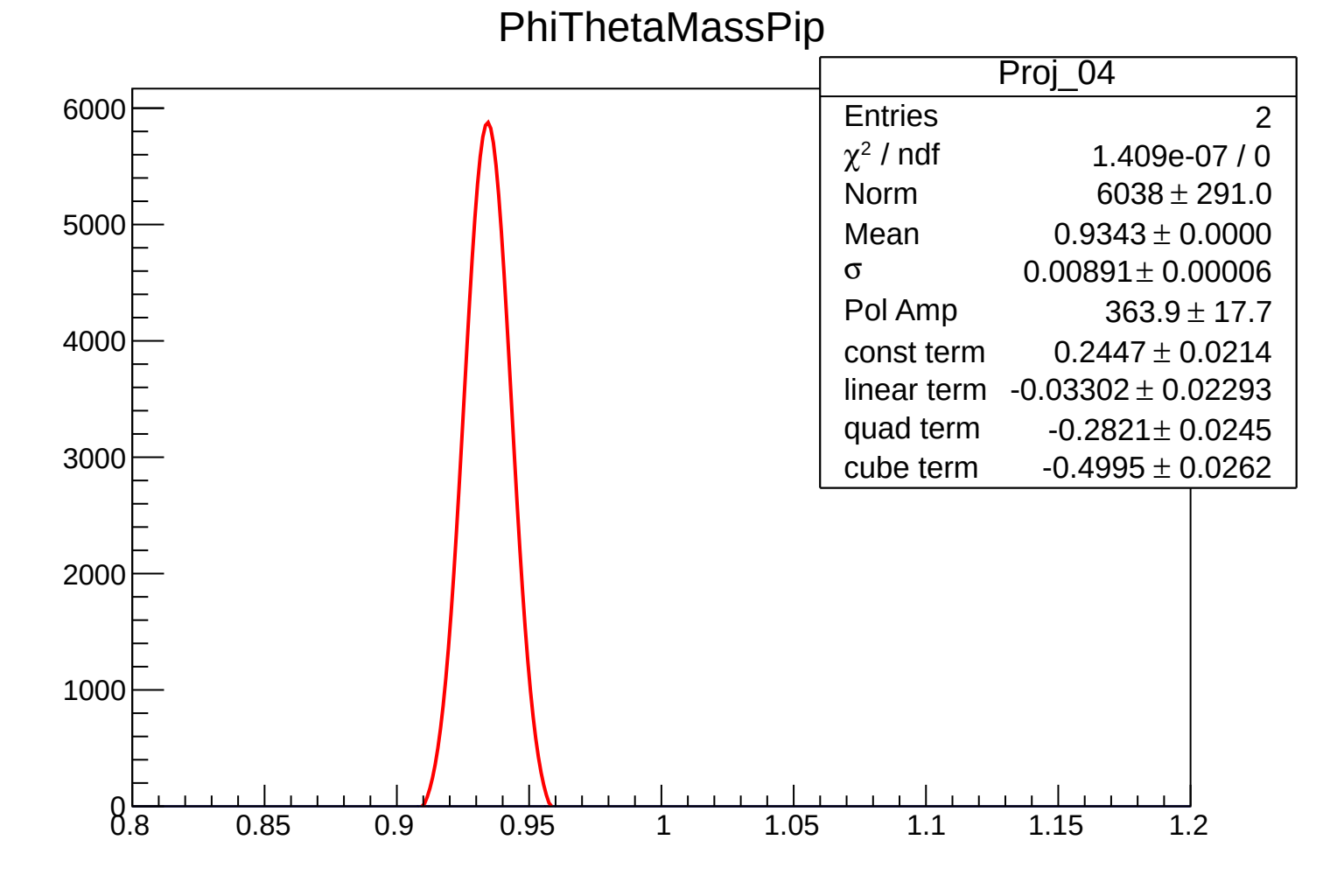
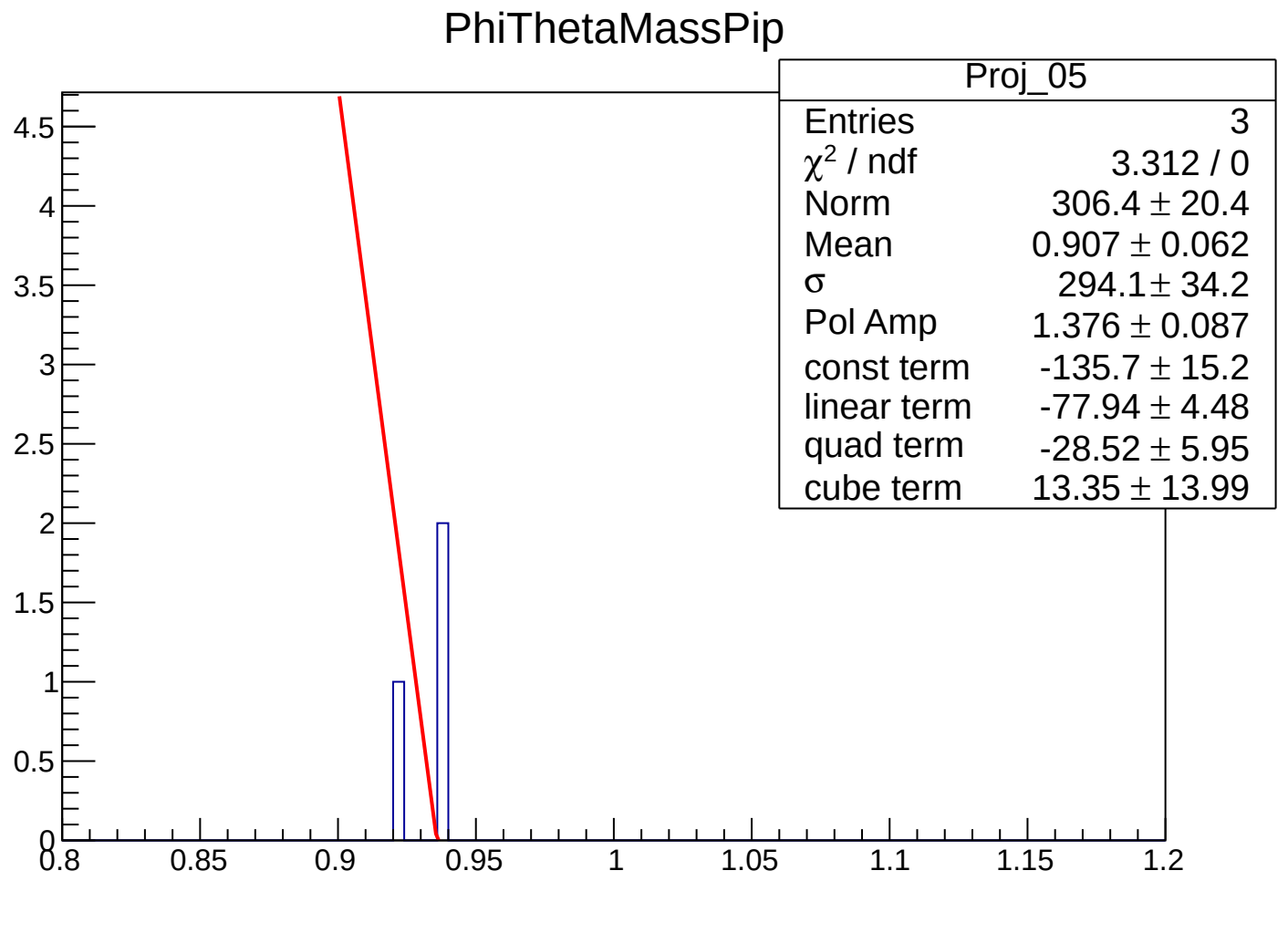
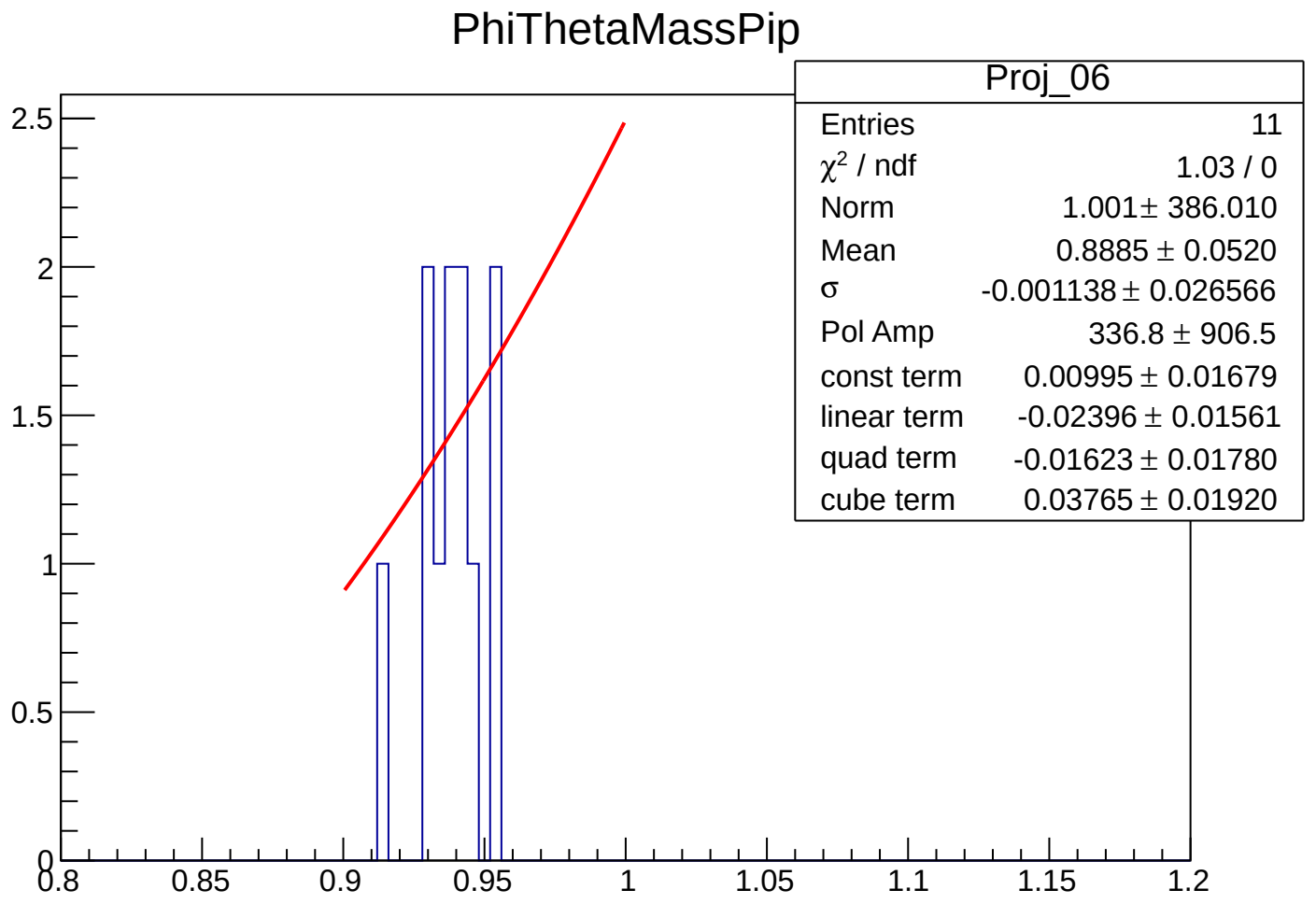
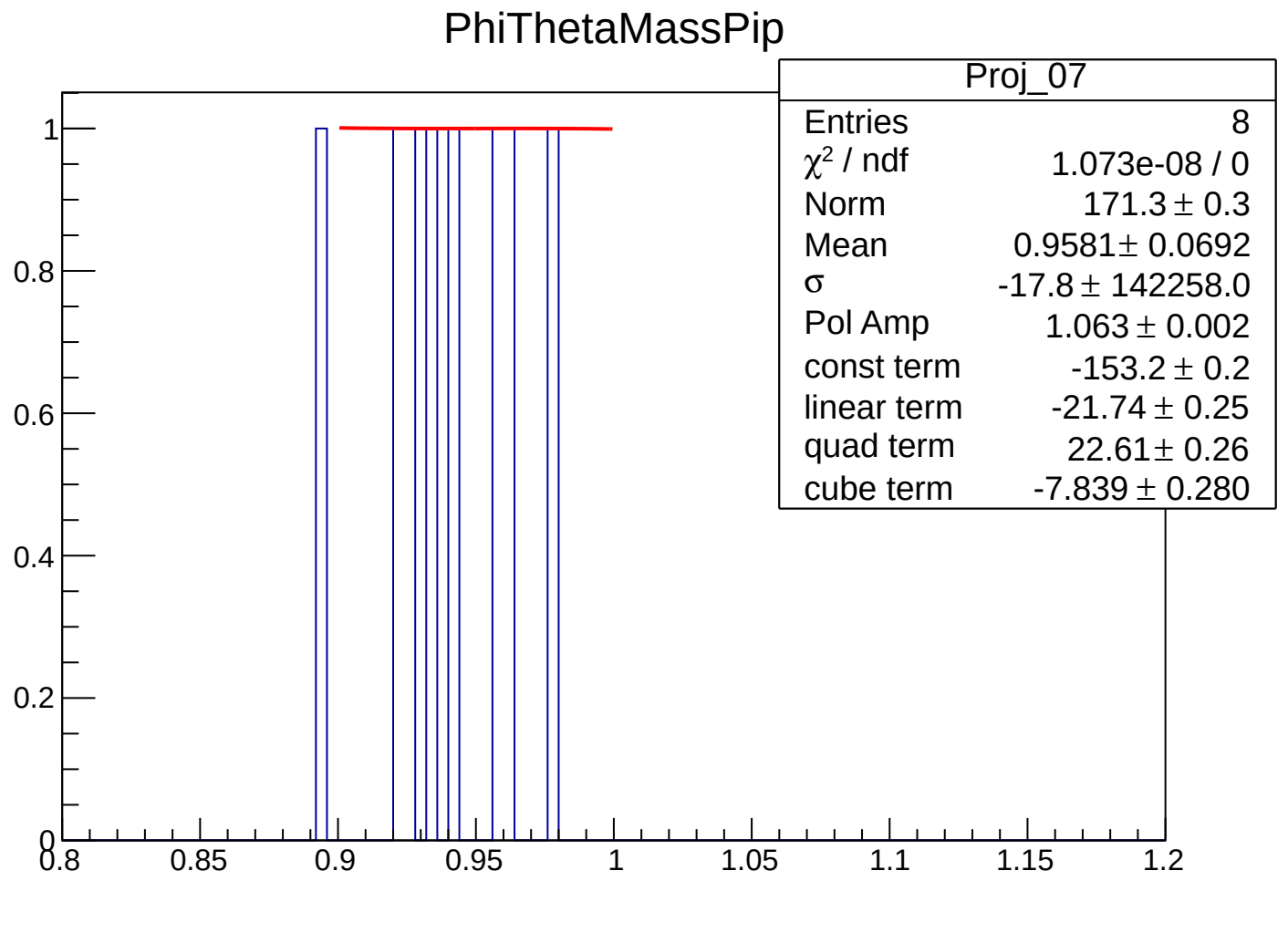
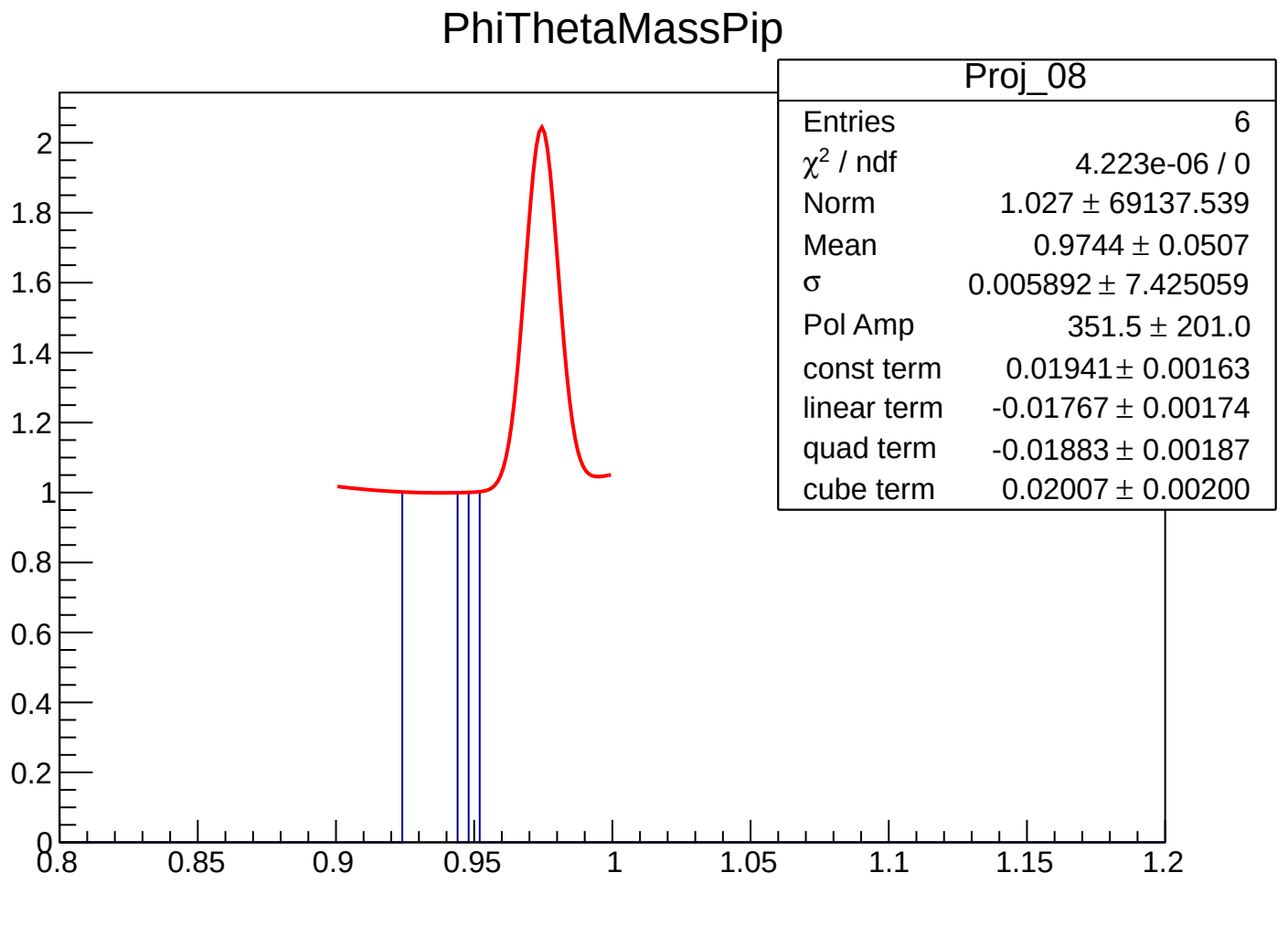
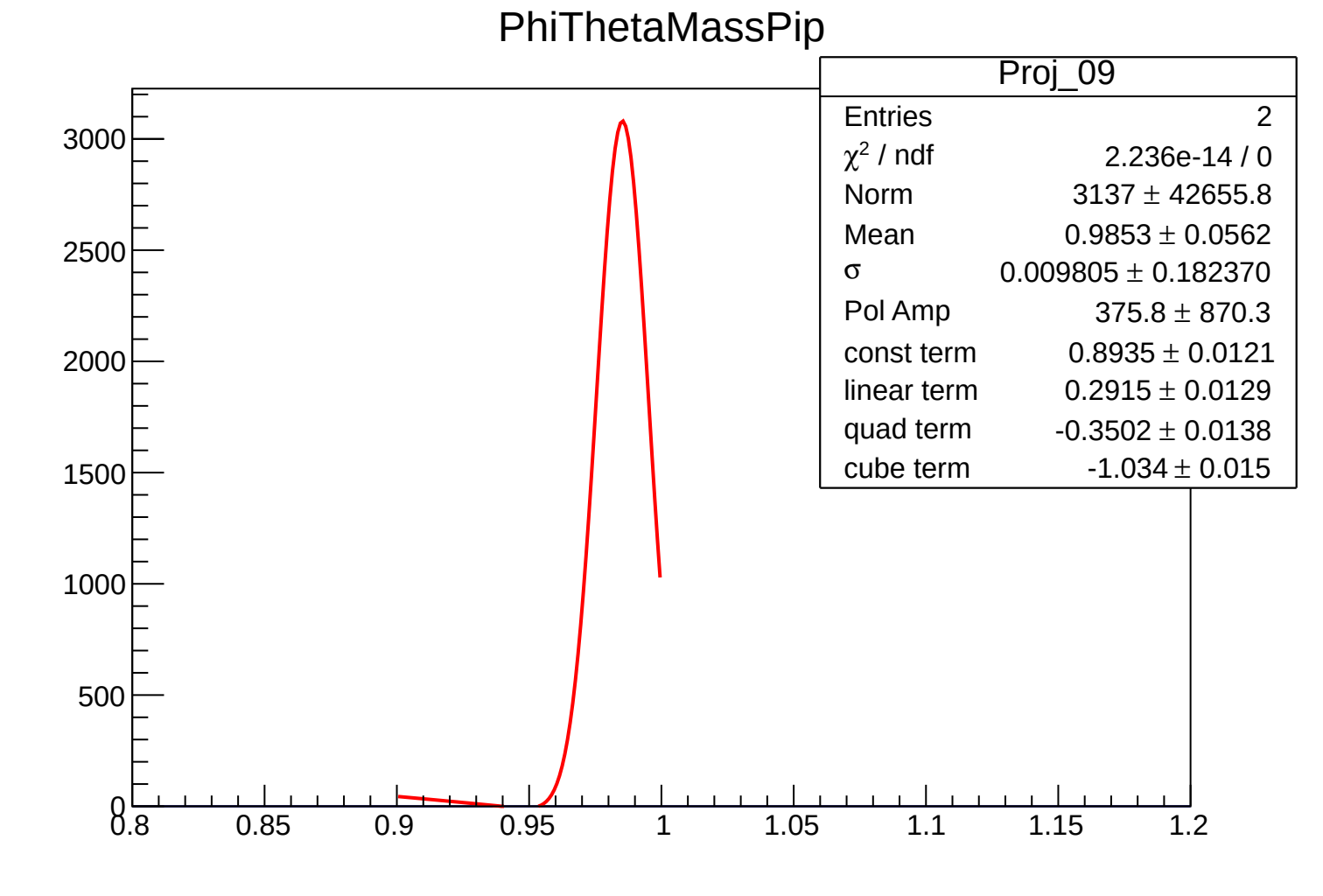

PhiThetaMassPip
Proj_04
Entries 2
χ² / ndf 1.409e-07 / 0
Norm 6038 ± 291.0
Mean 0.9343 ± 0.0000
σ 0.00891 ± 0.00006
Pol Amp 363.9 ± 17.7
const term 0.2447 ± 0.0214
linear term -0.03302 ± 0.02293
quad term -0.2821 ± 0.0245
cube term -0.4995 ± 0.0262
6000
5000
4000
3000
2000
1000
0
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

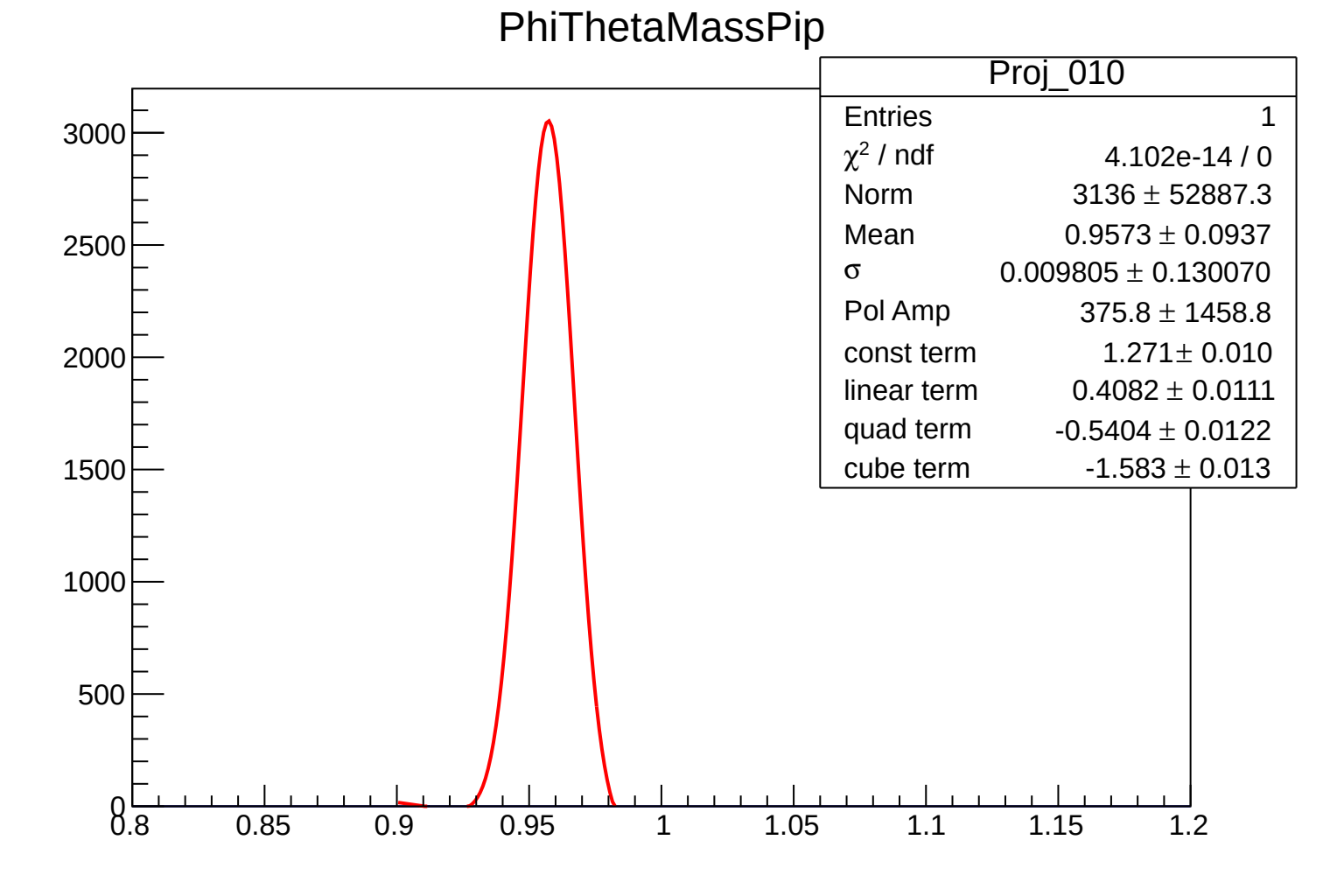

PhiThetaMassPip
Proj_05
Entries 3
χ² / ndf 3.312 / 0
Norm 306.4 ± 20.4
Mean 0.907 ± 0.062
σ 294.1 ± 34.2
Pol Amp 1.376 ± 0.087
const term -135.7 ± 15.2
linear term -77.94 ± 4.48
quad term -28.52 ± 5.95
cube term 13.35 ± 13.99
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

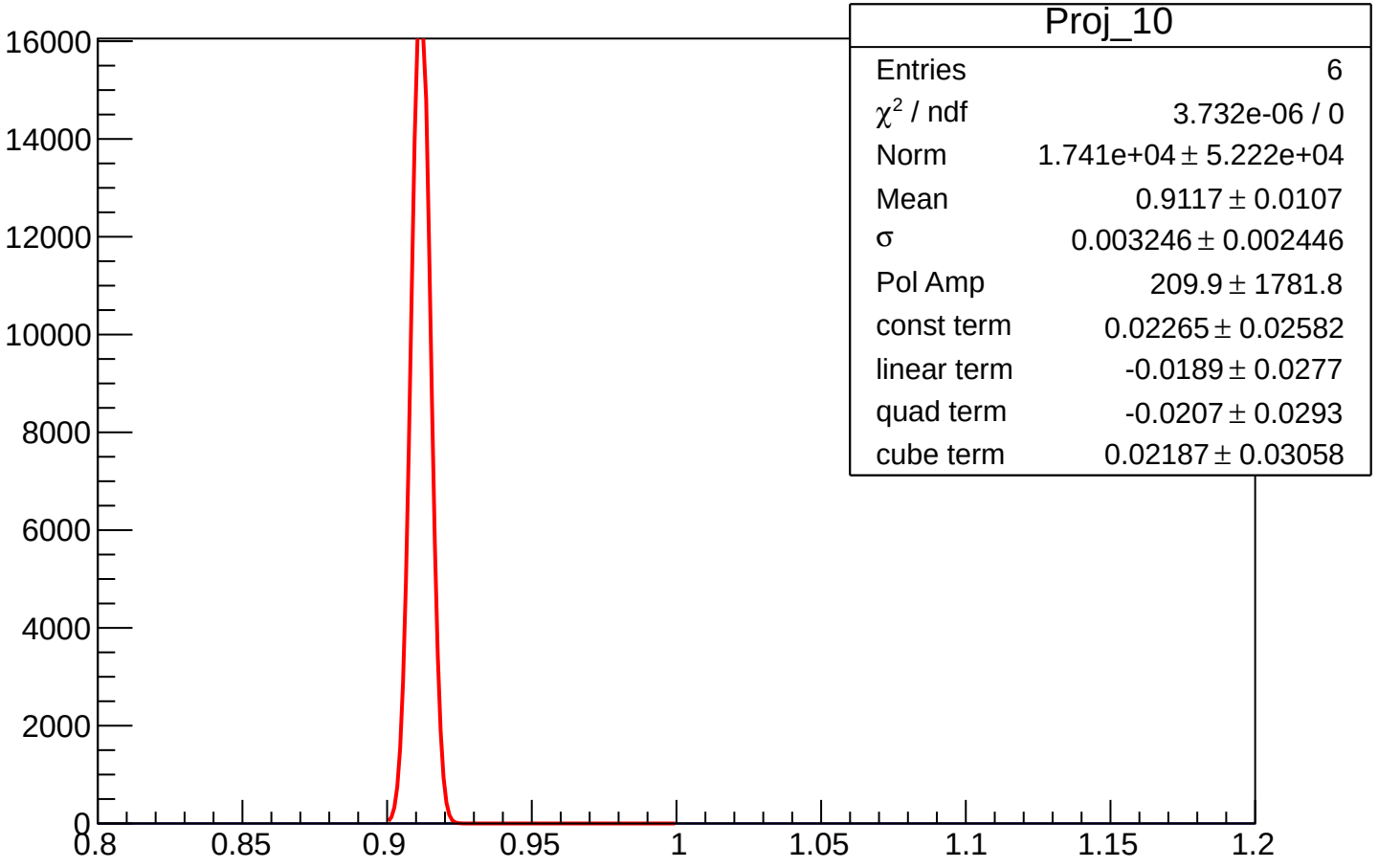

PhiThetaMassPip
Proj_06
Entries 11
χ² / ndf 1.03 / 0
Norm 1.001 ± 386.010
Mean 0.8885 ± 0.0520
σ -0.001138 ± 0.026566
Pol Amp 336.8 ± 906.5
const term 0.00995 ± 0.01679
linear term -0.02396 ± 0.01561
quad term -0.01623 ± 0.01780
cube term 0.03765 ± 0.01920
2.5
2
1.5
1
0.5
0
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

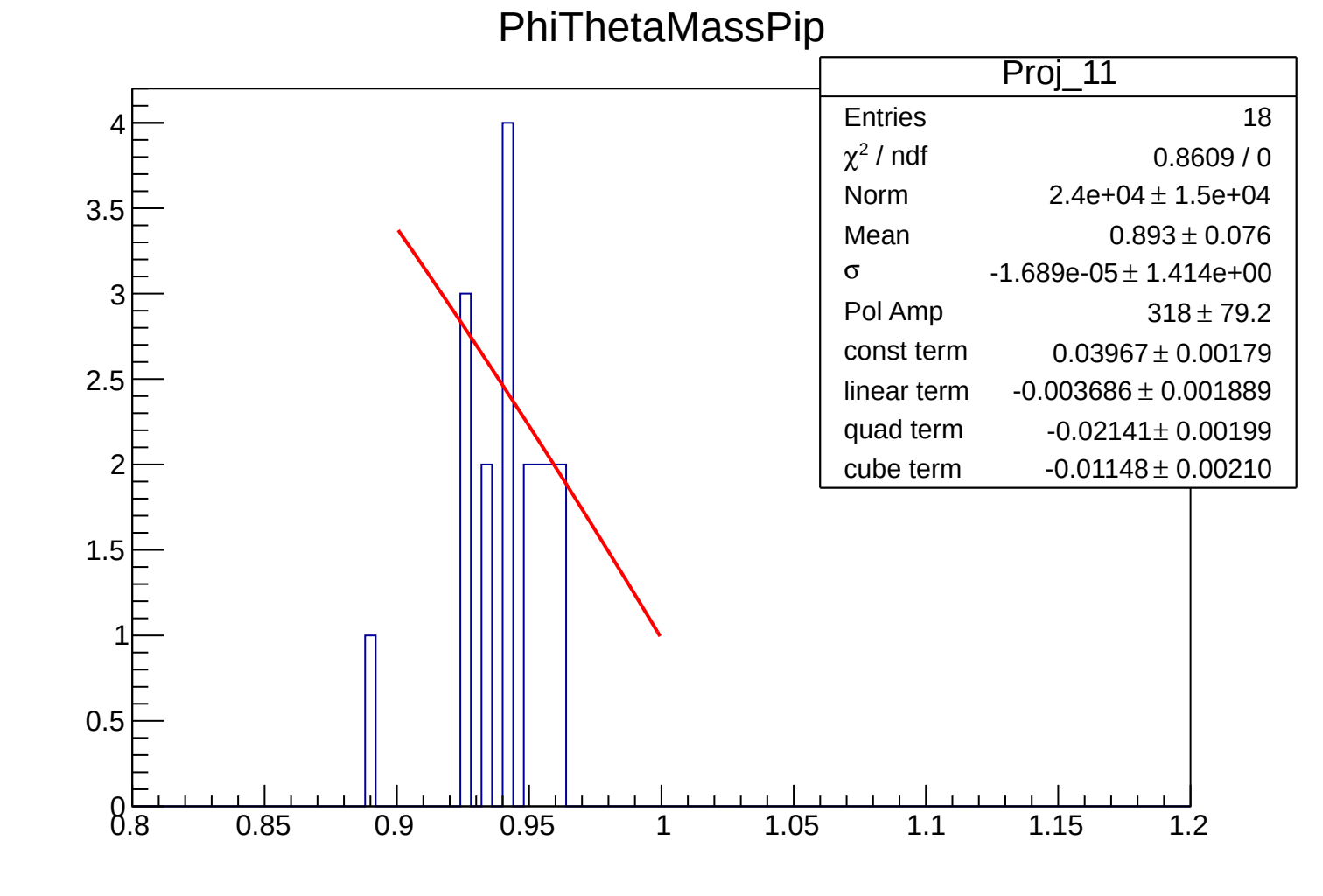

PhiThetaMassPip
Proj_07
Entries 8
χ² / ndf 1.073e-08 / 0
Norm 171.3 ± 0.3
Mean 0.9581 ± 0.0692
σ -17.8 ± 142258.0
Pol Amp 1.063 ± 0.002
const term -153.2 ± 0.2
linear term -21.74 ± 0.25
quad term 22.61 ± 0.26
cube term -7.839 ± 0.280
0
0.2
0.4
0.6
0.8
1
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

