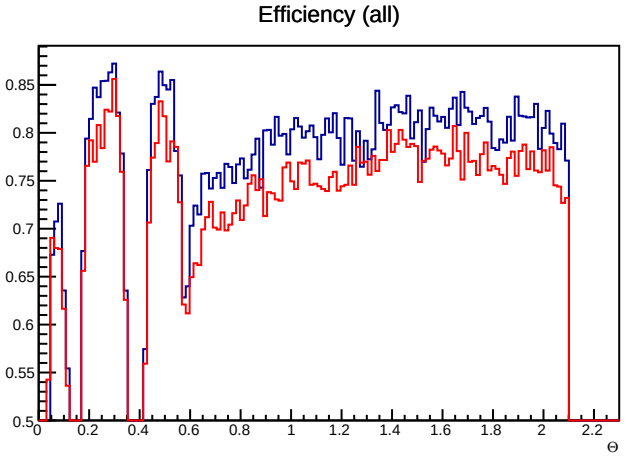
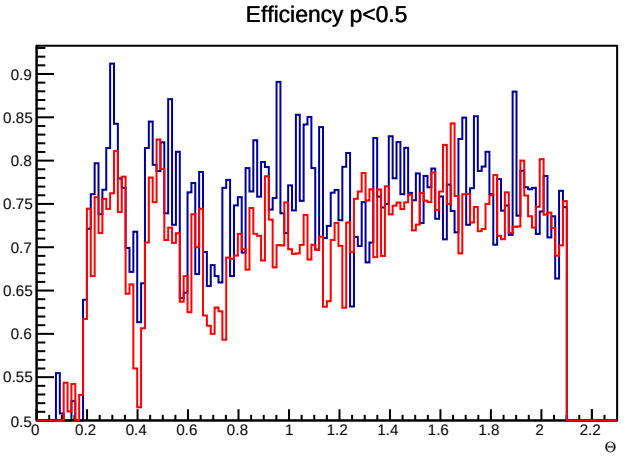
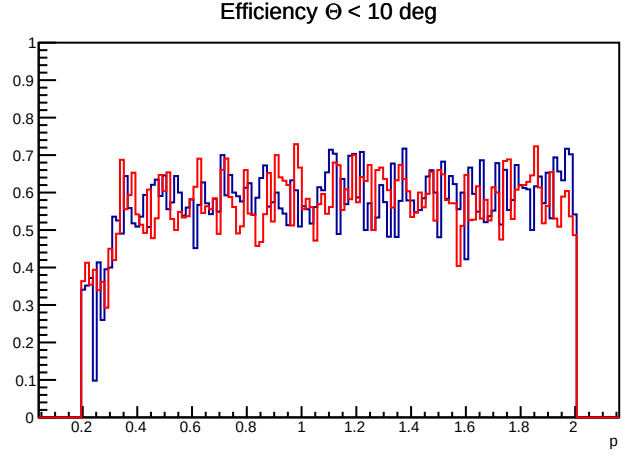
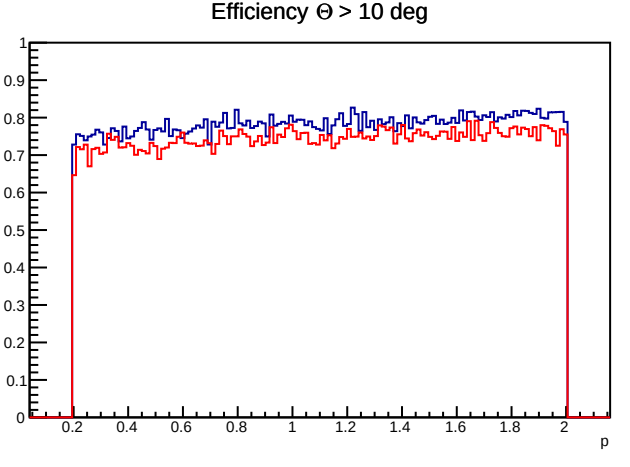
Pion Efficiencies

