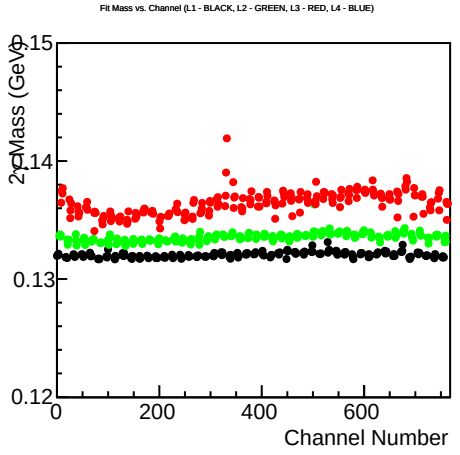
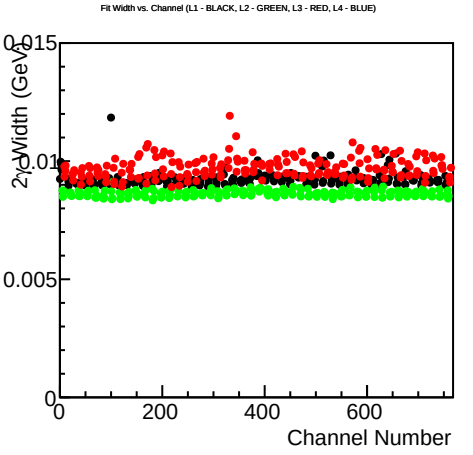
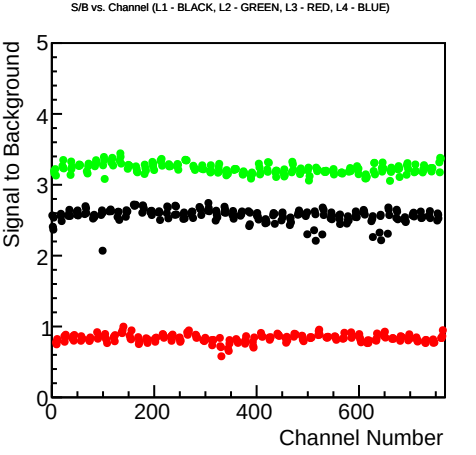
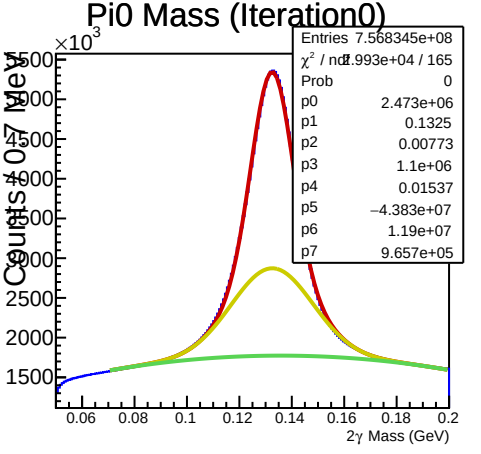
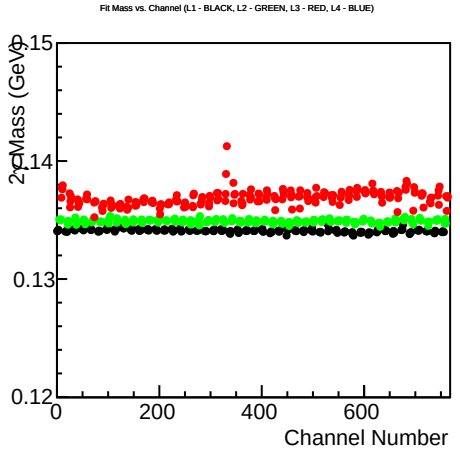
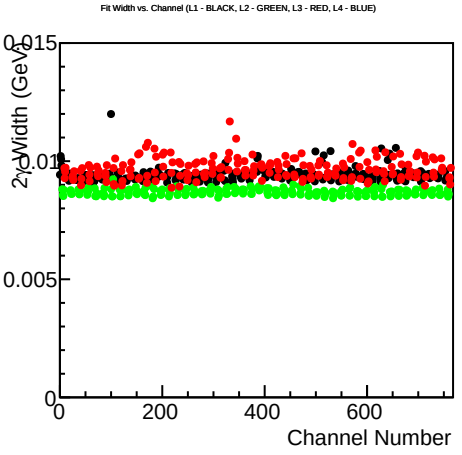