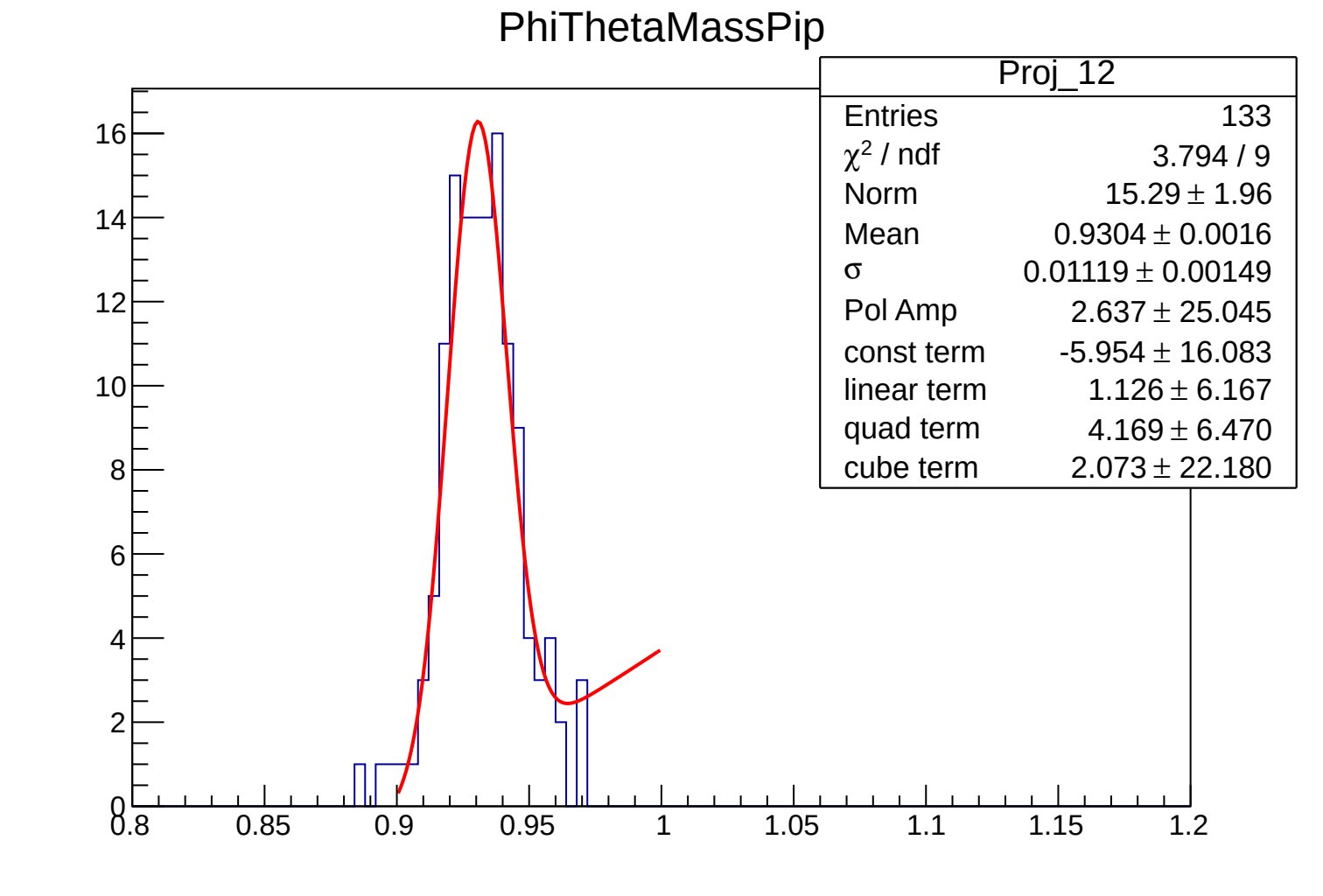

PhiThetaMassPip
Proj_08
Entries 6
χ² / ndf 4.223e-06 / 0
Norm 1.027 ± 69137.539
Mean 0.9744 ± 0.0507
σ 0.005892 ± 7.425059
Pol Amp 351.5 ± 201.0
const term 0.01941 ± 0.00163
linear term -0.01767 ± 0.00174
quad term -0.01883 ± 0.00187
cube term 0.02007 ± 0.00200
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

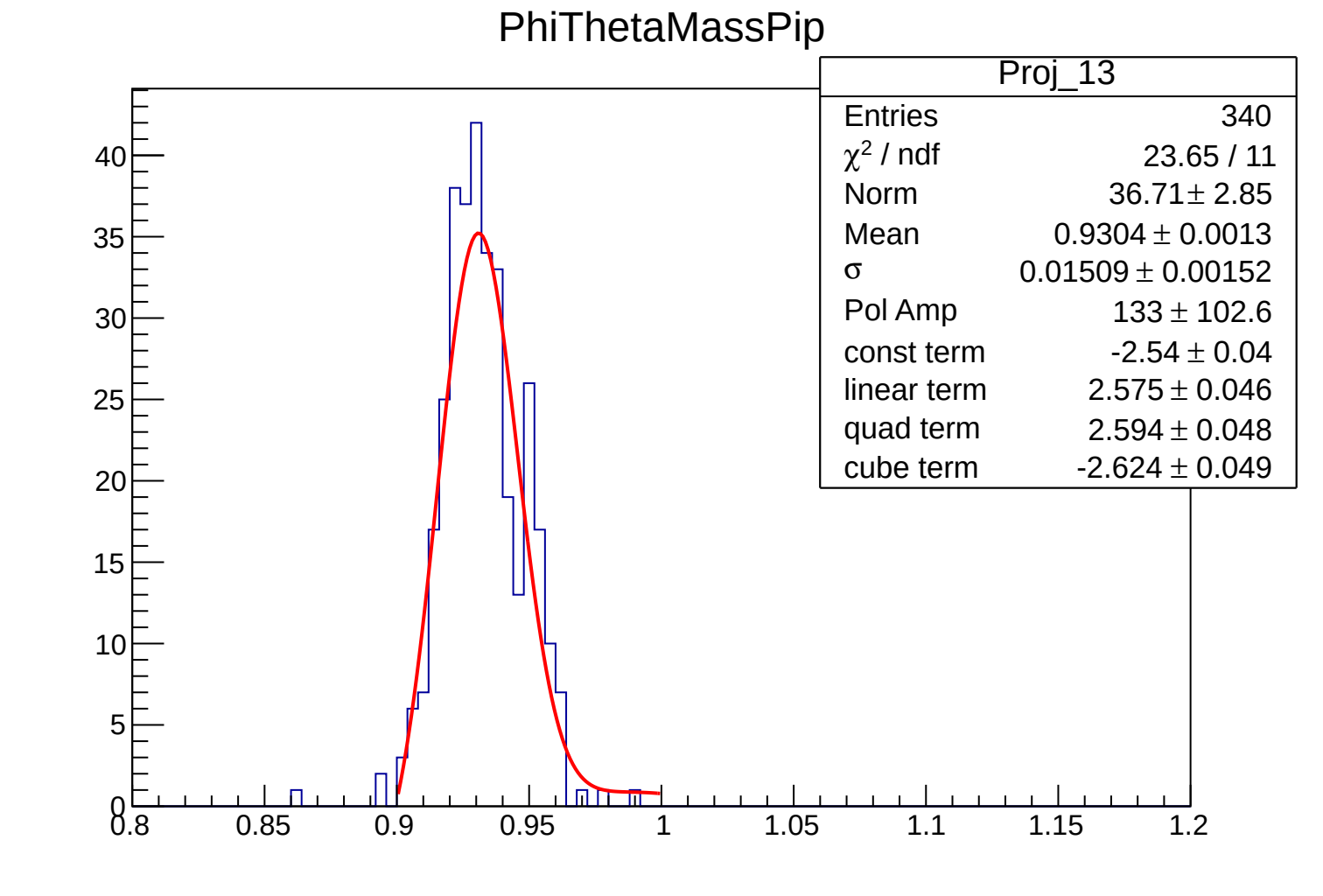

PhiThetaMassPip
Proj_09
Entries 2
χ² / ndf 2.236e-14 / 0
Norm 3137 ± 42655.8
Mean 0.9853 ± 0.0562
σ 0.009805 ± 0.182370
Pol Amp 375.8 ± 870.3
const term 0.8935 ± 0.0121
linear term 0.2915 ± 0.0129
quad term -0.3502 ± 0.0138
cube term -1.034 ± 0.015
3000
2500
2000
1500
1000
500
0
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

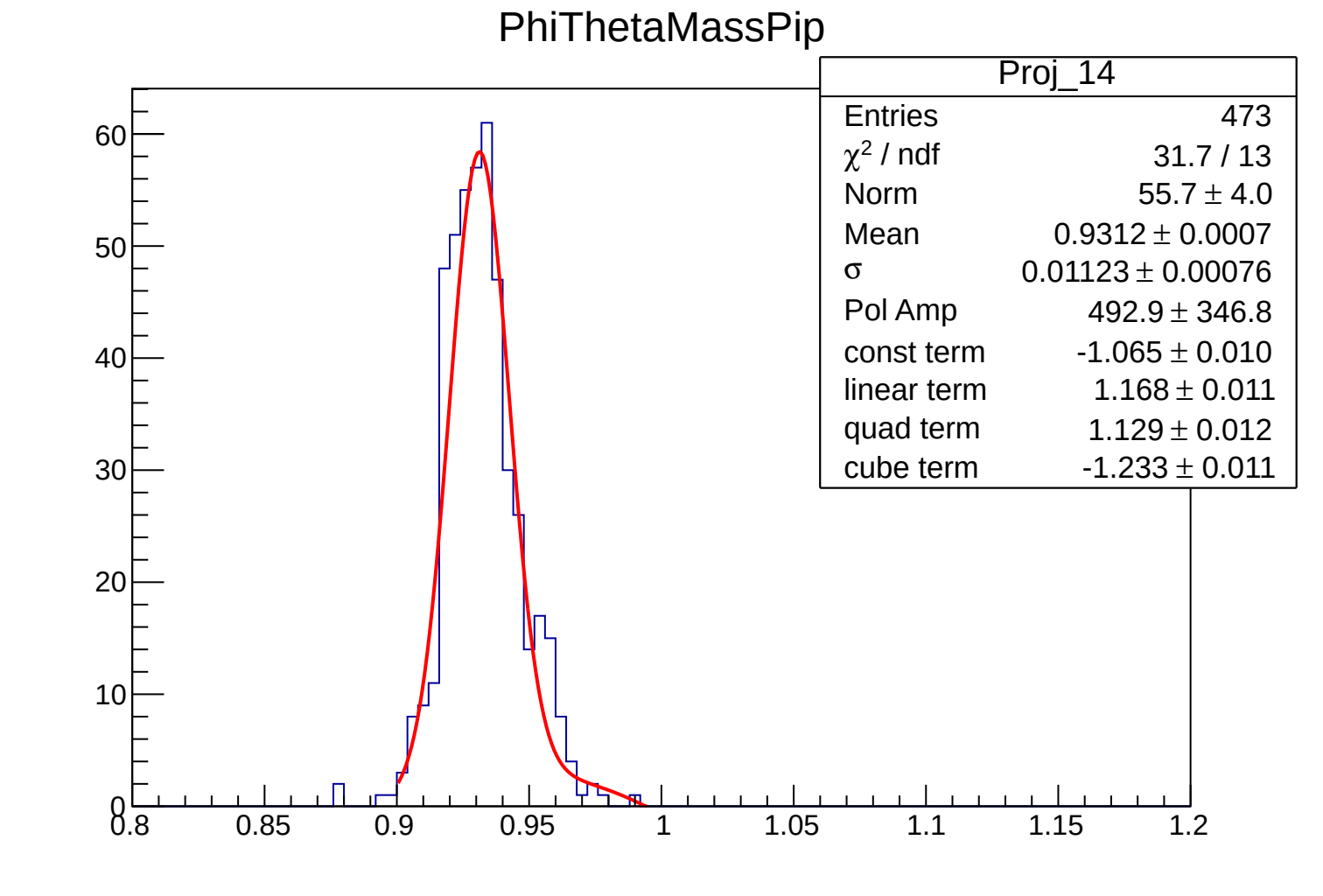

PhiThetaMassPip
Proj_010
Entries 1
χ² / ndf 4.102e-14 / 0
Norm 3136 ± 52887.3
Mean 0.9573 ± 0.0937
σ 0.009805 ± 0.130070
Pol Amp 375.8 ± 1458.8
const term 1.271± 0.010
linear term 0.4082 ± 0.0111
quad term -0.5404 ± 0.0122
cube term -1.583 ± 0.013
3000
2500
2000
1500
1000
500
0
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

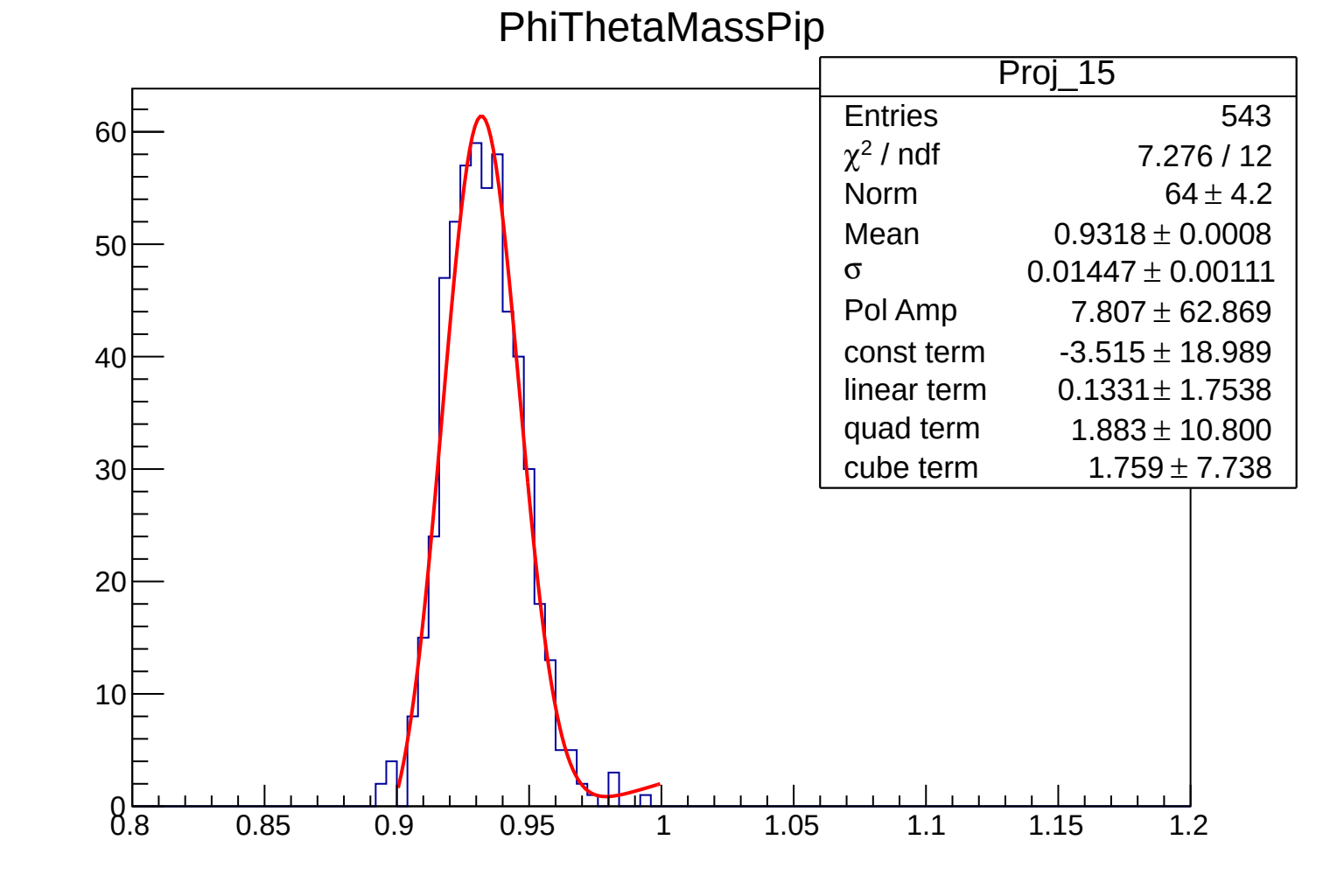

PhiThetaMassPip
Proj_10
Entries 6
χ² / ndf 3.732e-06 / 0
Norm 1.741e+04 ± 5.222e+04
Mean 0.9117 ± 0.0107
σ 0.003246 ± 0.002446
Pol Amp 209.9 ± 1781.8
const term 0.02265 ± 0.02582
linear term -0.0189 ± 0.0277
quad term -0.0207 ± 0.0293
cube term 0.02187 ± 0.03058
16000
14000
12000
10000
8000
6000
4000
2000
0
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

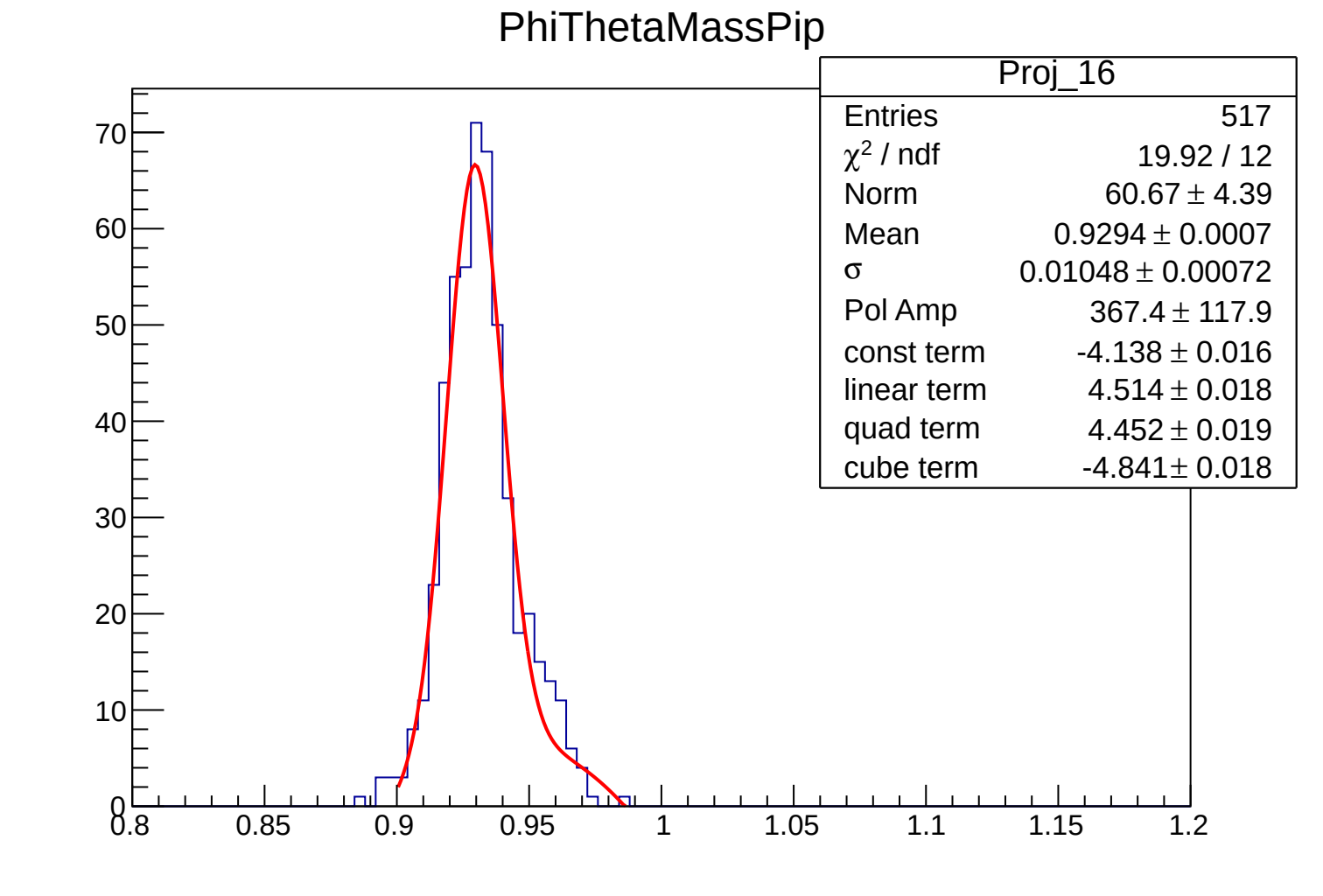

PhiThetaMassPip
Proj_11
Entries 18
χ² / ndf 0.8609 / 0
Norm 2.4e+04 ± 1.5e+04
Mean 0.893 ± 0.076
σ -1.689e-05 ± 1.414e+00
Pol Amp 318 ± 79.2
const term 0.03967 ± 0.00179
linear term -0.003686 ± 0.001889
quad term -0.02141 ± 0.00199
cube term -0.01148 ± 0.00210
0
0.5
1
1.5
2
2.5
3
3.5
4
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

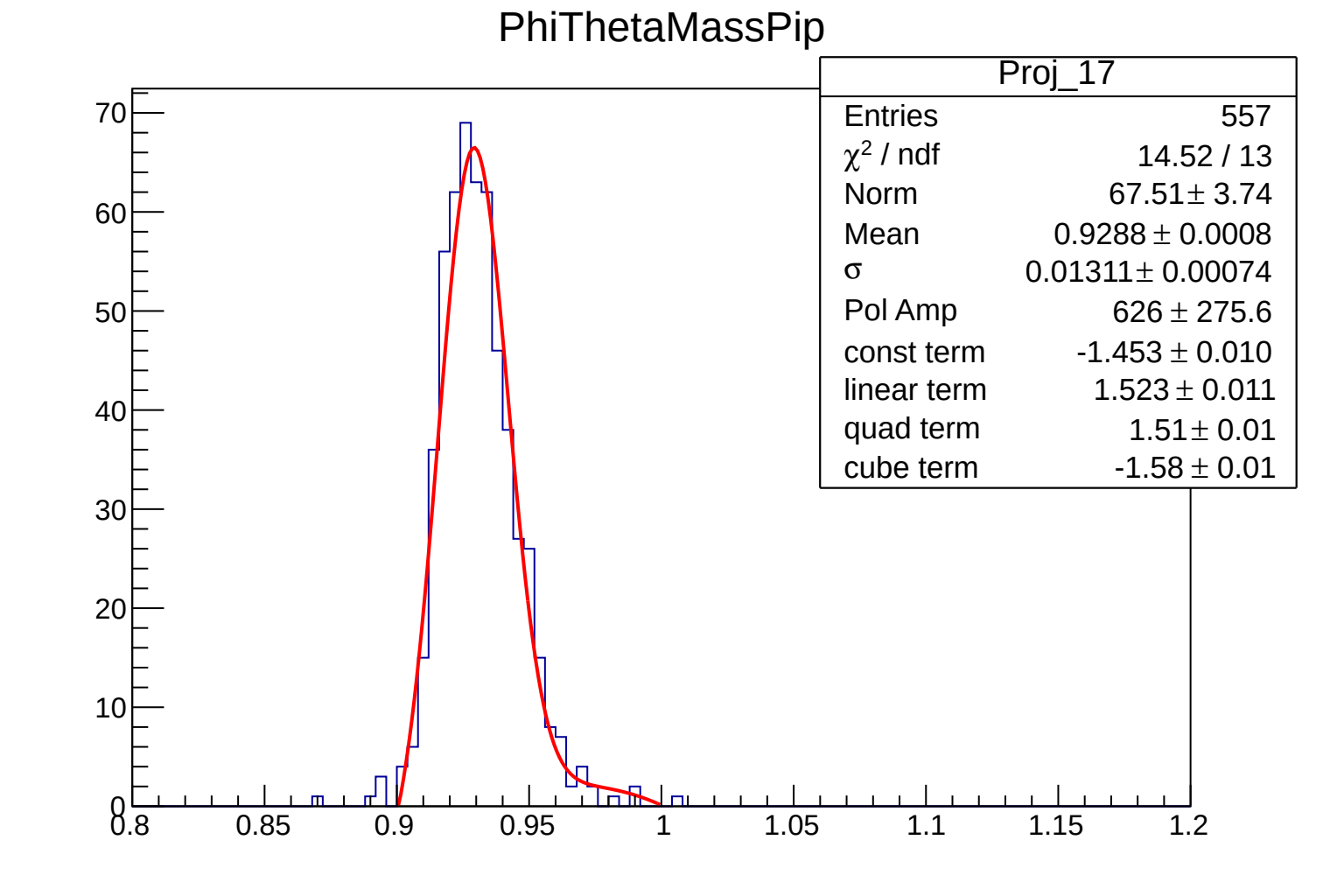

PhiThetaMassPip
Proj_12
Entries 133
χ² / ndf 3.794 / 9
Norm 15.29 ± 1.96
Mean 0.9304 ± 0.0016
σ 0.01119 ± 0.00149
Pol Amp 2.637 ± 25.045
const term -5.954 ± 16.083
linear term 1.126 ± 6.167
quad term 4.169 ± 6.470
cube term 2.073 ± 22.180
0
2
4
6
8
10
12
14
16
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

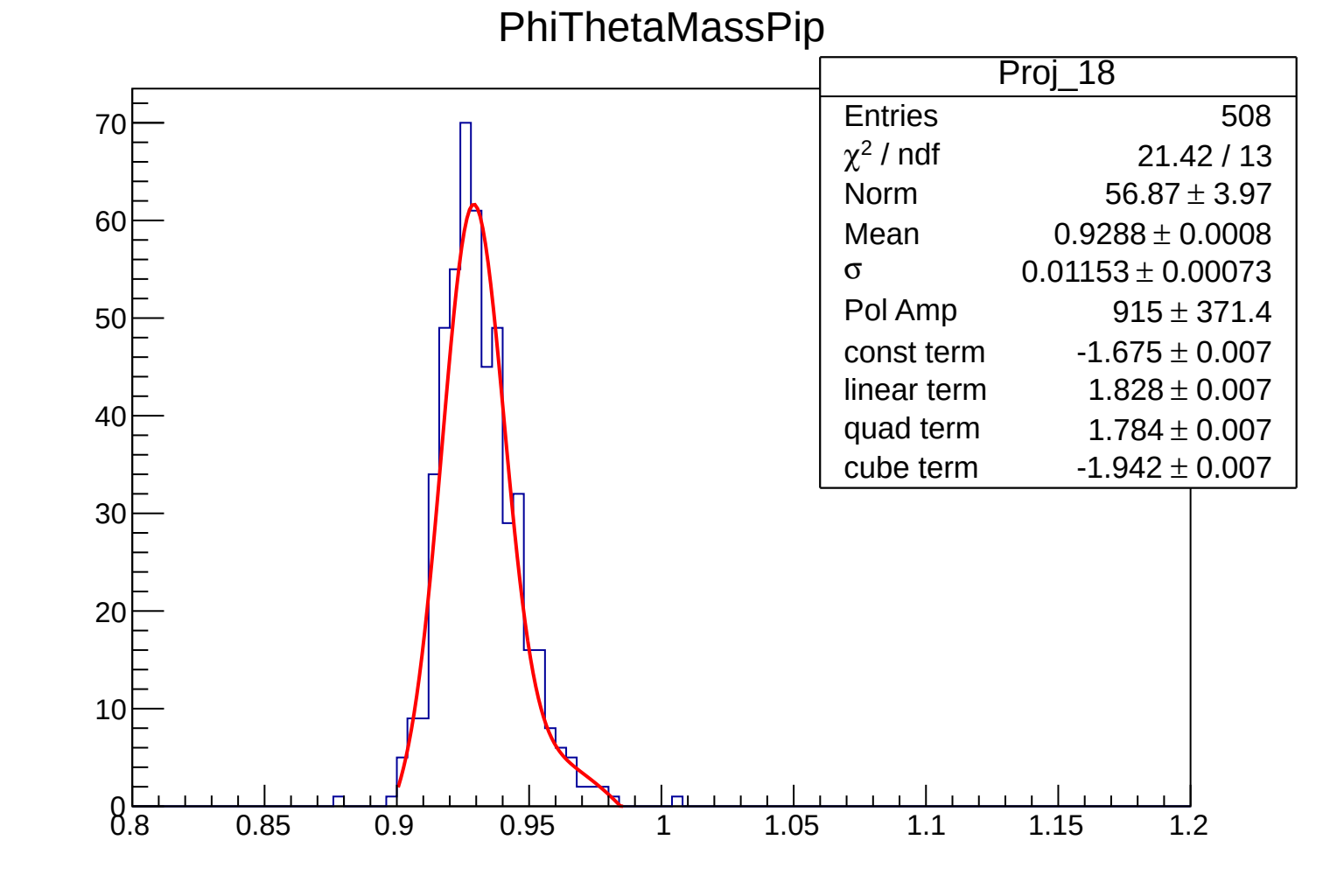

PhiThetaMassPip
Proj_13
Entries 340
χ² / ndf 23.65 / 11
Norm 36.71 ± 2.85
Mean 0.9304 ± 0.0013
σ 0.01509 ± 0.00152
Pol Amp 133 ± 102.6
const term -2.54 ± 0.04
linear term 2.575 ± 0.046
quad term 2.594 ± 0.048
cube term -2.624 ± 0.049
0
5
10
15
20
25
30
35
40
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

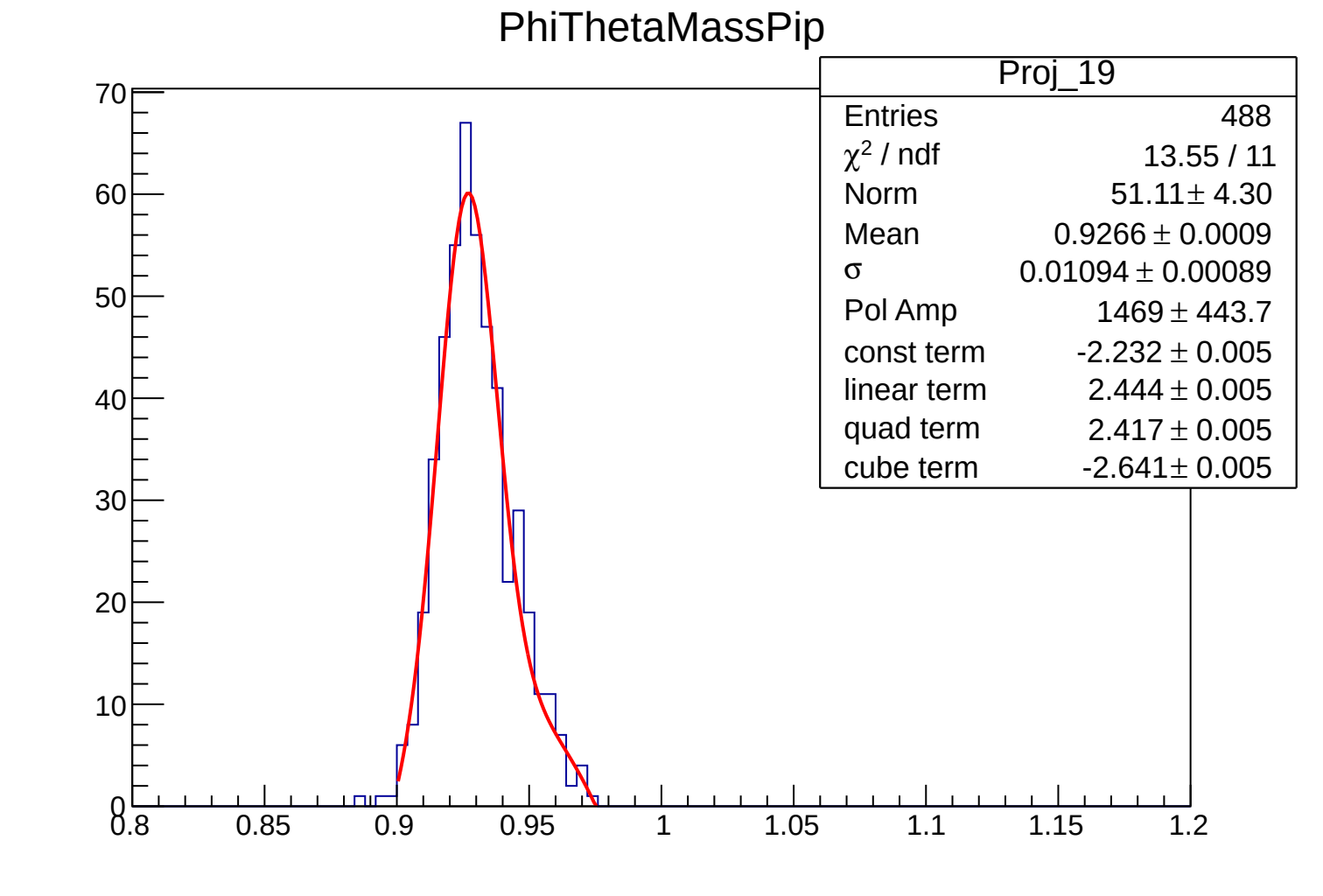

PhiThetaMassPip
Proj_14
Entries 473
χ² / ndf 31.7 / 13
Norm 55.7 ± 4.0
Mean 0.9312 ± 0.0007
σ 0.01123 ± 0.00076
Pol Amp 492.9 ± 346.8
const term -1.065 ± 0.010
linear term 1.168 ± 0.011
quad term 1.129 ± 0.012
cube term -1.233 ± 0.011
0
10
20
30
40
50
60
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

