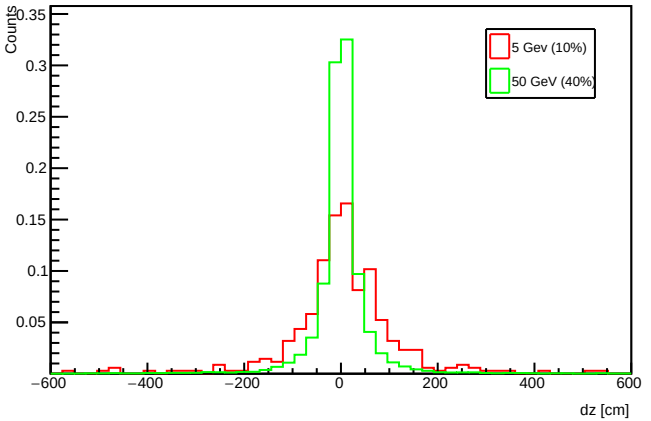
reco subleading Mu vxy: j1pt >120, at most 2 jets w/ pt >30 GeV



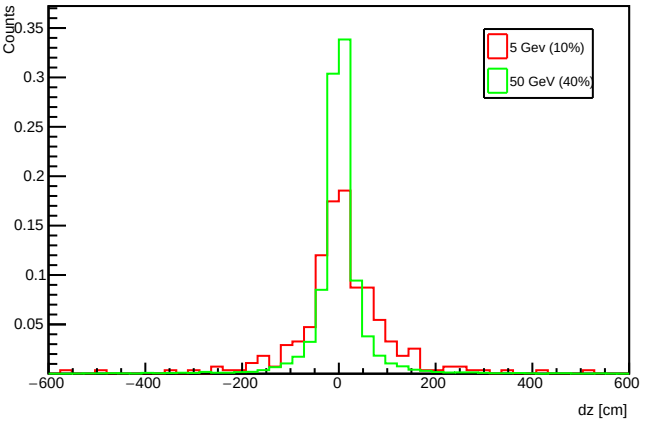
reco subleading Mu vxy: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



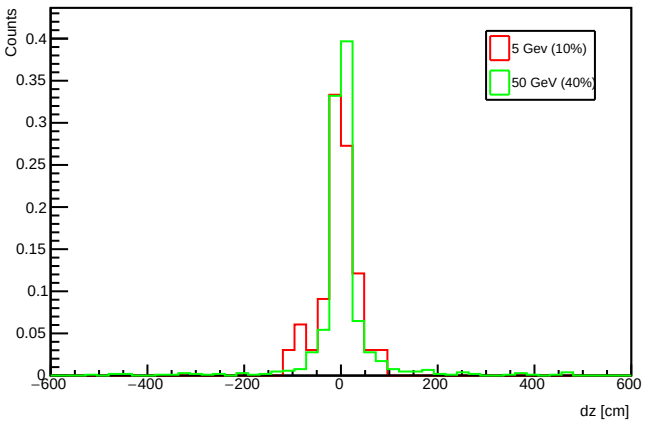
reco subleading Mu vz: no cuts



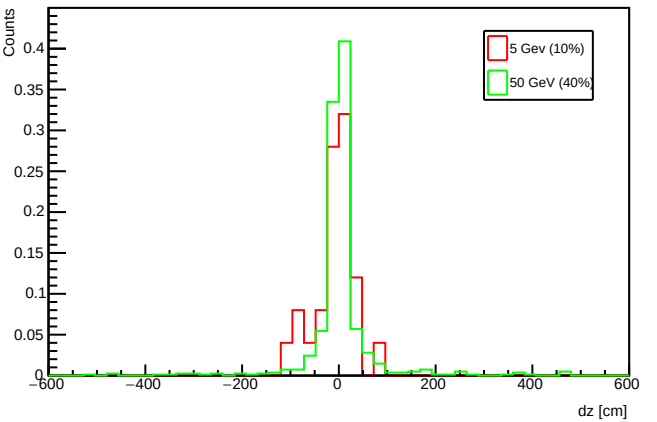
reco subleading Mu vz: n_jet >=1, j1pt > 30 GeV



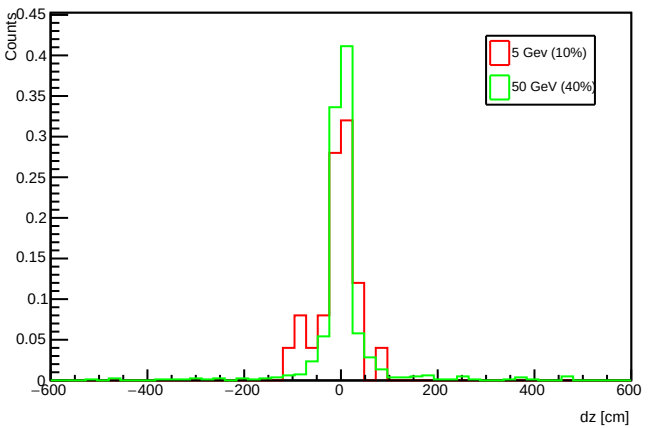
reco subleading Mu vz: MET > 120 GeV



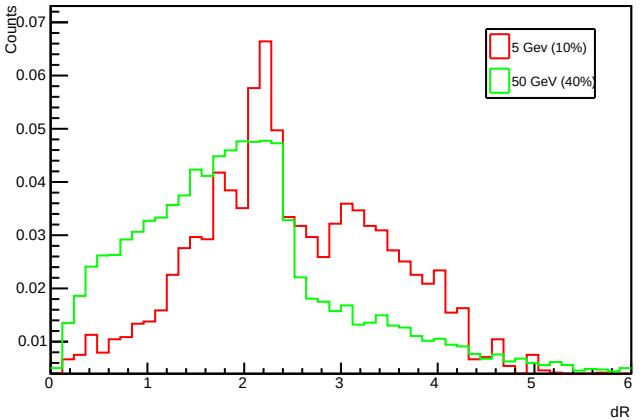
reco subleading Mu vz: j1pt >120, at most 2 jets w/ pt >30 GeV



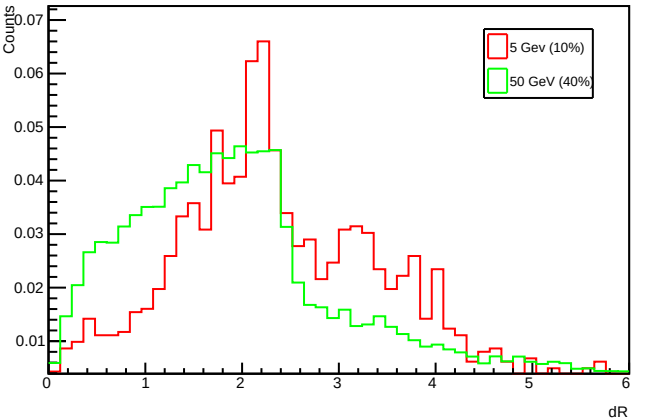
reco subleading Mu vz: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



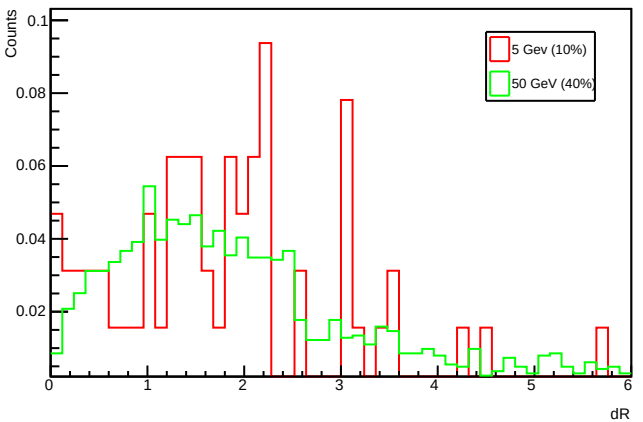
dR: reco leading mu and subleading mu: no cuts



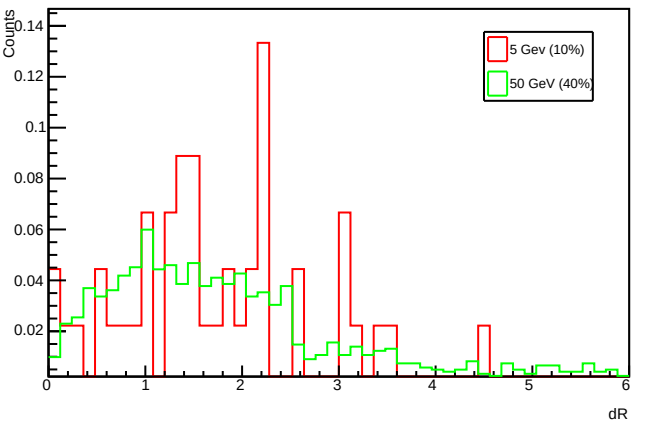
dR: reco leading mu and subleading mu: n_jet >=1, j1pt > 30 GeV



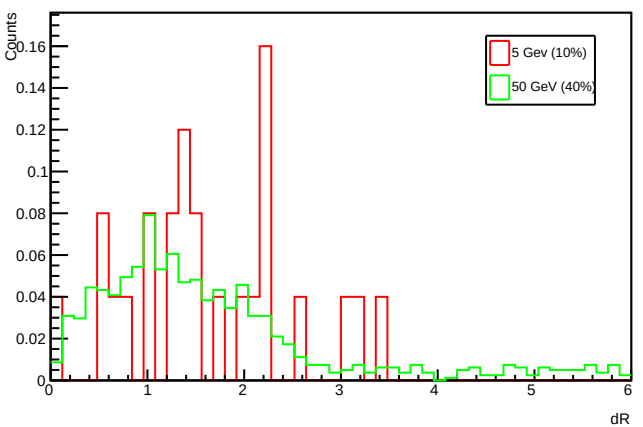
dR: reco leading mu and subleading mu: MET > 120 GeV



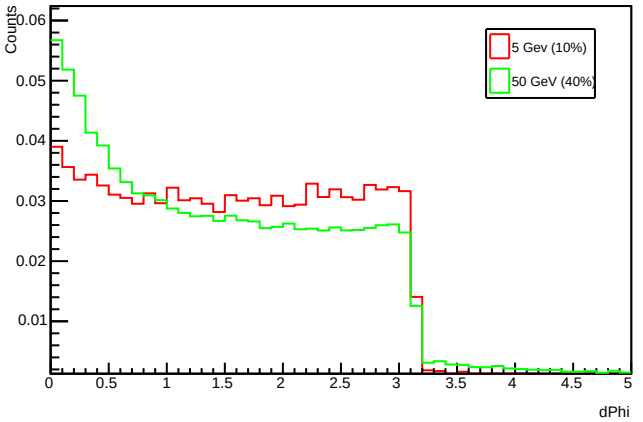
dR: reco leading mu and subleading mu: j1pt >120, at most 2 jets w/ pt >30 GeV



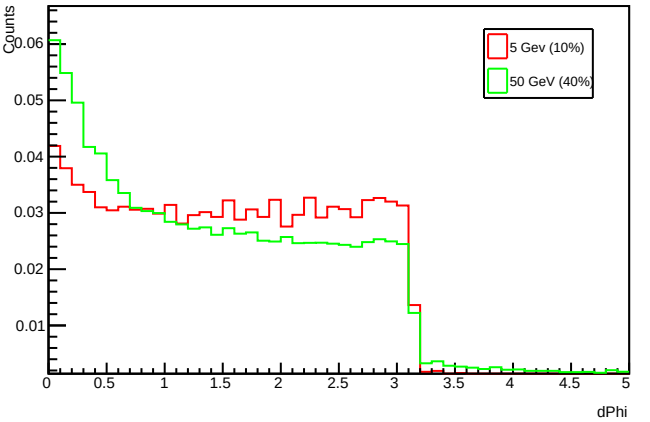
dR: reco leading mu and subleading mu: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