Fit Mass vs. Channel (L1 - BLACK, L2 - GREEN, L3 - RED, L4 - BLUE)
2γ Mass (GeV)
0.15
0.14
0.13
0.12
0
200
400
600
Channel Number

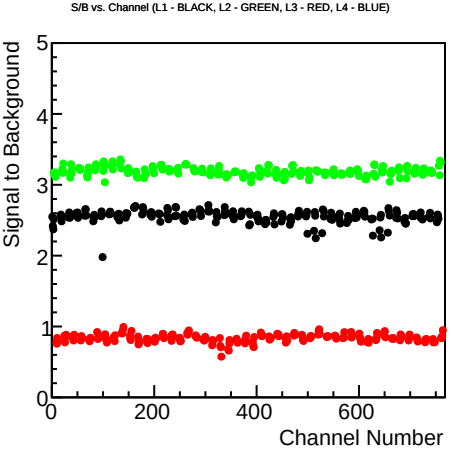

Fit Width vs. Channel (L1 - BLACK, L2 - GREEN, L3 - RED, L4 - BLUE)
2γ Width (GeV)
0.015
0.01
0.005
0
200
400
600
Channel Number

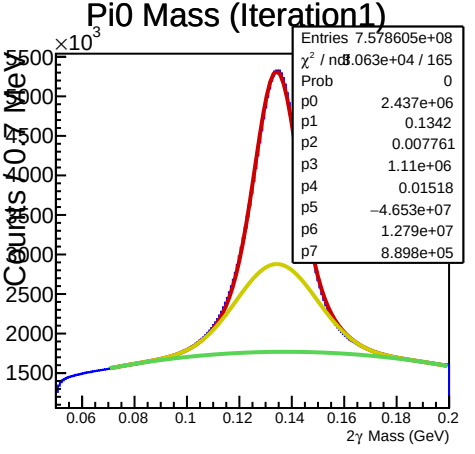

S/B vs. Channel (L1 - BLACK, L2 - GREEN, L3 - RED, L4 - BLUE)
Signal to Background
5
4
3
2
1
0
0
200
400
600
Channel Number


Pi0 Mass (Iteration0)
×10³
Counts / 0.7 MeV
Entries 7.568345e+08
χ² / ndf 2.993e+04 / 165
Prob 0
p0 2.473e+06
p1 0.1325
p2 0.00773
p3 1.1e+06
p4 0.01537
p5 −4.383e+07
p6 1.19e+07
p7 9.657e+05
2γ Mass (GeV)