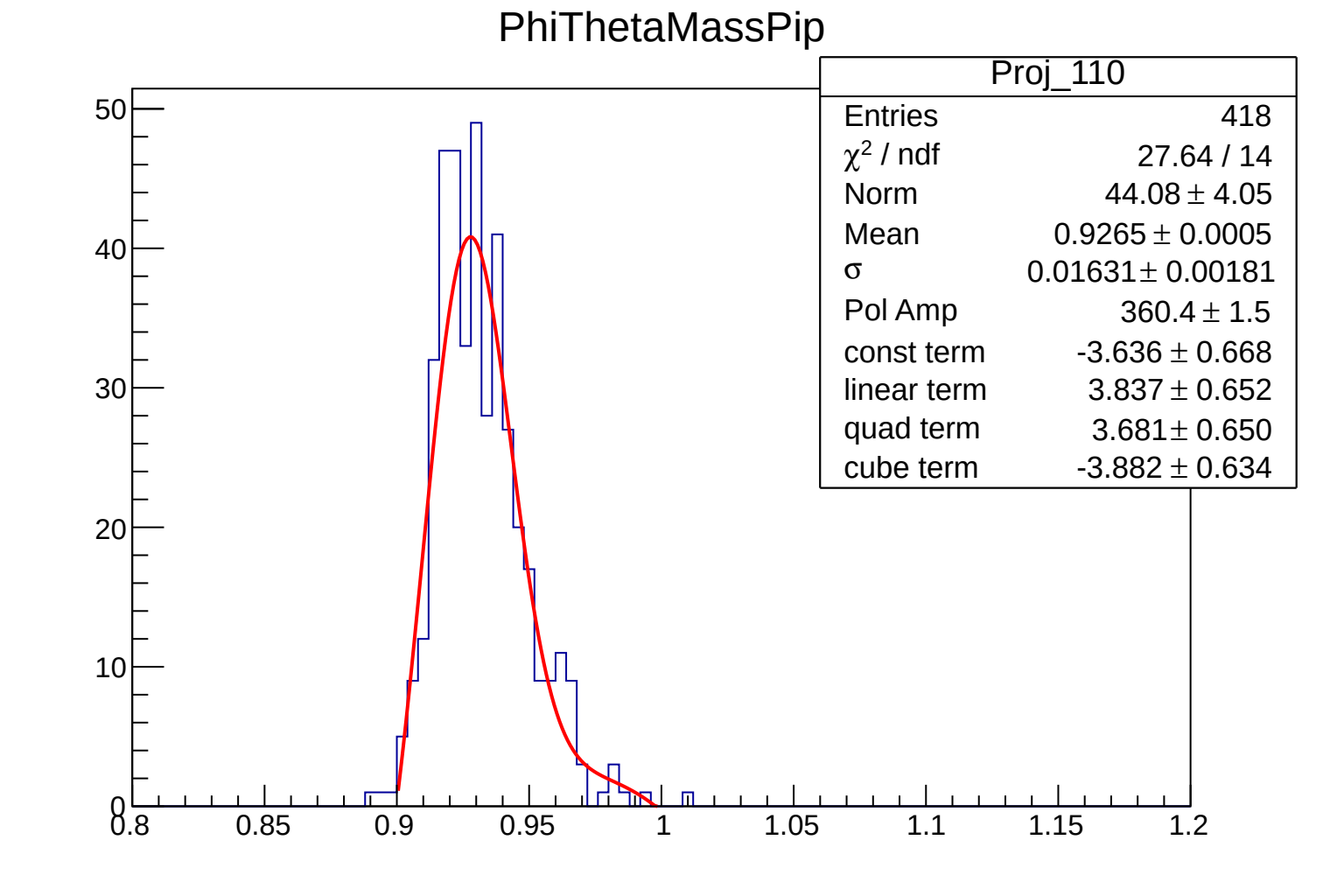

PhiThetaMassPip
Proj_15
Entries 543
χ² / ndf 7.276 / 12
Norm 64 ± 4.2
Mean 0.9318 ± 0.0008
σ 0.01447 ± 0.00111
Pol Amp 7.807 ± 62.869
const term -3.515 ± 18.989
linear term 0.1331 ± 1.7538
quad term 1.883 ± 10.800
cube term 1.759 ± 7.738
0
10
20
30
40
50
60
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

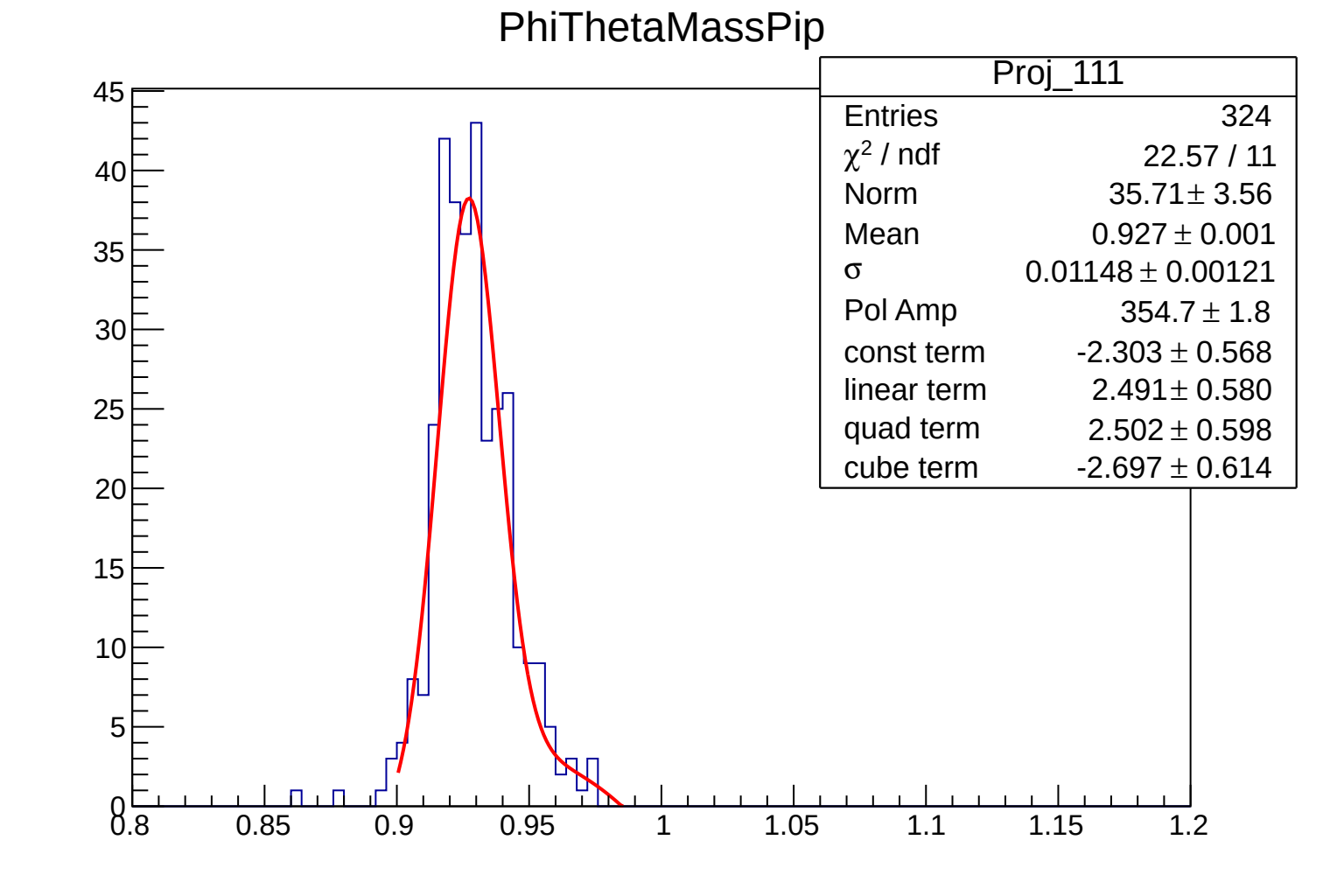

PhiThetaMassPip
Proj_16
Entries 517
χ² / ndf 19.92 / 12
Norm 60.67 ± 4.39
Mean 0.9294 ± 0.0007
σ 0.01048 ± 0.00072
Pol Amp 367.4 ± 117.9
const term -4.138 ± 0.016
linear term 4.514 ± 0.018
quad term 4.452 ± 0.019
cube term -4.841 ± 0.018
0
10
20
30
40
50
60
70
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

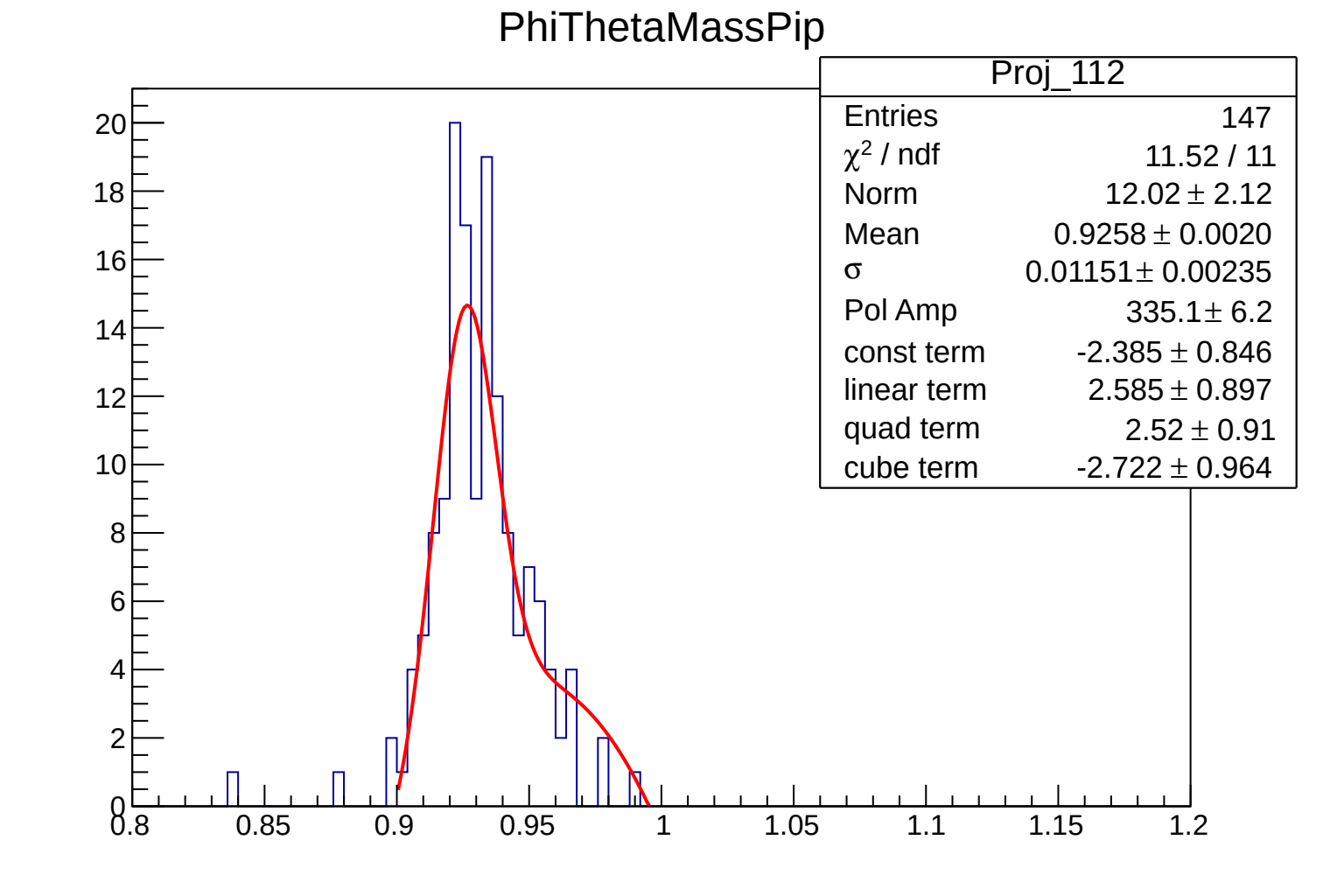

PhiThetaMassPip
Proj_17
Entries 557
χ² / ndf 14.52 / 13
Norm 67.51 ± 3.74
Mean 0.9288 ± 0.0008
σ 0.01311 ± 0.00074
Pol Amp 626 ± 275.6
const term -1.453 ± 0.010
linear term 1.523 ± 0.011
quad term 1.51 ± 0.01
cube term -1.58 ± 0.01
0
10
20
30
40
50
60
70
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

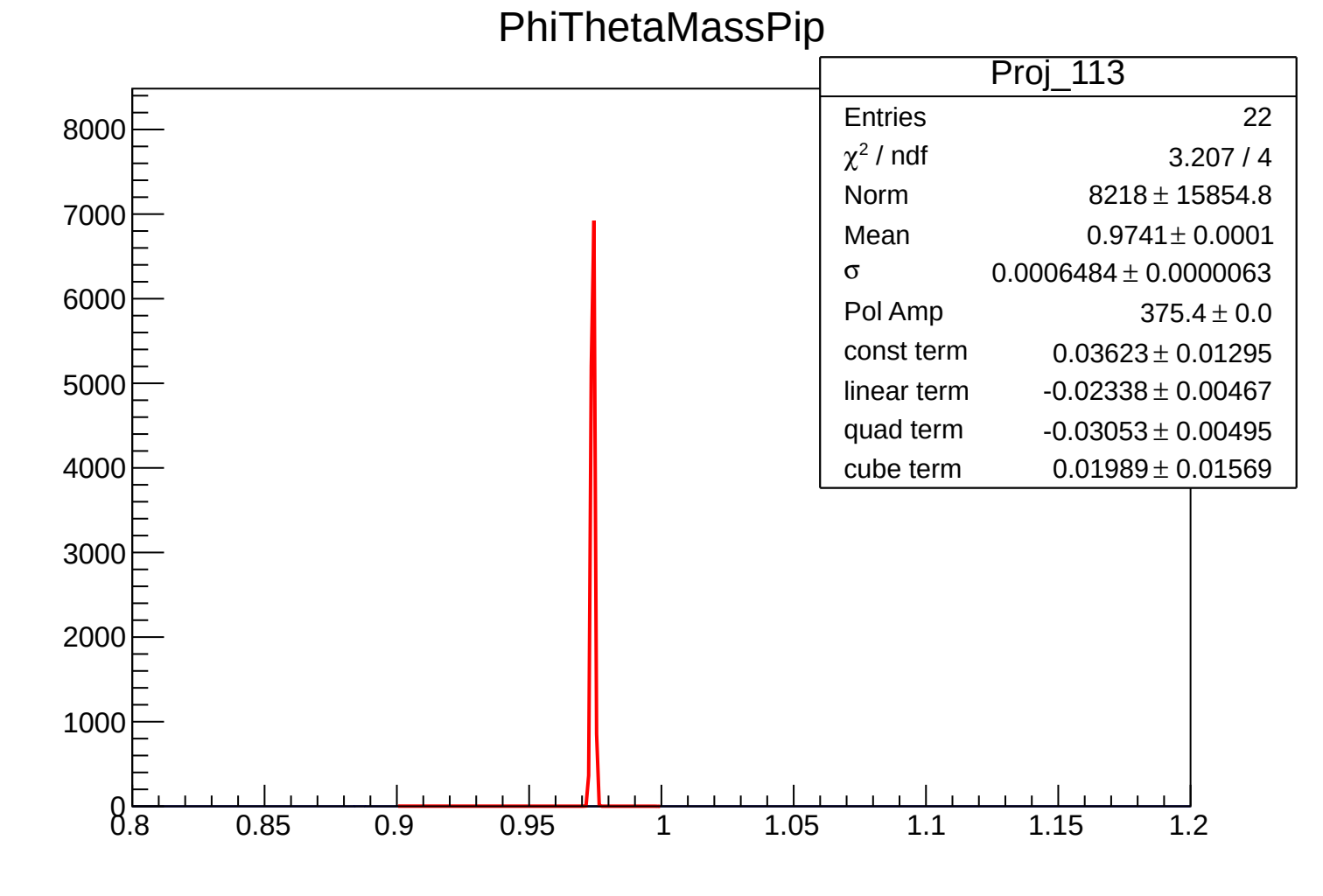

PhiThetaMassPip
Proj_18
Entries 508
χ² / ndf 21.42 / 13
Norm 56.87 ± 3.97
Mean 0.9288 ± 0.0008
σ 0.01153 ± 0.00073
Pol Amp 915 ± 371.4
const term -1.675 ± 0.007
linear term 1.828 ± 0.007
quad term 1.784 ± 0.007
cube term -1.942 ± 0.007
0
10
20
30
40
50
60
70
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

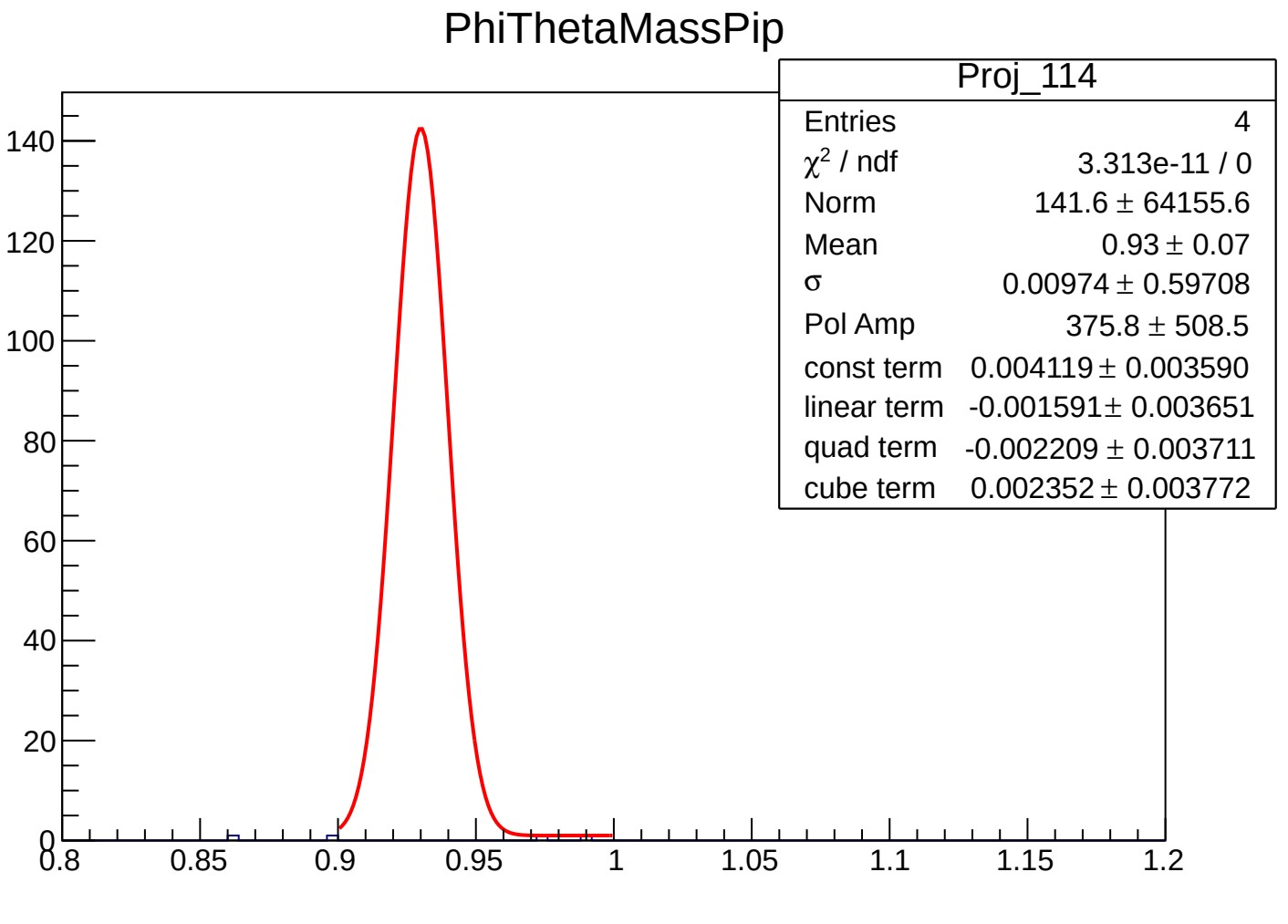

PhiThetaMassPip
Proj_19
Entries 488
χ² / ndf 13.55 / 11
Norm 51.11 ± 4.30
Mean 0.9266 ± 0.0009
σ 0.01094 ± 0.00089
Pol Amp 1469 ± 443.7
const term -2.232 ± 0.005
linear term 2.444 ± 0.005
quad term 2.417 ± 0.005
cube term -2.641 ± 0.005
70
60
50
40
30
20
10
0
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

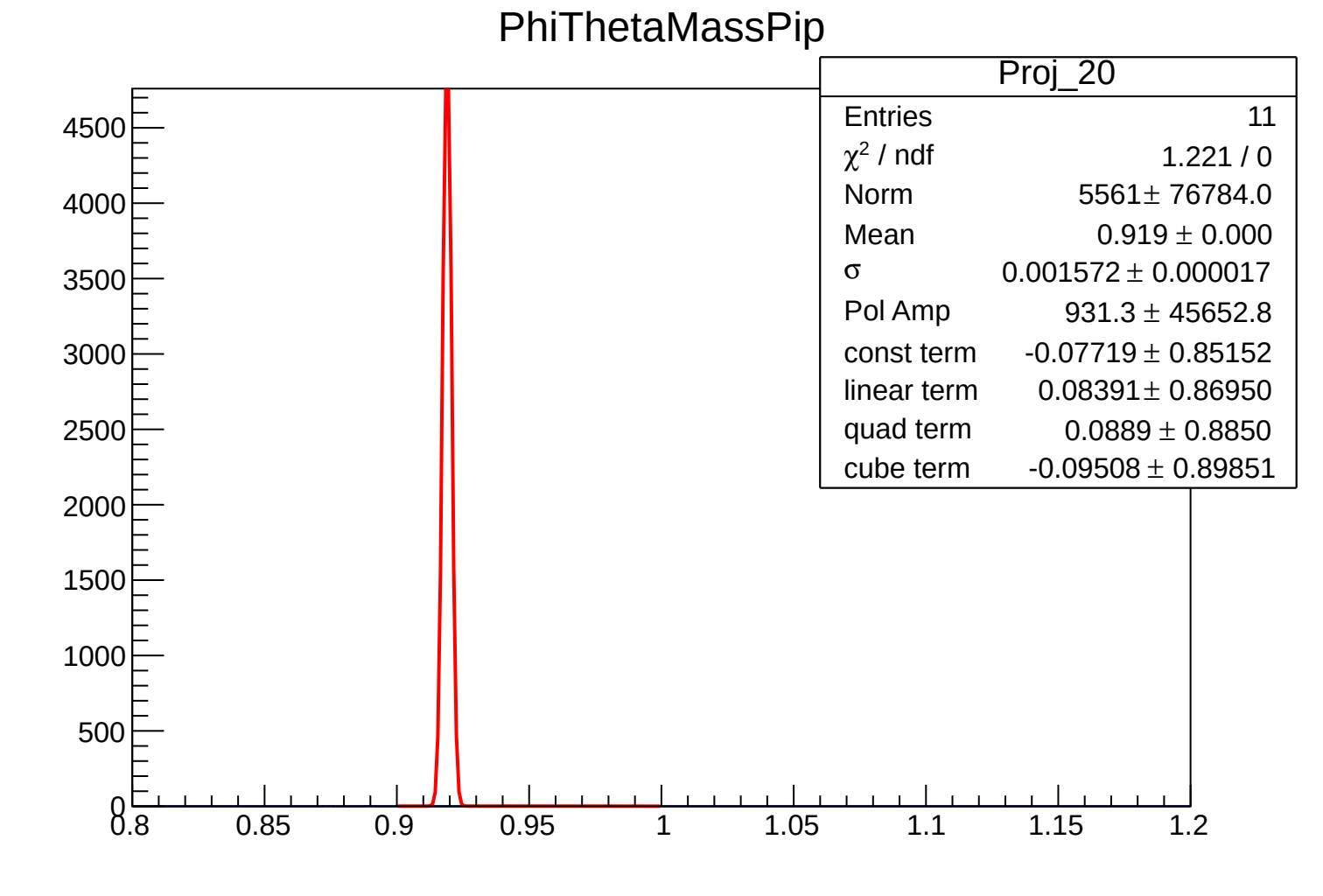

PhiThetaMassPip
Proj_110
Entries 418
χ² / ndf 27.64 / 14
Norm 44.08 ± 4.05
Mean 0.9265 ± 0.0005
σ 0.01631 ± 0.00181
Pol Amp 360.4 ± 1.5
const term -3.636 ± 0.668
linear term 3.837 ± 0.652
quad term 3.681 ± 0.650
cube term -3.882 ± 0.634
50
40
30
20
10
0
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

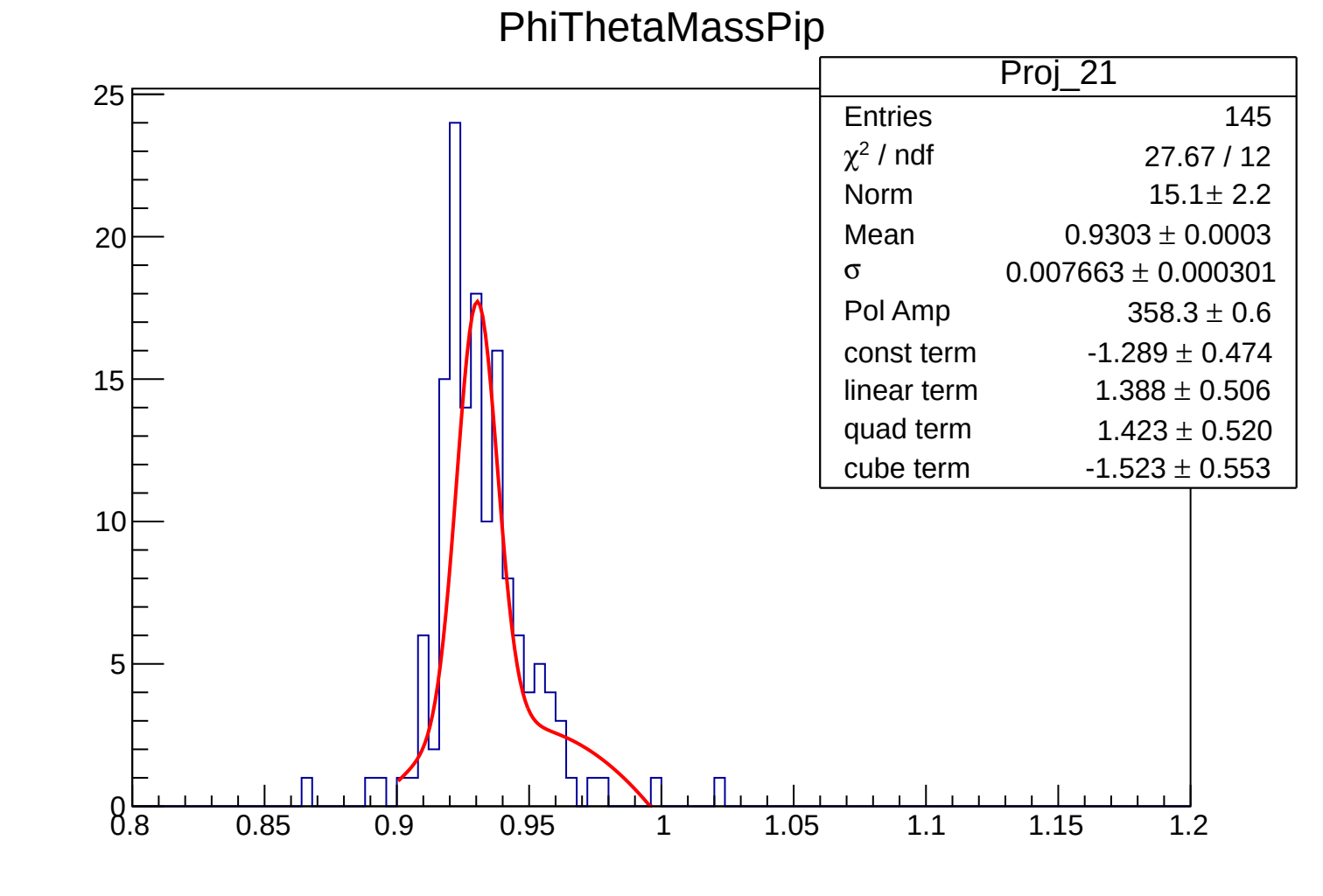

PhiThetaMassPip
Proj_111
Entries 324
χ² / ndf 22.57 / 11
Norm 35.71 ± 3.56
Mean 0.927 ± 0.001
σ 0.01148 ± 0.00121
Pol Amp 354.7 ± 1.8
const term -2.303 ± 0.568
linear term 2.491 ± 0.580
quad term 2.502 ± 0.598
cube term -2.697 ± 0.614
0
5
10
15
20
25
30
35
40
45
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

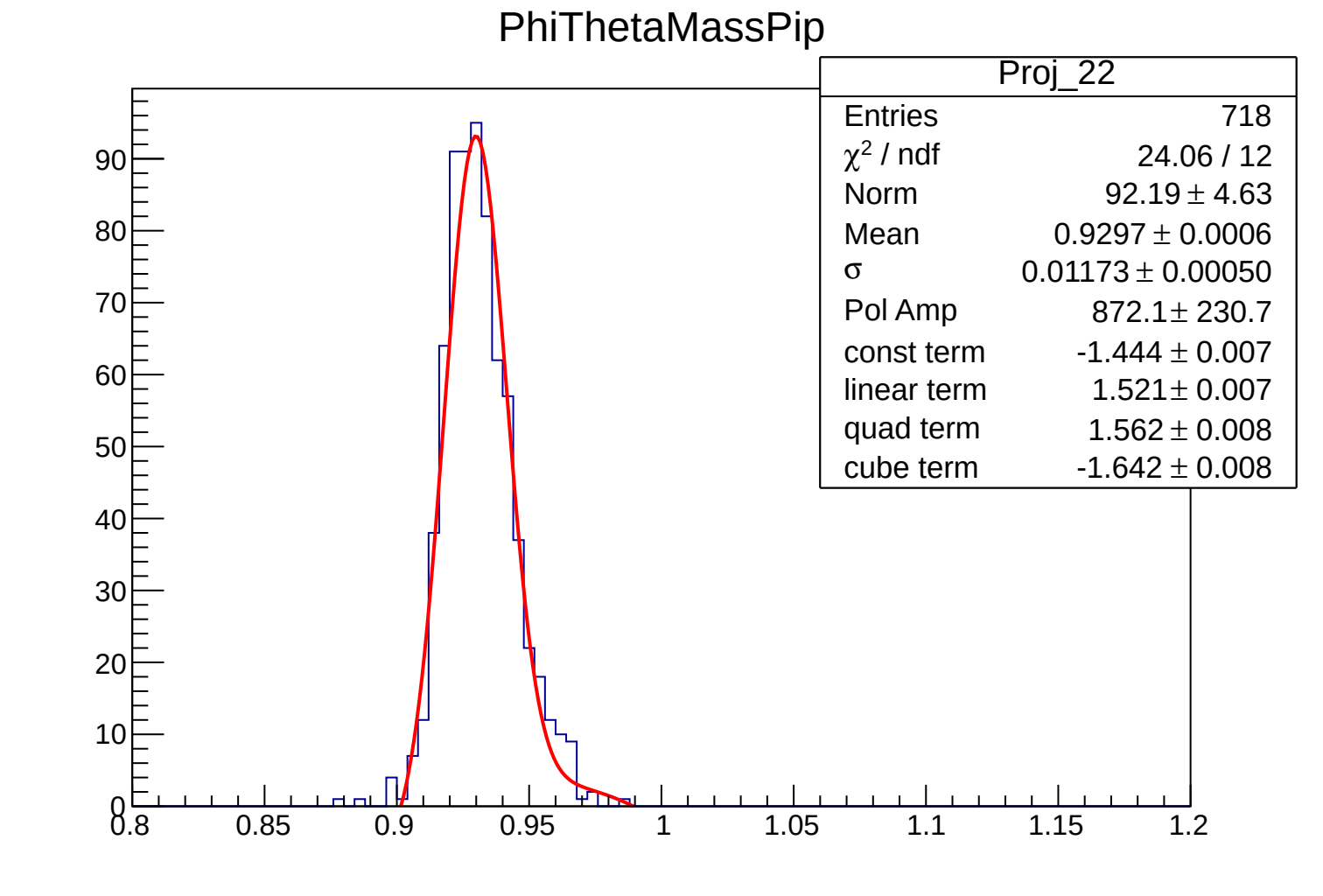

PhiThetaMassPip
Proj_112
Entries 147
χ² / ndf 11.52 / 11
Norm 12.02 ± 2.12
Mean 0.9258 ± 0.0020
σ 0.01151 ± 0.00235
Pol Amp 335.1 ± 6.2
const term -2.385 ± 0.846
linear term 2.585 ± 0.897
quad term 2.52 ± 0.91
cube term -2.722 ± 0.964
0
2
4
6
8
10
12
14
16
18
20
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

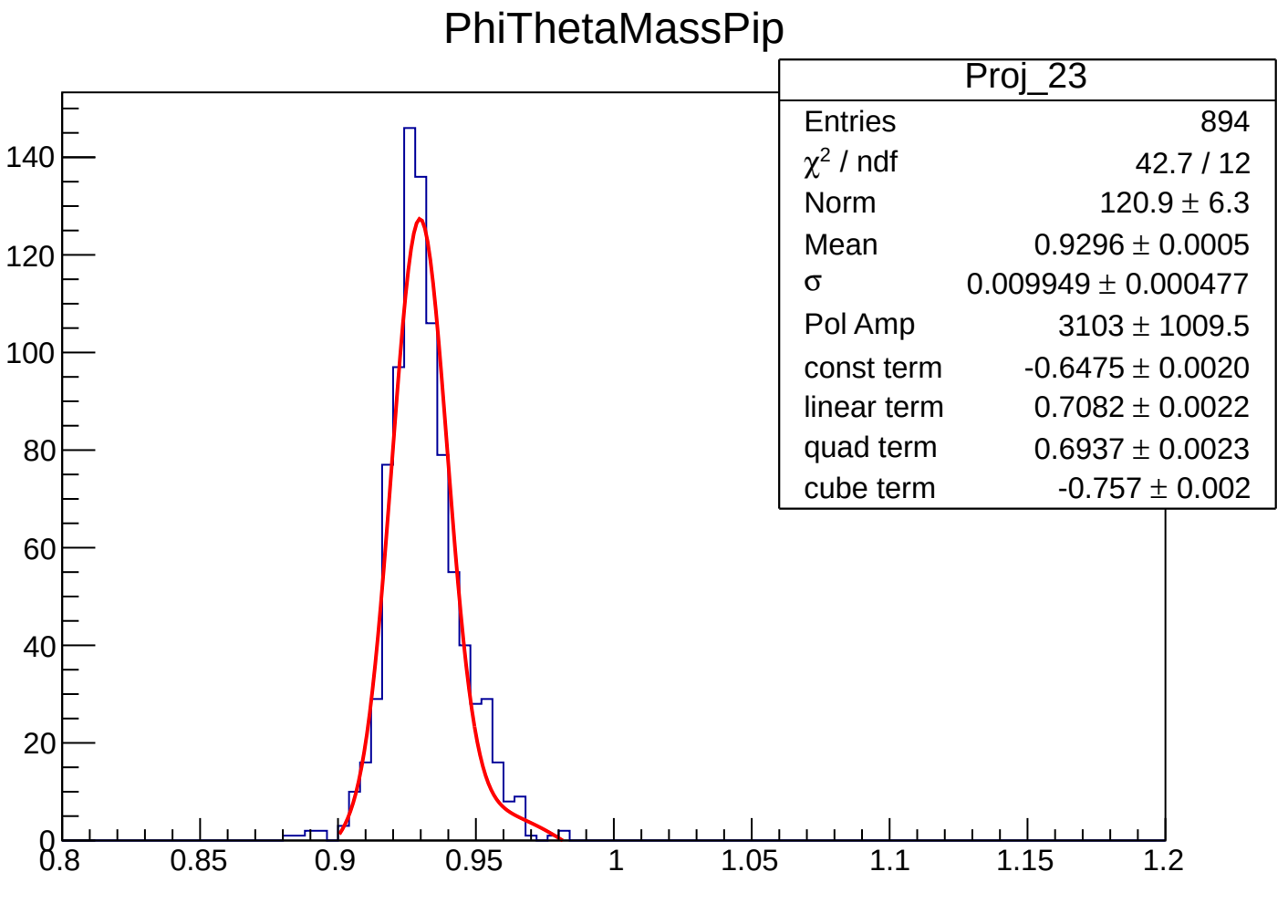

PhiThetaMassPip
Proj_113
Entries 22
χ² / ndf 3.207 / 4
Norm 8218 ± 15854.8
Mean 0.9741 ± 0.0001
σ 0.0006484 ± 0.0000063
Pol Amp 375.4 ± 0.0
const term 0.03623 ± 0.01295
linear term -0.02338 ± 0.00467
quad term -0.03053 ± 0.00495
cube term 0.01989 ± 0.01569
8000
7000
6000
5000
4000
3000
2000
1000
0
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