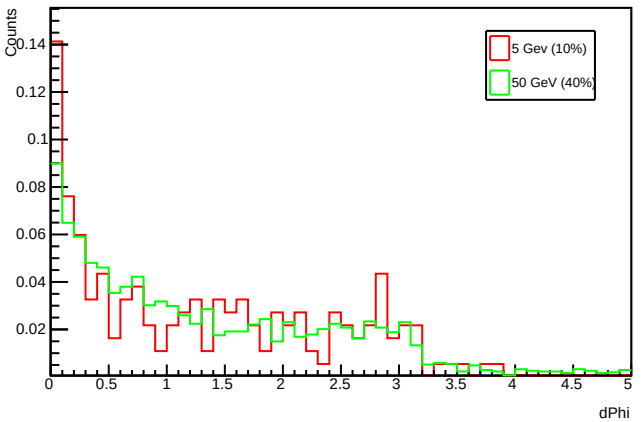
dPhi: reco MET and leading mu: no cuts



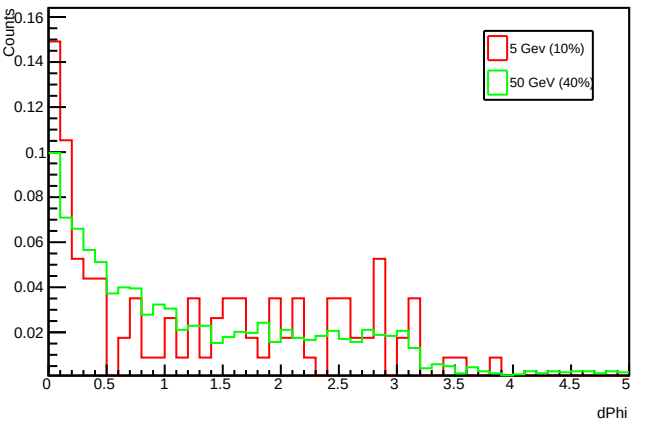
dPhi: reco MET and leading mu: n_jet >=1, j1pt > 30 GeV



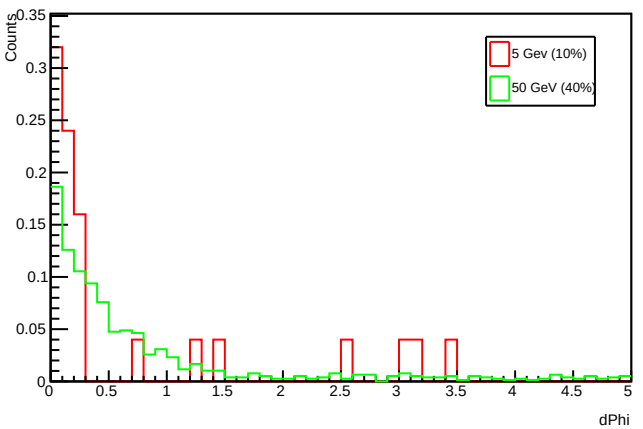
dPhi: reco MET and leading mu: MET > 120 GeV



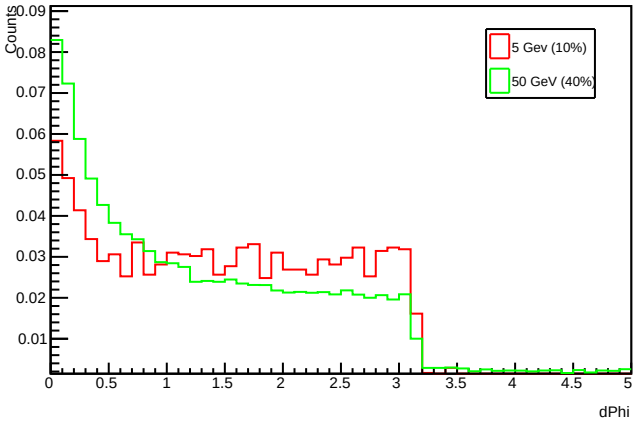
dPhi: reco MET and leading mu: j1pt >120, at most 2 jets w/ pt >30 GeV



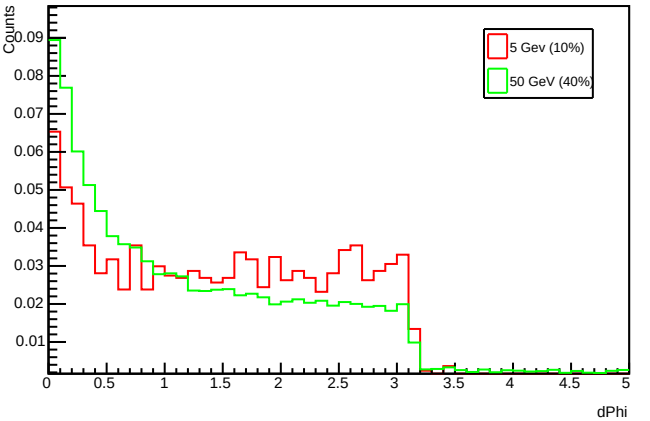
dPhi: reco MET and leading mu: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



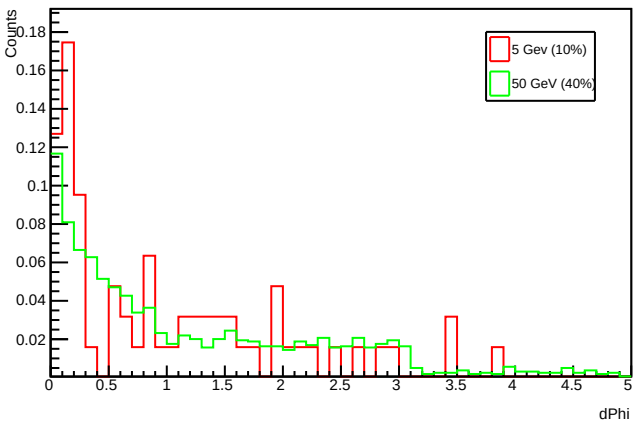
dPhi: reco leading mu and subleading mu: no cuts



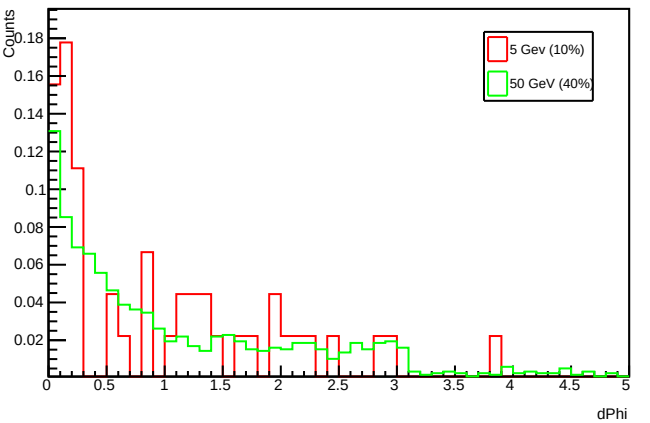
dPhi: reco leading mu and subleading mu: n_jet >=1, j1pt > 30 GeV



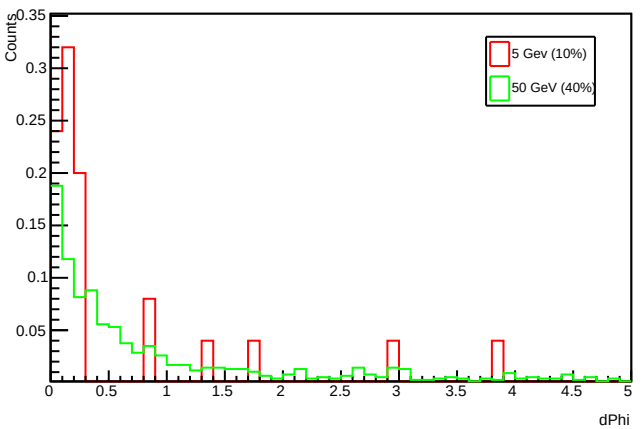
dPhi: reco leading mu and subleading mu: MET > 120 GeV



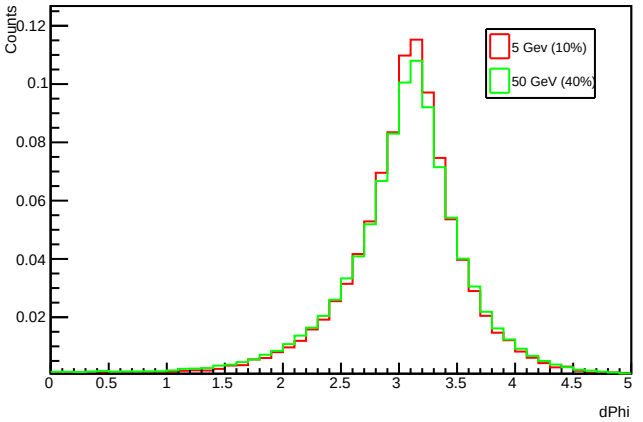
dPhi: reco leading mu and subleading mu: j1pt >120, at most 2 jets w/ pt >30 GeV



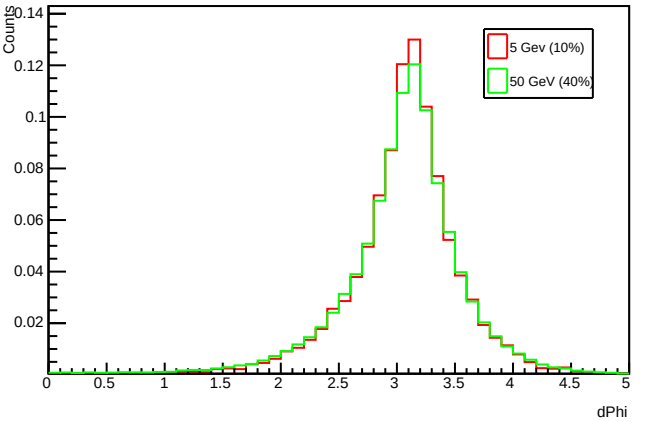
dPhi: reco leading mu and subleading mu: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



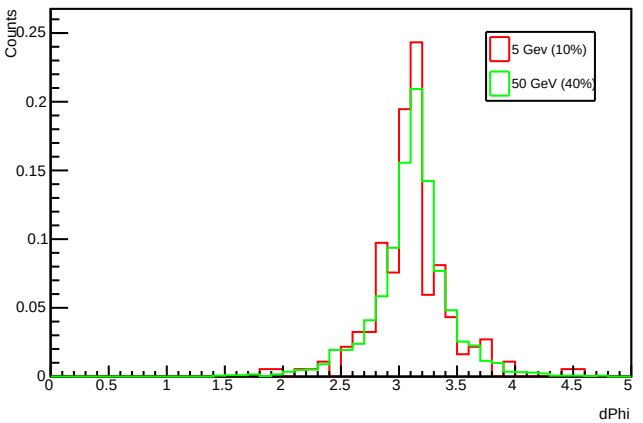
dPhi: reco MET and leading jet: no cuts



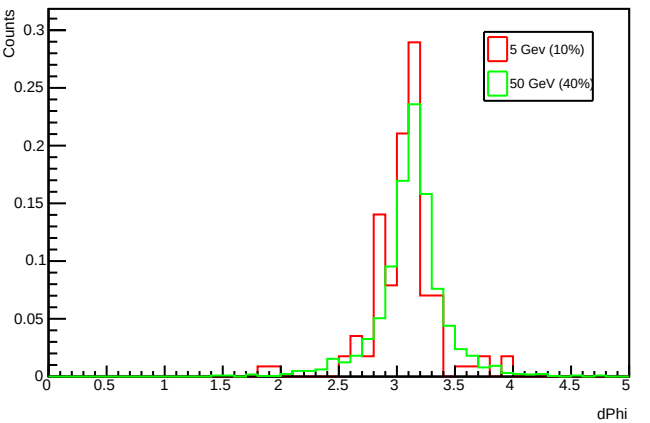
dPhi: reco MET and leading jet: n_jet >=1, j1pt > 30 GeV



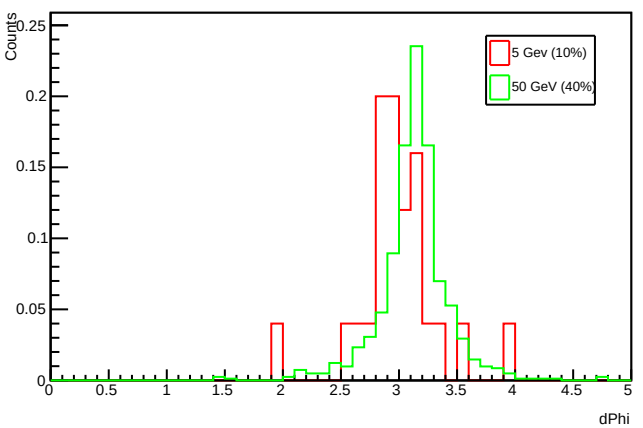
dPhi: reco MET and leading jet: MET > 120 GeV



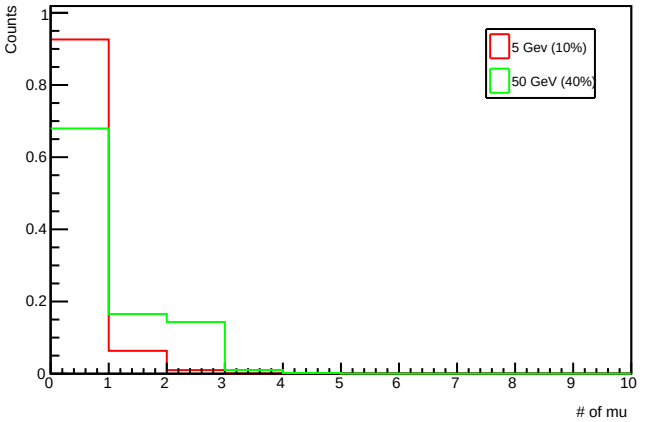
dPhi: reco MET and leading jet: j1pt >120, at most 2 jets w/ pt >30 GeV