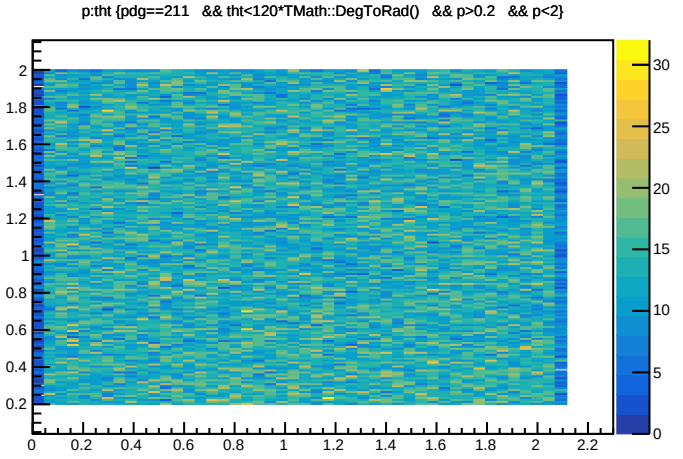
"day1+gem2+strip"
 blue: fts1234
 red: fts1256

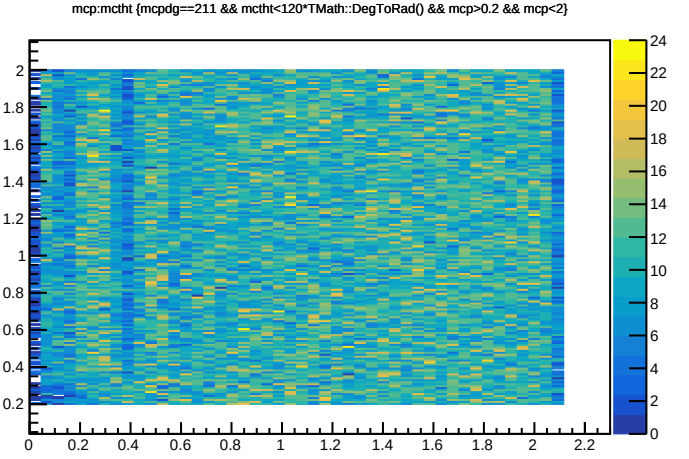

Efficiency (all)
0.85
0.8
0.75
0.7
0.65
0.6
0.55
0.5
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2
2.2
Θ

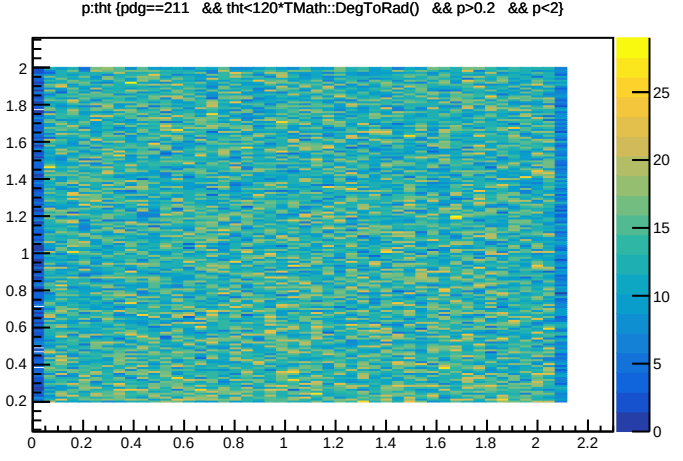

Efficiency p<0.5
0.9
0.85
0.8
0.75
0.7
0.65
0.6
0.55
0.5
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2
2.2
Θ