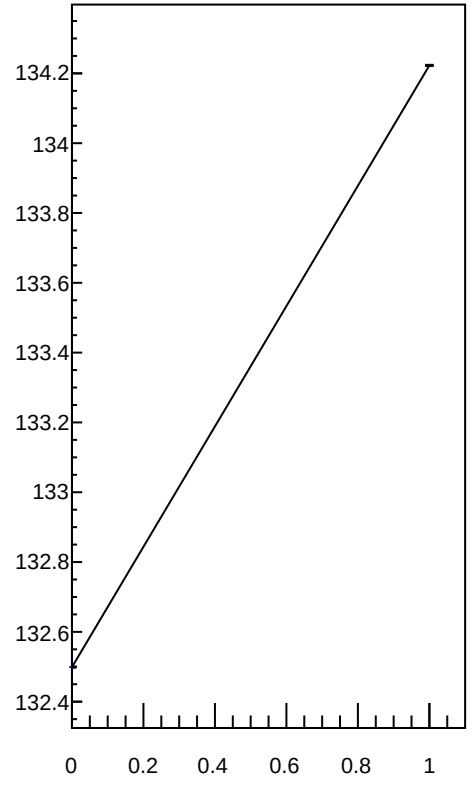

Fit Mass vs. Channel (L1 - BLACK, L2 - GREEN, L3 - RED, L4 - BLUE)
2γ Mass (GeV)
0.15
0.14
0.13
0.12
0
200
400
600
Channel Number


Fit Width vs. Channel (L1 - BLACK, L2 - GREEN, L3 - RED, L4 - BLUE)
2γ Width (GeV)
0.015
0.01
0.005
0
200
400
600
Channel Number

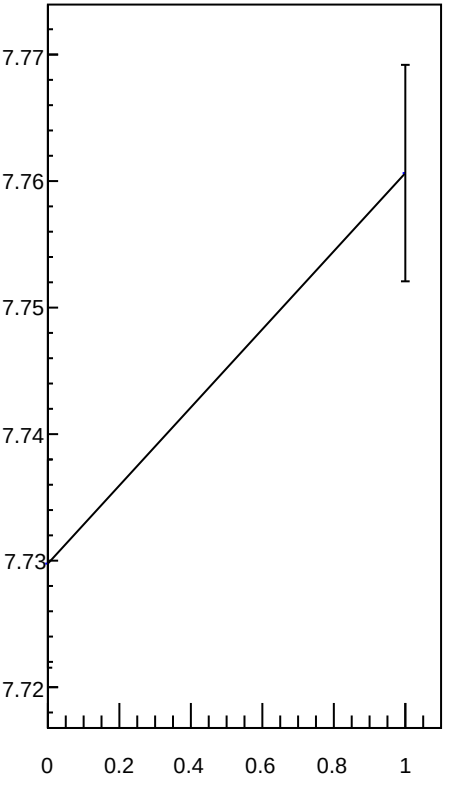

S/B vs. Channel (L1 - BLACK, L2 - GREEN, L3 - RED, L4 - BLUE)
Signal to Background
5
4
3
2
1
0
0
200
400
600
Channel Number


Pi0 Mass (Iteration1)
×10³
Counts /0.7 MeV
3500
3000
2500
2000
1500
Entries 7.578605e+08
χ² / ndf 3.063e+04 / 165
Prob 0
p0 2.437e+06
p1 0.1342
p2 0.007761
p3 1.11e+06
p4 0.01518
p5 −4.653e+07
p6 1.279e+07
p7 8.898e+05
0.06
0.08
0.1
0.12
0.14
0.16
0.18
0.2
2γ Mass (GeV)