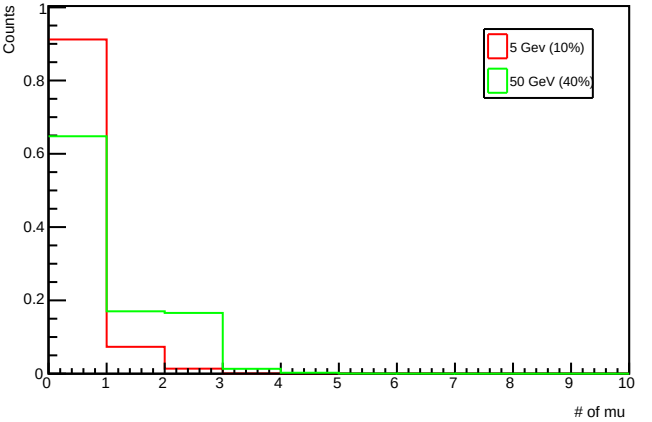
dPhi: reco MET and leading jet: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



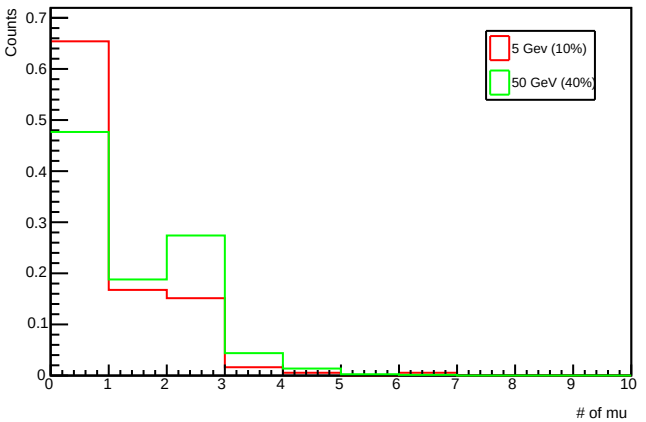
reco number of mu: no cuts



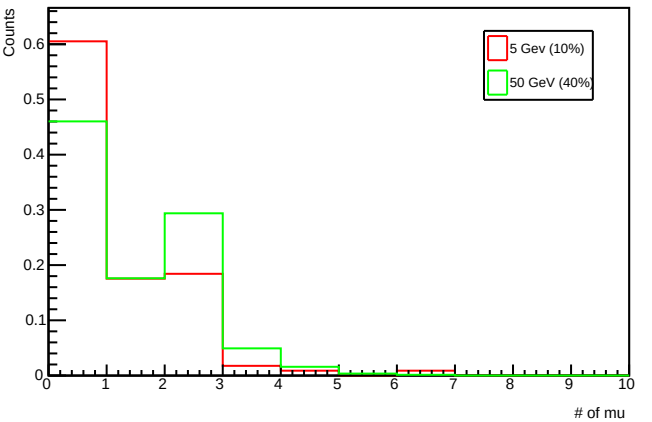
reco number of mu: n_jet >=1, j1pt > 30 GeV



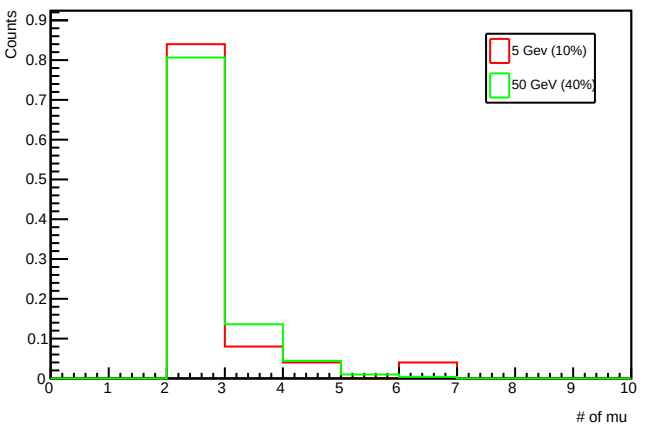
reco number of mu: MET > 120 GeV



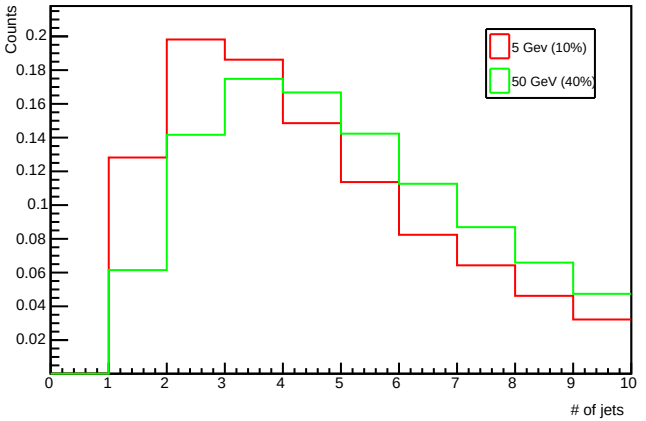
reco number of mu: j1pt >120, at most 2 jets w/ pt >30 GeV



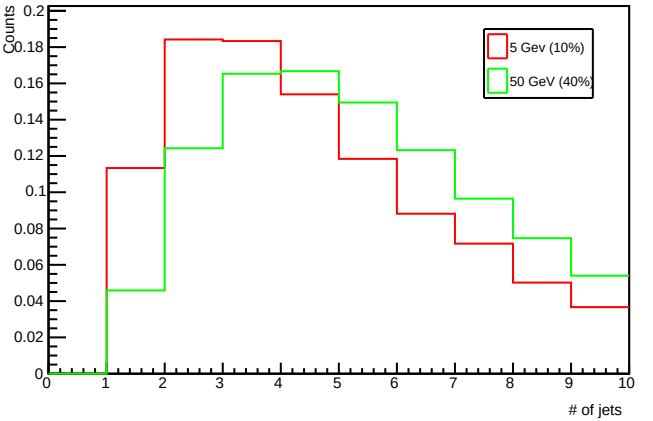
reco number of mu: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



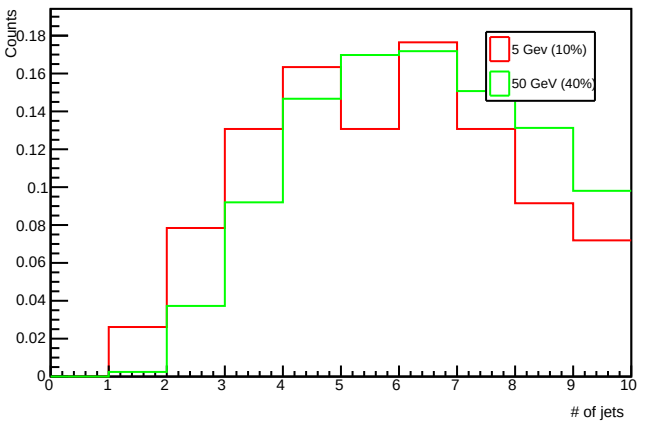
reco number of jets: no cuts



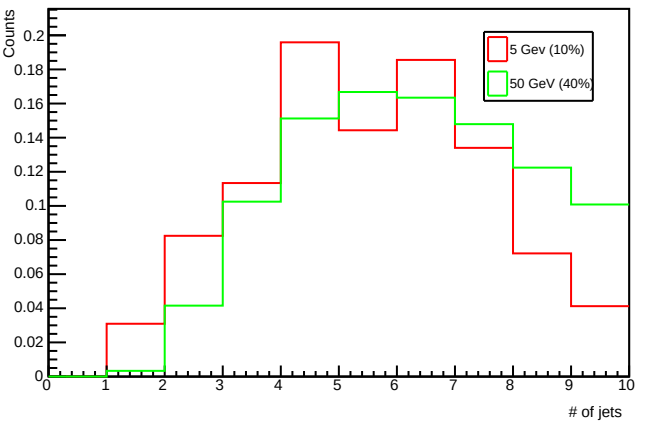
reco number of jets: n_jet >=1, j1pt > 30 GeV



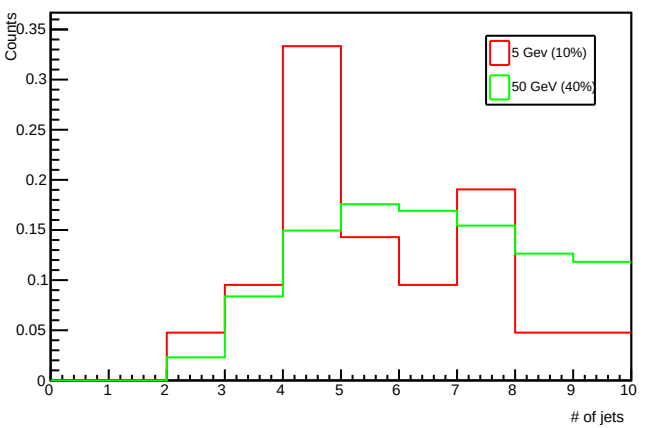
reco number of jets: MET > 120 GeV



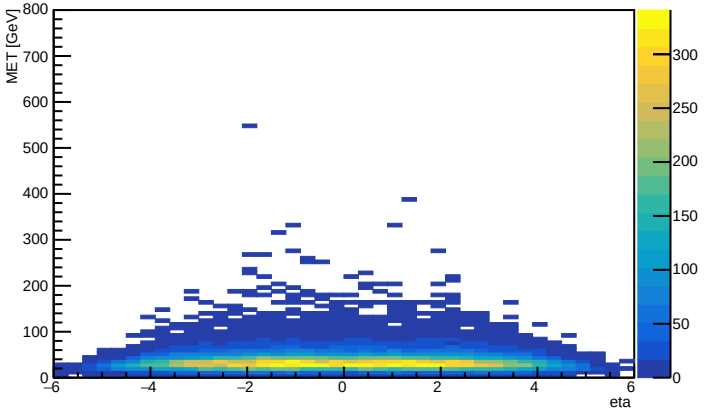
reco number of jets: j1pt >120, at most 2 jets w/ pt >30 GeV



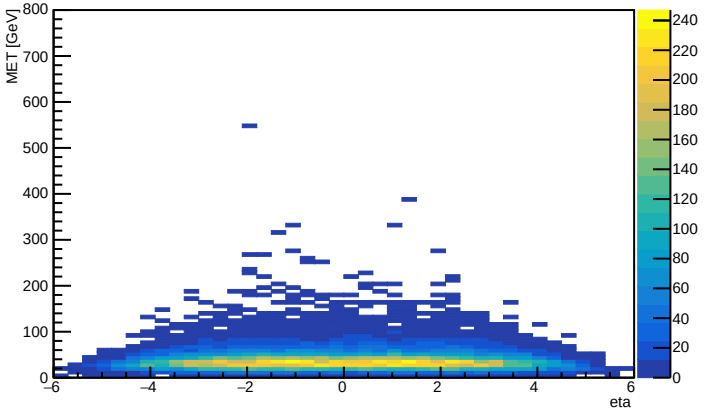
reco number of jets: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



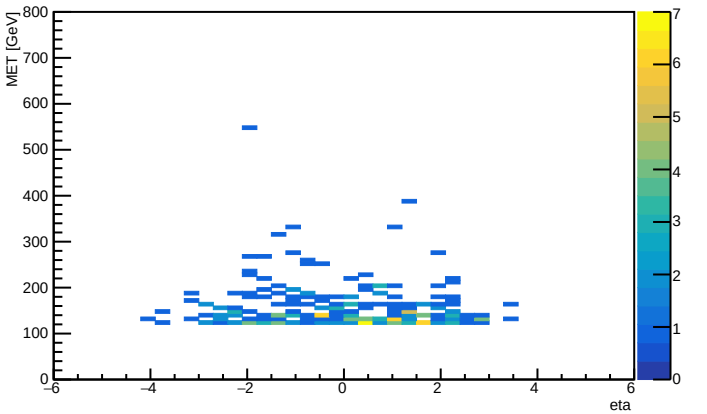
5 Gev (10%) gen leading Met eta vs pt: no cuts



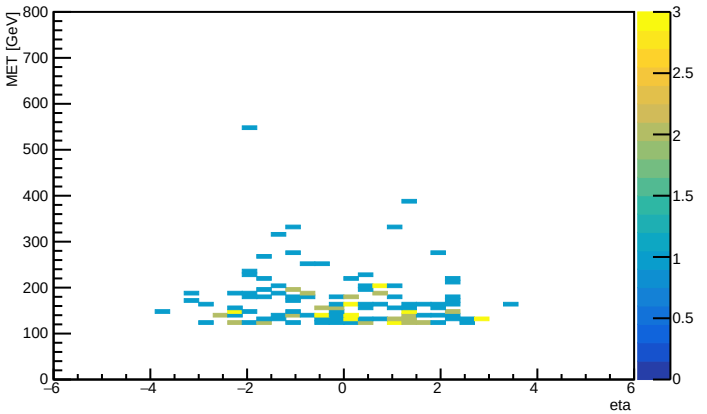
5 Gev (10%) gen leading Met eta vs pt: n_jet >=1, j1pt > 30 GeV