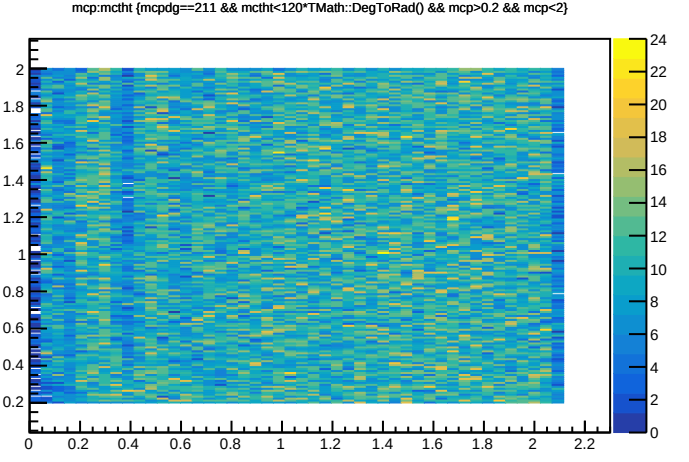

Efficiency Θ < 10 deg
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2
p


Efficiency Θ > 10 deg
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2
p

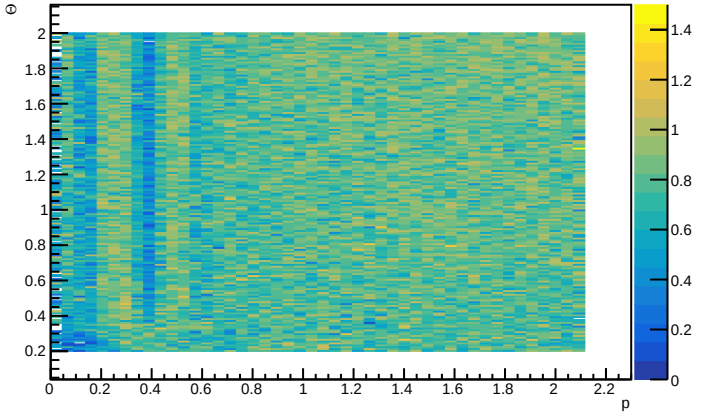

p:tht {pdg==211 && tht<120*TMath::DegToRad() && p>0.2 && p<2}


mcp:mctht {mcpdg==211 && mctht<120*TMath::DegToRad() && mcp>0.2 && mcp<2}