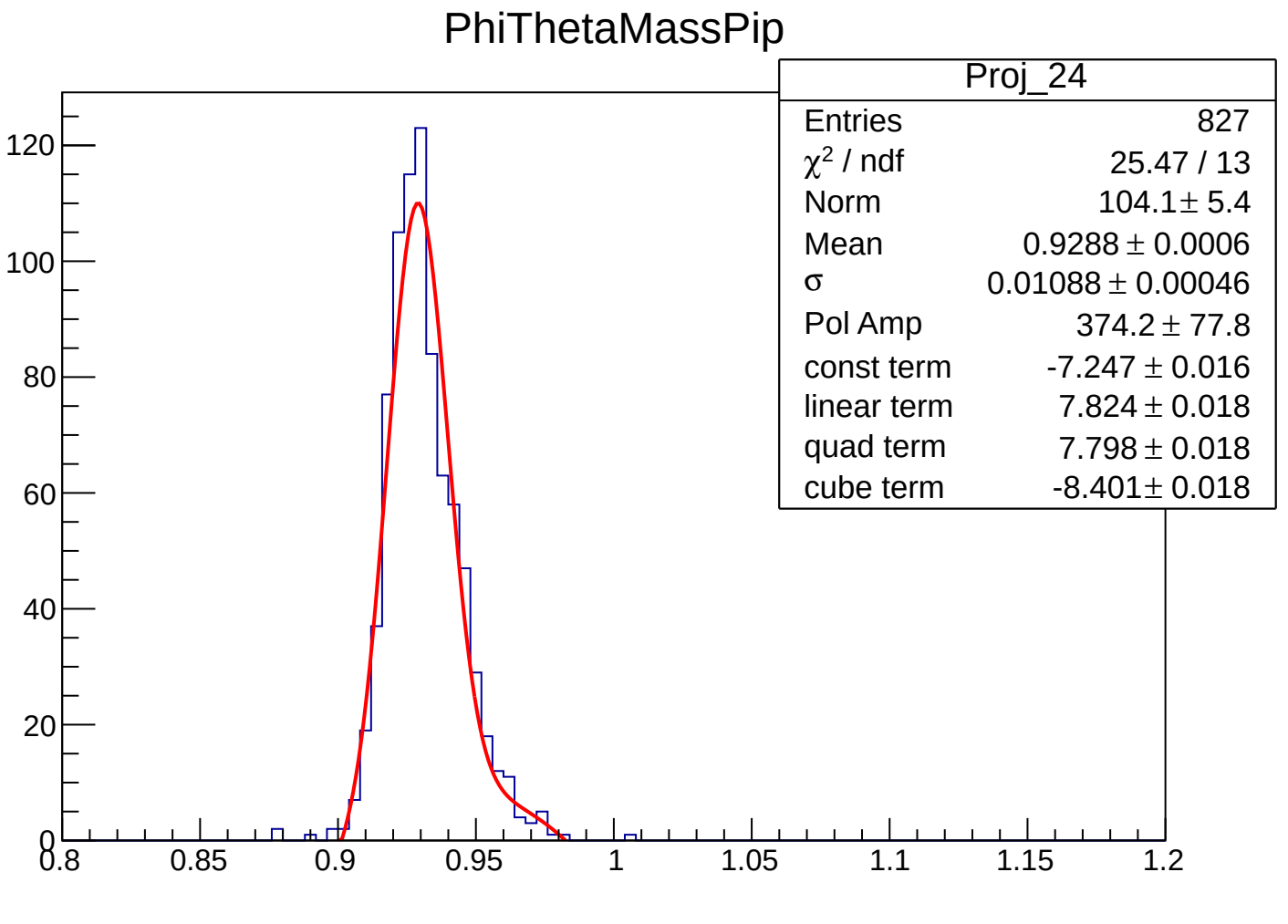

PhiThetaMassPip
Proj_114
Entries 4
χ² / ndf 3.313e-11 / 0
Norm 141.6 ± 64155.6
Mean 0.93 ± 0.07
σ 0.00974 ± 0.59708
Pol Amp 375.8 ± 508.5
const term 0.004119 ± 0.003590
linear term -0.001591 ± 0.003651
quad term -0.002209 ± 0.003711
cube term 0.002352 ± 0.003772
140
120
100
80
60
40
20
0
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

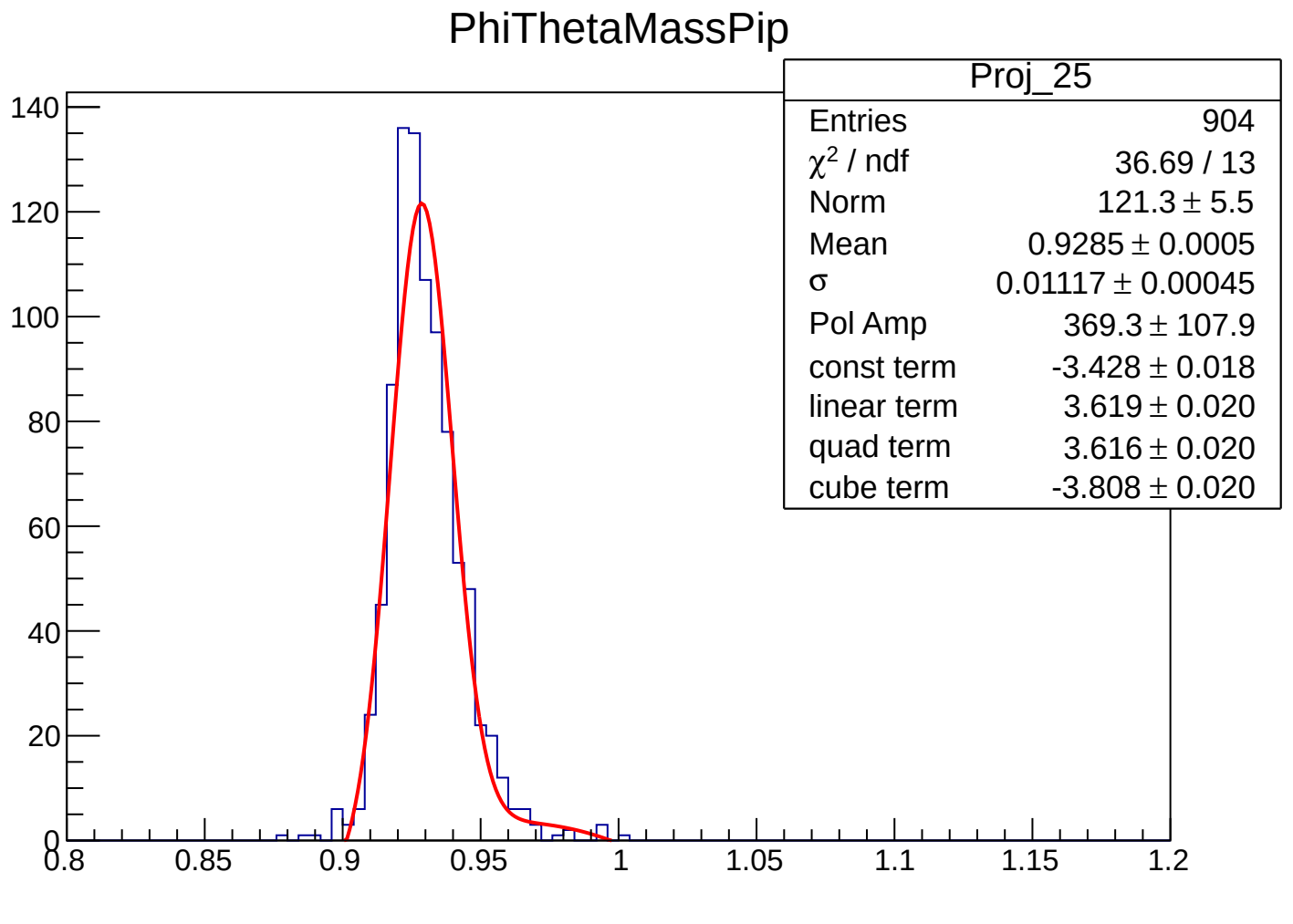

PhiThetaMassPip
Proj_20
Entries 11
χ² / ndf 1.221 / 0
Norm 5561 ± 76784.0
Mean 0.919 ± 0.000
σ 0.001572 ± 0.000017
Pol Amp 931.3 ± 45652.8
const term -0.07719 ± 0.85152
linear term 0.08391 ± 0.86950
quad term 0.0889 ± 0.8850
cube term -0.09508 ± 0.89851
4500
4000
3500
3000
2500
2000
1500
1000
500
0
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

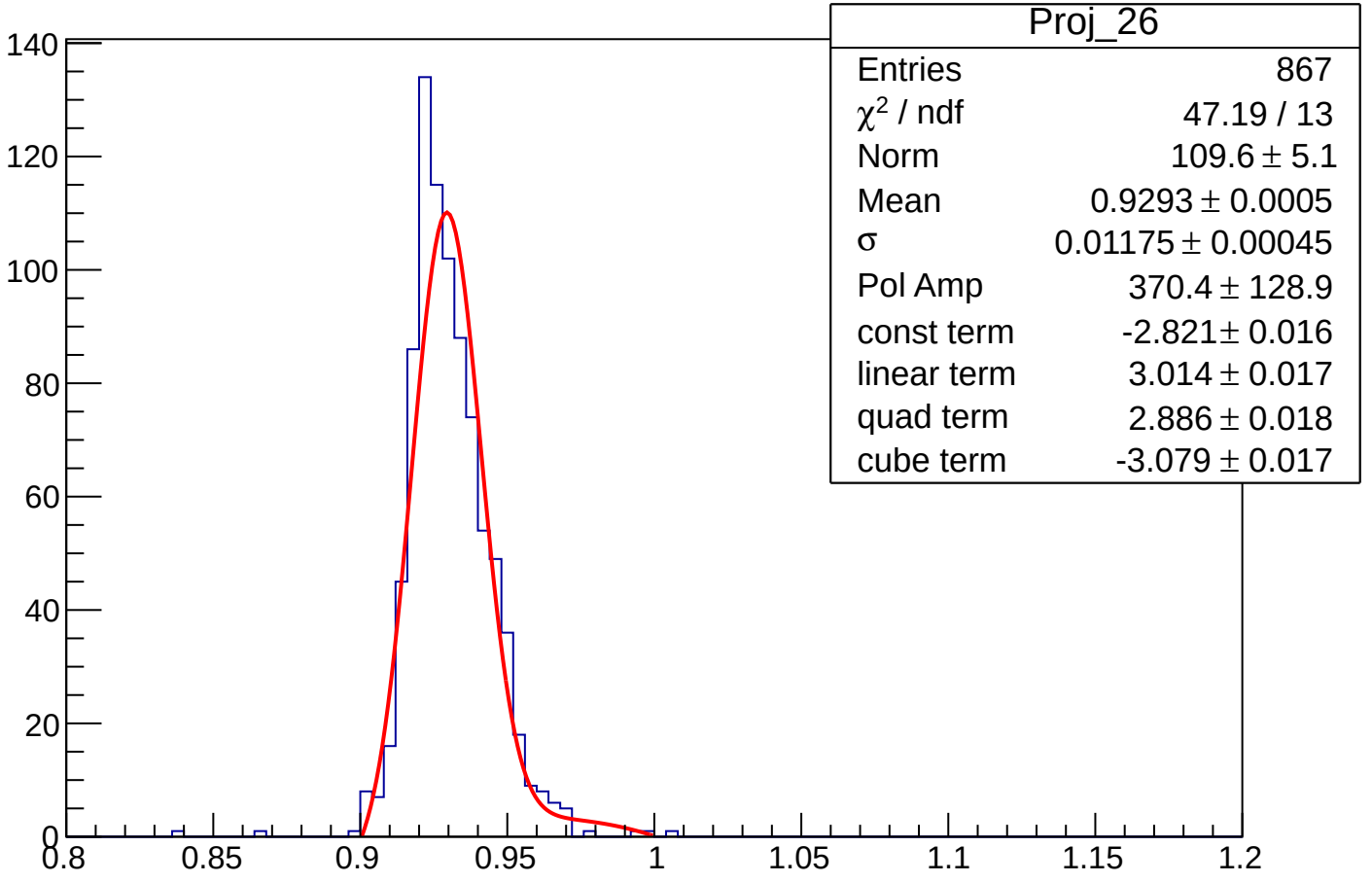

PhiThetaMassPip
Proj_21
Entries 145
χ² / ndf 27.67 / 12
Norm 15.1± 2.2
Mean 0.9303 ± 0.0003
σ 0.007663 ± 0.000301
Pol Amp 358.3 ± 0.6
const term -1.289 ± 0.474
linear term 1.388 ± 0.506
quad term 1.423 ± 0.520
cube term -1.523 ± 0.553
25
20
15
10
5
0
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

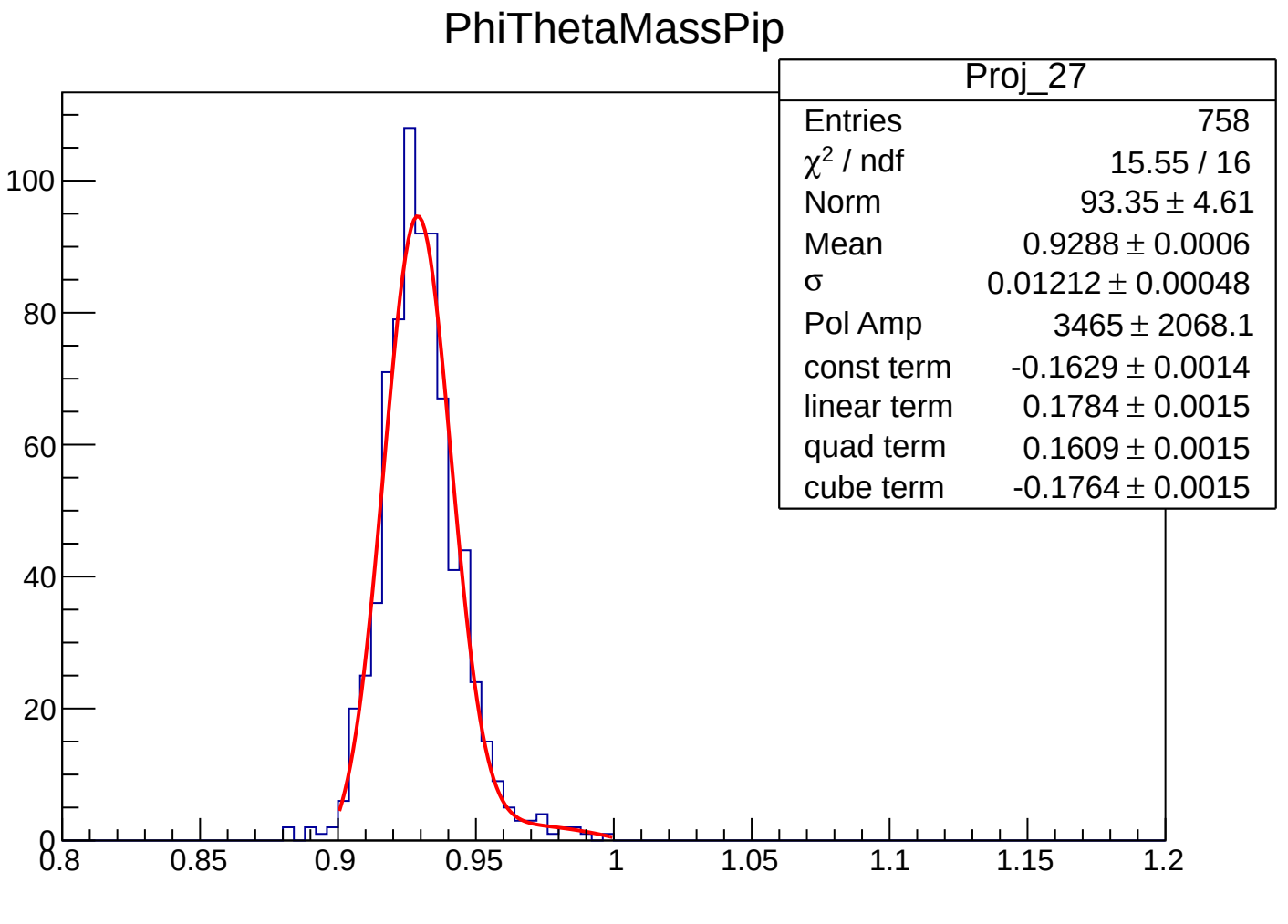

PhiThetaMassPip
Proj_22
Entries 718
χ² / ndf 24.06 / 12
Norm 92.19 ± 4.63
Mean 0.9297 ± 0.0006
σ 0.01173 ± 0.00050
Pol Amp 872.1 ± 230.7
const term -1.444 ± 0.007
linear term 1.521 ± 0.007
quad term 1.562 ± 0.008
cube term -1.642 ± 0.008
0
10
20
30
40
50
60
70
80
90
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

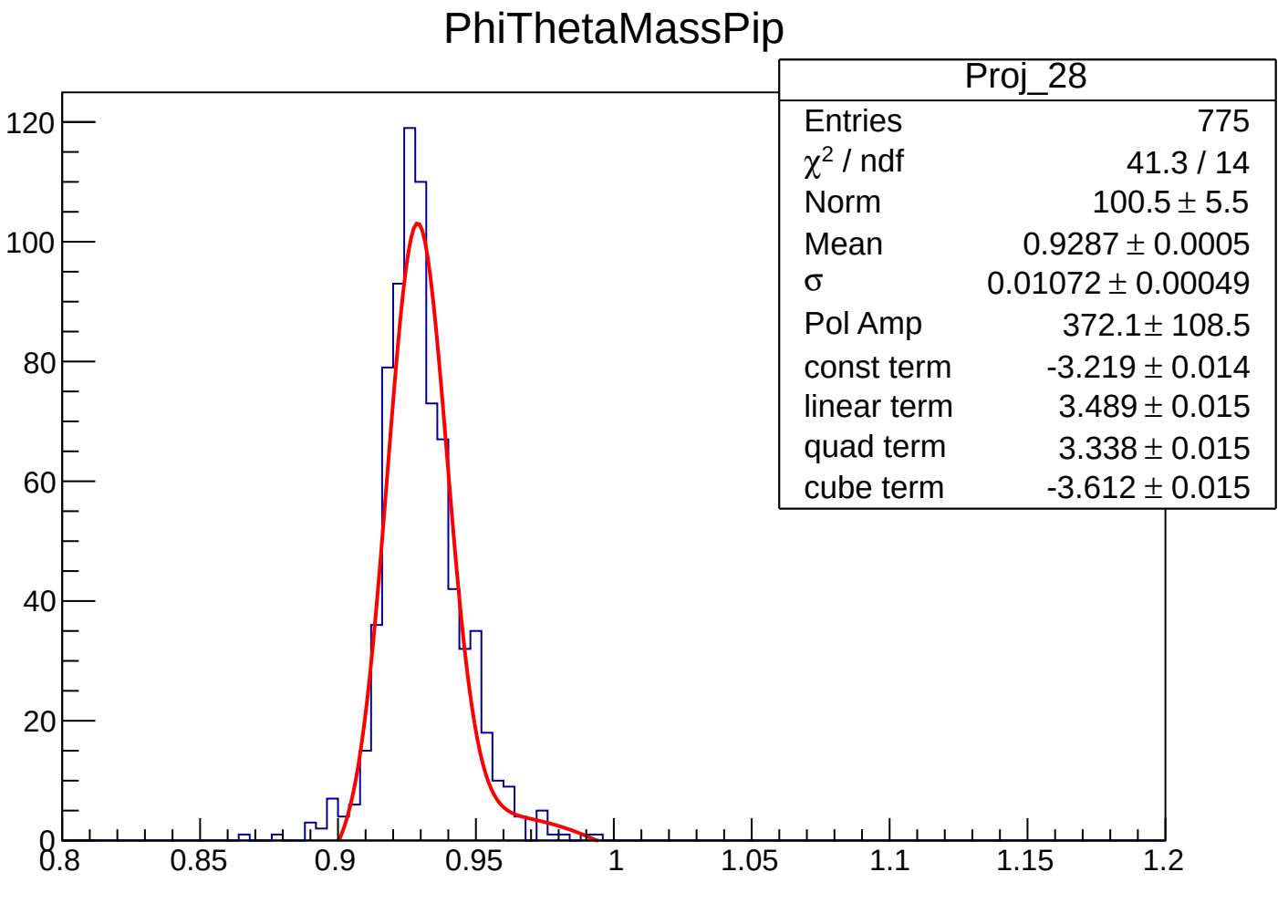

PhiThetaMassPip
Proj_23
Entries 894
χ² / ndf 42.7 / 12
Norm 120.9 ± 6.3
Mean 0.9296 ± 0.0005
σ 0.009949 ± 0.000477
Pol Amp 3103 ± 1009.5
const term -0.6475 ± 0.0020
linear term 0.7082 ± 0.0022
quad term 0.6937 ± 0.0023
cube term -0.757 ± 0.002
0
20
40
60
80
100
120
140
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

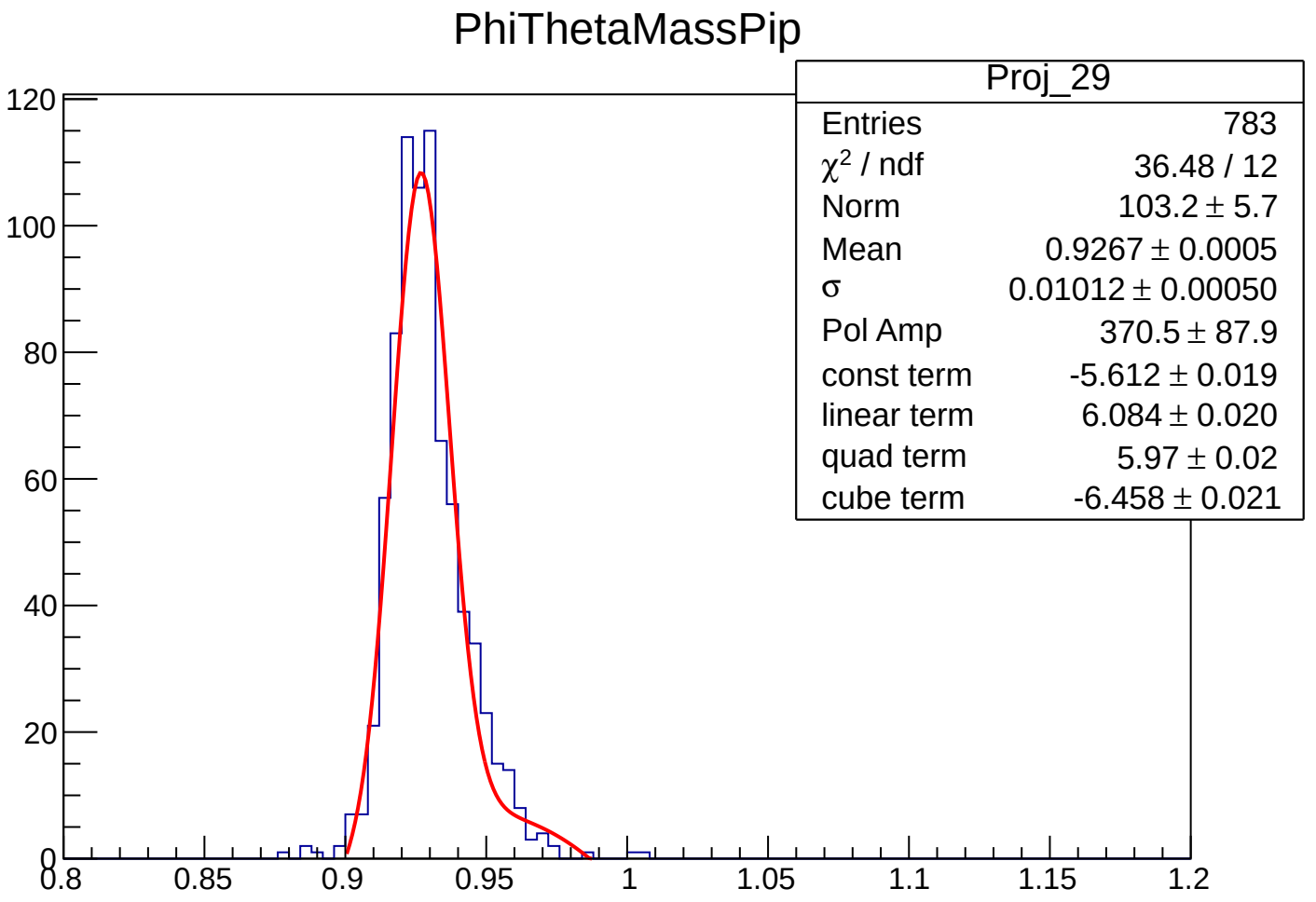

PhiThetaMassPip
Proj_24
Entries 827
χ² / ndf 25.47 / 13
Norm 104.1 ± 5.4
Mean 0.9288 ± 0.0006
σ 0.01088 ± 0.00046
Pol Amp 374.2 ± 77.8
const term -7.247 ± 0.016
linear term 7.824 ± 0.018
quad term 7.798 ± 0.018
cube term -8.401 ± 0.018
120
100
80
60
40
20
0
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

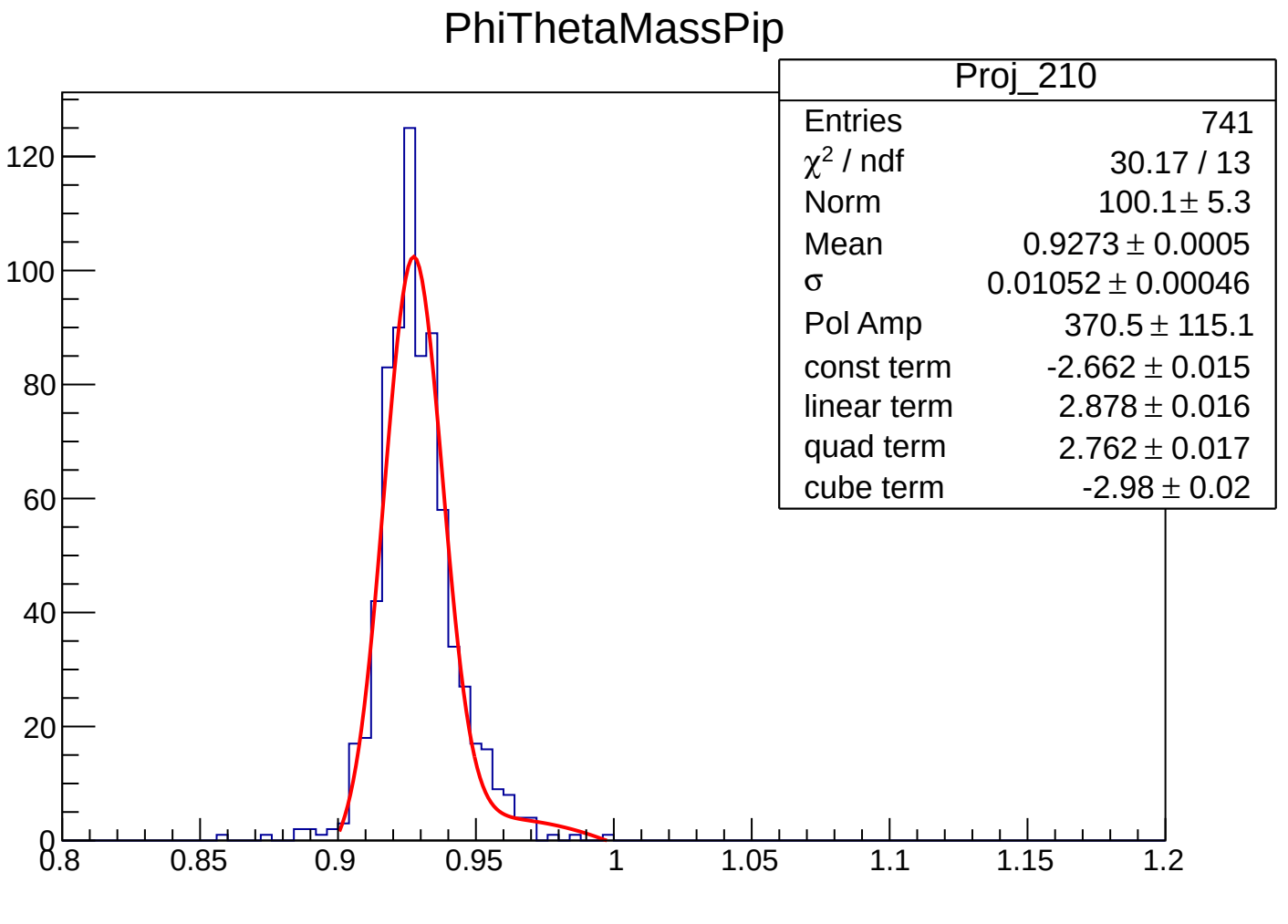

PhiThetaMassPip
Proj_25
Entries 904
χ² / ndf 36.69 / 13
Norm 121.3 ± 5.5
Mean 0.9285 ± 0.0005
σ 0.01117 ± 0.00045
Pol Amp 369.3 ± 107.9
const term -3.428 ± 0.018
linear term 3.619 ± 0.020
quad term 3.616 ± 0.020
cube term -3.808 ± 0.020
140
120
100
80
60
40
20
0
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

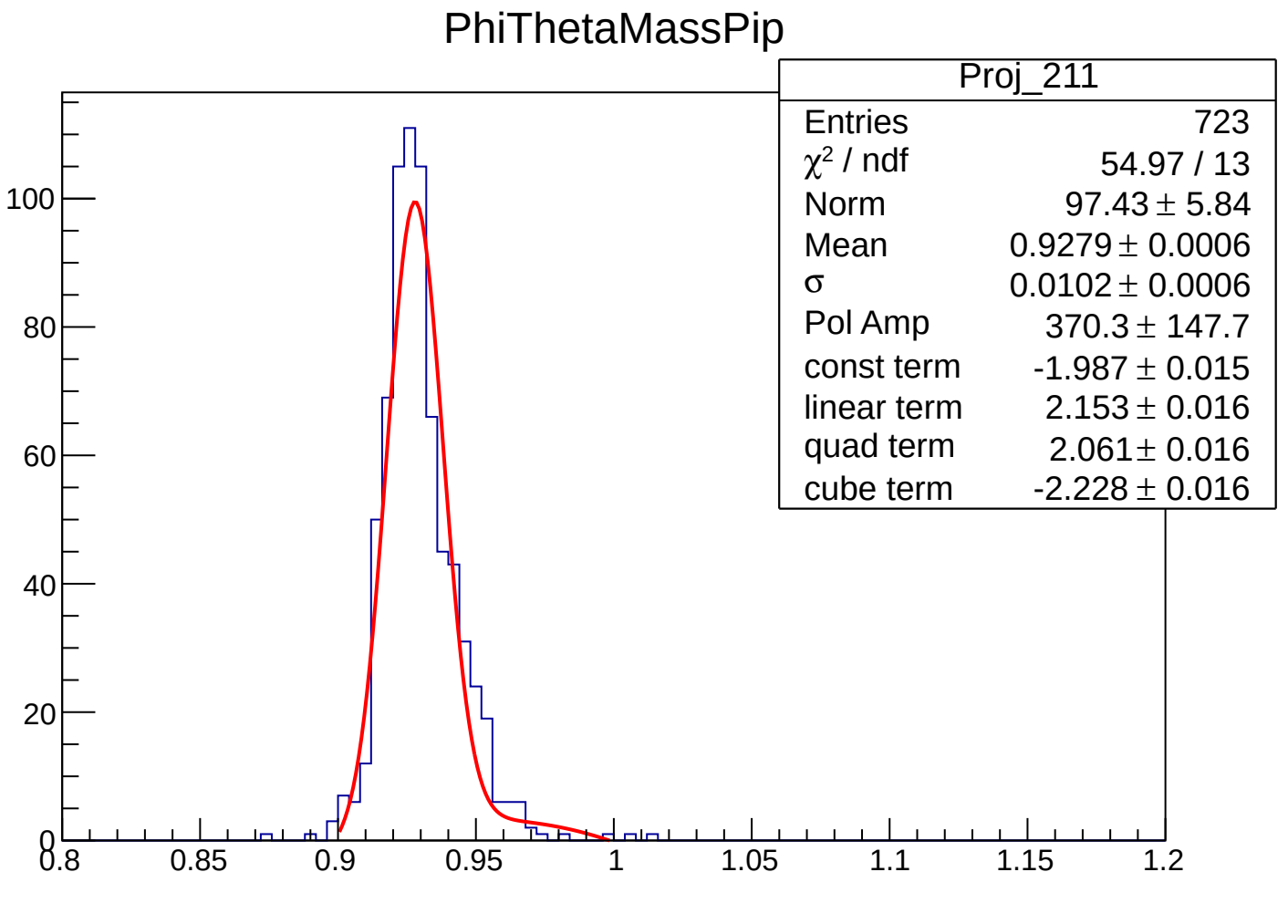

PhiThetaMassPip
Proj_26
Entries 867
χ² / ndf 47.19 / 13
Norm 109.6 ± 5.1
Mean 0.9293 ± 0.0005
σ 0.01175 ± 0.00045
Pol Amp 370.4 ± 128.9
const term -2.821 ± 0.016
linear term 3.014 ± 0.017
quad term 2.886 ± 0.018
cube term -3.079 ± 0.017
140
120
100
80
60
40
20
0
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