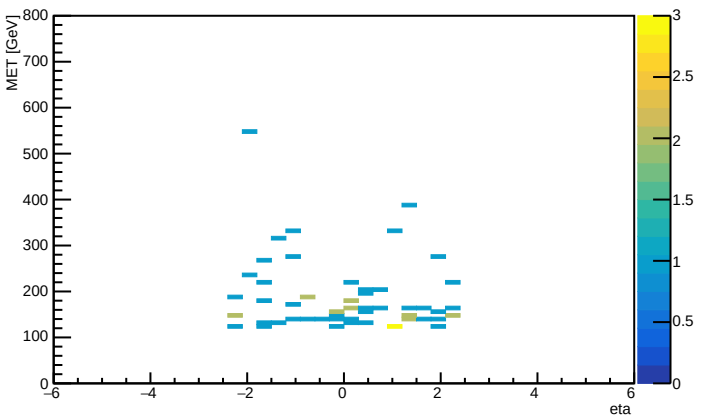
5 Gev (10%) gen leading Met eta vs pt: MET > 120 GeV



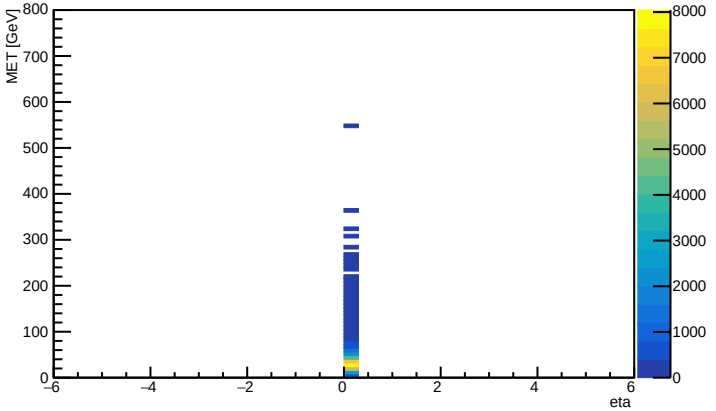
5 Gev (10%) gen leading Met eta vs pt: j1pt >120, at most 2 jets w/ pt >30 GeV



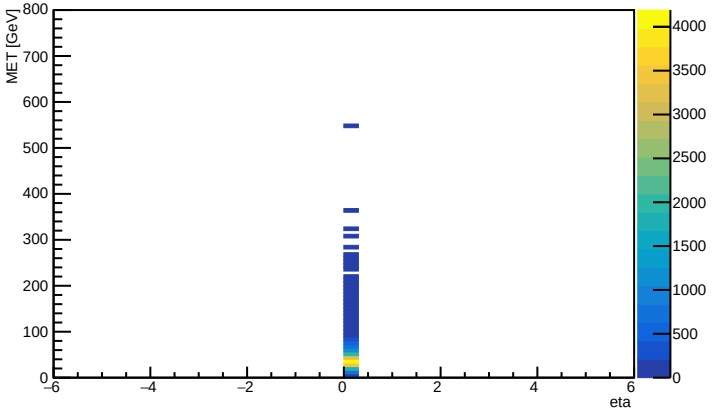
5 Gev (10%) gen leading Met eta vs pt: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



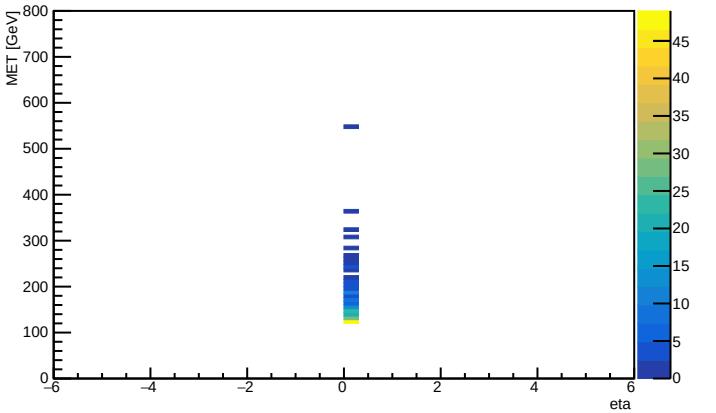
5 Gev (10%) reco leading Met eta vs pt: no cuts



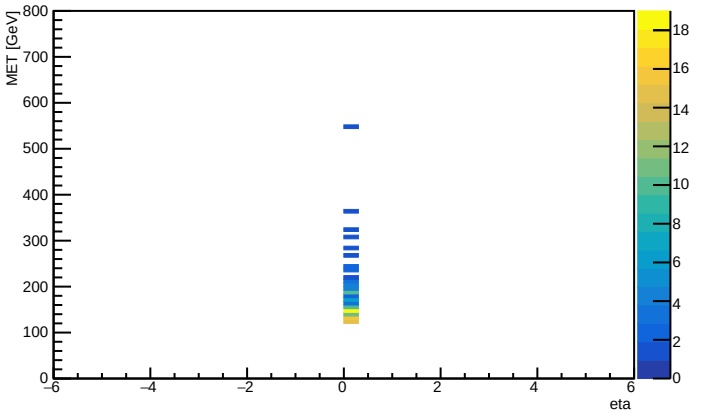
5 Gev (10%) reco leading Met eta vs pt: n_jet >=1, j1pt > 30 GeV



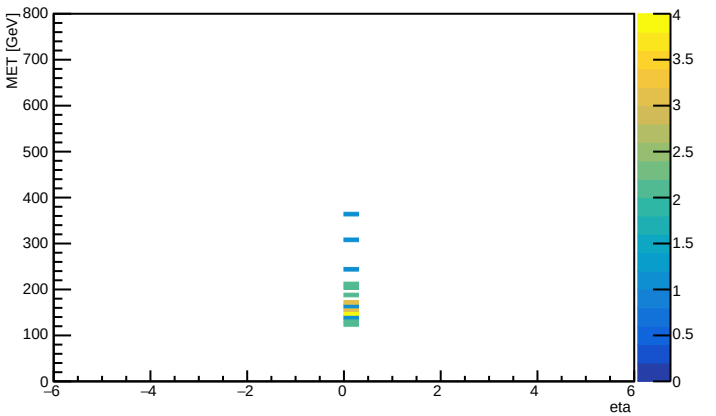
5 Gev (10%) reco leading Met eta vs pt: MET > 120 GeV



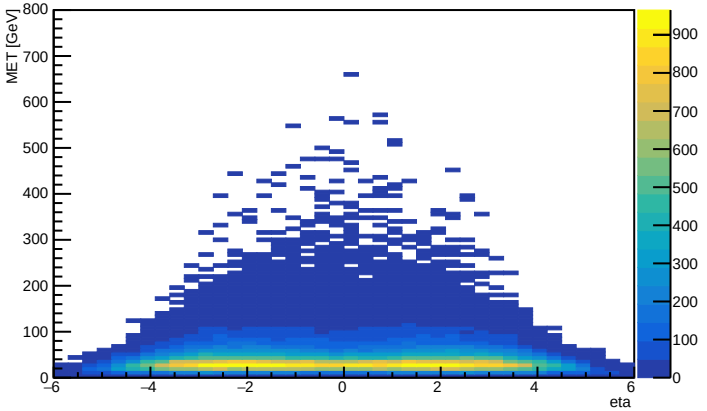
5 Gev (10%) reco leading Met eta vs pt: j1pt >120, at most 2 jets w/ pt >30 GeV



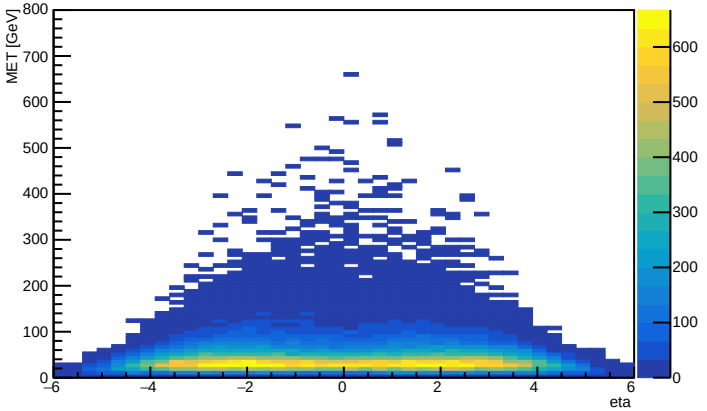
5 Gev (10%) reco leading Met eta vs pt: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



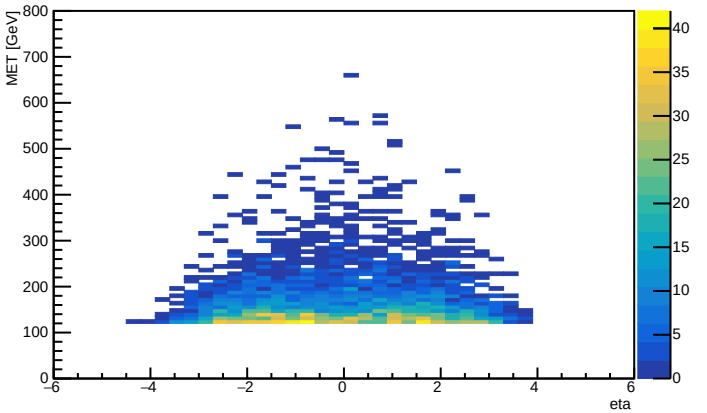
50 GeV (40%) gen leading Met eta vs pt: no cuts



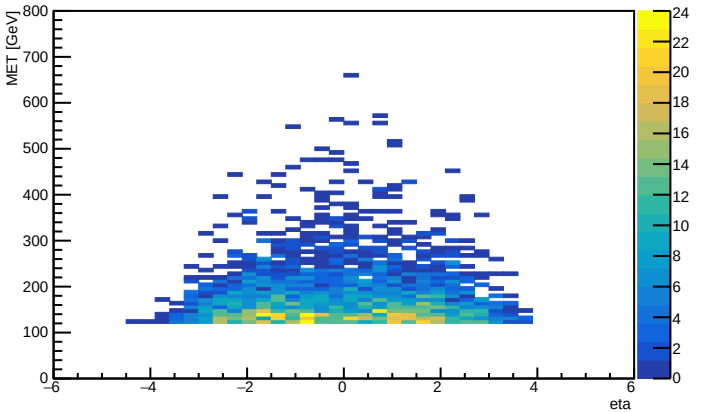
50 GeV (40%) gen leading Met eta vs pt: n_jet >=1, j1pt > 30 GeV



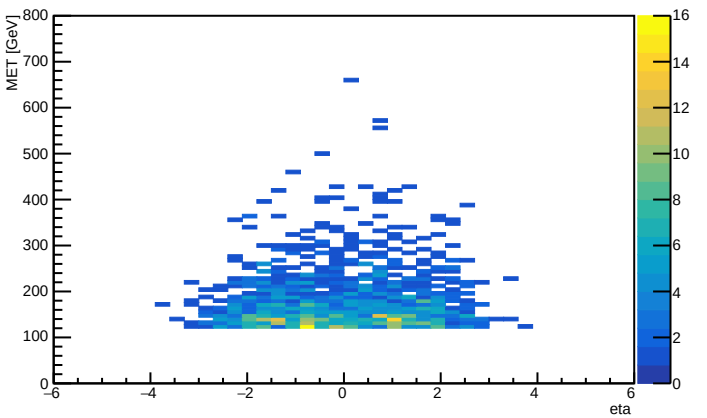
50 GeV (40%) gen leading Met eta vs pt: MET > 120 GeV