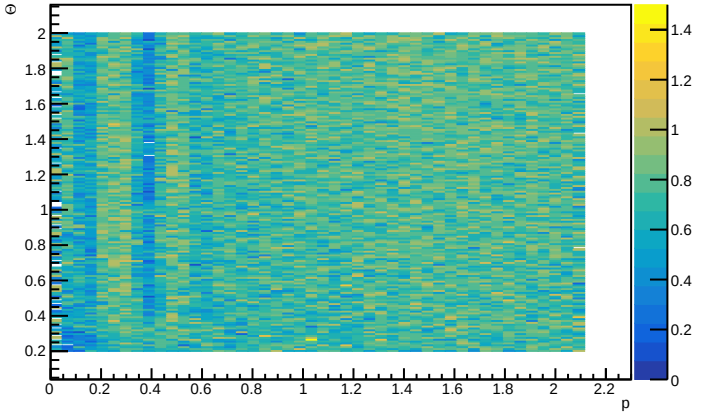

p:tht {pdg==211 && tht<120*TMath::DegToRad() && p>0.2 && p<2}


mcp:mctht {mcpdg==211 && mctht<120*TMath::DegToRad() && mcp>0.2 && mcp<2}

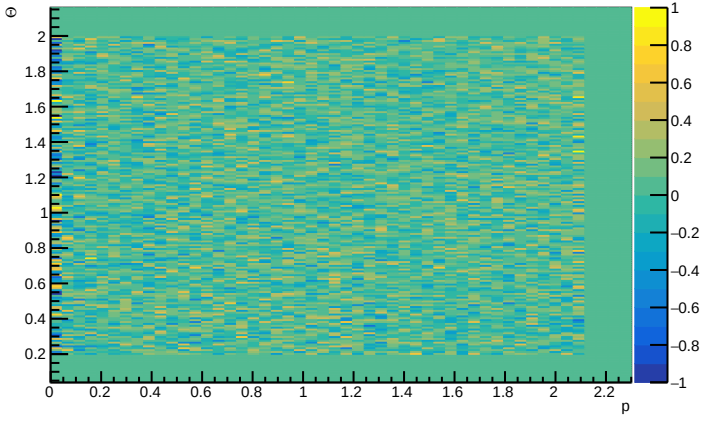
Efficiency 1245



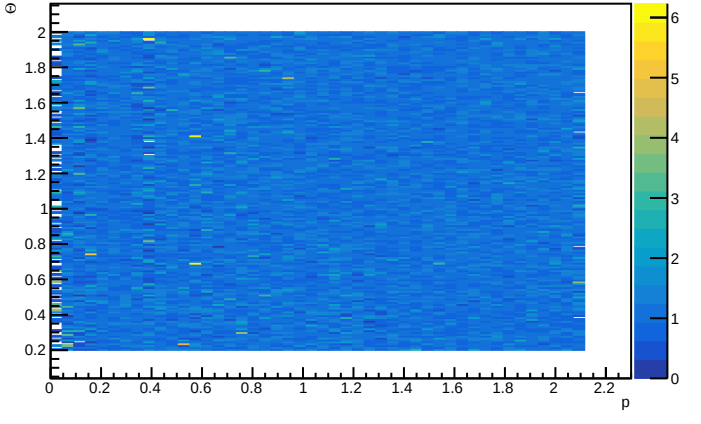
Efficiency 1256

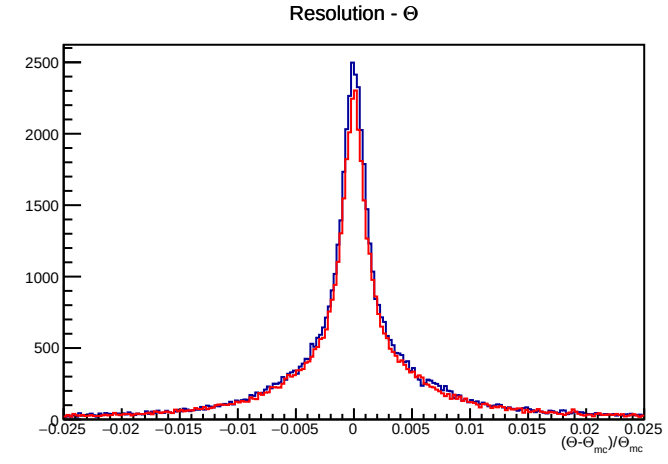