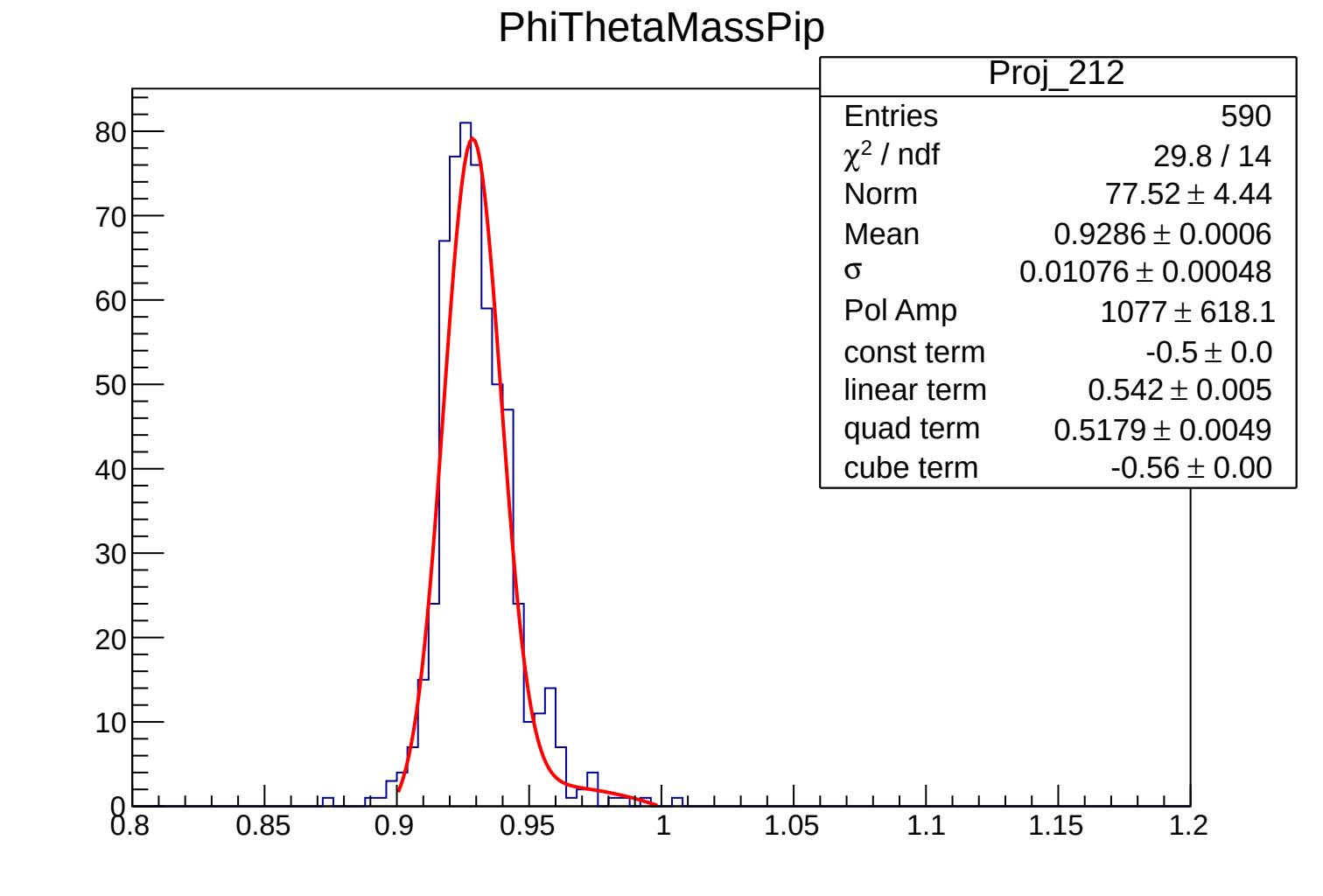

PhiThetaMassPip
Proj_27
Entries 758
χ² / ndf 15.55 / 16
Norm 93.35 ± 4.61
Mean 0.9288 ± 0.0006
σ 0.01212 ± 0.00048
Pol Amp 3465 ± 2068.1
const term -0.1629 ± 0.0014
linear term 0.1784 ± 0.0015
quad term 0.1609 ± 0.0015
cube term -0.1764 ± 0.0015
0
20
40
60
80
100
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

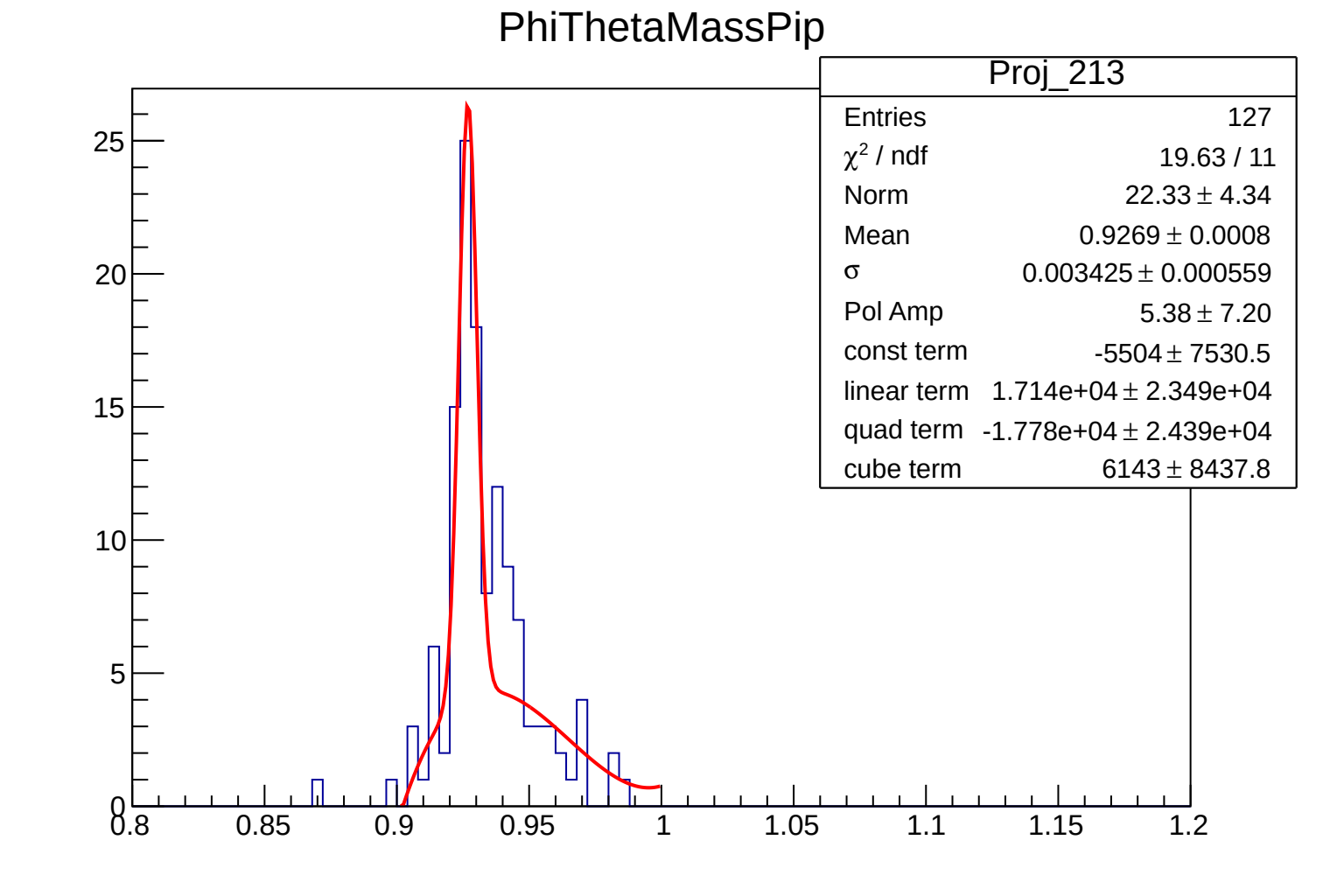

PhiThetaMassPip
Proj_28
Entries 775
χ² / ndf 41.3 / 14
Norm 100.5 ± 5.5
Mean 0.9287 ± 0.0005
σ 0.01072 ± 0.00049
Pol Amp 372.1 ± 108.5
const term -3.219 ± 0.014
linear term 3.489 ± 0.015
quad term 3.338 ± 0.015
cube term -3.612 ± 0.015
120
100
80
60
40
20
0
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

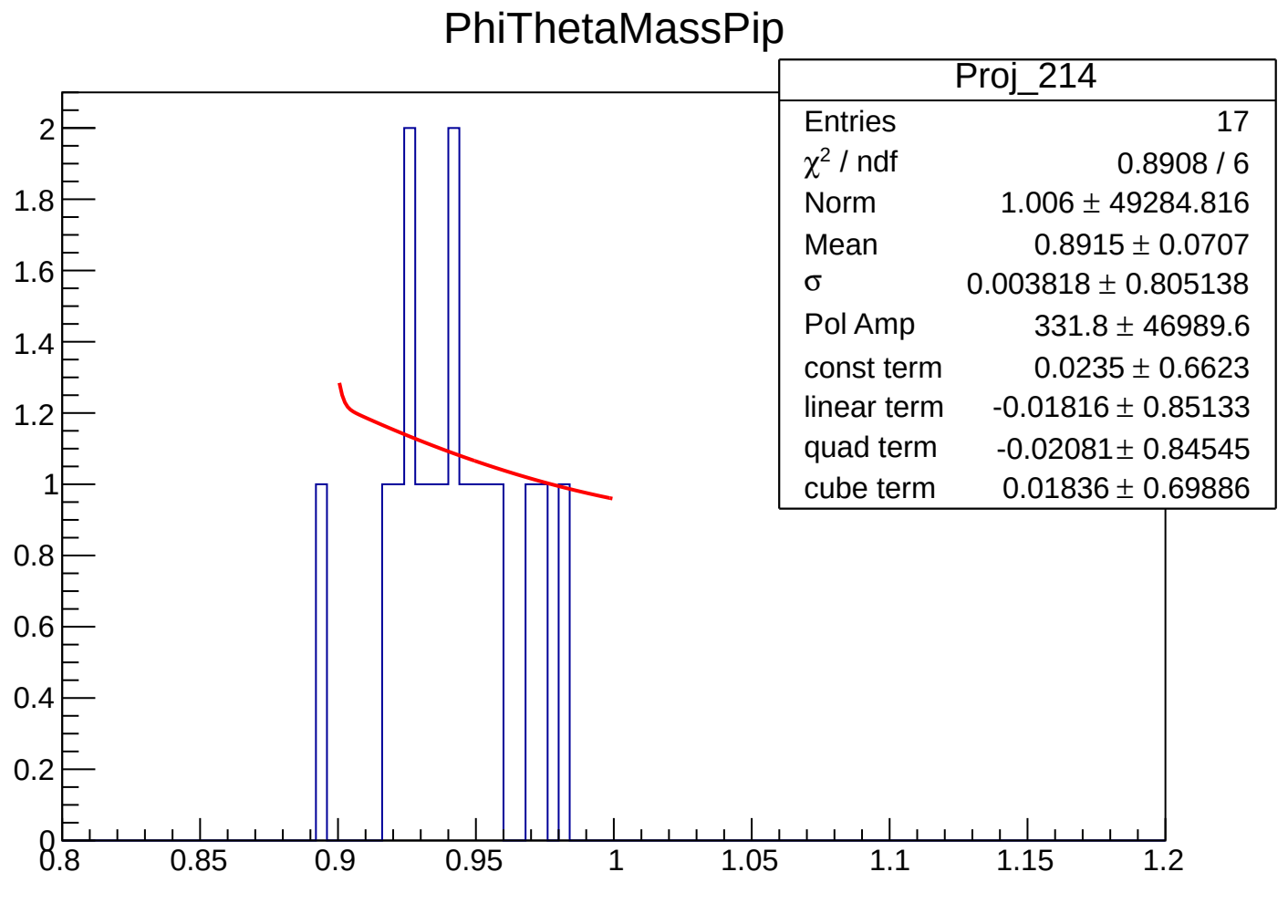

PhiThetaMassPip
Proj_29
Entries 783
χ² / ndf 36.48 / 12
Norm 103.2 ± 5.7
Mean 0.9267 ± 0.0005
σ 0.01012 ± 0.00050
Pol Amp 370.5 ± 87.9
const term -5.612 ± 0.019
linear term 6.084 ± 0.020
quad term 5.97 ± 0.02
cube term -6.458 ± 0.021
120
100
80
60
40
20
0
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

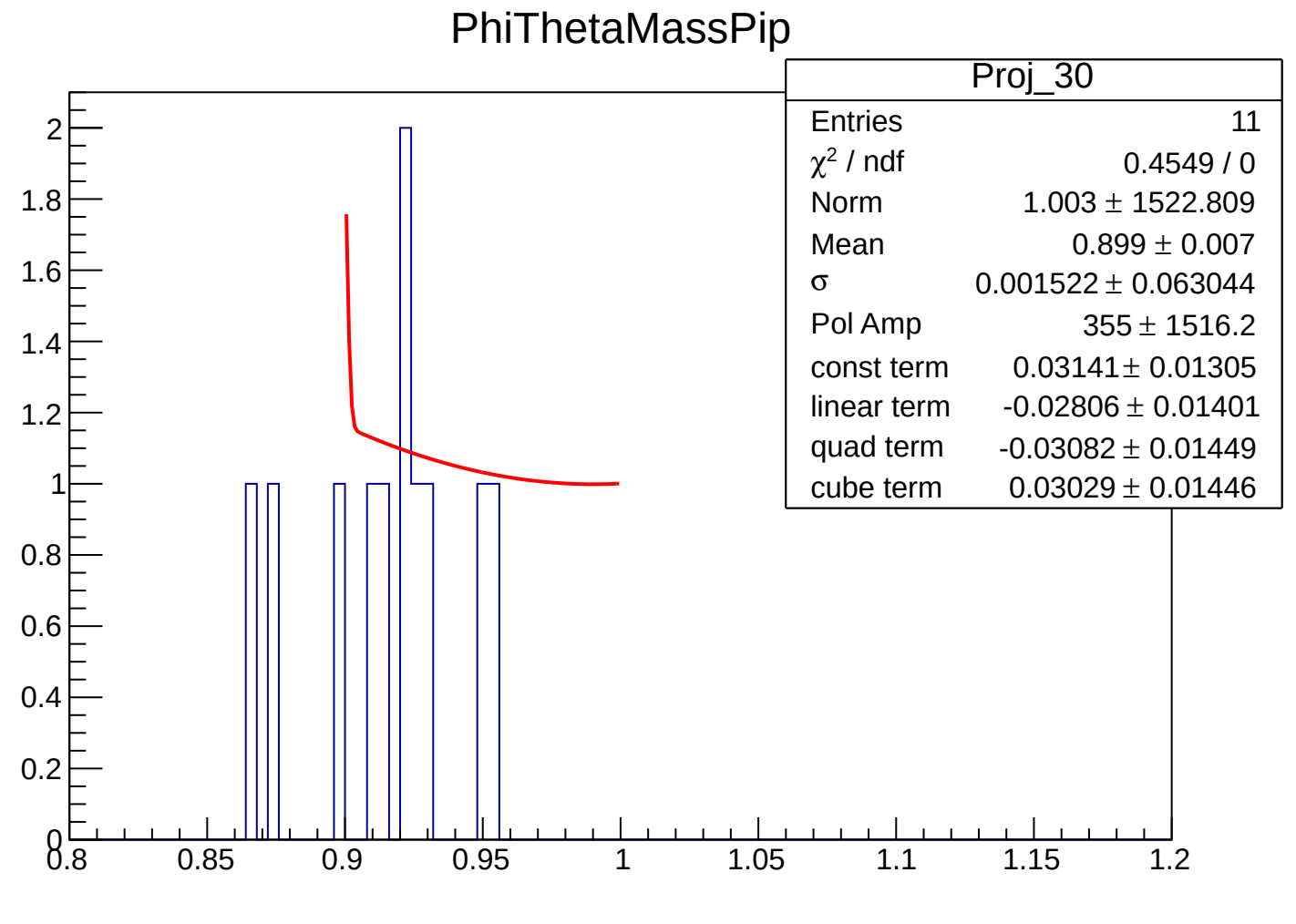

PhiThetaMassPip
Proj_210
Entries 741
χ² / ndf 30.17 / 13
Norm 100.1 ± 5.3
Mean 0.9273 ± 0.0005
σ 0.01052 ± 0.00046
Pol Amp 370.5 ± 115.1
const term -2.662 ± 0.015
linear term 2.878 ± 0.016
quad term 2.762 ± 0.017
cube term -2.98 ± 0.02
120
100
80
60
40
20
0
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

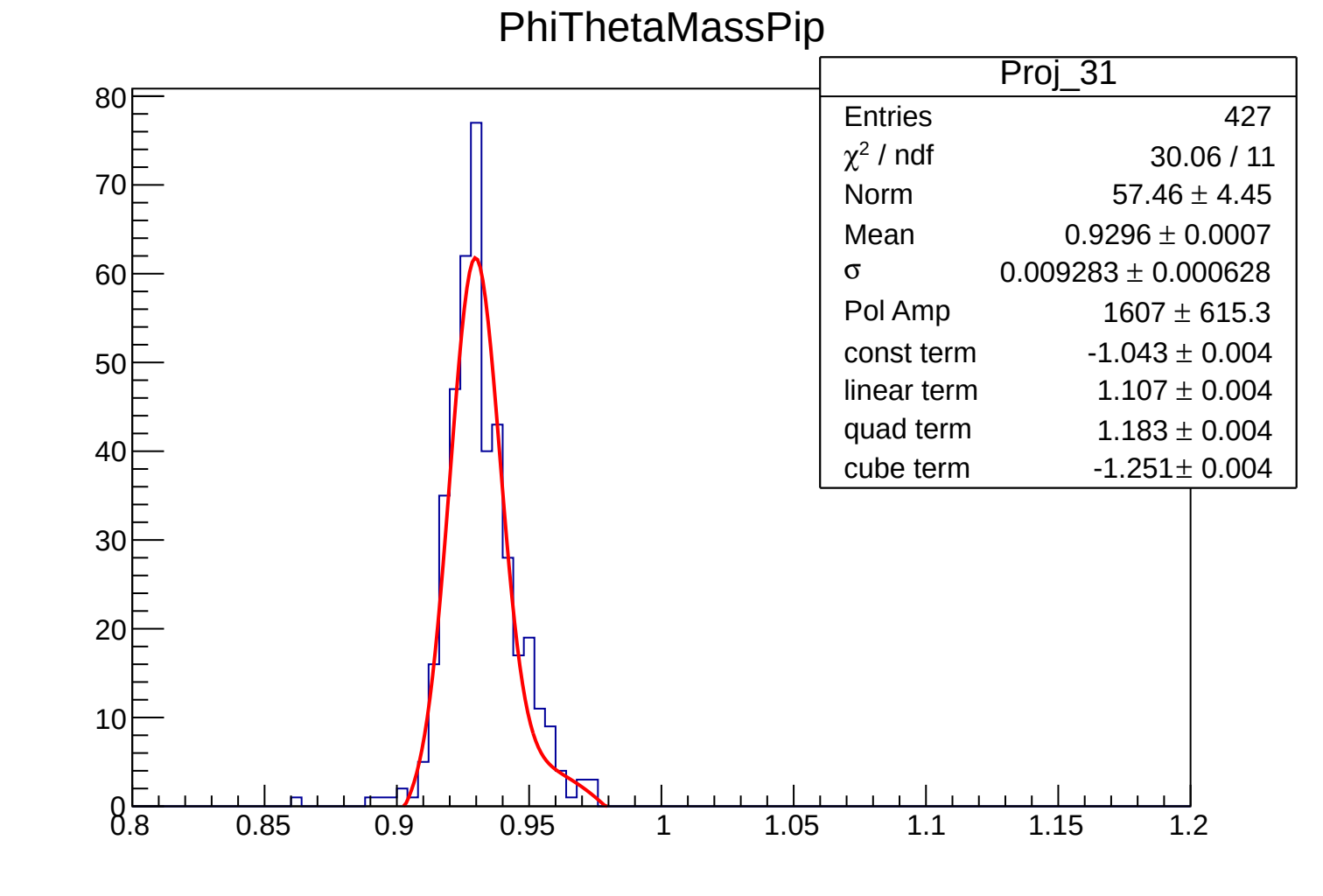

PhiThetaMassPip
Proj_211
Entries 723
χ² / ndf 54.97 / 13
Norm 97.43 ± 5.84
Mean 0.9279 ± 0.0006
σ 0.0102 ± 0.0006
Pol Amp 370.3 ± 147.7
const term -1.987 ± 0.015
linear term 2.153 ± 0.016
quad term 2.061 ± 0.016
cube term -2.228 ± 0.016
0
20
40
60
80
100
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

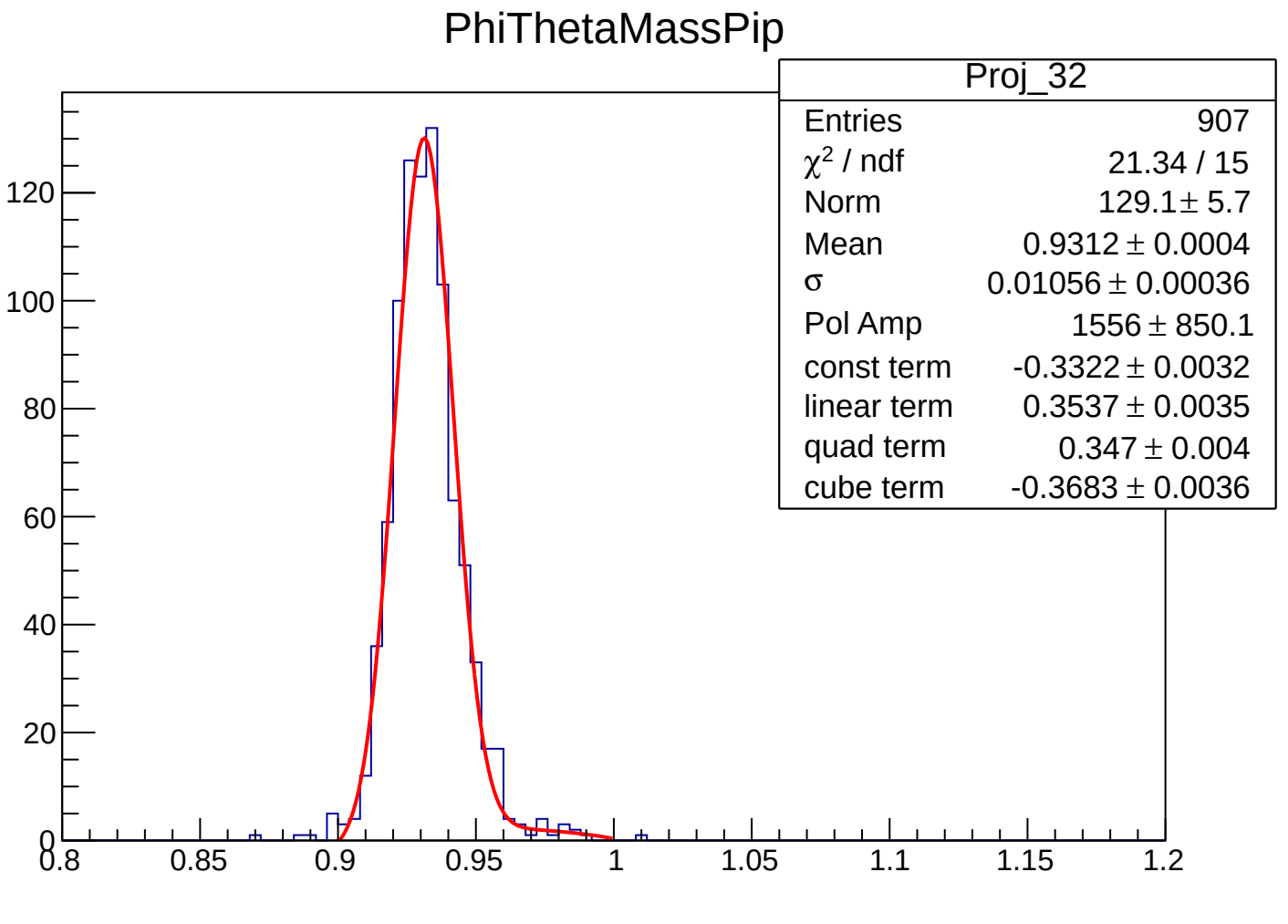

PhiThetaMassPip
Proj_212
Entries 590
χ² / ndf 29.8 / 14
Norm 77.52 ± 4.44
Mean 0.9286 ± 0.0006
σ 0.01076 ± 0.00048
Pol Amp 1077 ± 618.1
const term -0.5 ± 0.0
linear term 0.542 ± 0.005
quad term 0.5179 ± 0.0049
cube term -0.56 ± 0.00
0
10
20
30
40
50
60
70
80
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

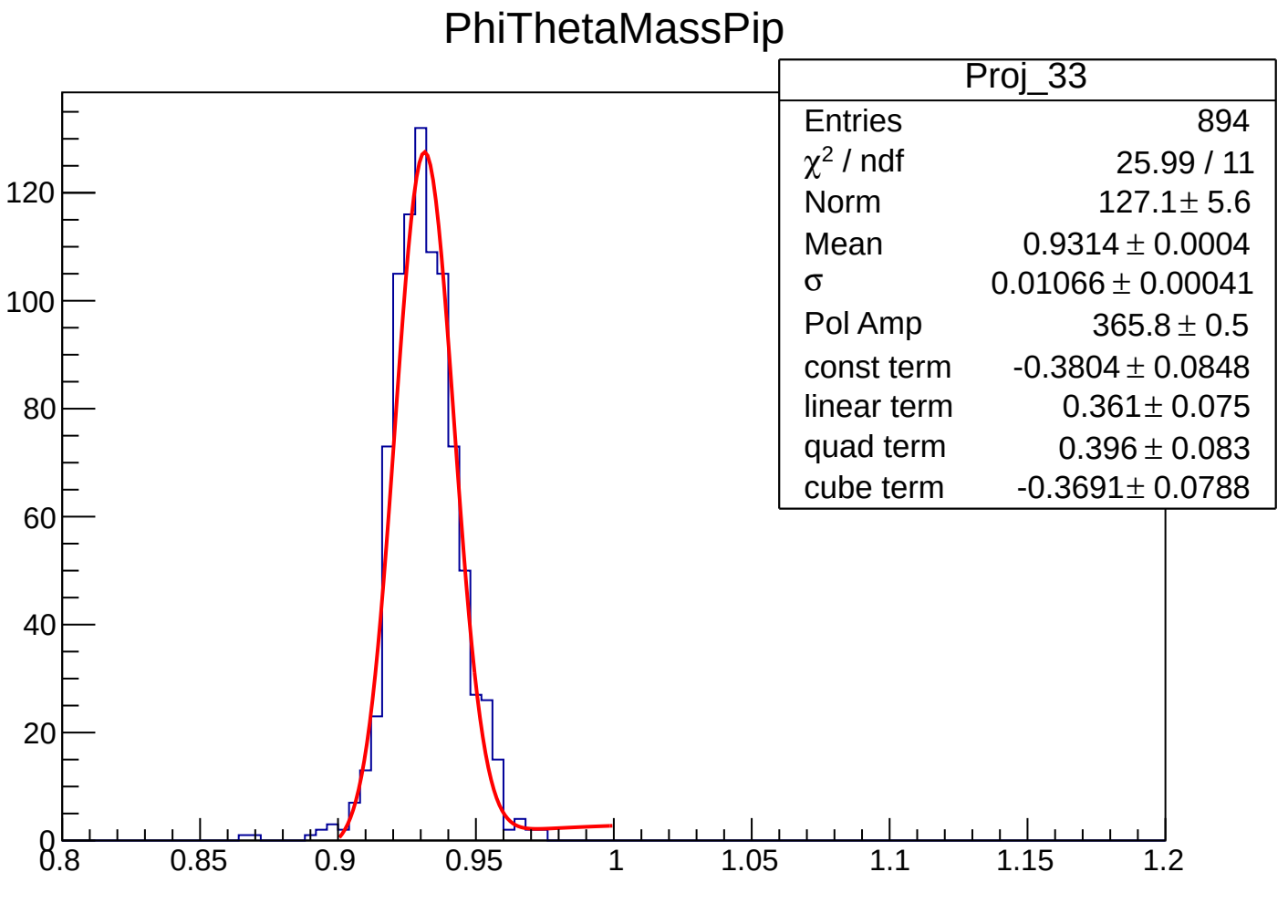

PhiThetaMassPip
Proj_213
Entries 127
χ² / ndf 19.63 / 11
Norm 22.33 ± 4.34
Mean 0.9269 ± 0.0008
σ 0.003425 ± 0.000559
Pol Amp 5.38 ± 7.20
const term -5504 ± 7530.5
linear term 1.714e+04 ± 2.349e+04
quad term -1.778e+04 ± 2.439e+04
cube term 6143 ± 8437.8
0
5
10
15
20
25
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

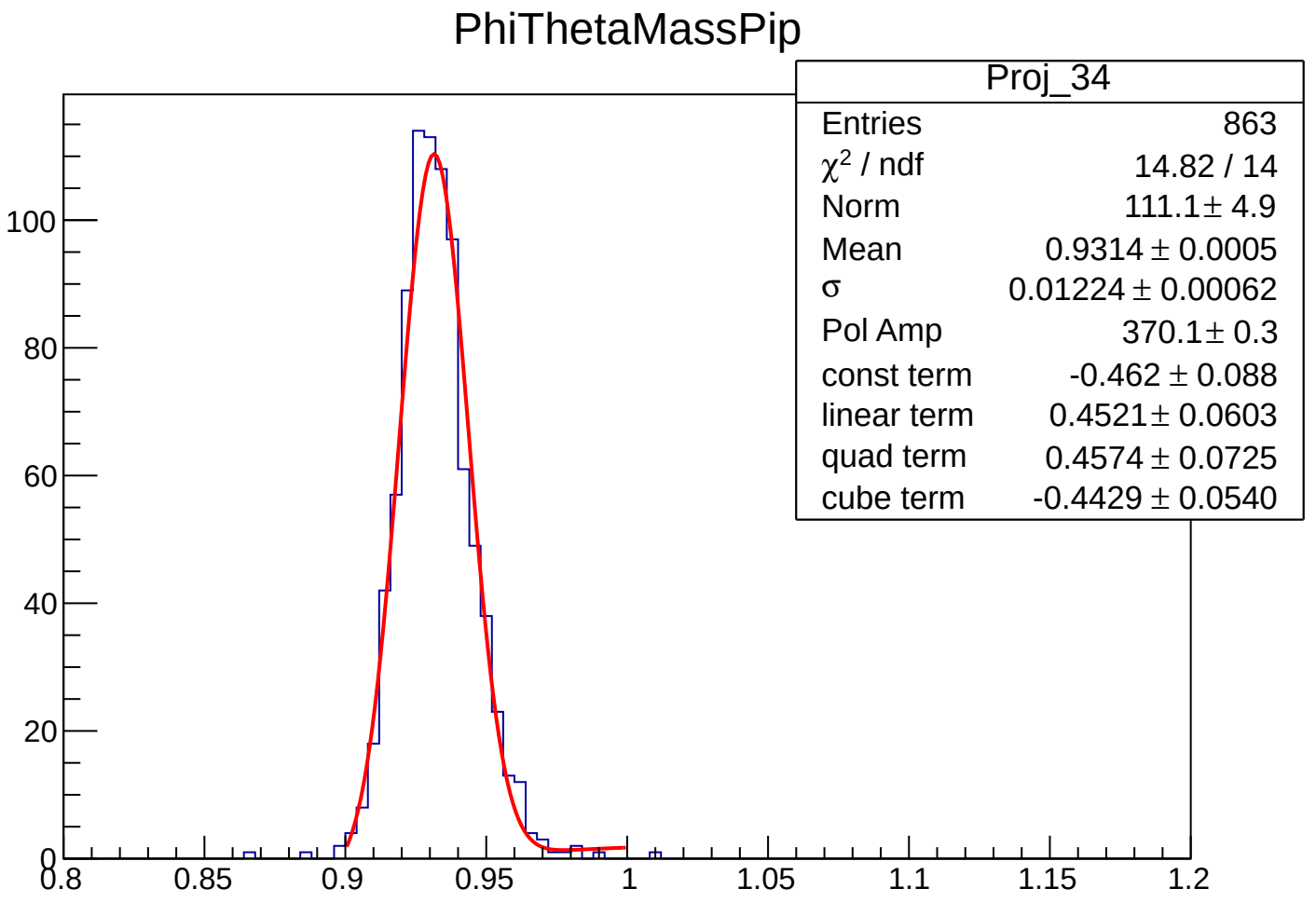

PhiThetaMassPip
Proj_214
Entries 17
χ² / ndf 0.8908 / 6
Norm 1.006 ± 49284.816
Mean 0.8915 ± 0.0707
σ 0.003818 ± 0.805138
Pol Amp 331.8 ± 46989.6
const term 0.0235 ± 0.6623
linear term -0.01816 ± 0.85133
quad term -0.02081 ± 0.84545
cube term 0.01836 ± 0.69886
0 0.2 0.4 0.6 0.8 1 1.2 1.4 1.6 1.8 2
0.8 0.85 0.9 0.95 1 1.05 1.1 1.15 1.2

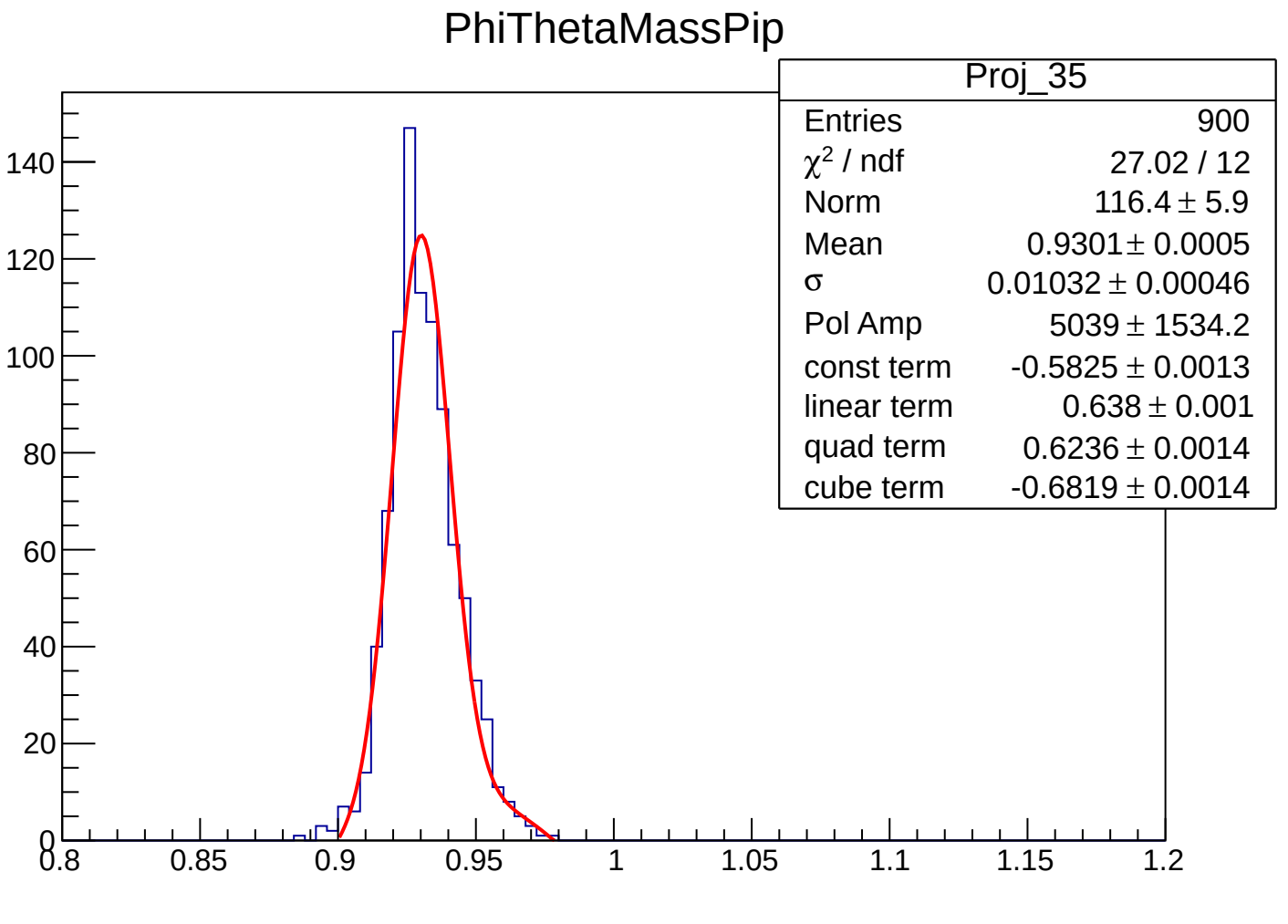

PhiThetaMassPip
Proj_30
Entries 11
χ² / ndf 0.4549 / 0
Norm 1.003 ± 1522.809
Mean 0.899 ± 0.007
σ 0.001522 ± 0.063044
Pol Amp 355 ± 1516.2
const term 0.03141 ± 0.01305
linear term -0.02806 ± 0.01401
quad term -0.03082 ± 0.01449
cube term 0.03029 ± 0.01446
0 0.2 0.4 0.6 0.8 1 1.2 1.4 1.6 1.8 2
0.8 0.85 0.9 0.95 1 1.05 1.1 1.15 1.2