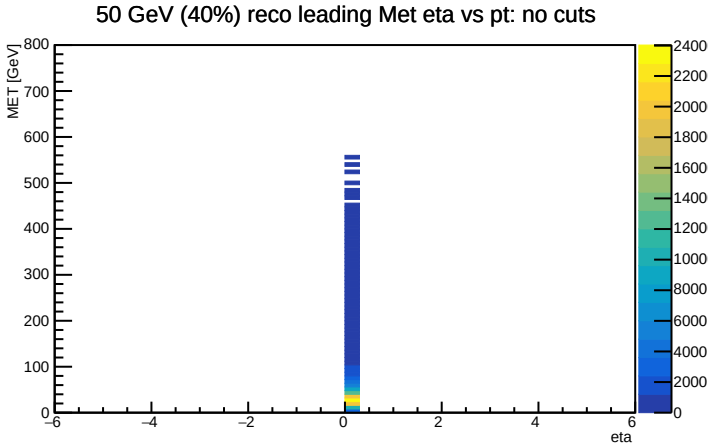


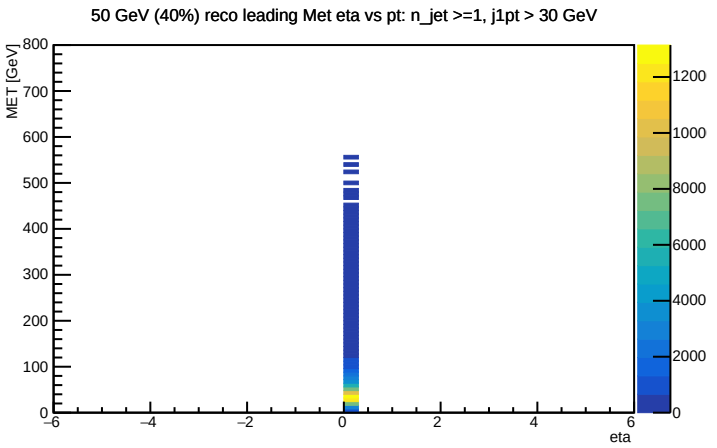
50 GeV (40%) gen leading Met eta vs pt: j1pt >120, at most 2 jets w/ pt >30 GeV

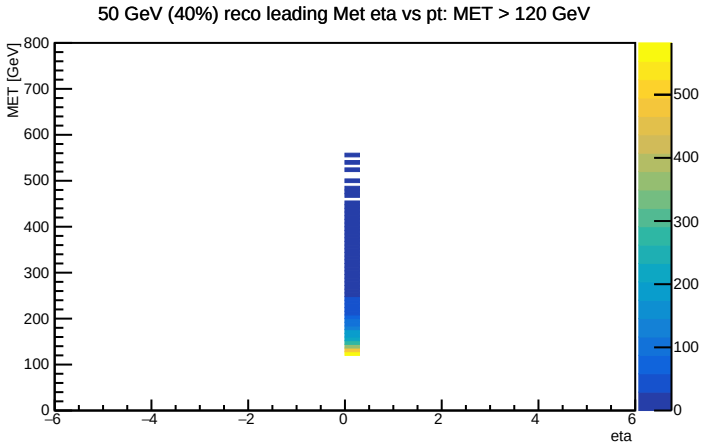


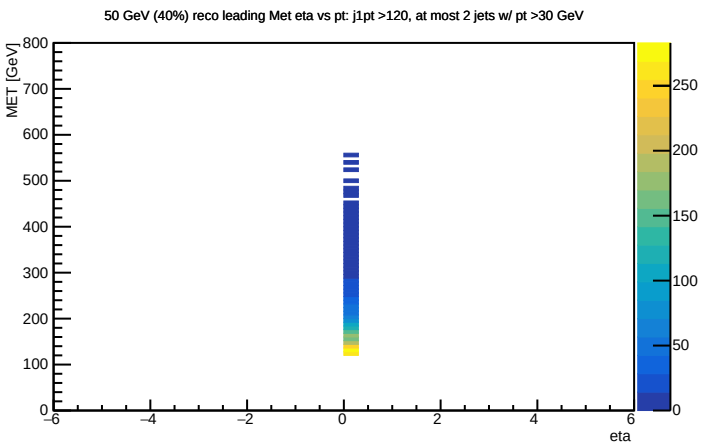
50 GeV (40%) gen leading Met eta vs pt: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4

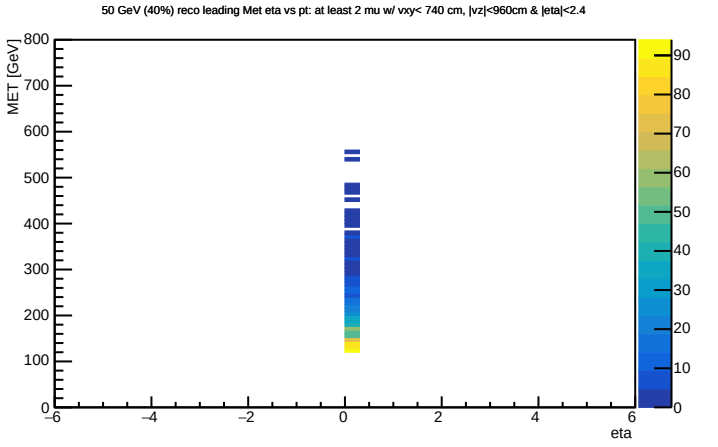



50 GeV (40%) reco leading Met eta vs pt: no cuts
MET [GeV]
eta

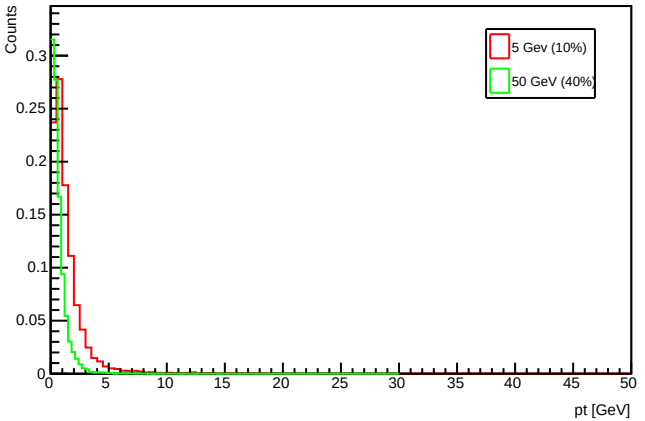

50 GeV (40%) reco leading Met eta vs pt: n_jet >=1, j1pt > 30 GeV
MET [GeV]
eta


50 GeV (40%) reco leading Met eta vs pt: MET > 120 GeV
MET [GeV]
eta

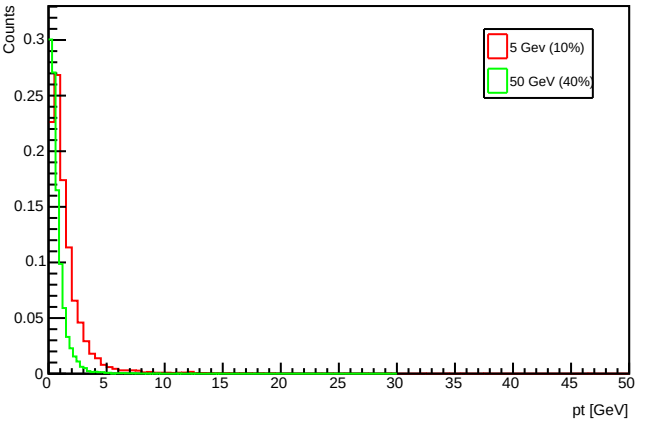

50 GeV (40%) reco leading Met eta vs pt: j1pt >120, at most 2 jets w/ pt >30 GeV
MET [GeV]
eta


50 GeV (40%) reco leading Met eta vs pt: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4
MET [GeV]
eta

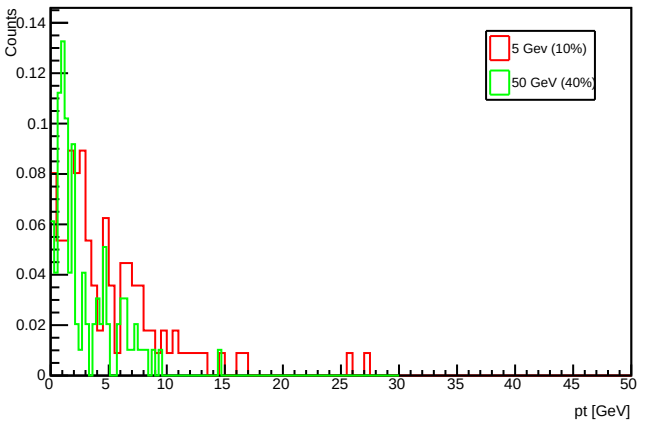
gen leading Mu pt: no cuts



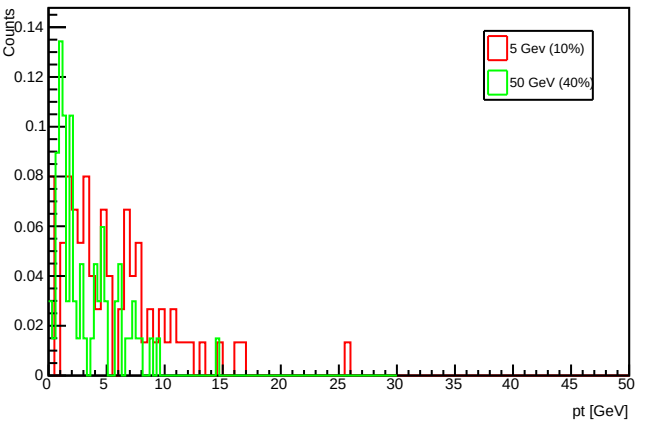
gen leading Mu pt: n_jet >=1, j1pt > 30 GeV



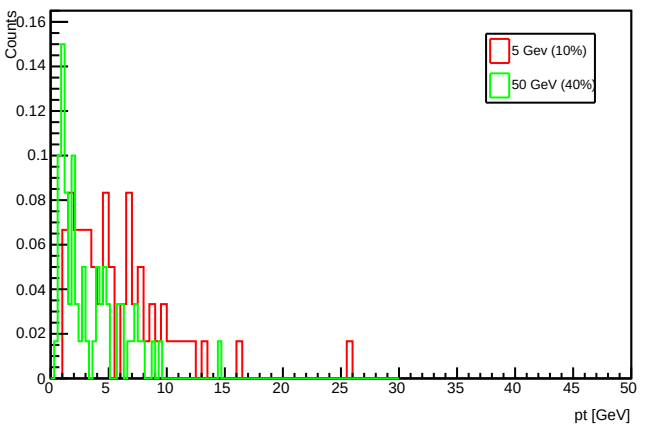
gen leading Mu pt: MET > 120 GeV



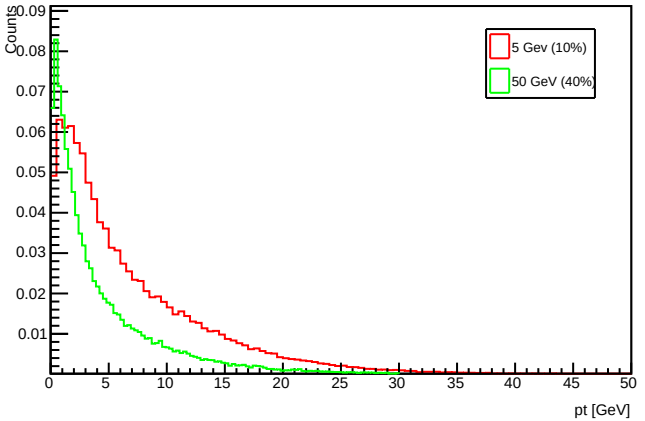
gen leading Mu pt: j1pt >120, at most 2 jets w/ pt >30 GeV



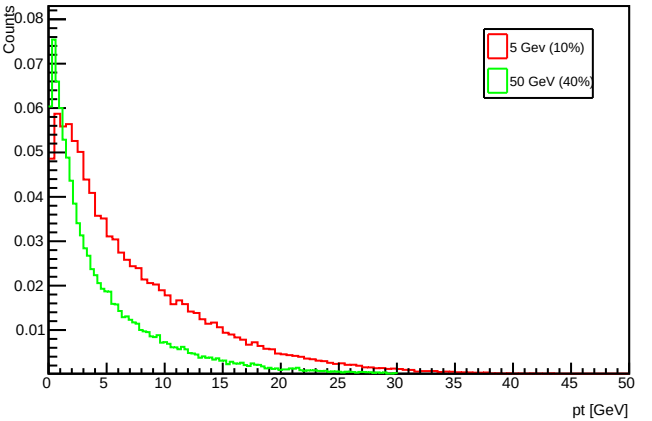
gen leading Mu pt: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