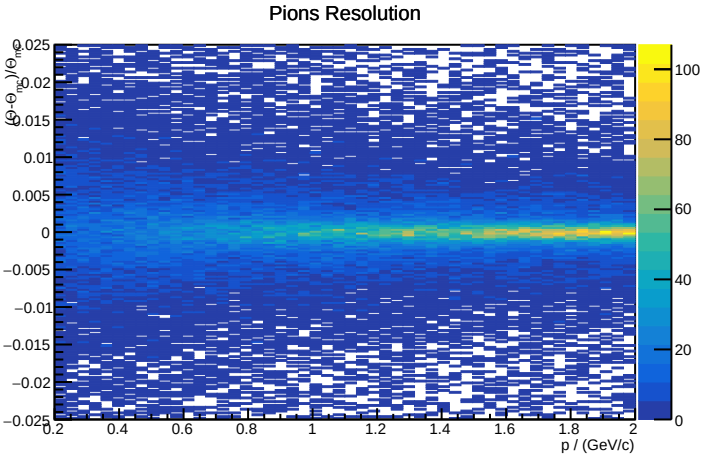
Eff. Difference

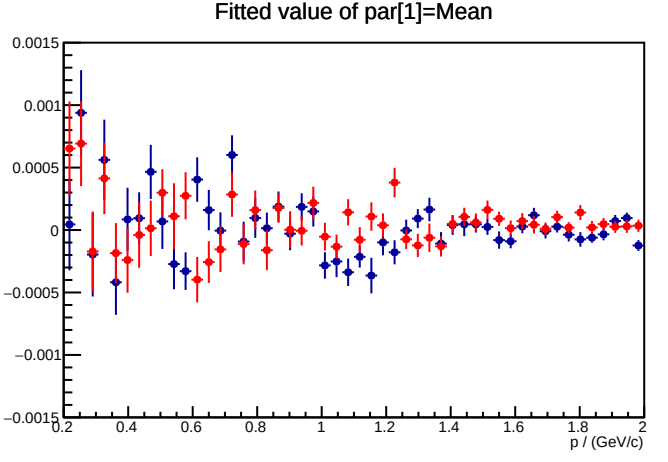


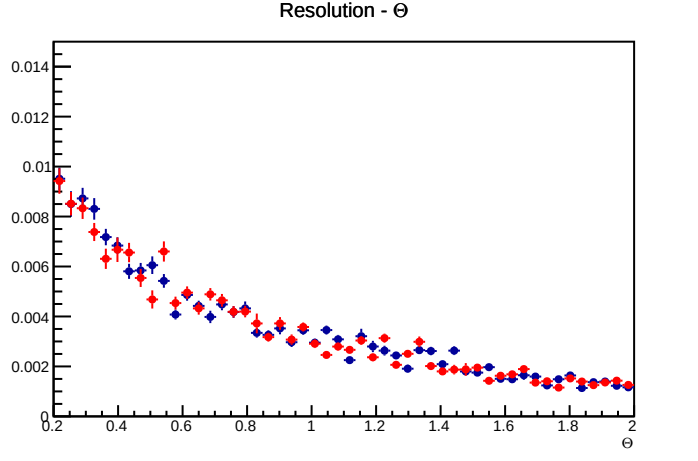
Eff. Ratio

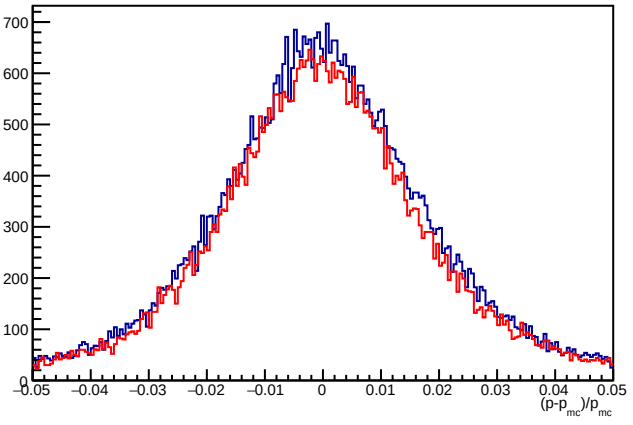


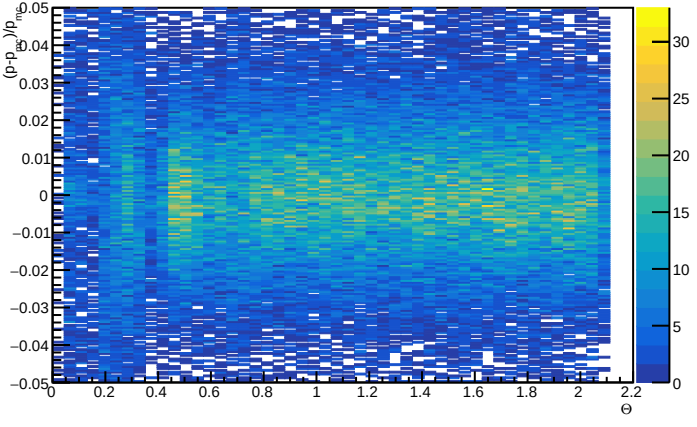

Resolution - Θ
2500
2000
1500
1000
500
0
−0.025 −0.02 −0.015 −0.01 −0.005 0 0.005 0.01 0.015 0.02 0.025
(Θ-Θmc)/Θmc