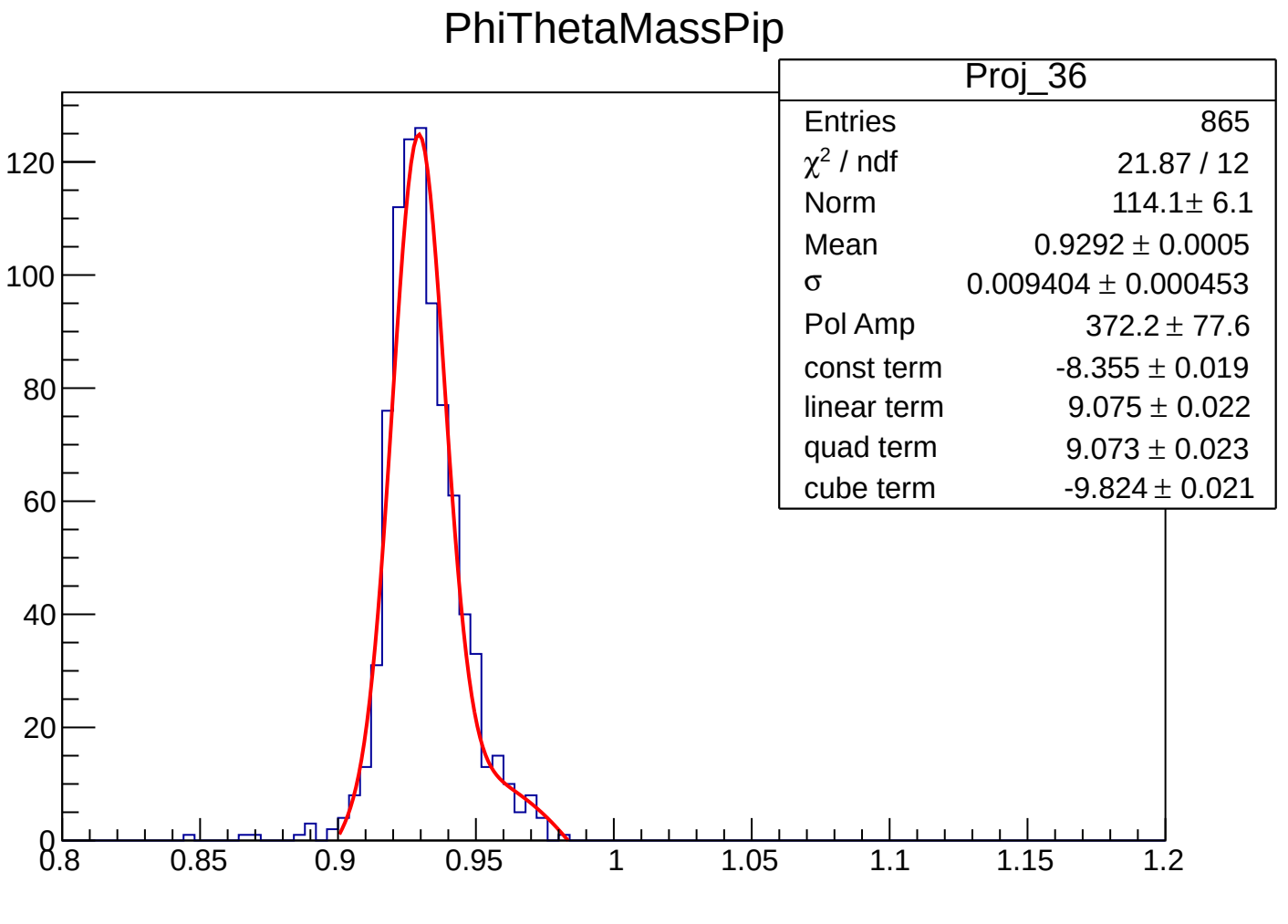

PhiThetaMassPip
Proj_31
Entries 427
χ² / ndf 30.06 / 11
Norm 57.46 ± 4.45
Mean 0.9296 ± 0.0007
σ 0.009283 ± 0.000628
Pol Amp 1607 ± 615.3
const term -1.043 ± 0.004
linear term 1.107 ± 0.004
quad term 1.183 ± 0.004
cube term -1.251± 0.004
80
70
60
50
40
30
20
10
0
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

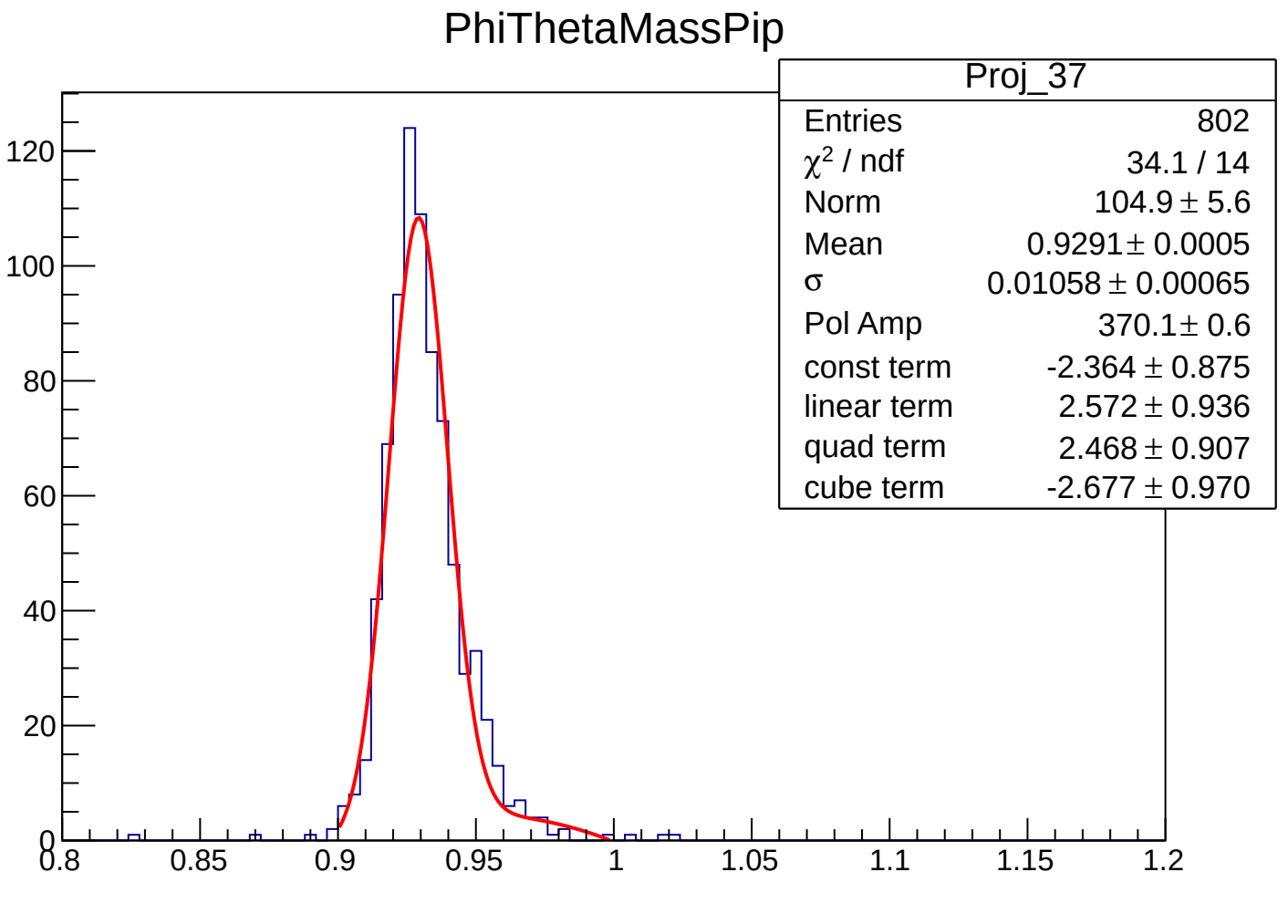

PhiThetaMassPip
Proj_32
Entries 907
χ² / ndf 21.34 / 15
Norm 129.1 ± 5.7
Mean 0.9312 ± 0.0004
σ 0.01056 ± 0.00036
Pol Amp 1556 ± 850.1
const term -0.3322 ± 0.0032
linear term 0.3537 ± 0.0035
quad term 0.347 ± 0.004
cube term -0.3683 ± 0.0036
0
20
40
60
80
100
120
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

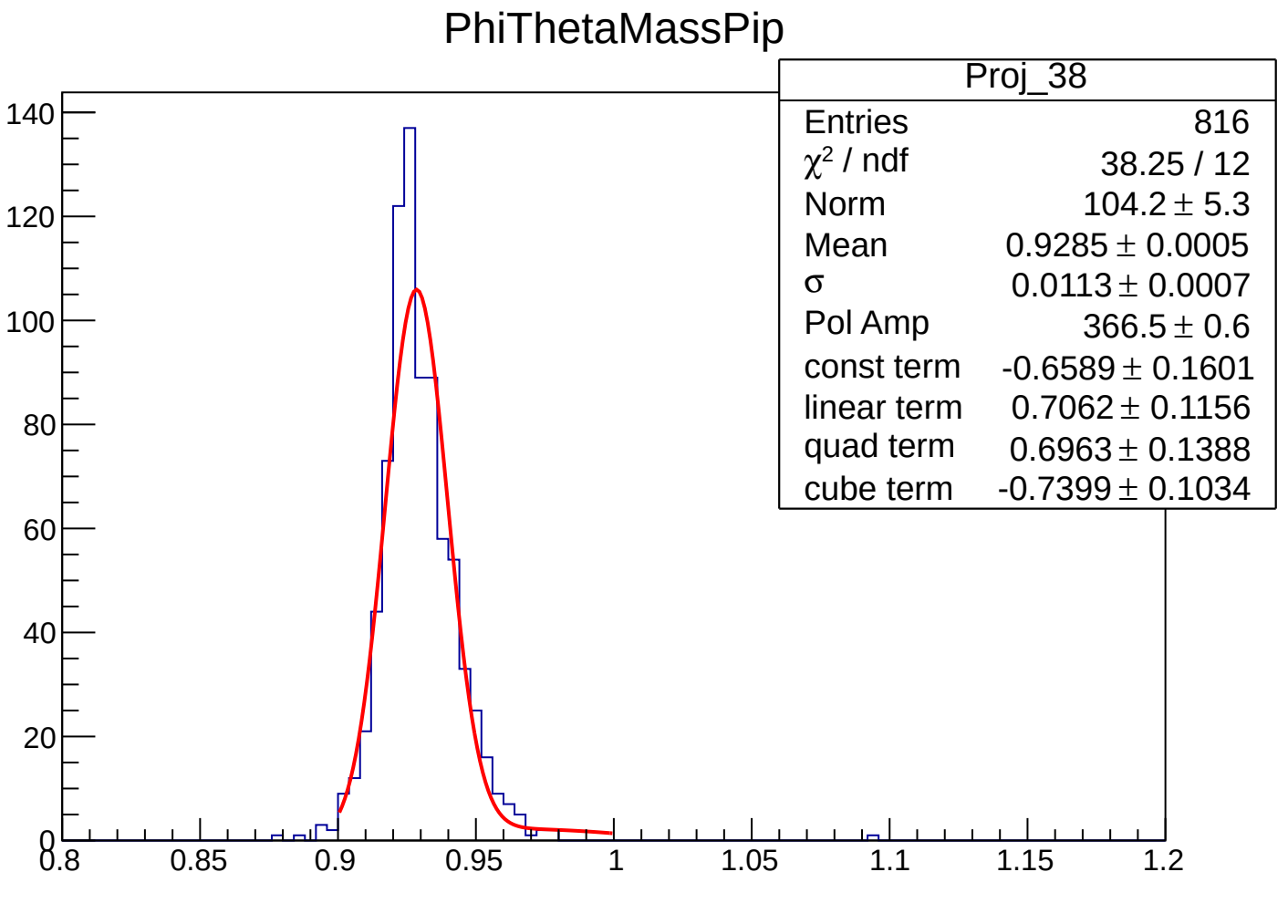

PhiThetaMassPip
Proj_33
Entries 894
χ² / ndf 25.99 / 11
Norm 127.1 ± 5.6
Mean 0.9314 ± 0.0004
σ 0.01066 ± 0.00041
Pol Amp 365.8 ± 0.5
const term -0.3804 ± 0.0848
linear term 0.361 ± 0.075
quad term 0.396 ± 0.083
cube term -0.3691 ± 0.0788
0
20
40
60
80
100
120
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

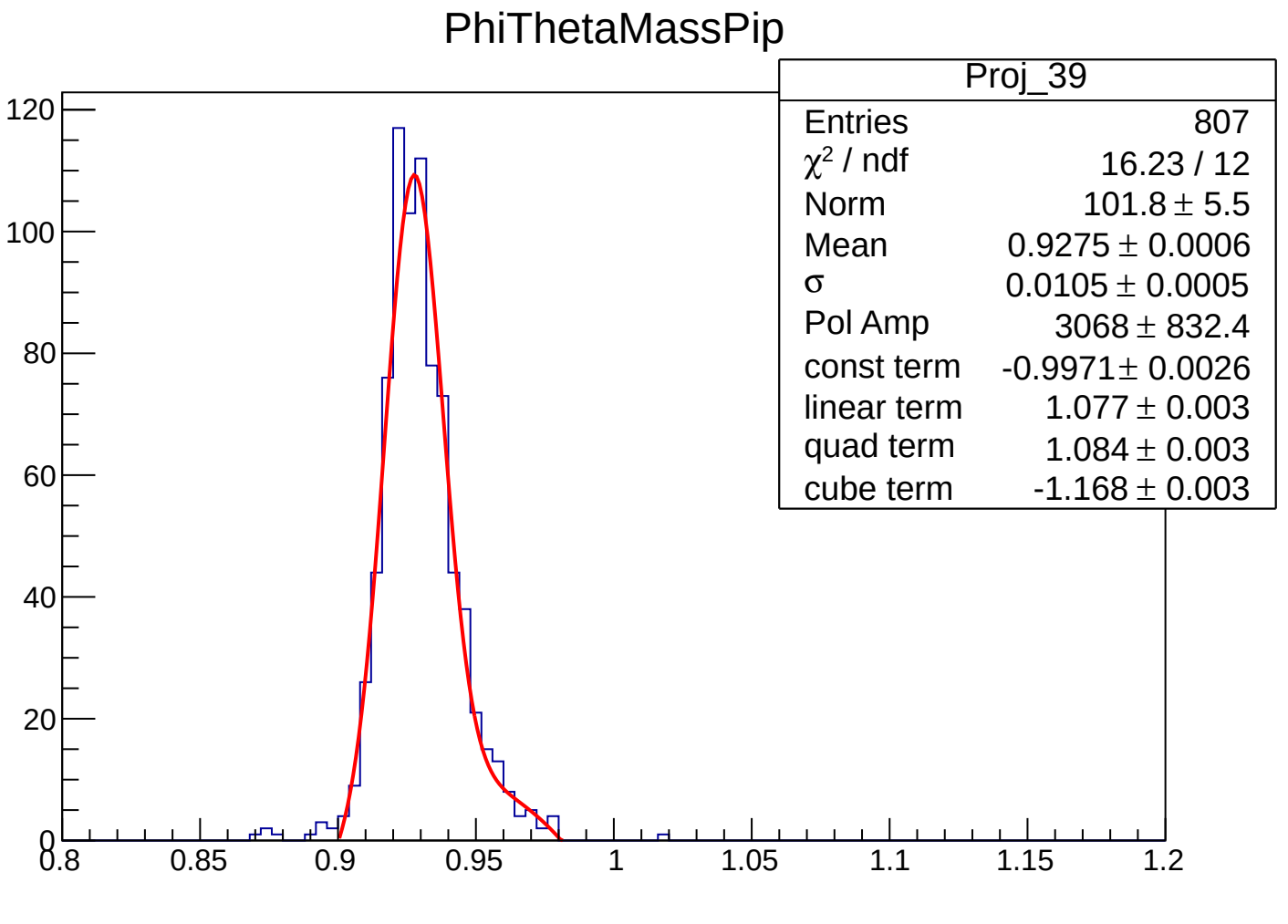

PhiThetaMassPip
Proj_34
Entries 863
χ² / ndf 14.82 / 14
Norm 111.1 ± 4.9
Mean 0.9314 ± 0.0005
σ 0.01224 ± 0.00062
Pol Amp 370.1 ± 0.3
const term -0.462 ± 0.088
linear term 0.4521 ± 0.0603
quad term 0.4574 ± 0.0725
cube term -0.4429 ± 0.0540
0
20
40
60
80
100
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

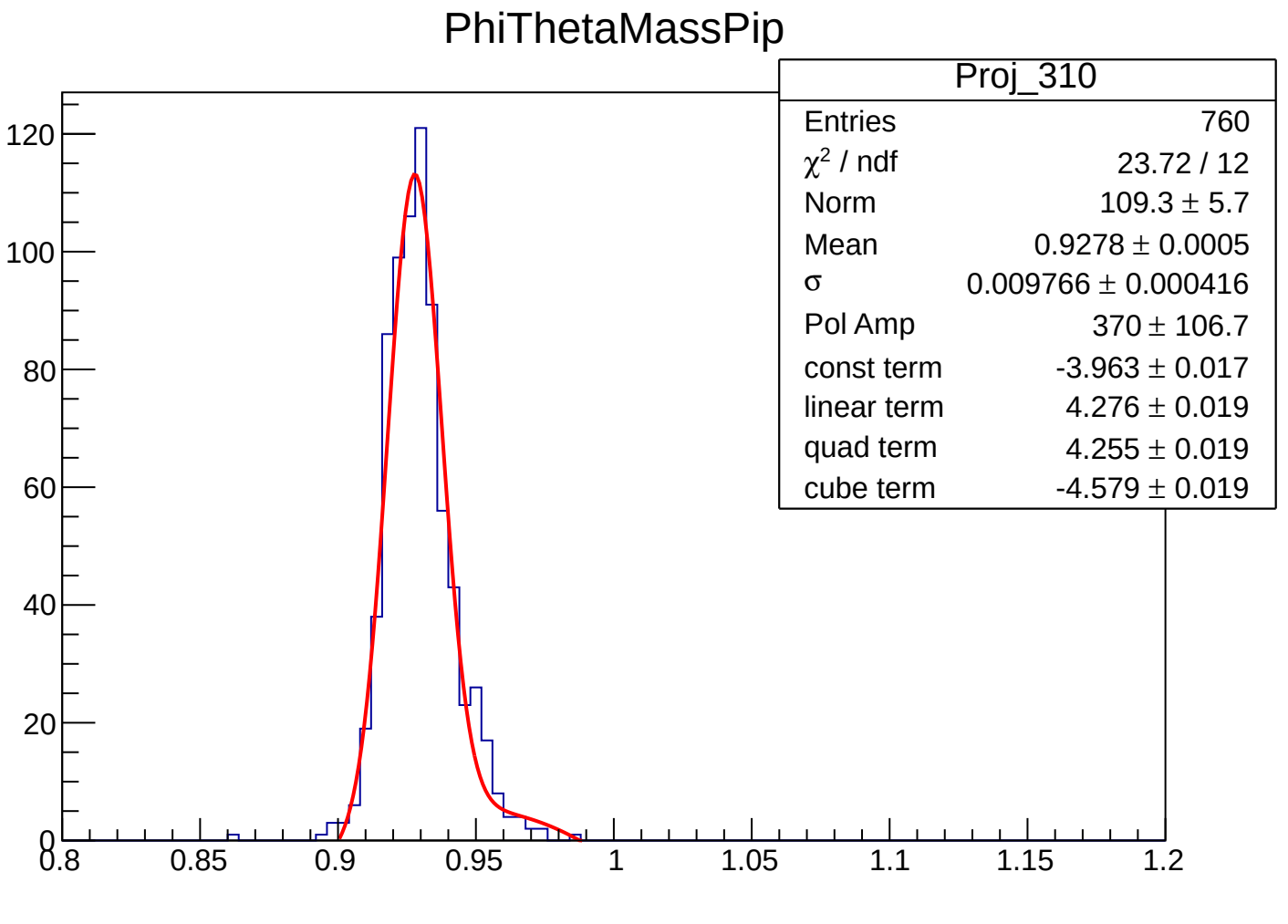

PhiThetaMassPip
Proj_35
Entries 900
χ² / ndf 27.02 / 12
Norm 116.4 ± 5.9
Mean 0.9301 ± 0.0005
σ 0.01032 ± 0.00046
Pol Amp 5039 ± 1534.2
const term -0.5825 ± 0.0013
linear term 0.638 ± 0.001
quad term 0.6236 ± 0.0014
cube term -0.6819 ± 0.0014
0
20
40
60
80
100
120
140
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

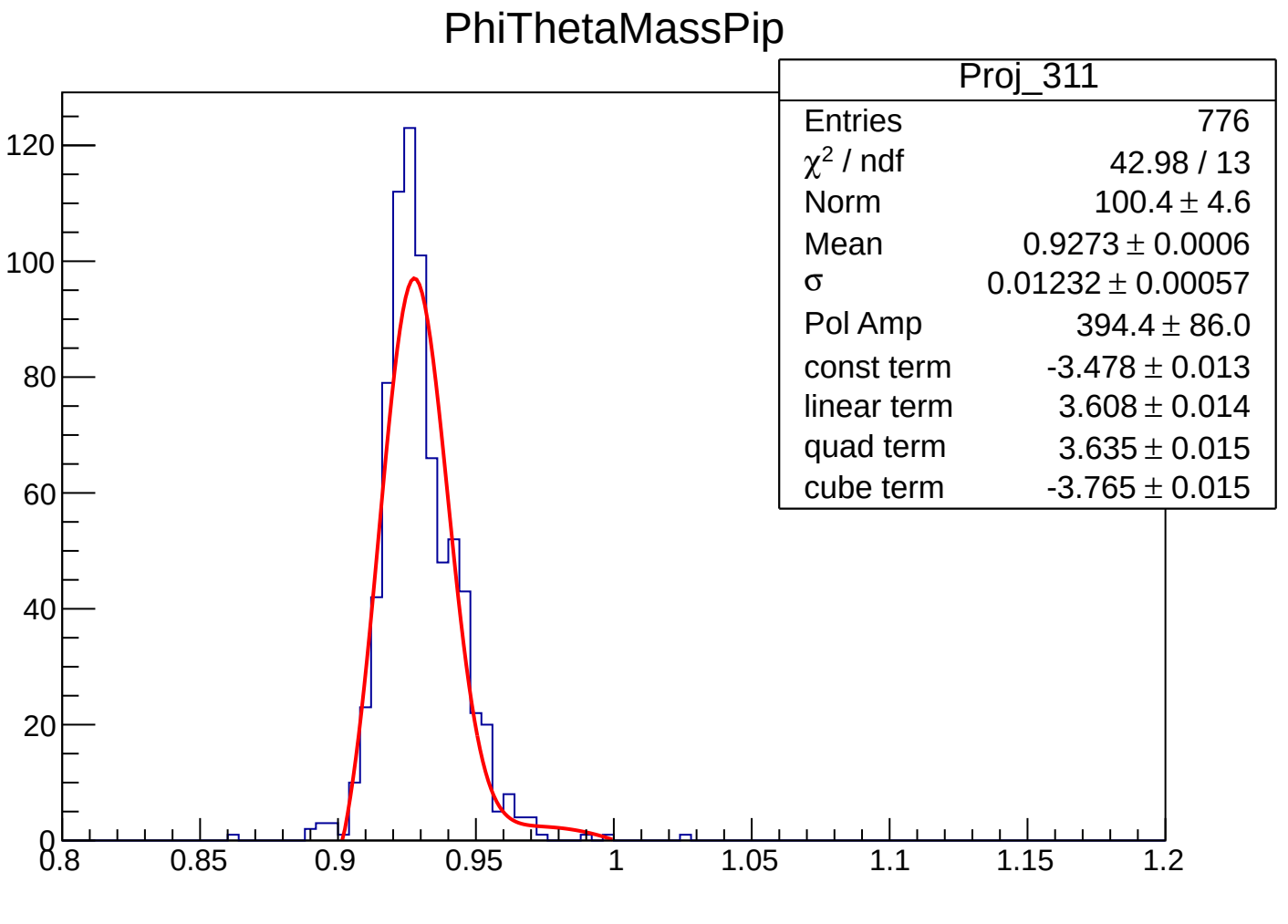

PhiThetaMassPip
Proj_36
Entries 865
χ² / ndf 21.87 / 12
Norm 114.1± 6.1
Mean 0.9292 ± 0.0005
σ 0.009404 ± 0.000453
Pol Amp 372.2 ± 77.6
const term -8.355 ± 0.019
linear term 9.075 ± 0.022
quad term 9.073 ± 0.023
cube term -9.824 ± 0.021
120
100
80
60
40
20
0
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

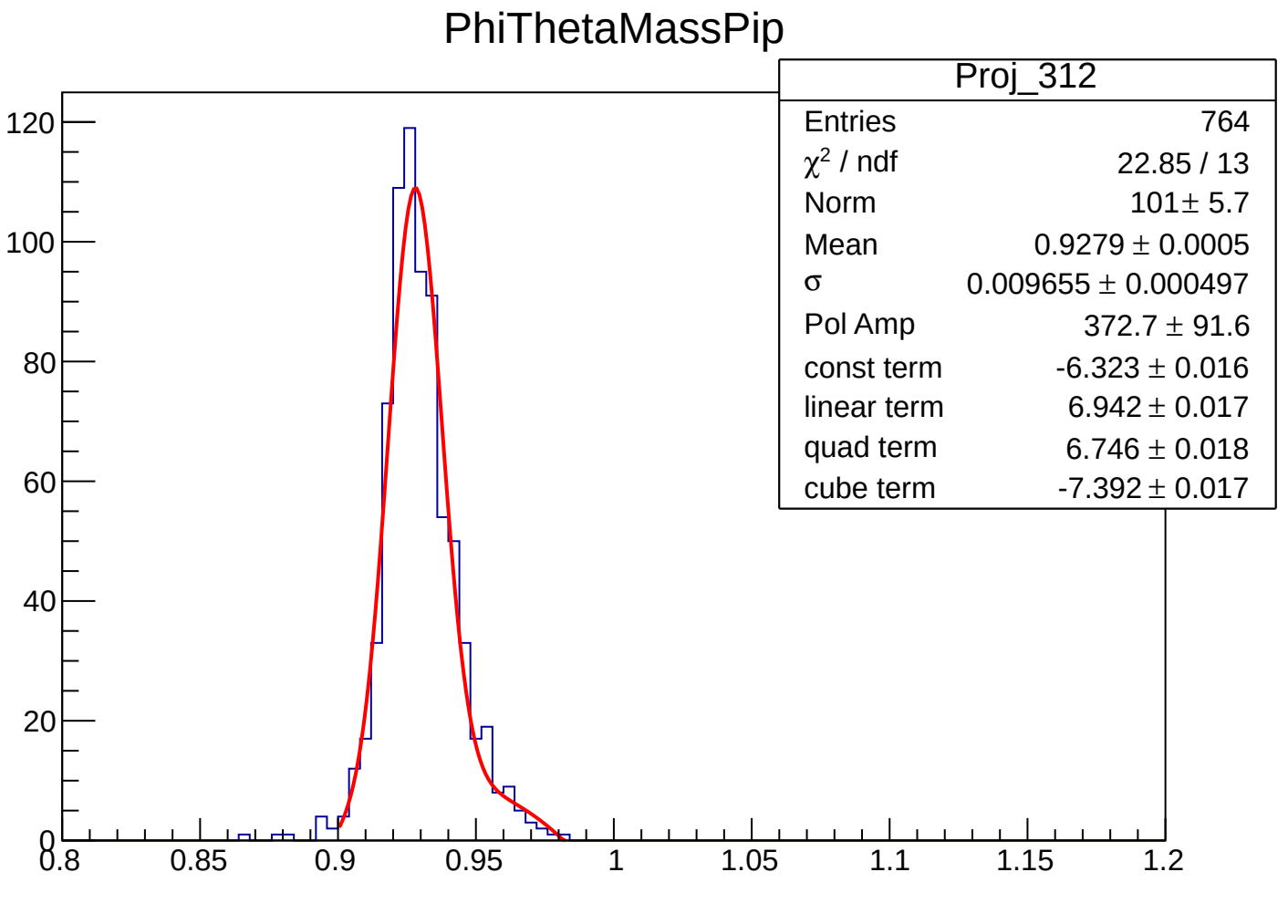

PhiThetaMassPip
Proj_37
Entries 802
χ² / ndf 34.1 / 14
Norm 104.9 ± 5.6
Mean 0.9291 ± 0.0005
σ 0.01058 ± 0.00065
Pol Amp 370.1 ± 0.6
const term -2.364 ± 0.875
linear term 2.572 ± 0.936
quad term 2.468 ± 0.907
cube term -2.677 ± 0.970
120
100
80
60
40
20
0
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

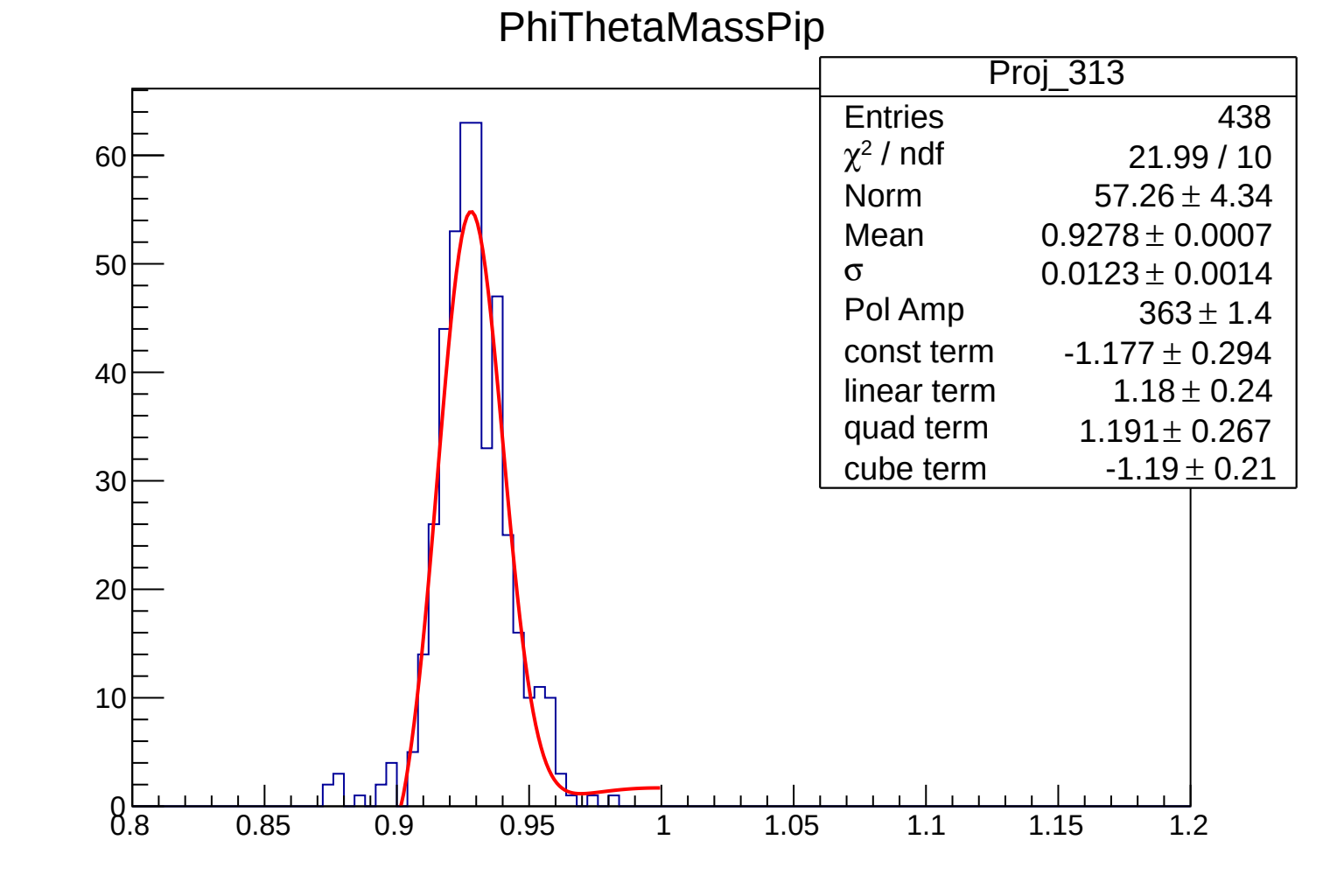

PhiThetaMassPip
Proj_38
Entries 816
χ² / ndf 38.25 / 12
Norm 104.2 ± 5.3
Mean 0.9285 ± 0.0005
σ 0.0113 ± 0.0007
Pol Amp 366.5 ± 0.6
const term -0.6589 ± 0.1601
linear term 0.7062 ± 0.1156
quad term 0.6963 ± 0.1388
cube term -0.7399 ± 0.1034
140
120
100
80
60
40
20
0
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