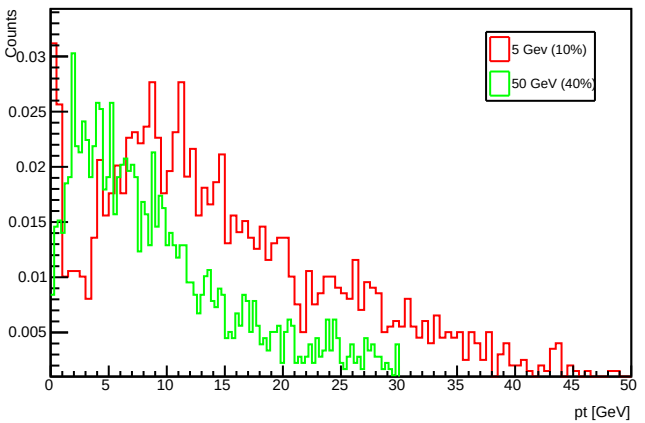
gen leading Mu pt: no cuts



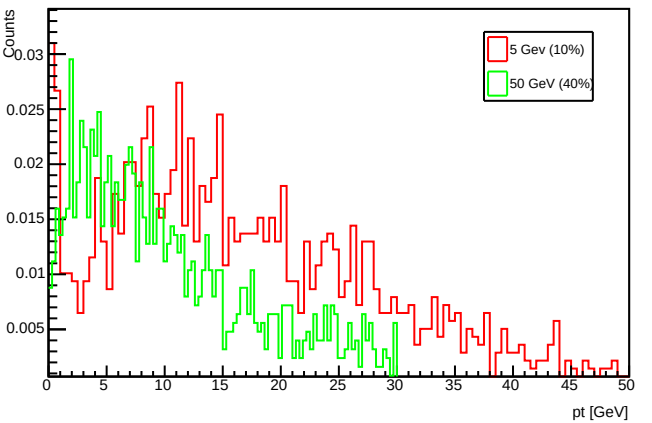
gen leading Mu pt: n_jet >=1, j1pt > 30 GeV



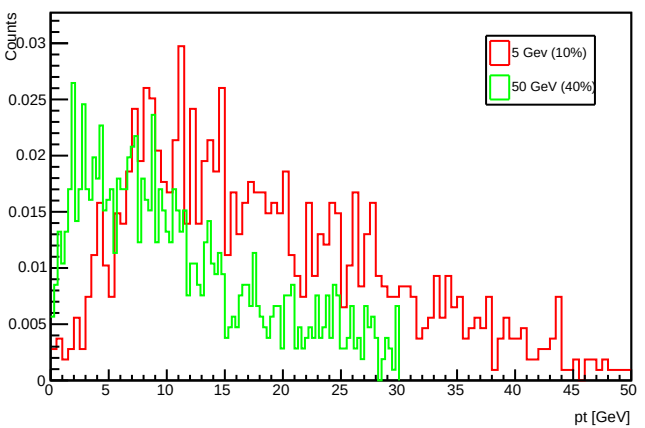
gen leading Mu pt: MET > 120 GeV



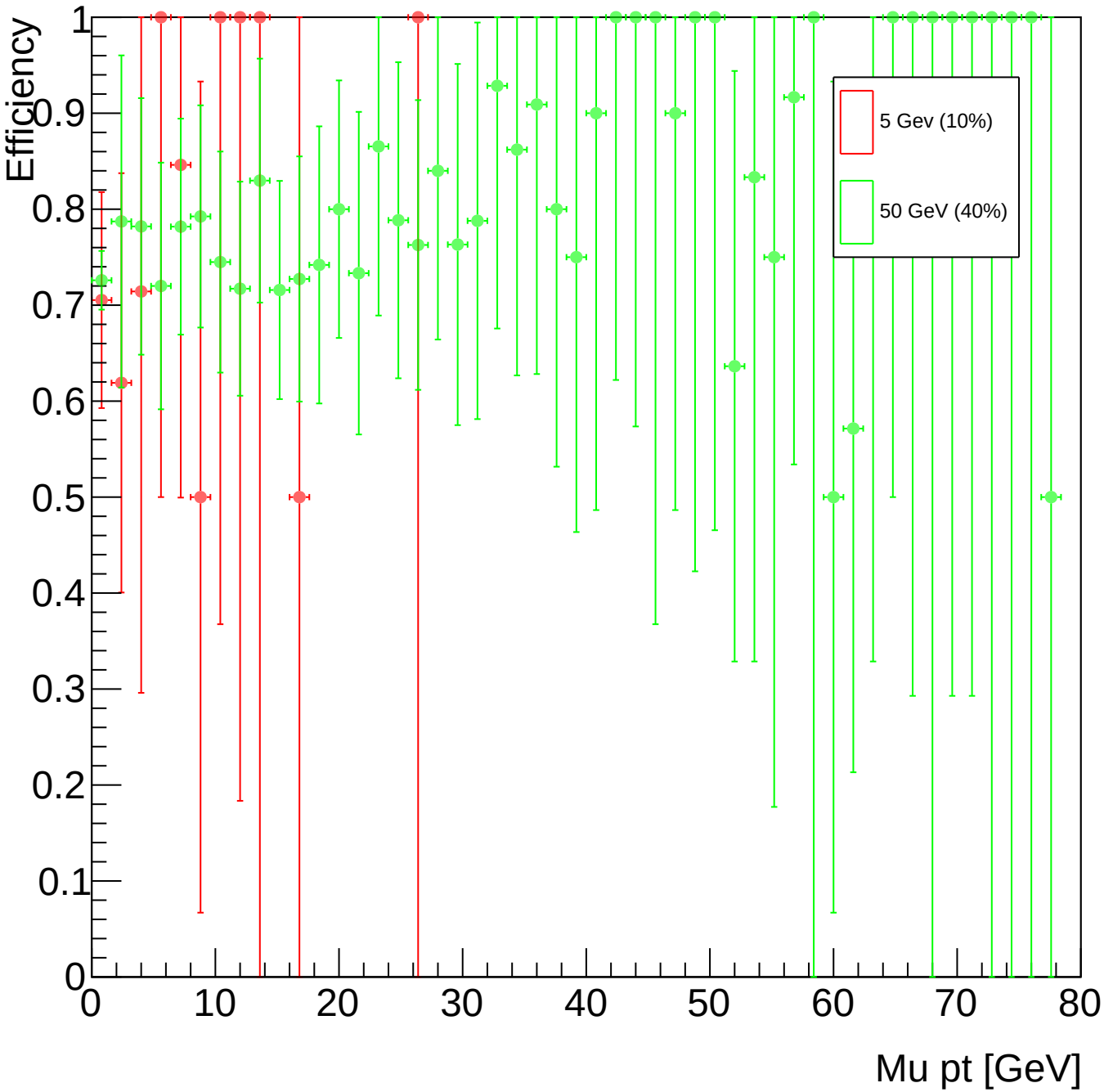
gen leading Mu pt: j1pt >120, at most 2 jets w/ pt >30 GeV

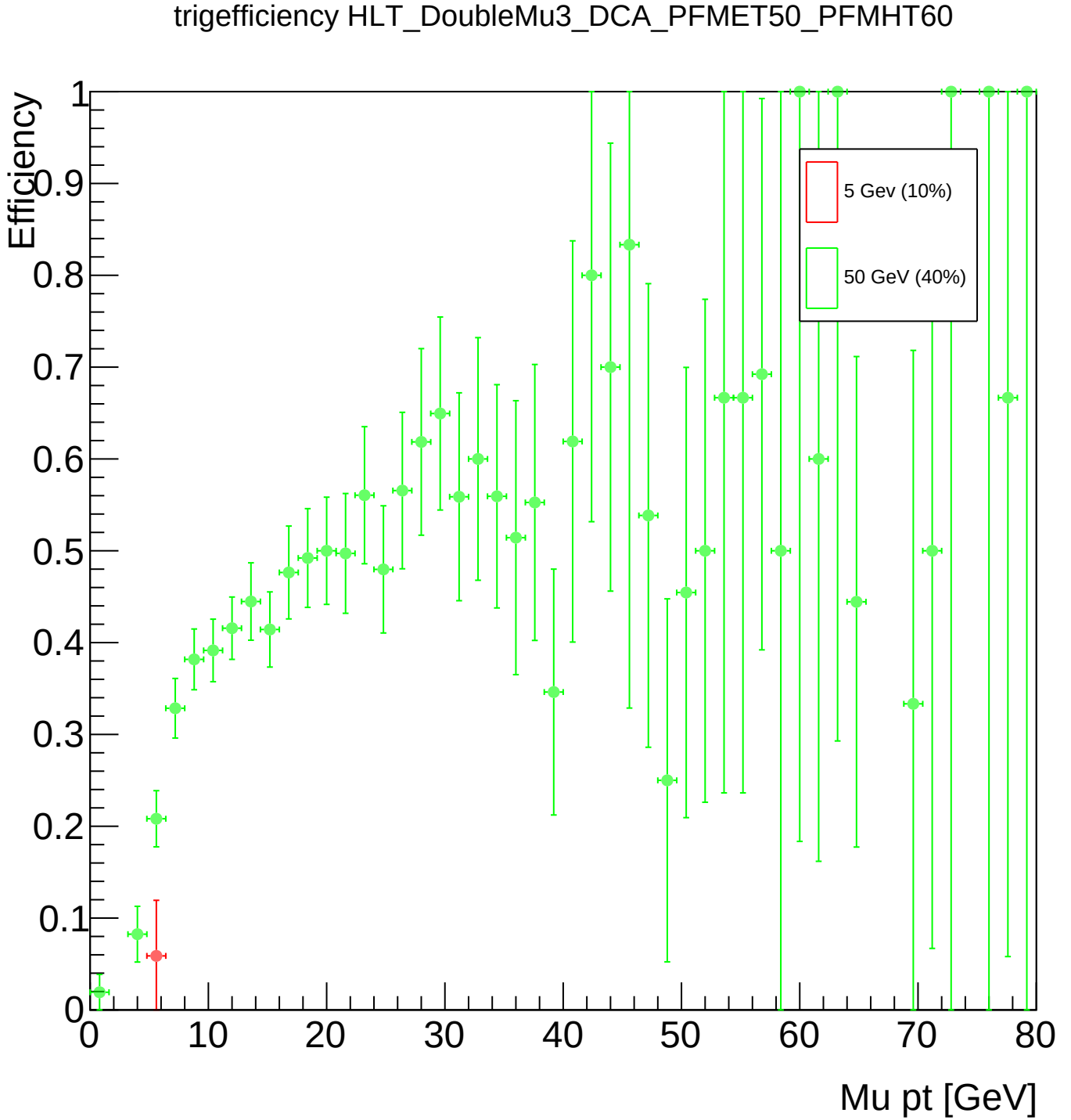


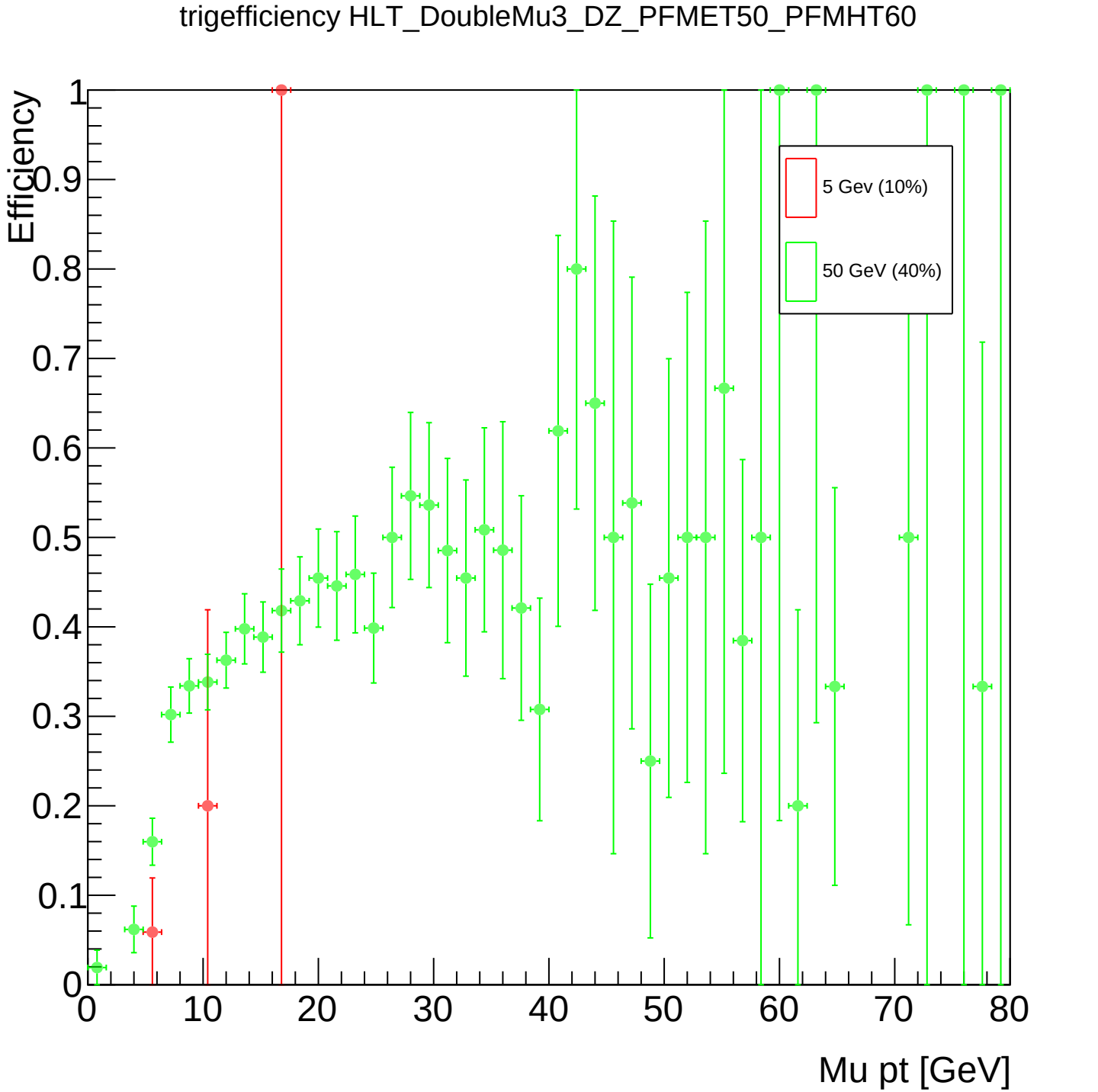
gen leading Mu pt: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4