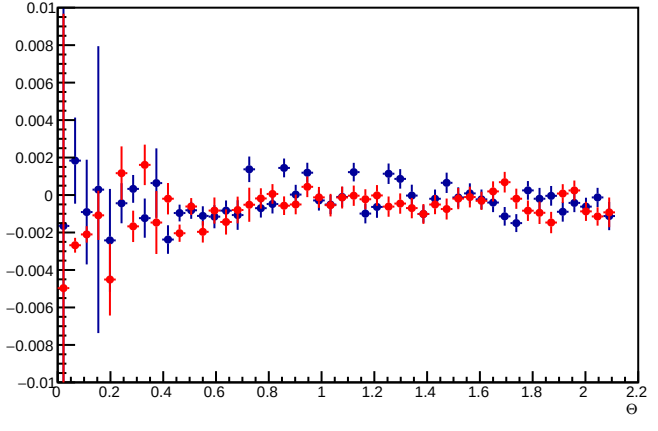

Pions Resolution
(Θ-Θmc)/Θmc
0.025
0.02
0.015
0.01
0.005
0
−0.005
−0.01
−0.015
−0.02
−0.025
0.2 0.4 0.6 0.8 1 1.2 1.4 1.6 1.8 2
p / (GeV/c)
100
80
60
40
20
0

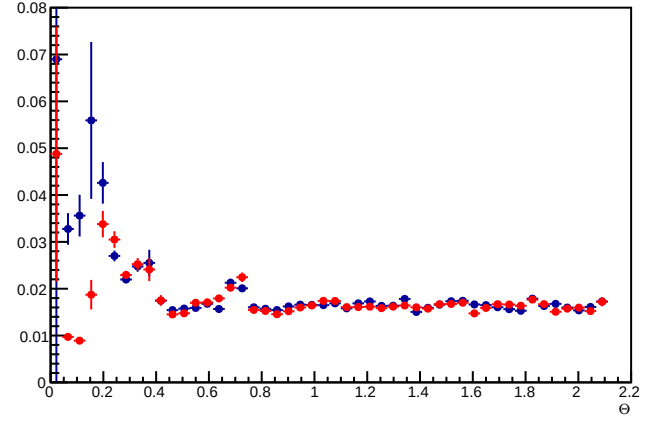

Fitted value of par[1]=Mean
0.0015
0.001
0.0005
0
−0.0005
−0.001
−0.0015
0.2 0.4 0.6 0.8 1 1.2 1.4 1.6 1.8 2
p / (GeV/c)

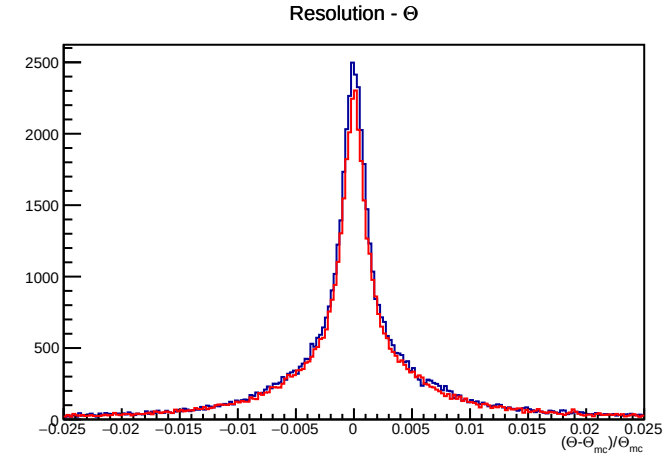

Resolution - Θ
0.014
0.012
0.01
0.008
0.006
0.004
0.002
0
0.2 0.4 0.6 0.8 1 1.2 1.4 1.6 1.8 2
Θ

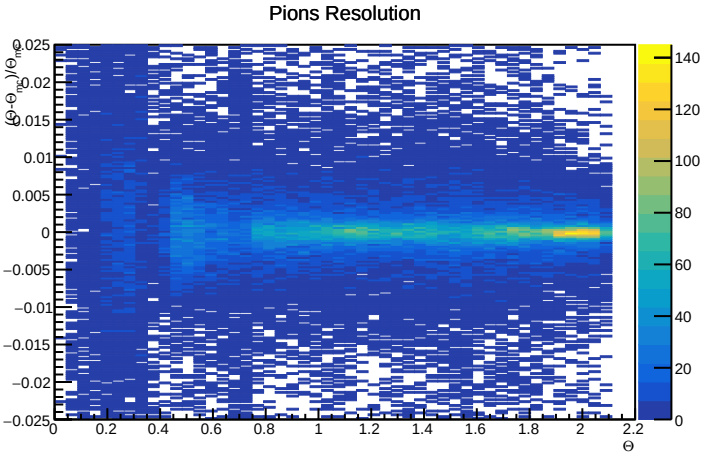

Resolution - p
700
600
500
400
300
200
100
0
−0.05
−0.04
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
0.04
0.05
(p-p_mc)/p_mc