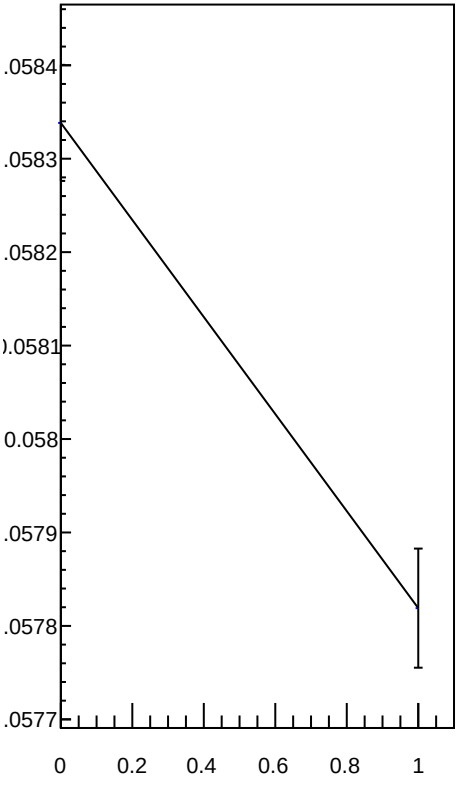
2γ fit mean vs. Iteration



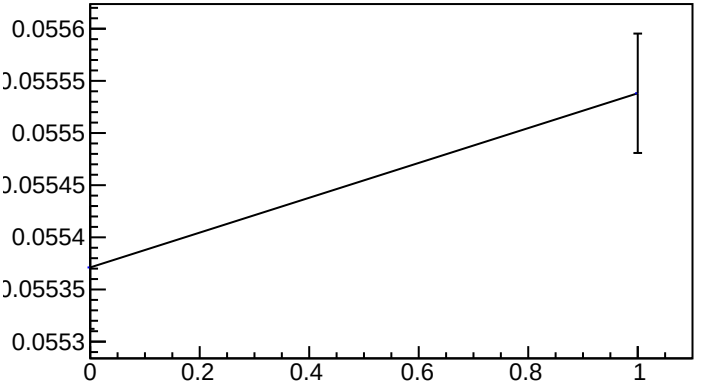
2γ fit sigma vs. Iteration



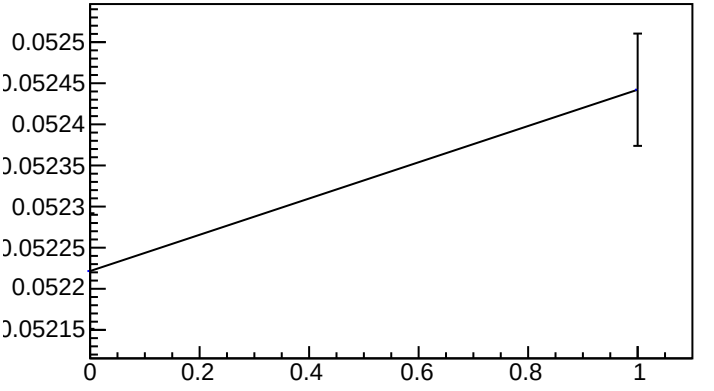
2γ fit sigma over mean vs. Iteration



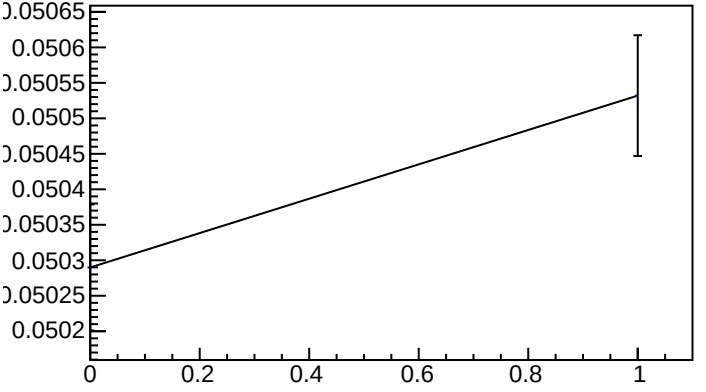
σ/μ vs. Iteration (E1, E2 > 500 MeV)



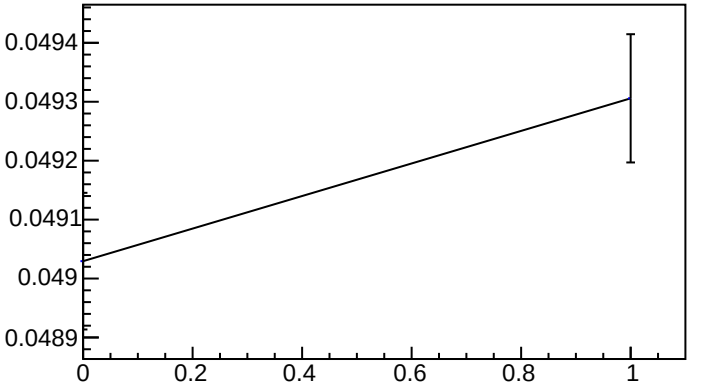
σ/μ vs. Iteration (E1, E2 > 700 MeV)