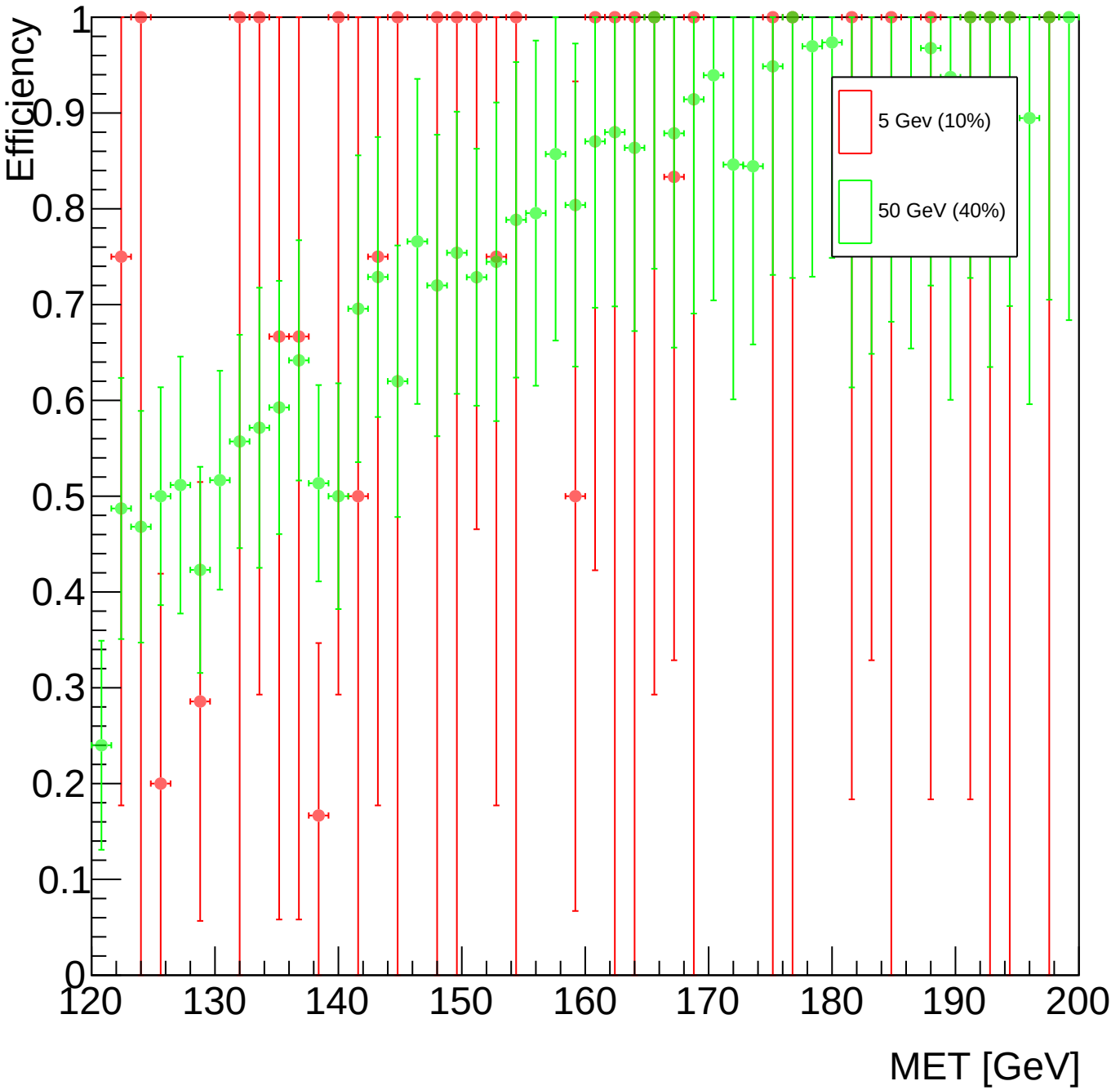


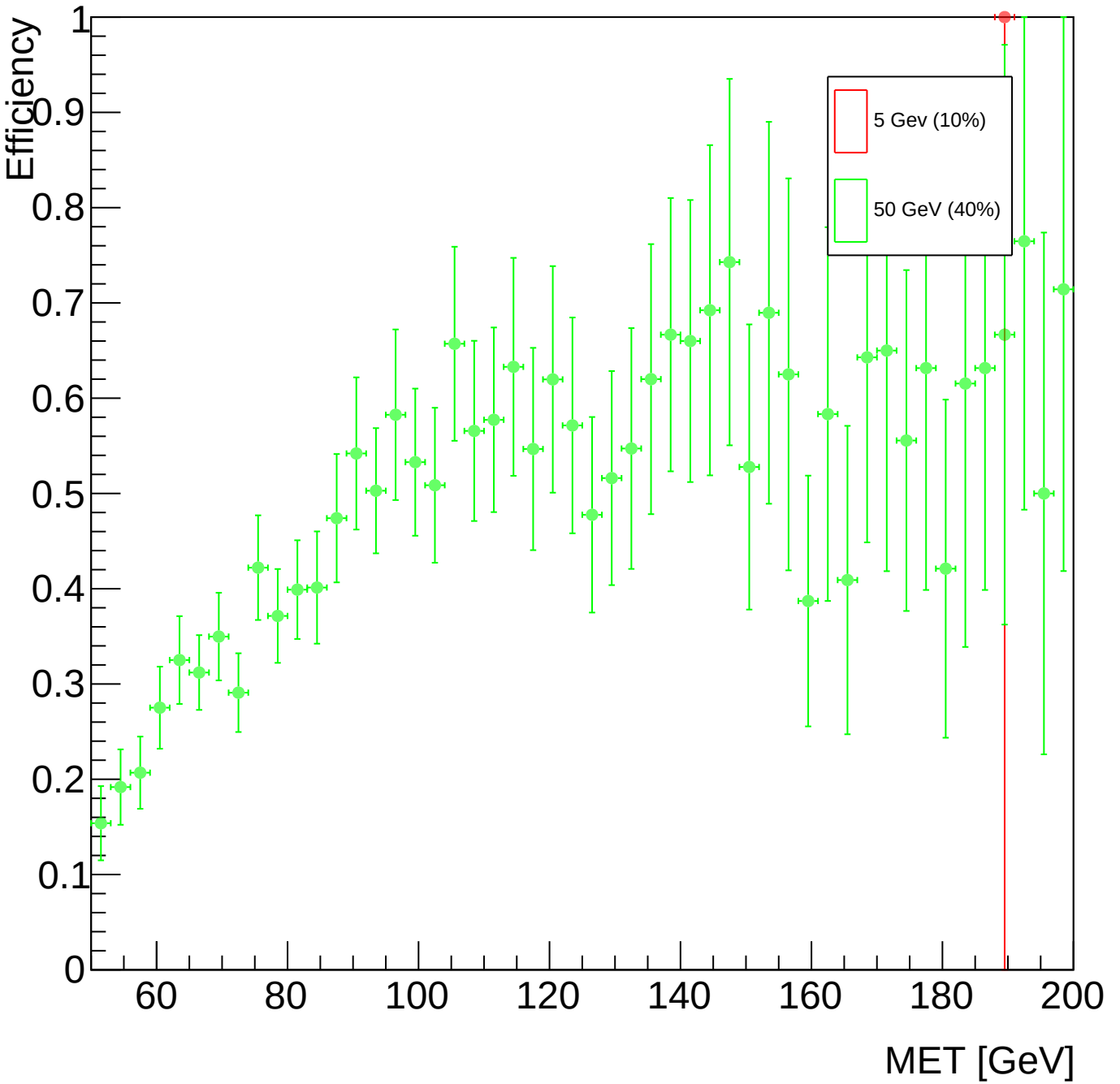
efficiencies

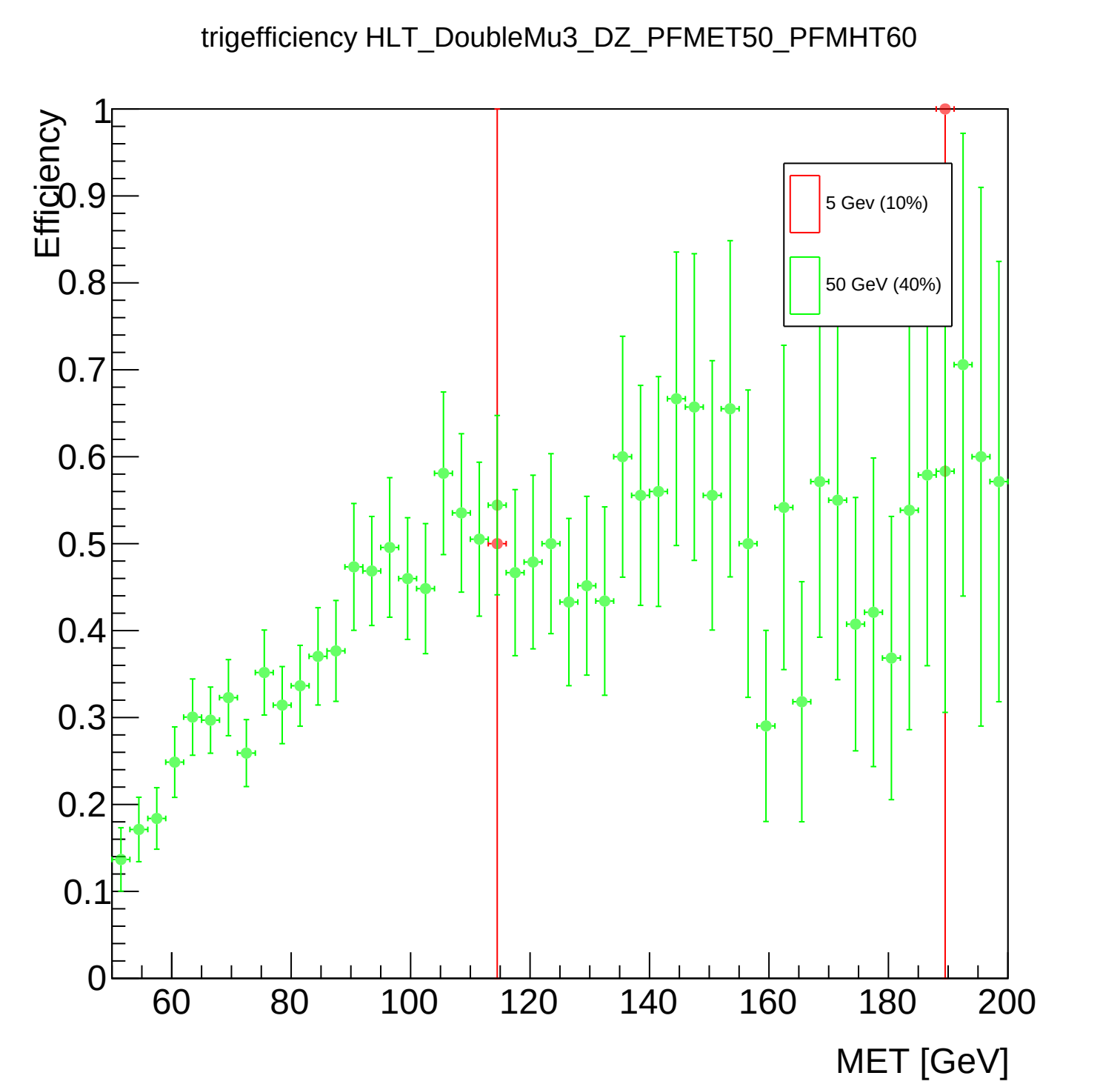

trigefficiency HLT_PFMET120_PFMHT120
Efficiency
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
0
10
20
30
40
50
60
70
80
Mu pt [GeV]
5 Gev (10%)
50 GeV (40%)