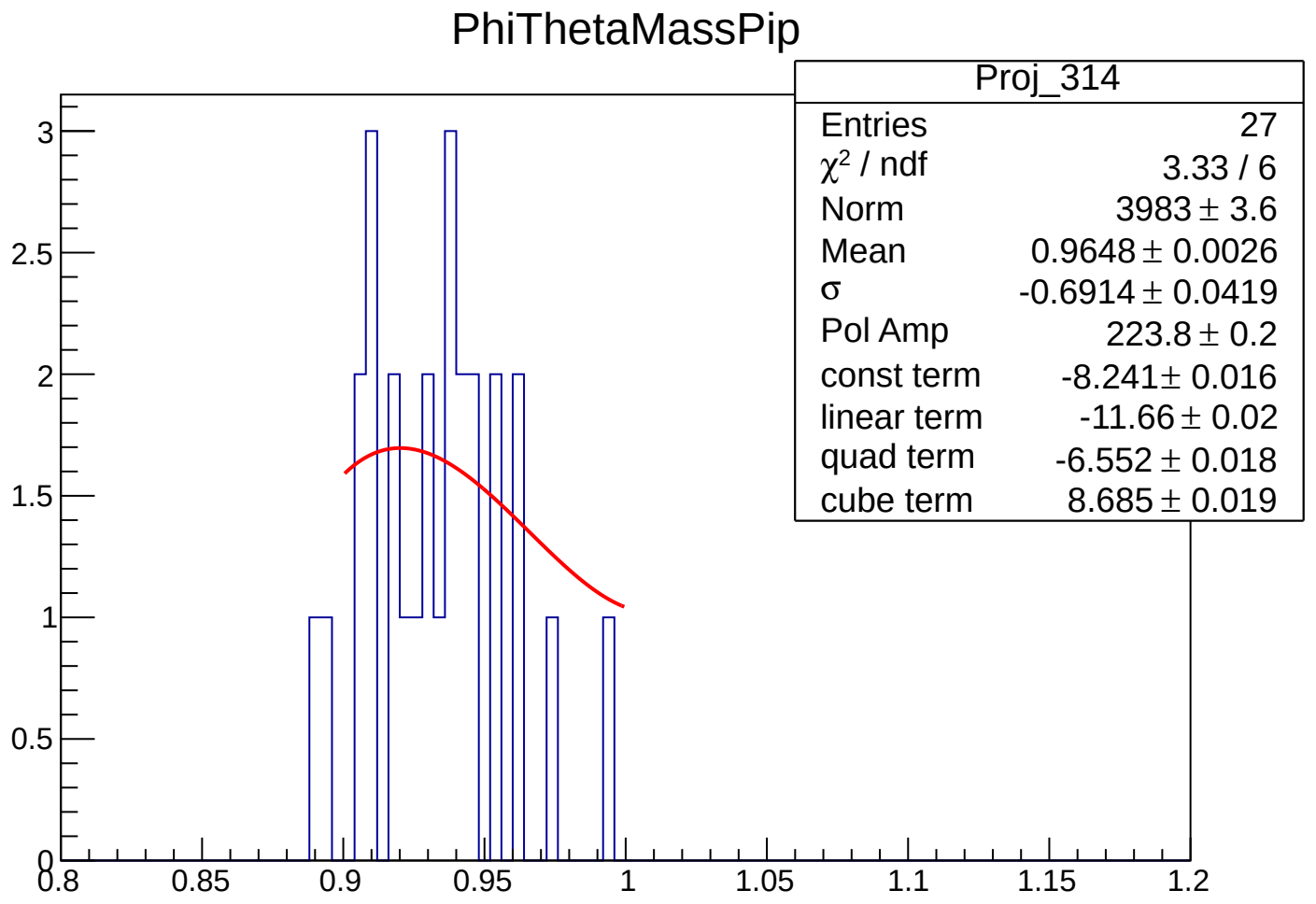

PhiThetaMassPip
Proj_39
Entries 807
χ² / ndf 16.23 / 12
Norm 101.8 ± 5.5
Mean 0.9275 ± 0.0006
σ 0.0105 ± 0.0005
Pol Amp 3068 ± 832.4
const term -0.9971 ± 0.0026
linear term 1.077 ± 0.003
quad term 1.084 ± 0.003
cube term -1.168 ± 0.003
120
100
80
60
40
20
0
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

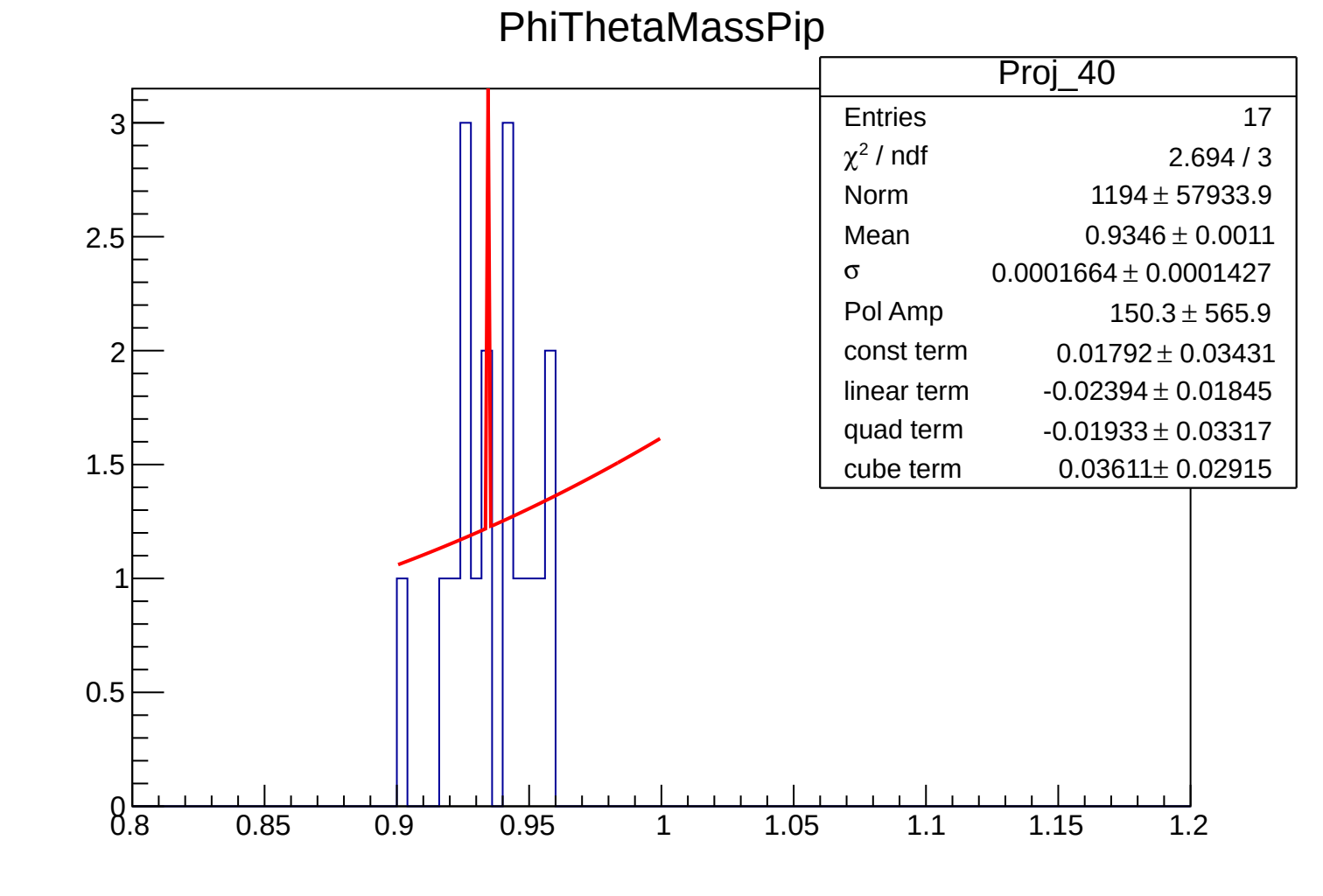

PhiThetaMassPip
Proj_310
Entries 760
χ² / ndf 23.72 / 12
Norm 109.3 ± 5.7
Mean 0.9278 ± 0.0005
σ 0.009766 ± 0.000416
Pol Amp 370 ± 106.7
const term -3.963 ± 0.017
linear term 4.276 ± 0.019
quad term 4.255 ± 0.019
cube term -4.579 ± 0.019
120
100
80
60
40
20
0
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

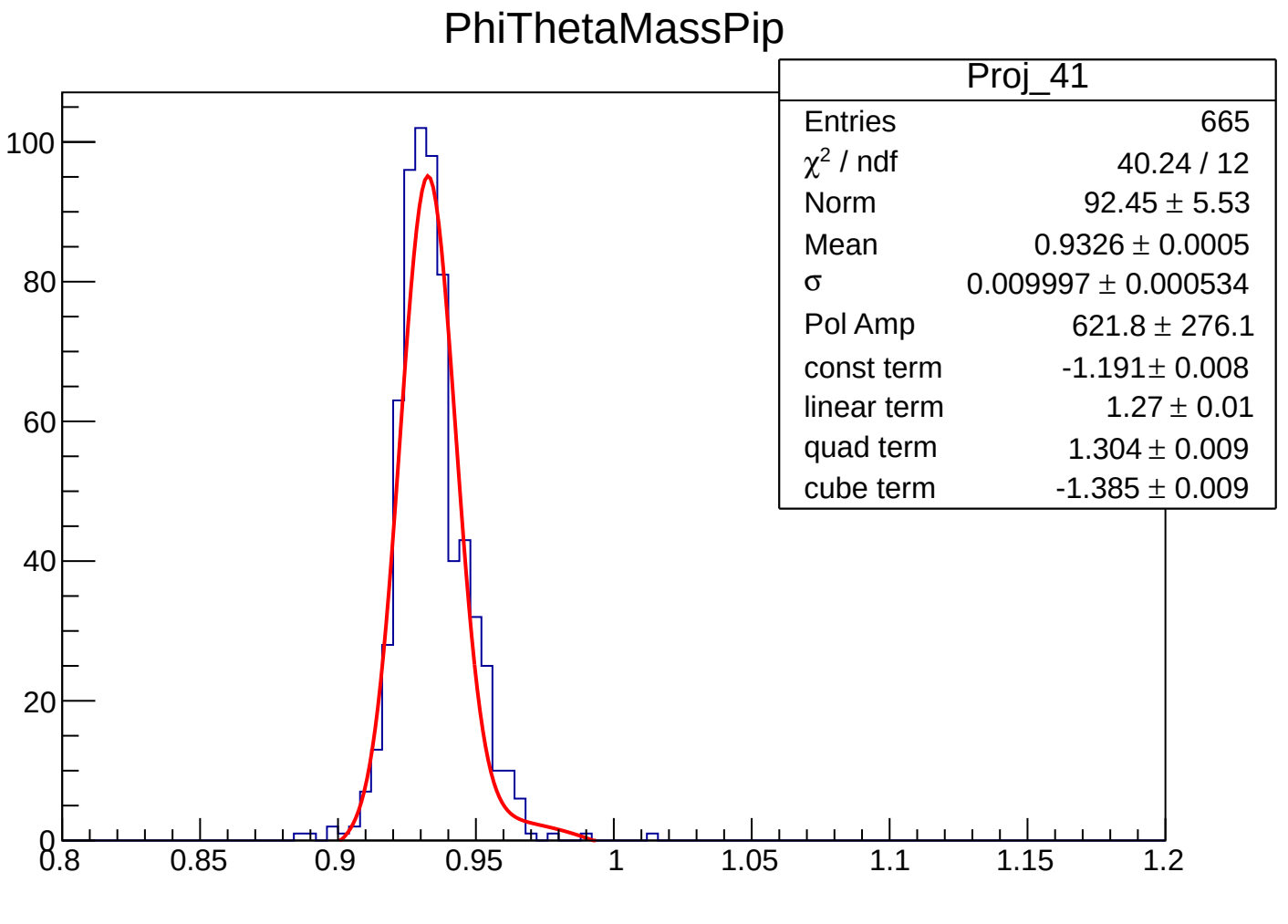

PhiThetaMassPip
Proj_311
Entries 776
χ² / ndf 42.98 / 13
Norm 100.4 ± 4.6
Mean 0.9273 ± 0.0006
σ 0.01232 ± 0.00057
Pol Amp 394.4 ± 86.0
const term -3.478 ± 0.013
linear term 3.608 ± 0.014
quad term 3.635 ± 0.015
cube term -3.765 ± 0.015
120
100
80
60
40
20
0
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

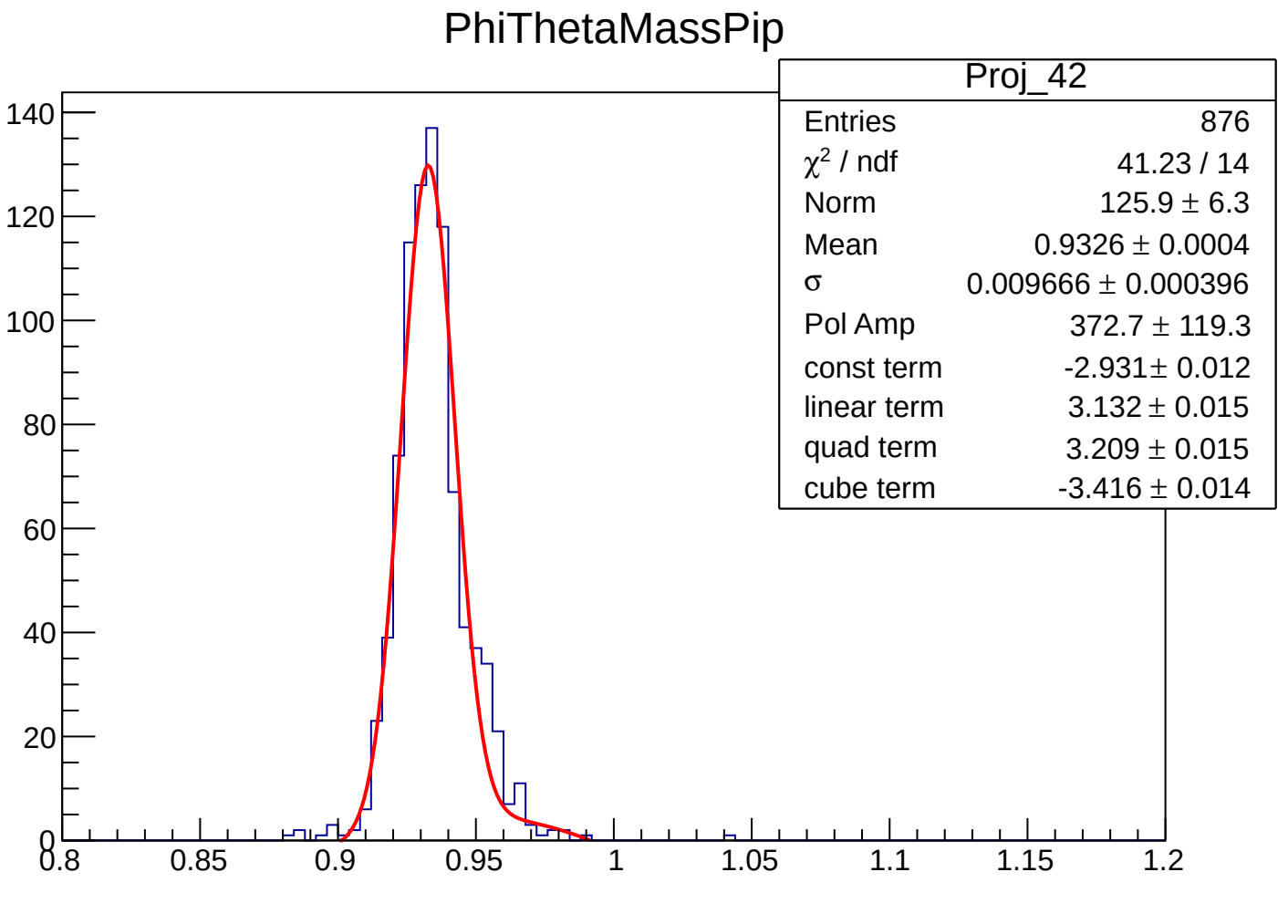

PhiThetaMassPip
Proj_312
Entries 764
χ² / ndf 22.85 / 13
Norm 101 ± 5.7
Mean 0.9279 ± 0.0005
σ 0.009655 ± 0.000497
Pol Amp 372.7 ± 91.6
const term -6.323 ± 0.016
linear term 6.942 ± 0.017
quad term 6.746 ± 0.018
cube term -7.392 ± 0.017
120
100
80
60
40
20
0
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

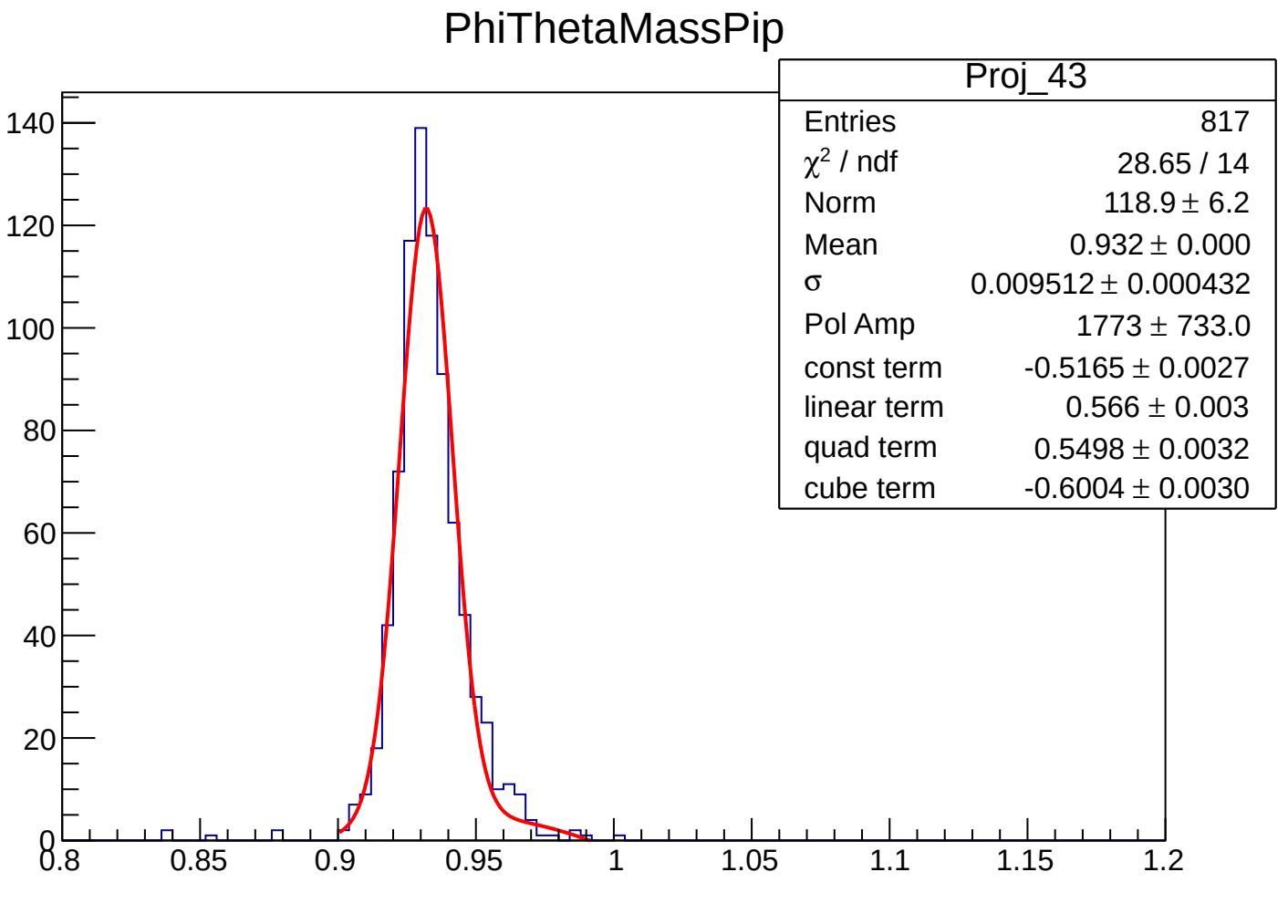

PhiThetaMassPip
Proj_313
Entries 438
χ² / ndf 21.99 / 10
Norm 57.26 ± 4.34
Mean 0.9278 ± 0.0007
σ 0.0123 ± 0.0014
Pol Amp 363 ± 1.4
const term -1.177 ± 0.294
linear term 1.18 ± 0.24
quad term 1.191 ± 0.267
cube term -1.19 ± 0.21
0
10
20
30
40
50
60
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

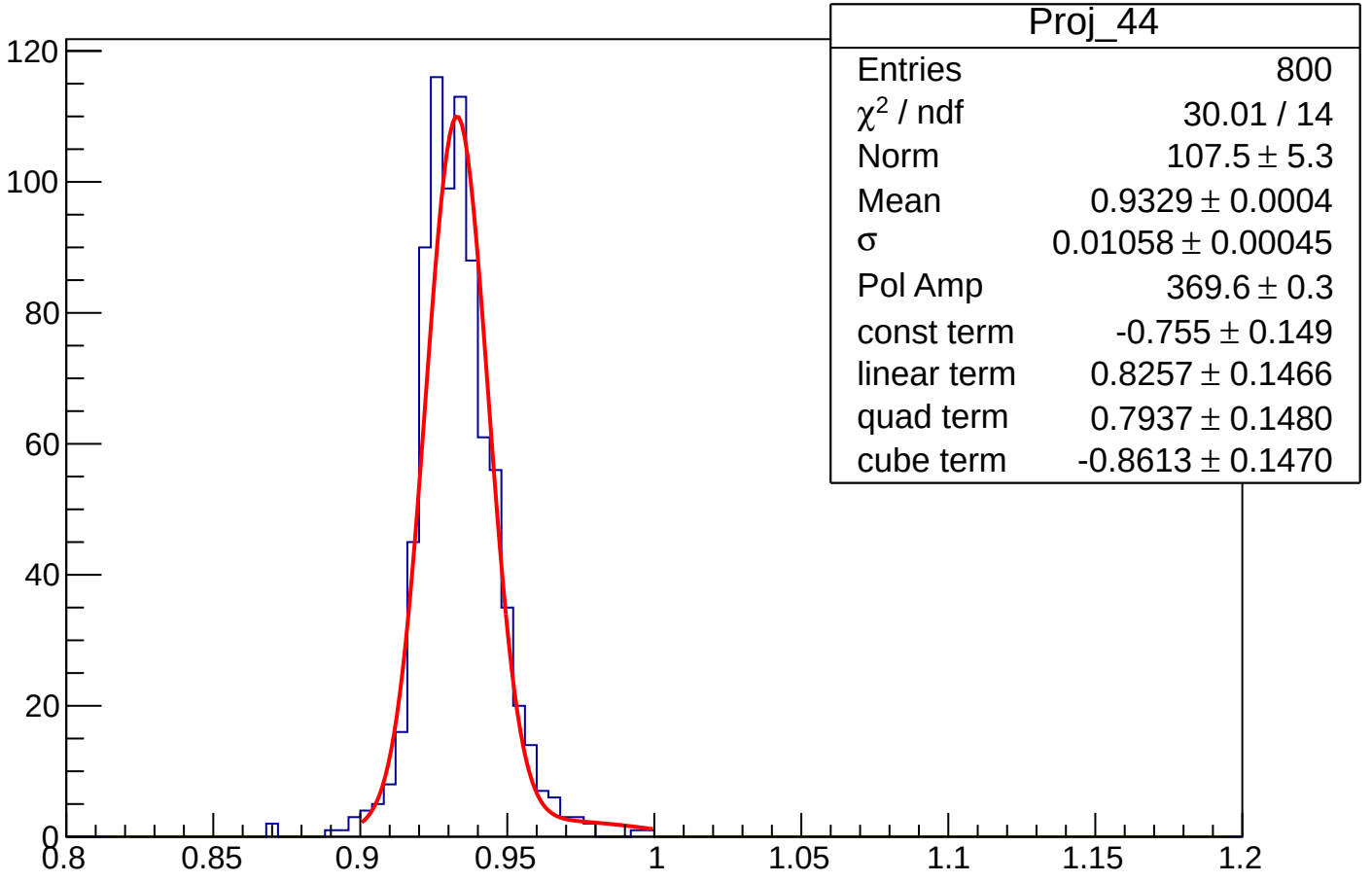

PhiThetaMassPip
Proj_314
Entries 27
χ² / ndf 3.33 / 6
Norm 3983 ± 3.6
Mean 0.9648 ± 0.0026
σ -0.6914 ± 0.0419
Pol Amp 223.8 ± 0.2
const term -8.241 ± 0.016
linear term -11.66 ± 0.02
quad term -6.552 ± 0.018
cube term 8.685 ± 0.019
0
0.5
1
1.5
2
2.5
3
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

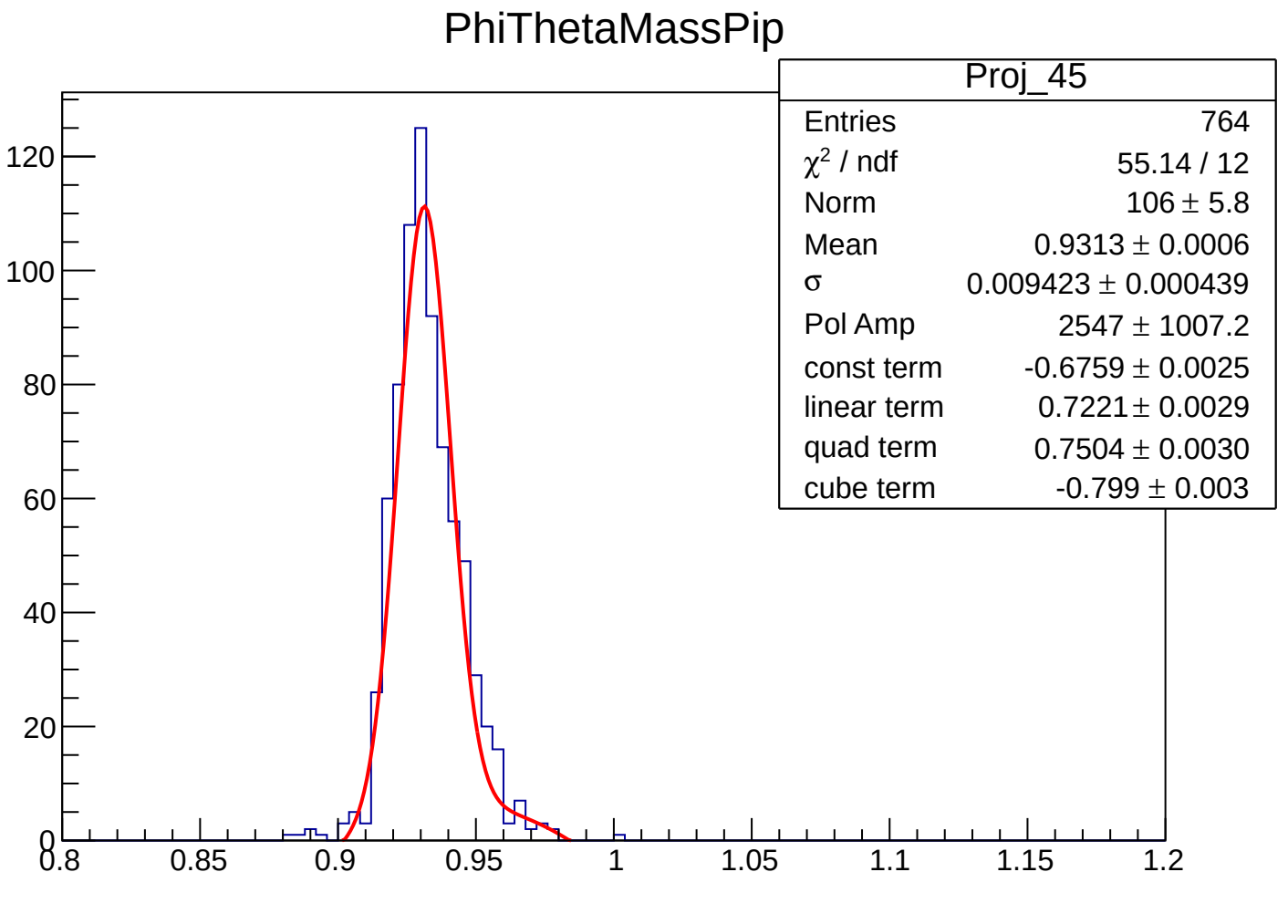

PhiThetaMassPip
Proj_40
Entries 17
χ² / ndf 2.694 / 3
Norm 1194 ± 57933.9
Mean 0.9346 ± 0.0011
σ 0.0001664 ± 0.0001427
Pol Amp 150.3 ± 565.9
const term 0.01792 ± 0.03431
linear term -0.02394 ± 0.01845
quad term -0.01933 ± 0.03317
cube term 0.03611± 0.02915
0
0.5
1
1.5
2
2.5
3
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

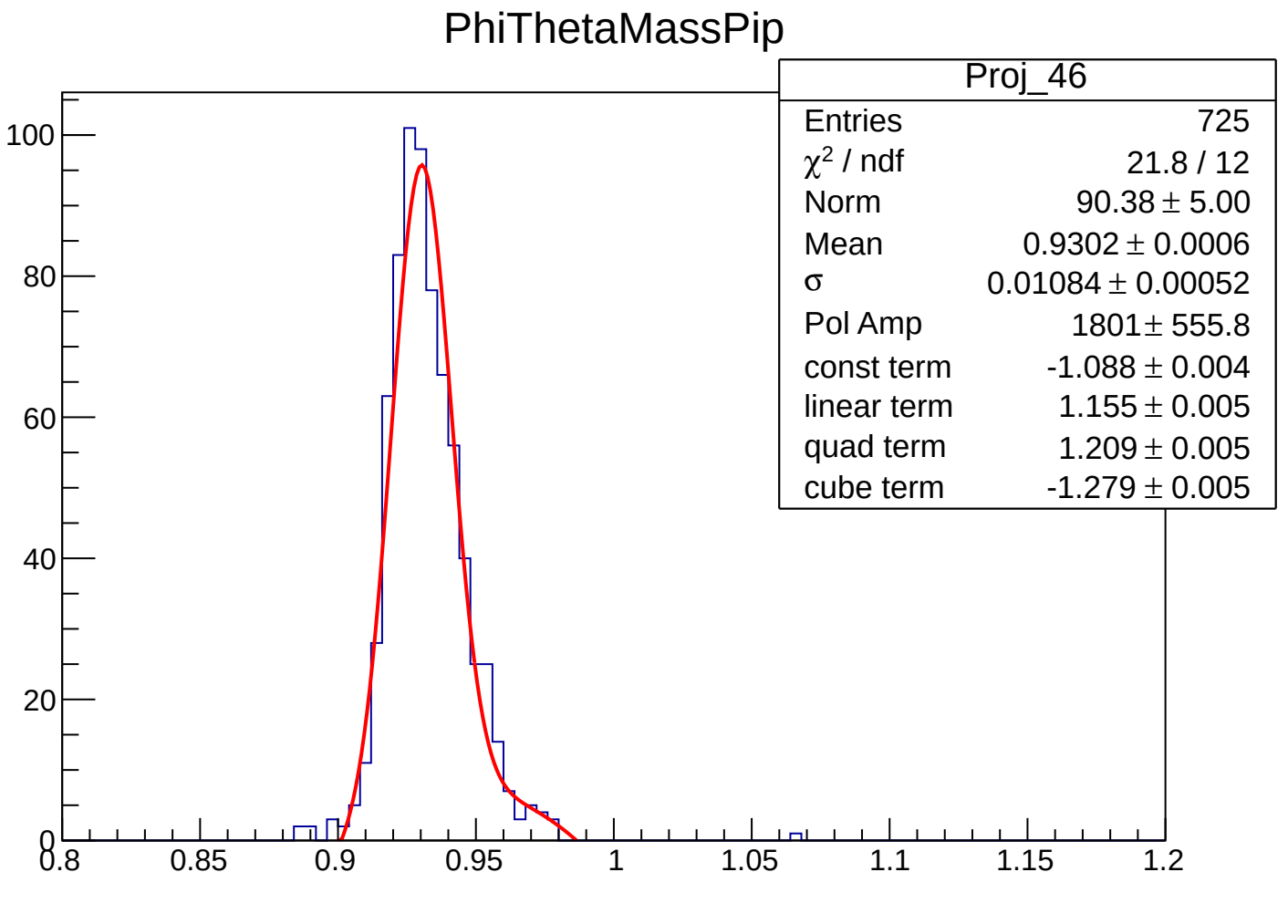

PhiThetaMassPip
Proj_41
Entries 665
χ² / ndf 40.24 / 12
Norm 92.45 ± 5.53
Mean 0.9326 ± 0.0005
σ 0.009997 ± 0.000534
Pol Amp 621.8 ± 276.1
const term -1.191± 0.008
linear term 1.27 ± 0.01
quad term 1.304 ± 0.009
cube term -1.385 ± 0.009
100
80
60
40
20
0
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

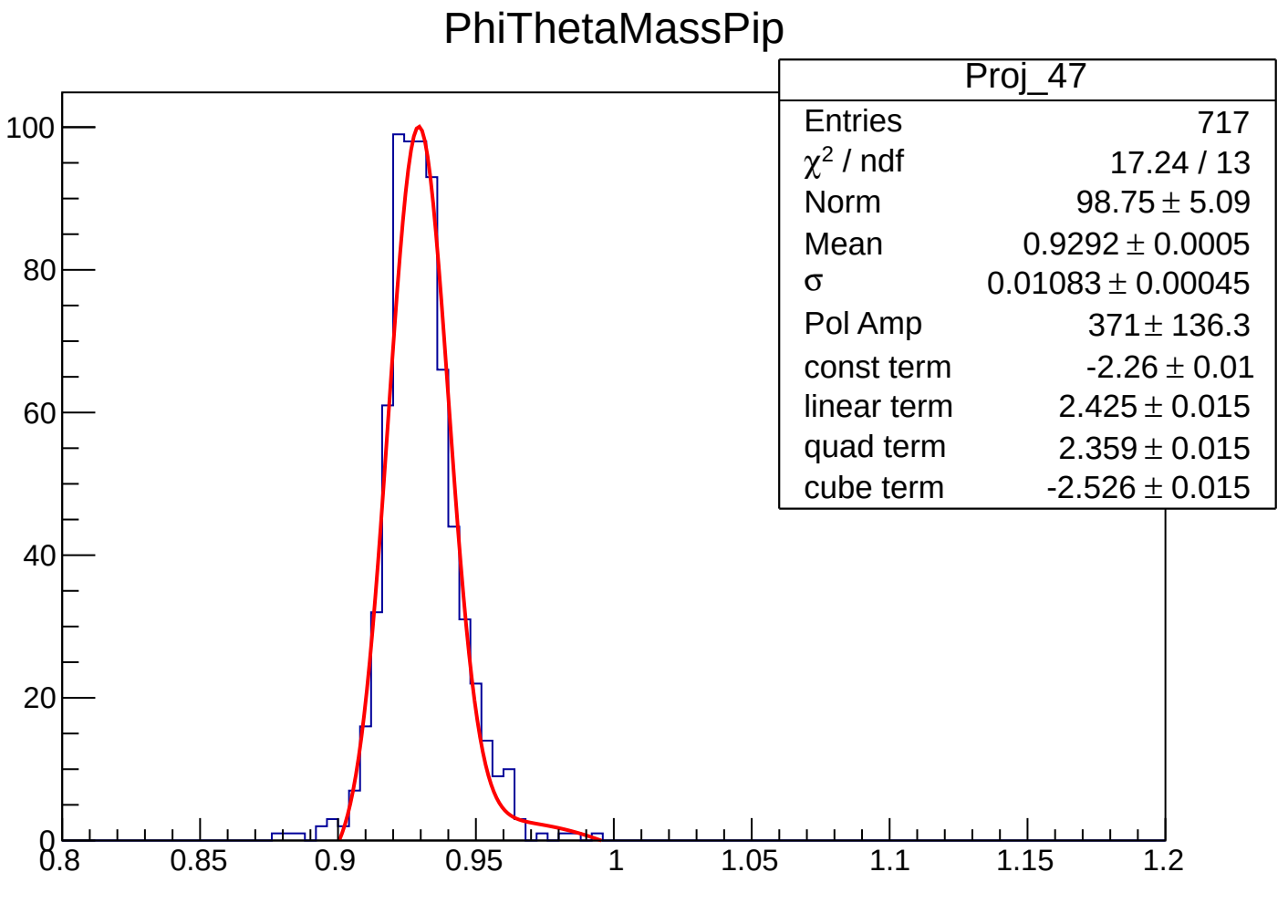

PhiThetaMassPip
Proj_42
Entries 876
χ² / ndf 41.23 / 14
Norm 125.9 ± 6.3
Mean 0.9326 ± 0.0004
σ 0.009666 ± 0.000396
Pol Amp 372.7 ± 119.3
const term -2.931 ± 0.012
linear term 3.132 ± 0.015
quad term 3.209 ± 0.015
cube term -3.416 ± 0.014
140
120
100
80
60
40
20
0
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