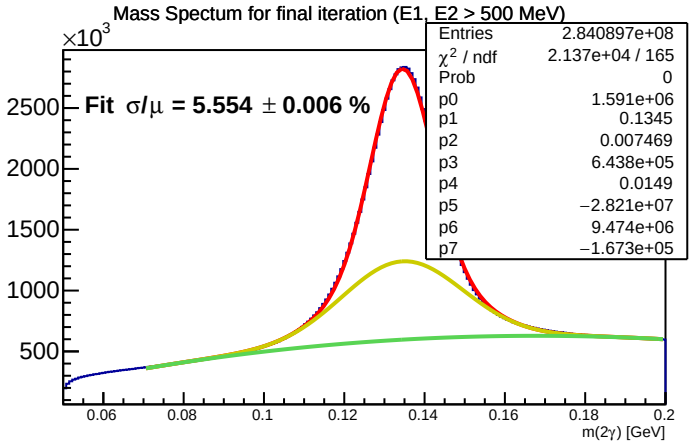


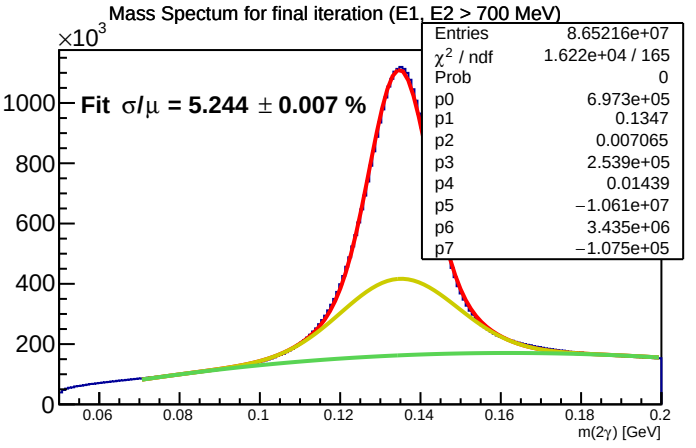
σ/μ vs. Iteration (E1, E2 > 900 MeV)