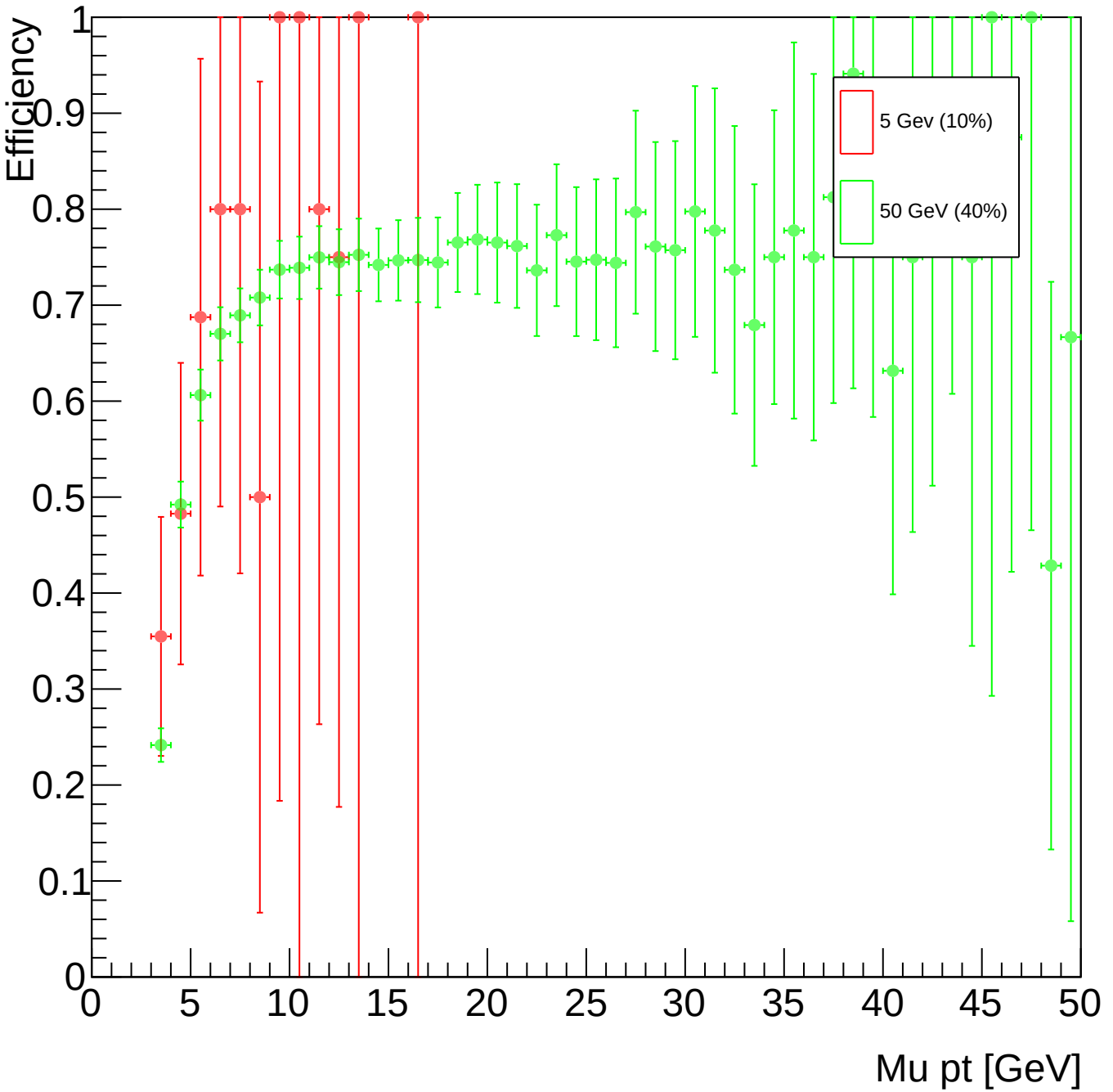

trigefficiency HLT_DoubleMu3_DCA_PFMET50_PFMHT60
Efficiency
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
0
10
20
30
40
50
60
70
80
Mu pt [GeV]
5 Gev (10%)
50 GeV (40%)

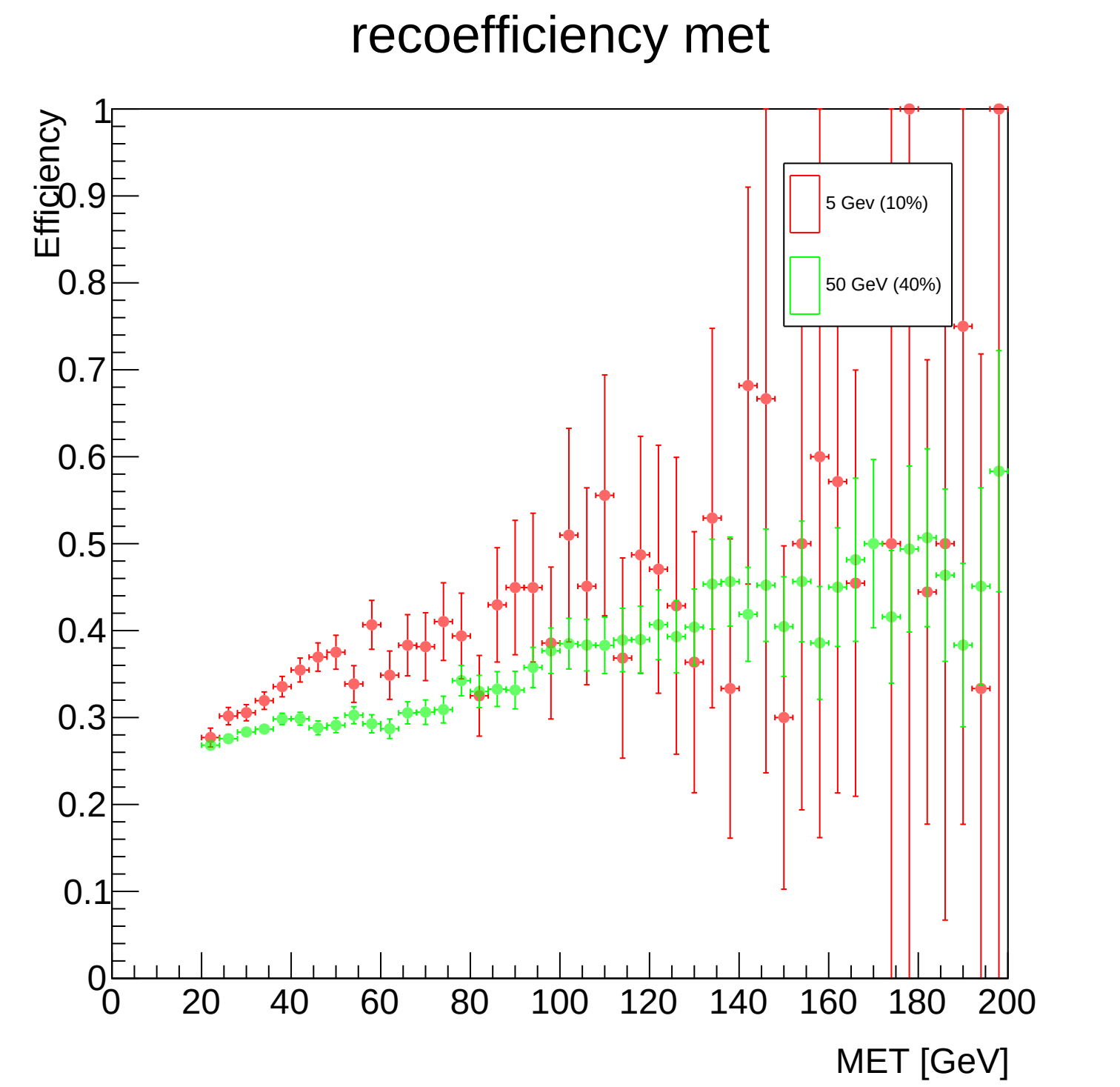

trigefficiency HLT_DoubleMu3_DZ_PFMET50_PFMHT60
Efficiency
Mu pt [GeV]
5 Gev (10%)
50 GeV (40%)
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
0
10
20
30
40
50
60
70
80

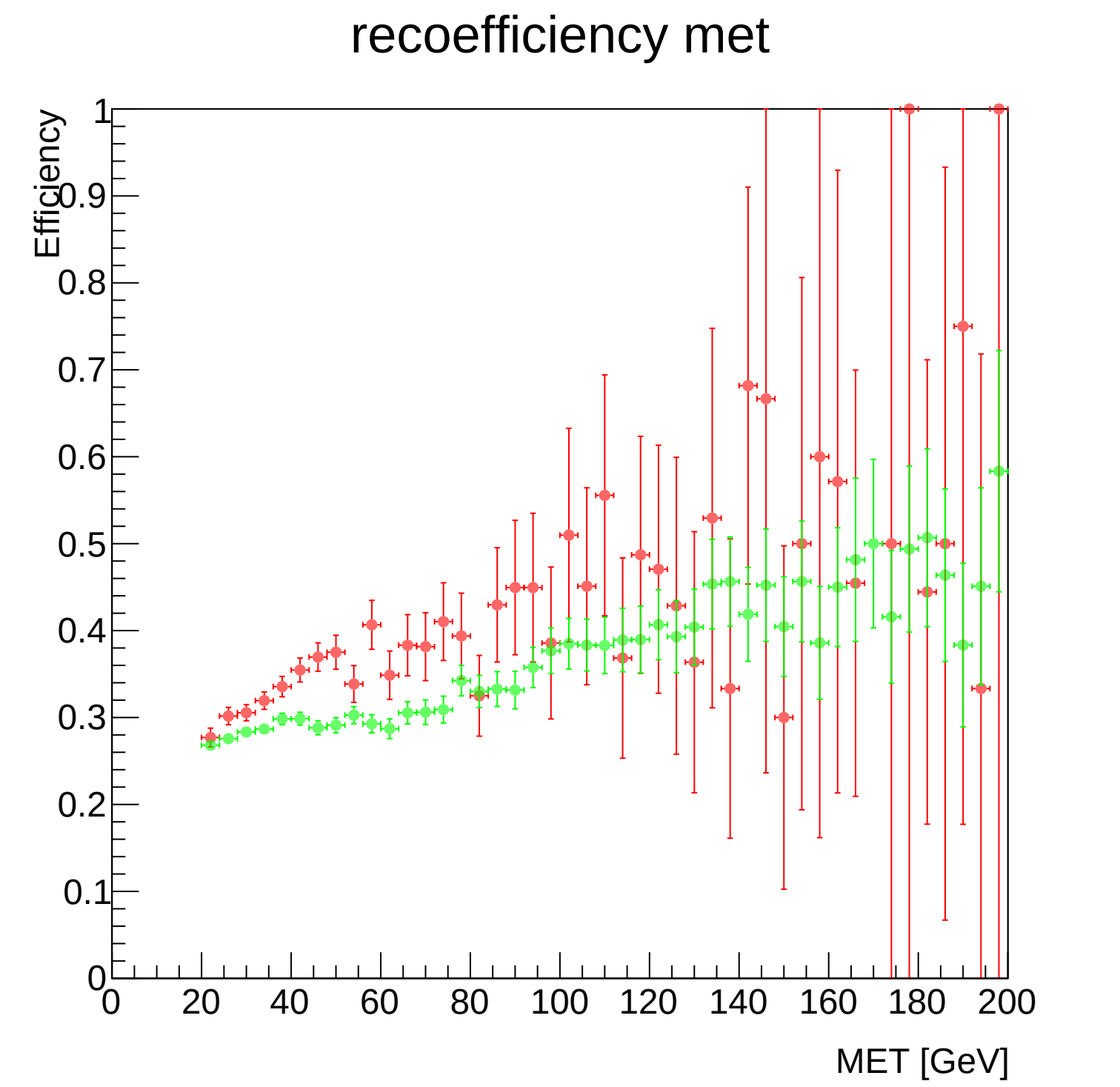

trigefficiency HLT_PFMET120_PFMHT120
Efficiency
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
120
130
140
150
160
170
180
190
200
MET [GeV]
5 Gev (10%)
50 GeV (40%)


trigefficiency HLT_DoubleMu3_DCA_PFMET50_PFMHT60
Efficiency
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
60
80
100
120
140
160
180
200
MET [GeV]
5 Gev (10%)
50 GeV (40%)


trigefficiency HLT_DoubleMu3_DZ_PFMET50_PFMHT60
Efficiency
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
60
80
100
120
140
160
180
200
MET [GeV]
5 Gev (10%)
50 GeV (40%)


recoefficiency mu
Efficiency
Mu pt [GeV]
5 Gev (10%)
50 GeV (40%)
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
0
5
10
15
20
25
30
35
40
45
50


recoefficiency met
Efficiency
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
0
20
40
60
80
100
120
140
160
180
200
MET [GeV]
5 Gev (10%)
50 GeV (40%)


recoefficiency met
Efficiency
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
0
20
40
60
80
100
120
140
160
180
200
MET [GeV]