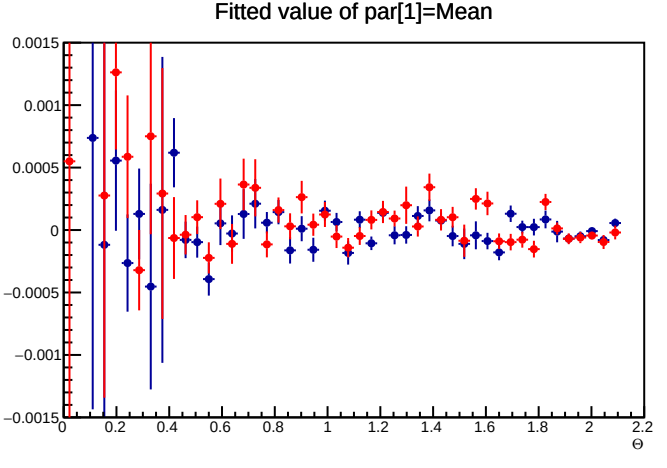

Pions Resolution
(p-p_rec)/p_mc
0.05
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.05
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2
2.2
Θ
30
25
20
15
10
5
0

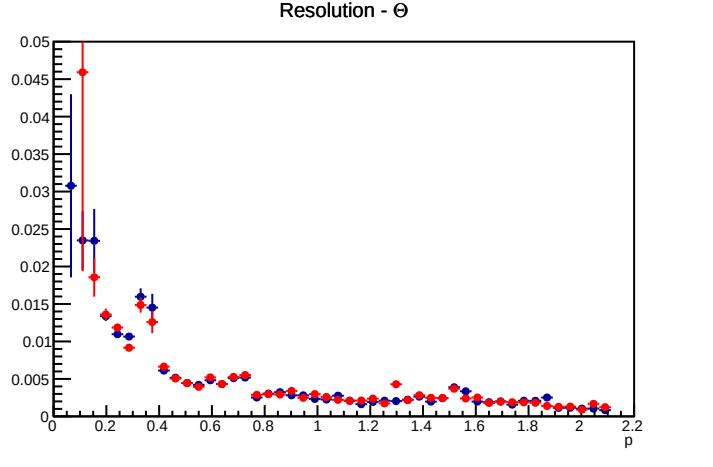

Fitted value of par[1]=Mean
0.01
0.008
0.006
0.004
0.002
0
−0.002
−0.004
−0.006
−0.008
−0.01
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2
2.2
Θ