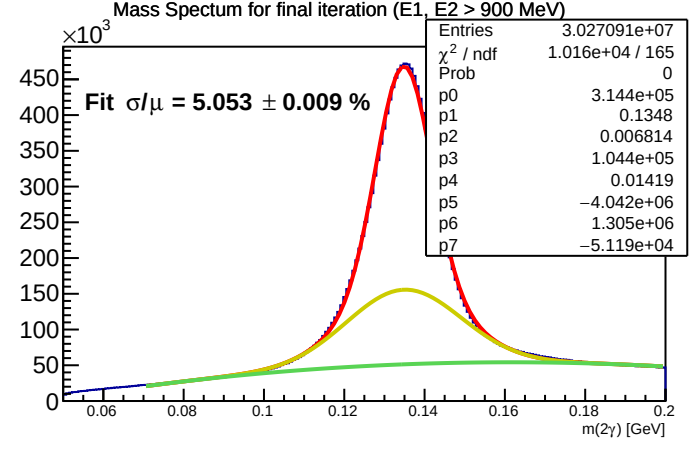


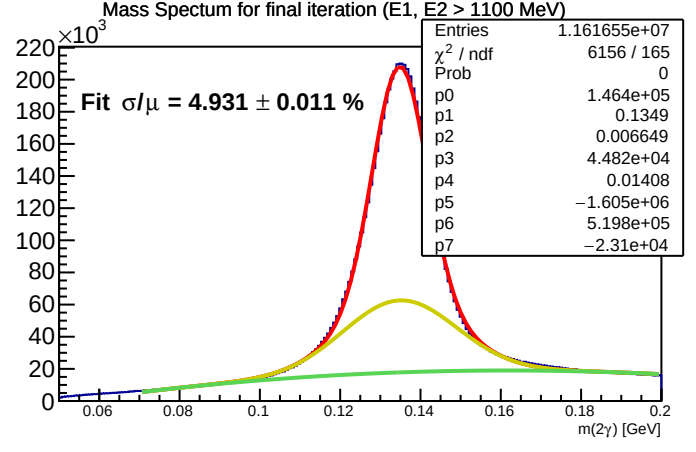
σ/μ vs. Iteration (E1, E2 > 1100 MeV)

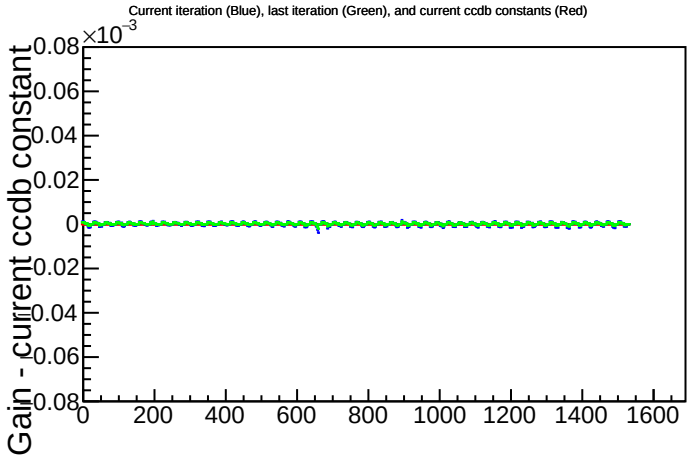


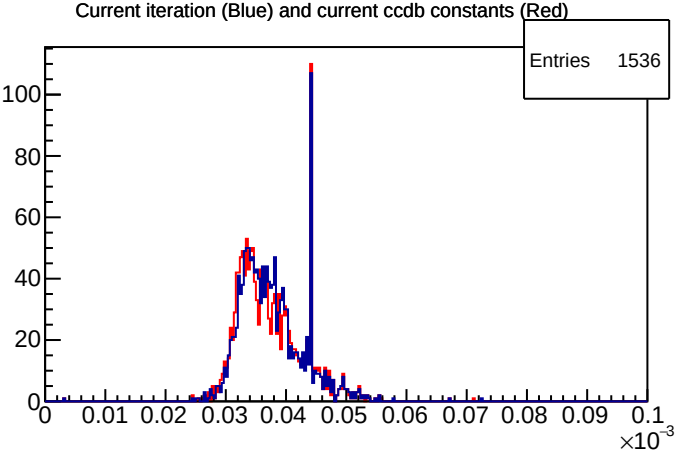

Mass Spectum for final iteration (E1, E2 > 500 MeV)
×10^3
Fit σ/μ = 5.554 ± 0.006 %
Entries 2.840897e+08
χ² / ndf 2.137e+04 / 165
Prob 0
p0 1.591e+06
p1 0.1345
p2 0.007469
p3 6.438e+05
p4 0.0149
p5 −2.821e+07
p6 9.474e+06
p7 −1.673e+05
m(2γ) [GeV]

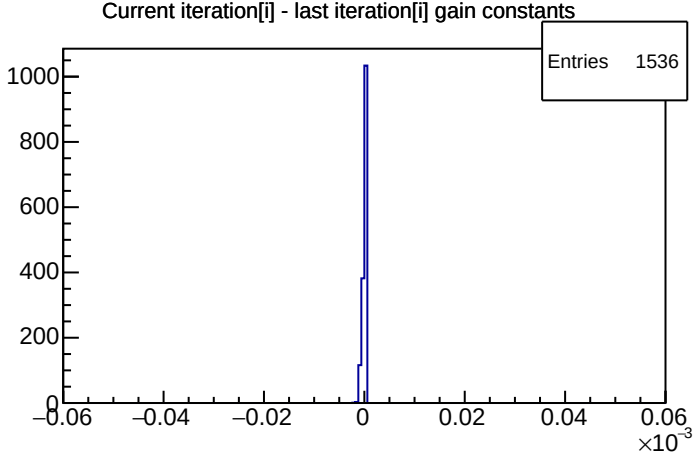

Mass Spectum for final iteration (E1, E2 > 700 MeV)
×10^3
Fit σ/μ = 5.244 ± 0.007 %
Entries 8.65216e+07
χ² / ndf 1.622e+04 / 165
Prob 0
p0 6.973e+05
p1 0.1347
p2 0.007065
p3 2.539e+05
p4 0.01439
p5 −1.061e+07
p6 3.435e+06
p7 −1.075e+05
m(2γ) [GeV]

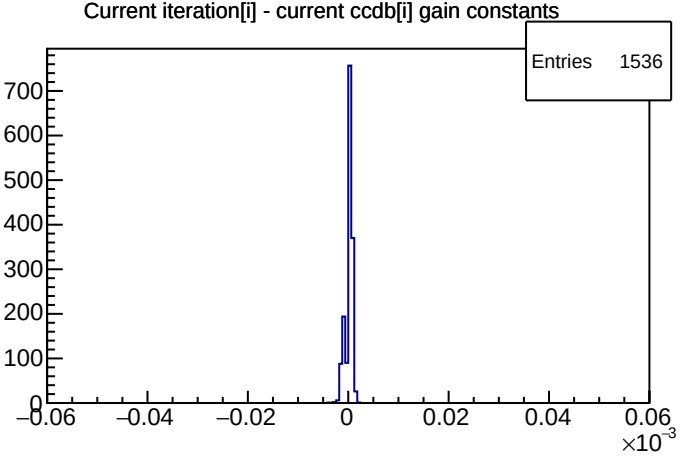

Mass Spectum for final iteration (E1, E2 > 900 MeV)
×10^3
Fit σ/μ = 5.053 ± 0.009 %
Entries 3.027091e+07
χ² / ndf 1.016e+04 / 165
Prob 0
p0 3.144e+05
p1 0.1348
p2 0.006814
p3 1.044e+05
p4 0.01419
p5 −4.042e+06
p6 1.305e+06
p7 −5.119e+04
m(2γ) [GeV]


Mass Spectum for final iteration (E1, E2 > 1100 MeV)
×10^3
Fit σ/μ = 4.931 ± 0.011 %
Entries 1.161655e+07
χ² / ndf 6156 / 165
Prob 0
p0 1.464e+05
p1 0.1349
p2 0.006649
p3 4.482e+04
p4 0.01408
p5 −1.605e+06
p6 5.198e+05
p7 −2.31e+04
m(2γ) [GeV]


Current iteration (Blue), last iteration (Green), and current ccdb constants (Red)
Gain - current ccdb constant
×10⁻³
0.08
0.06
0.04
0.02
0
0.02
0.04
0.06
0.08
0
200
400
600
800
1000
1200
1400
1600


Current iteration (Blue) and current ccdb constants (Red)
Entries 1536
100
80
60
40
20
0
0
0.01
0.02
0.03
0.04
0.05
0.06
0.07
0.08
0.09
0.1
×10⁻³


Current iteration[i] - last iteration[i] gain constants
Entries 1536
1000
800
600
400
200
0
−0.06
−0.04
−0.02
0
0.02
0.04
0.06
×10⁻³


Current iteration[i] - current ccdb[i] gain constants
Entries 1536
700
600
500
400
300
200
100
0
−0.06
−0.04
−0.02
0
0.02
0.04
0.06
×10⁻³