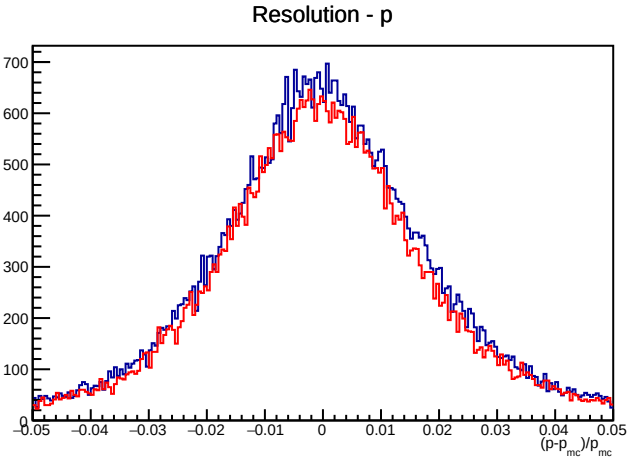

Resolution - p
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2
2.2
Θ

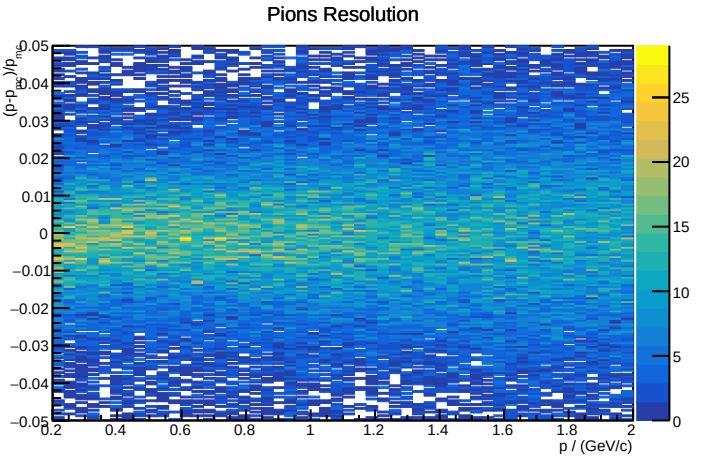

Resolution - Θ
2500
2000
1500
1000
500
0
−0.025 −0.02 −0.015 −0.01 −0.005 0 0.005 0.01 0.015 0.02 0.025
(Θ-Θmc)/Θmc

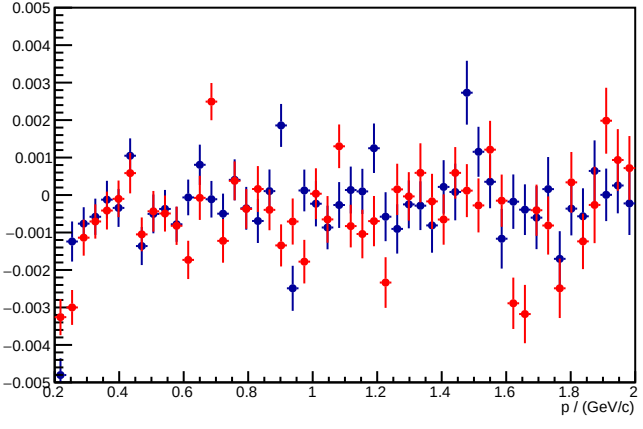

Pions Resolution
(Θ-Θmc)/Θmc
0.025
0.02
0.015
0.01
0.005
0
−0.005
−0.01
−0.015
−0.02
−0.025
0 0.2 0.4 0.6 0.8 1 1.2 1.4 1.6 1.8 2 2.2
Θ
140
120
100
80
60
40
20
0

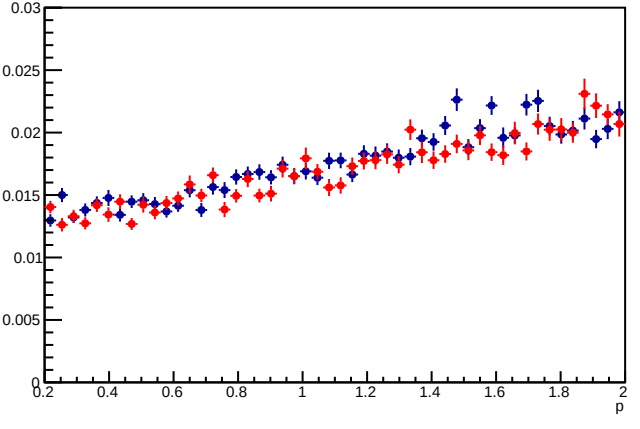

Fitted value of par[1]=Mean
0.0015
0.001
0.0005
0
−0.0005
−0.001
−0.0015
0 0.2 0.4 0.6 0.8 1 1.2 1.4 1.6 1.8 2 2.2
Θ


Resolution - Θ
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005
0
0 0.2 0.4 0.6 0.8 1 1.2 1.4 1.6 1.8 2 2.2
p


Resolution - p
(p-p_mc)/p_mc


Pions Resolution
(p-p_mc)/p_mc
p / (GeV/c)


Fitted value of par[1]=Mean
p / (GeV/c)


Resolution - p
p