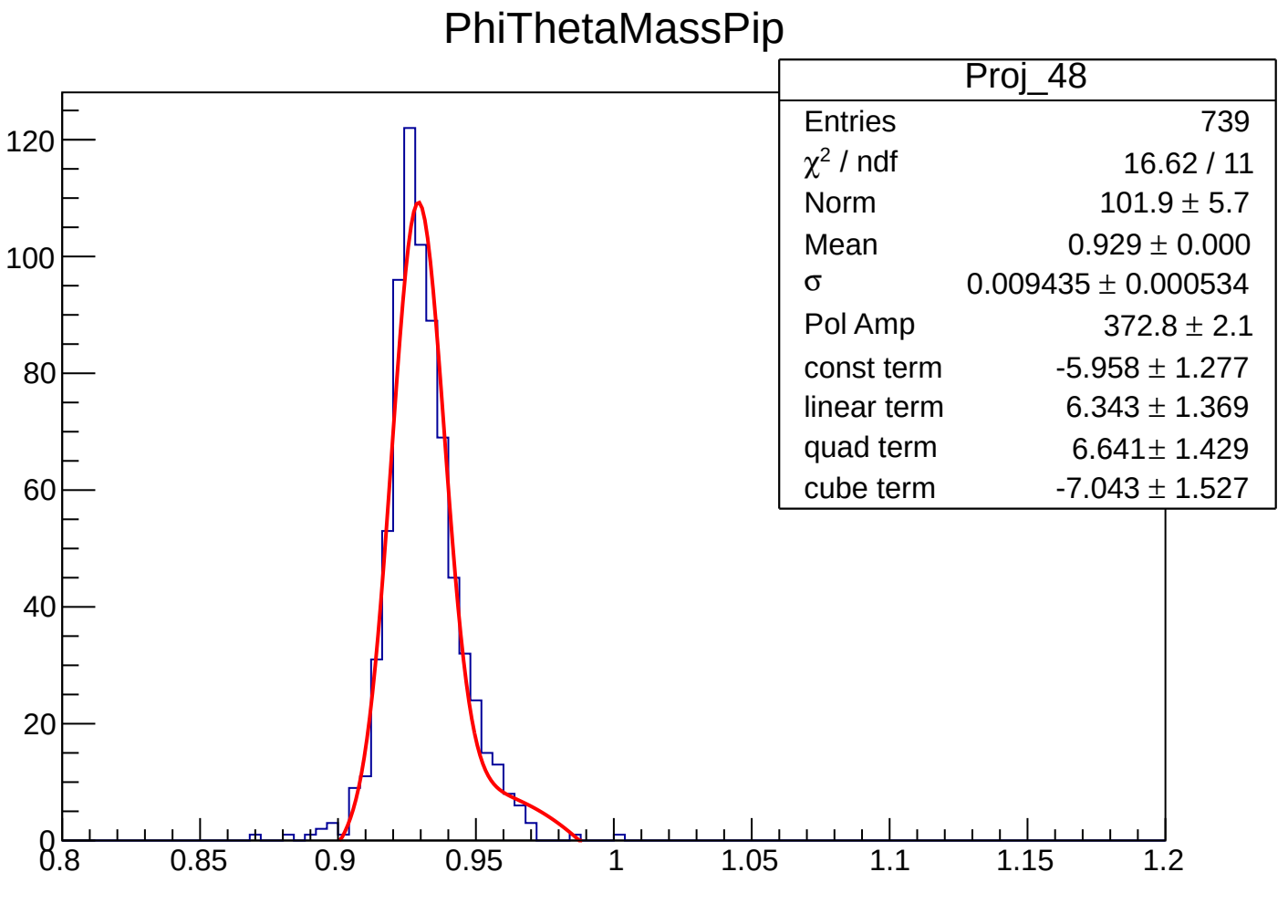

PhiThetaMassPip
Proj_43
Entries 817
χ² / ndf 28.65 / 14
Norm 118.9 ± 6.2
Mean 0.932 ± 0.000
σ 0.009512 ± 0.000432
Pol Amp 1773 ± 733.0
const term -0.5165 ± 0.0027
linear term 0.566 ± 0.003
quad term 0.5498 ± 0.0032
cube term -0.6004 ± 0.0030
140
120
100
80
60
40
20
0
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

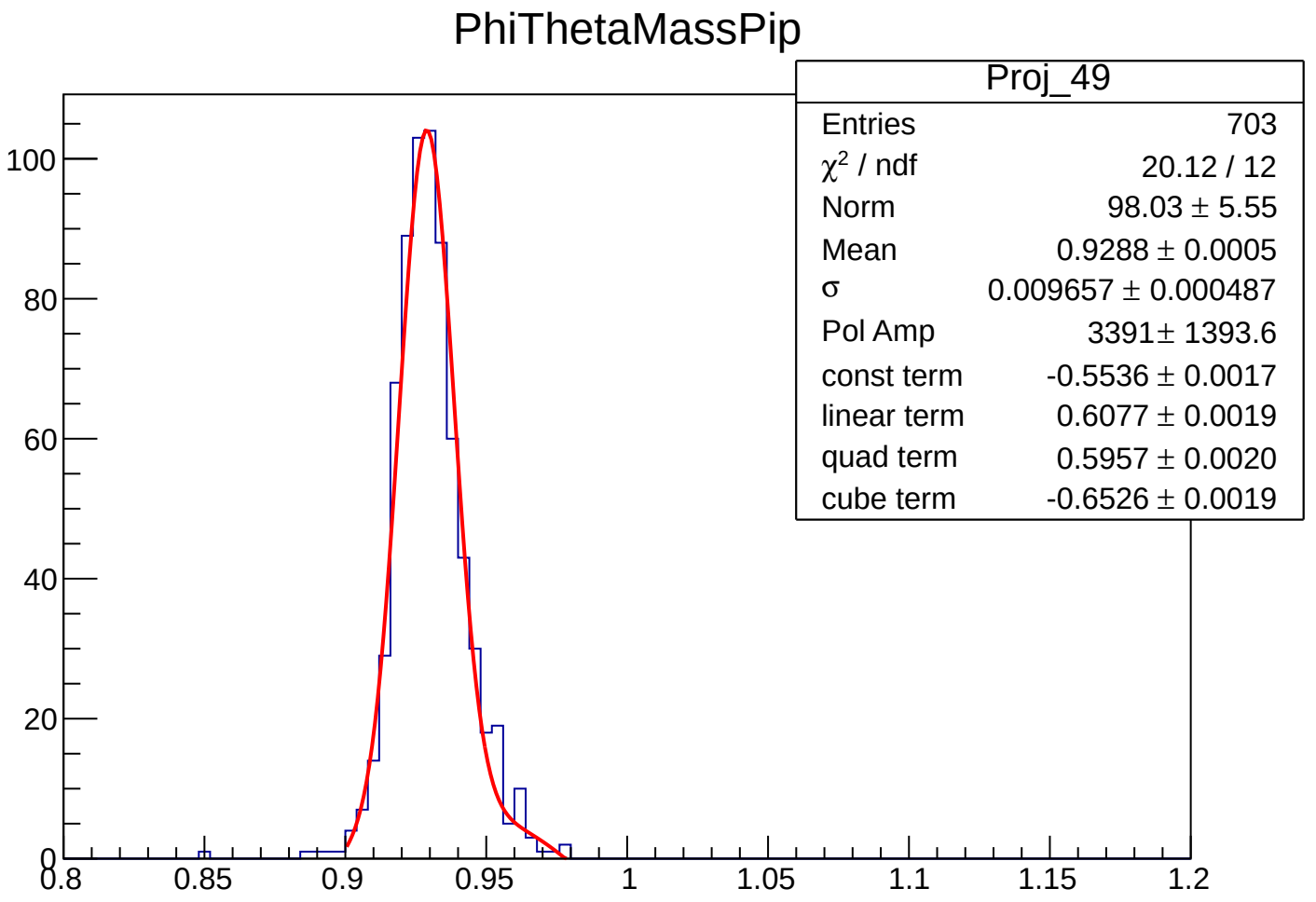

PhiThetaMassPip
Proj_44
Entries 800
χ² / ndf 30.01 / 14
Norm 107.5 ± 5.3
Mean 0.9329 ± 0.0004
σ 0.01058 ± 0.00045
Pol Amp 369.6 ± 0.3
const term -0.755 ± 0.149
linear term 0.8257 ± 0.1466
quad term 0.7937 ± 0.1480
cube term -0.8613 ± 0.1470
120
100
80
60
40
20
0
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

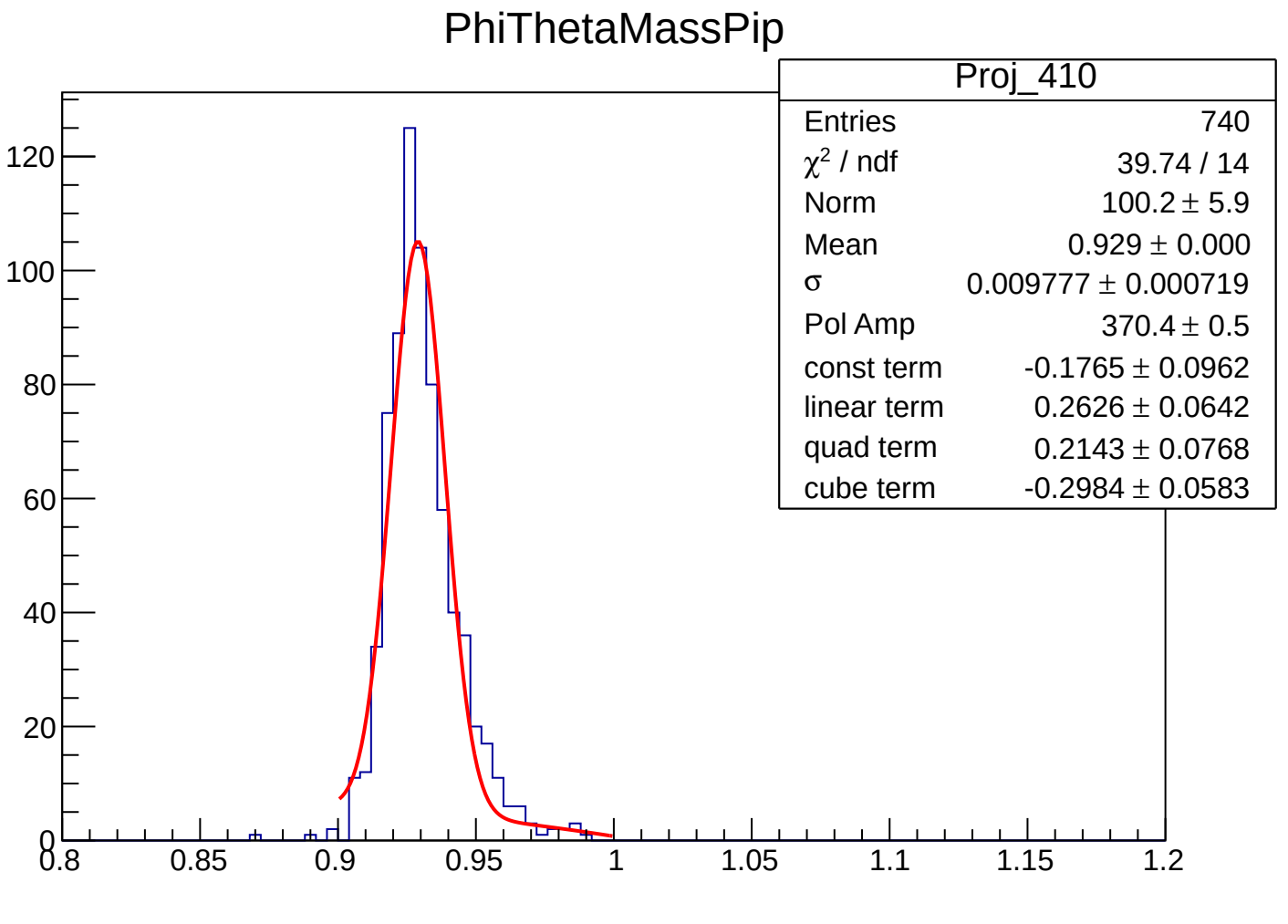

PhiThetaMassPip
Proj_45
Entries 764
χ² / ndf 55.14 / 12
Norm 106 ± 5.8
Mean 0.9313 ± 0.0006
σ 0.009423 ± 0.000439
Pol Amp 2547 ± 1007.2
const term -0.6759 ± 0.0025
linear term 0.7221 ± 0.0029
quad term 0.7504 ± 0.0030
cube term -0.799 ± 0.003
120
100
80
60
40
20
0
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

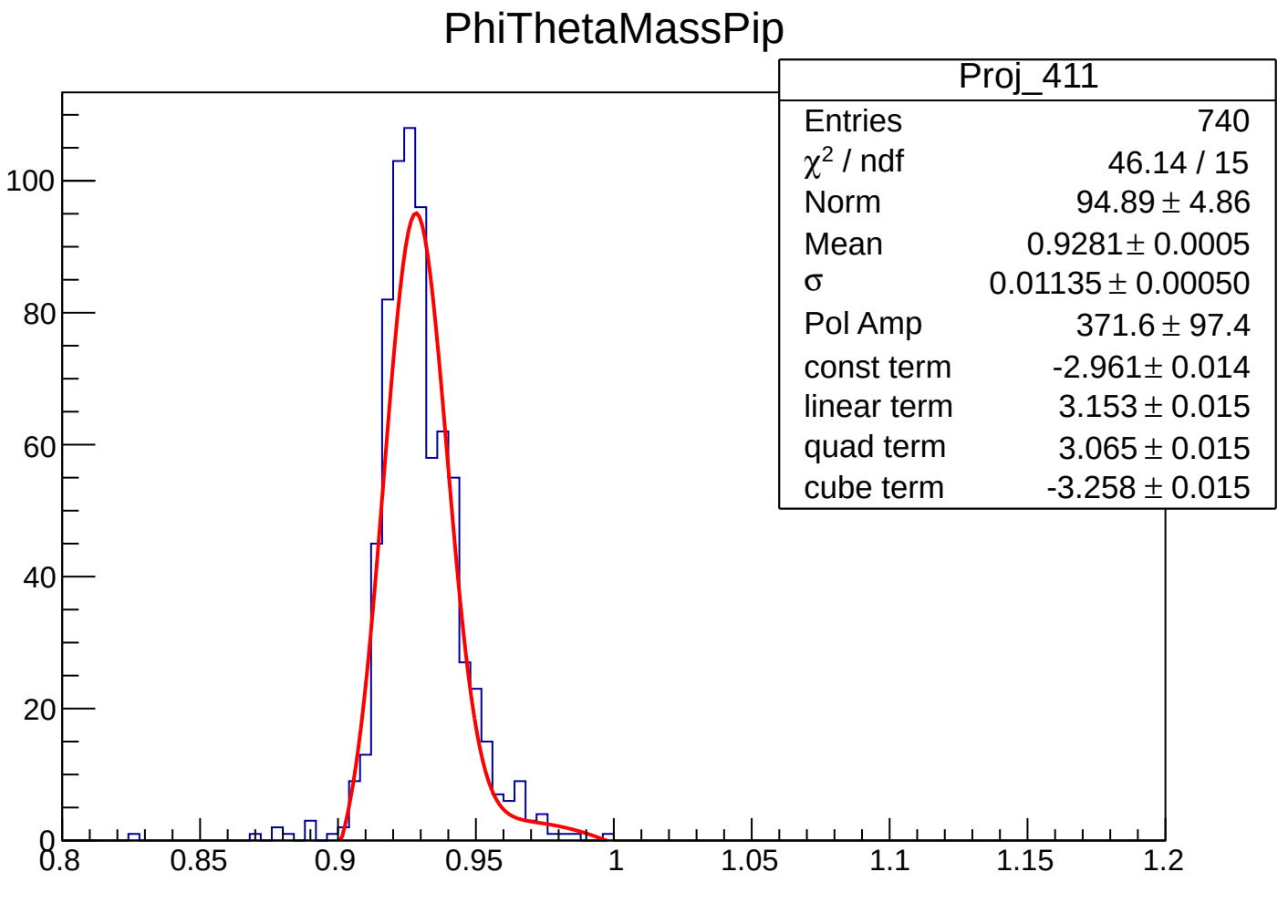

PhiThetaMassPip
Proj_46
Entries 725
χ² / ndf 21.8 / 12
Norm 90.38 ± 5.00
Mean 0.9302 ± 0.0006
σ 0.01084 ± 0.00052
Pol Amp 1801 ± 555.8
const term -1.088 ± 0.004
linear term 1.155 ± 0.005
quad term 1.209 ± 0.005
cube term -1.279 ± 0.005
100
80
60
40
20
0
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

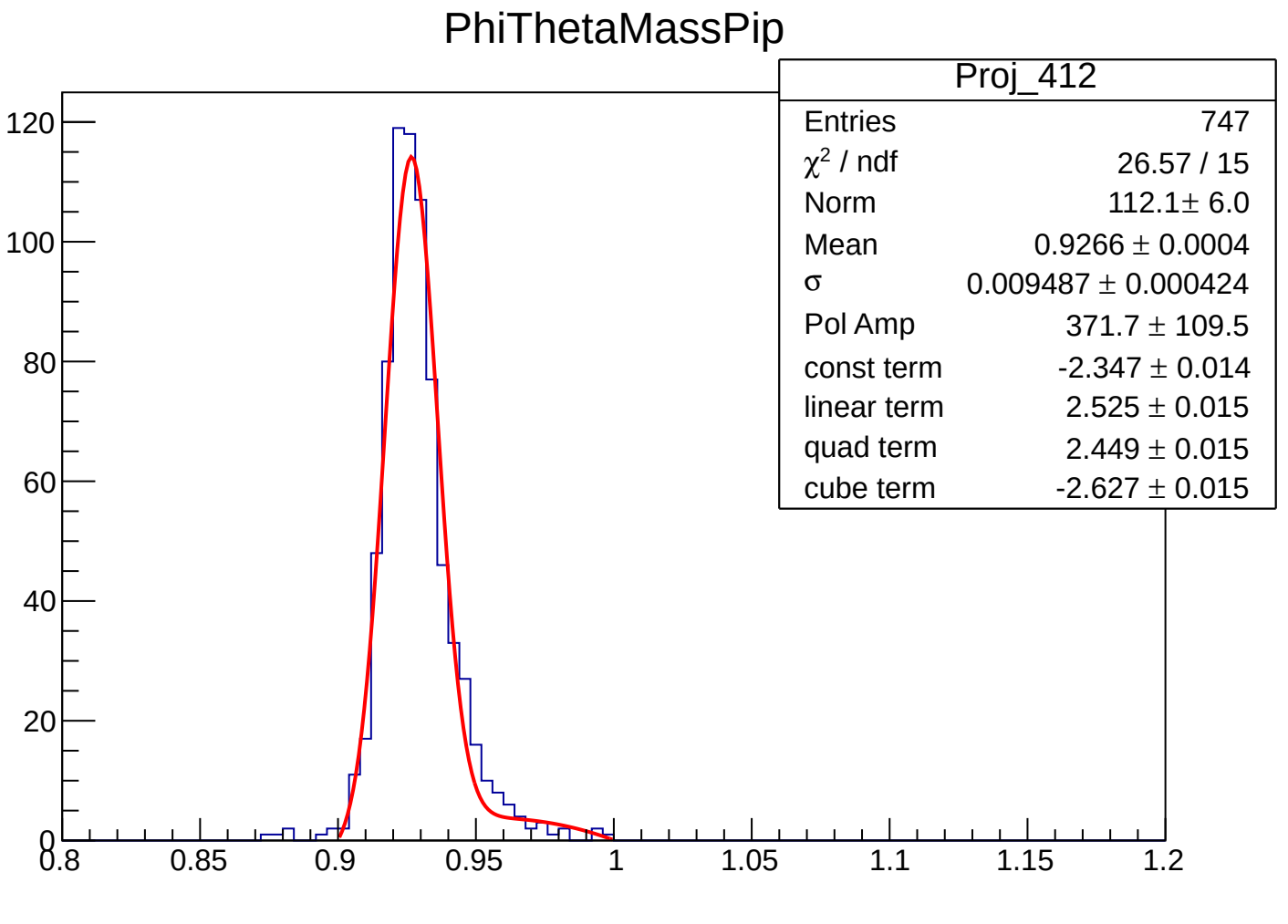

PhiThetaMassPip
Proj_47
Entries 717
χ² / ndf 17.24 / 13
Norm 98.75 ± 5.09
Mean 0.9292 ± 0.0005
σ 0.01083 ± 0.00045
Pol Amp 371 ± 136.3
const term -2.26 ± 0.01
linear term 2.425 ± 0.015
quad term 2.359 ± 0.015
cube term -2.526 ± 0.015
100
80
60
40
20
0
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

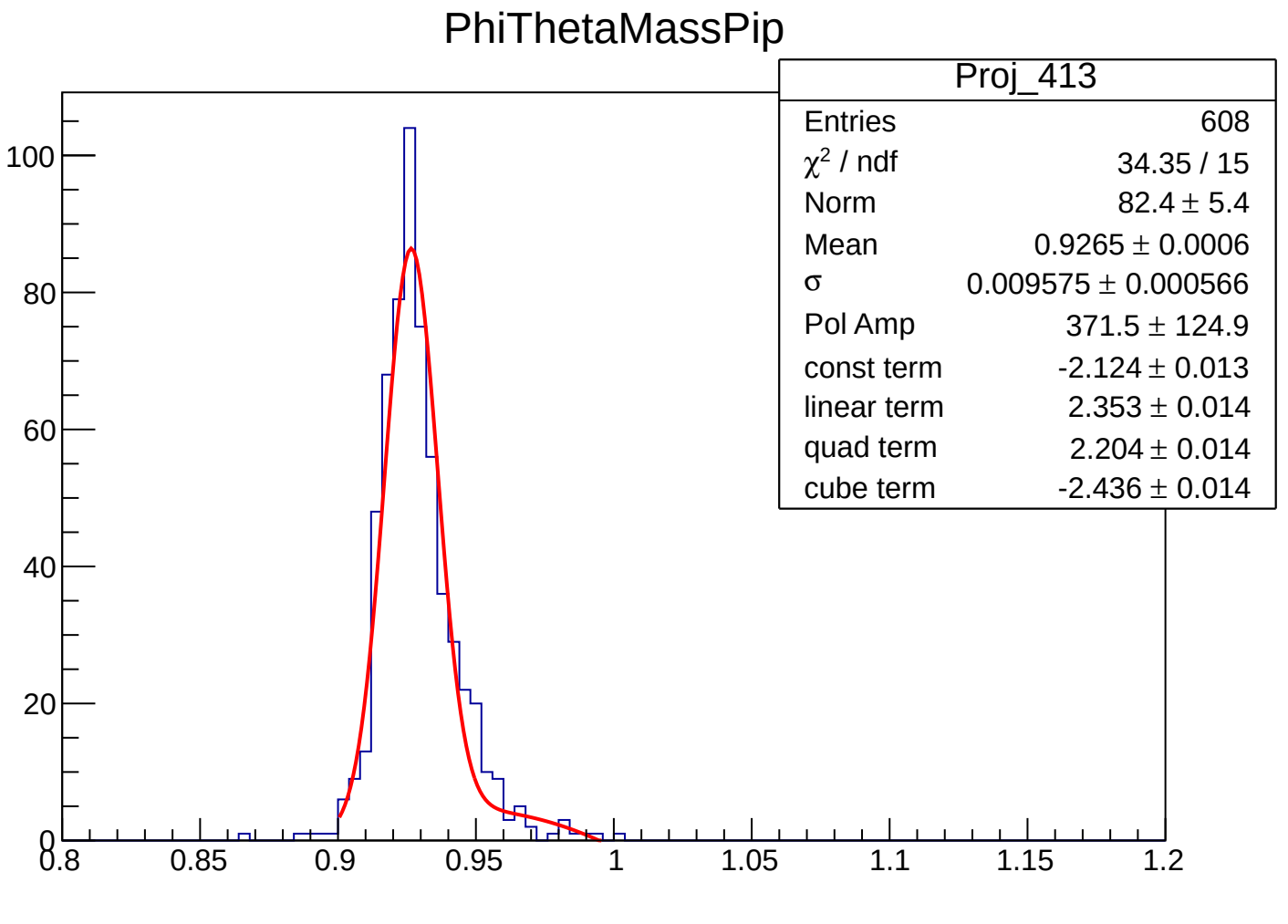

PhiThetaMassPip
Proj_48
Entries 739
χ² / ndf 16.62 / 11
Norm 101.9 ± 5.7
Mean 0.929 ± 0.000
σ 0.009435 ± 0.000534
Pol Amp 372.8 ± 2.1
const term -5.958 ± 1.277
linear term 6.343 ± 1.369
quad term 6.641± 1.429
cube term -7.043 ± 1.527
120
100
80
60
40
20
0
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

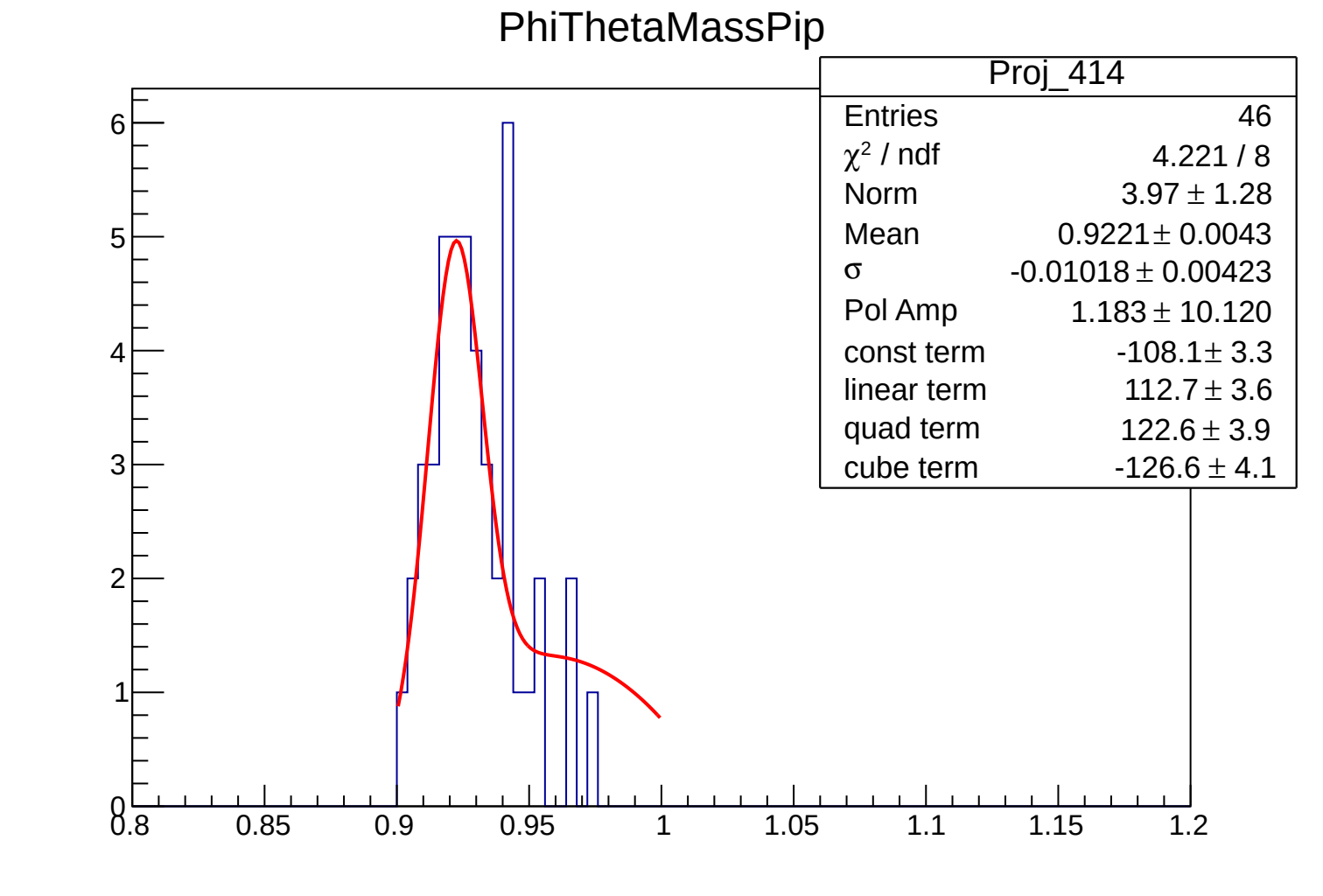

PhiThetaMassPip
Proj_49
Entries 703
χ² / ndf 20.12 / 12
Norm 98.03 ± 5.55
Mean 0.9288 ± 0.0005
σ 0.009657 ± 0.000487
Pol Amp 3391± 1393.6
const term -0.5536 ± 0.0017
linear term 0.6077 ± 0.0019
quad term 0.5957 ± 0.0020
cube term -0.6526 ± 0.0019
100
80
60
40
20
0
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

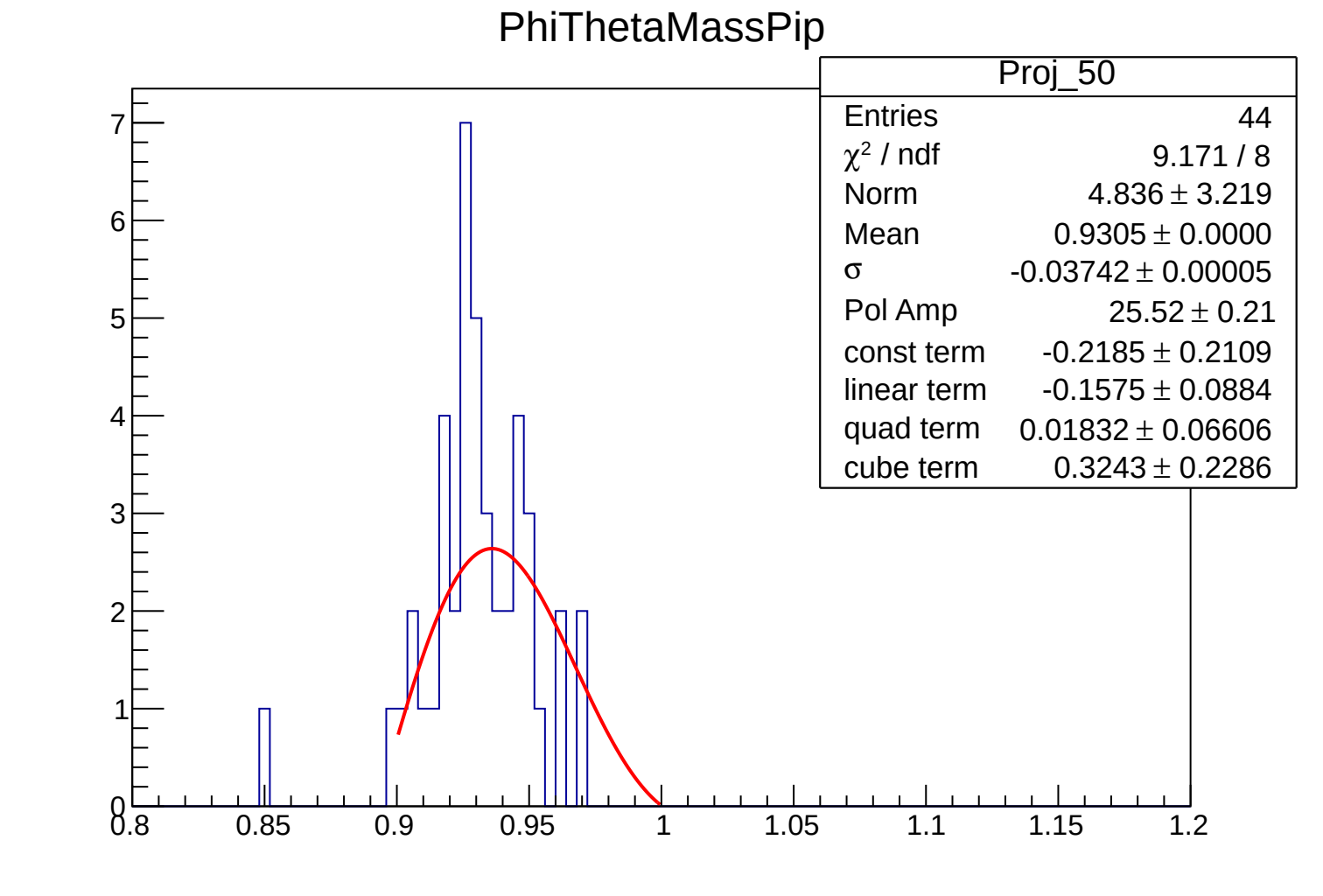

PhiThetaMassPip
Proj_410
Entries 740
χ² / ndf 39.74 / 14
Norm 100.2 ± 5.9
Mean 0.929 ± 0.000
σ 0.009777 ± 0.000719
Pol Amp 370.4 ± 0.5
const term -0.1765 ± 0.0962
linear term 0.2626 ± 0.0642
quad term 0.2143 ± 0.0768
cube term -0.2984 ± 0.0583
0
20
40
60
80
100
120
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

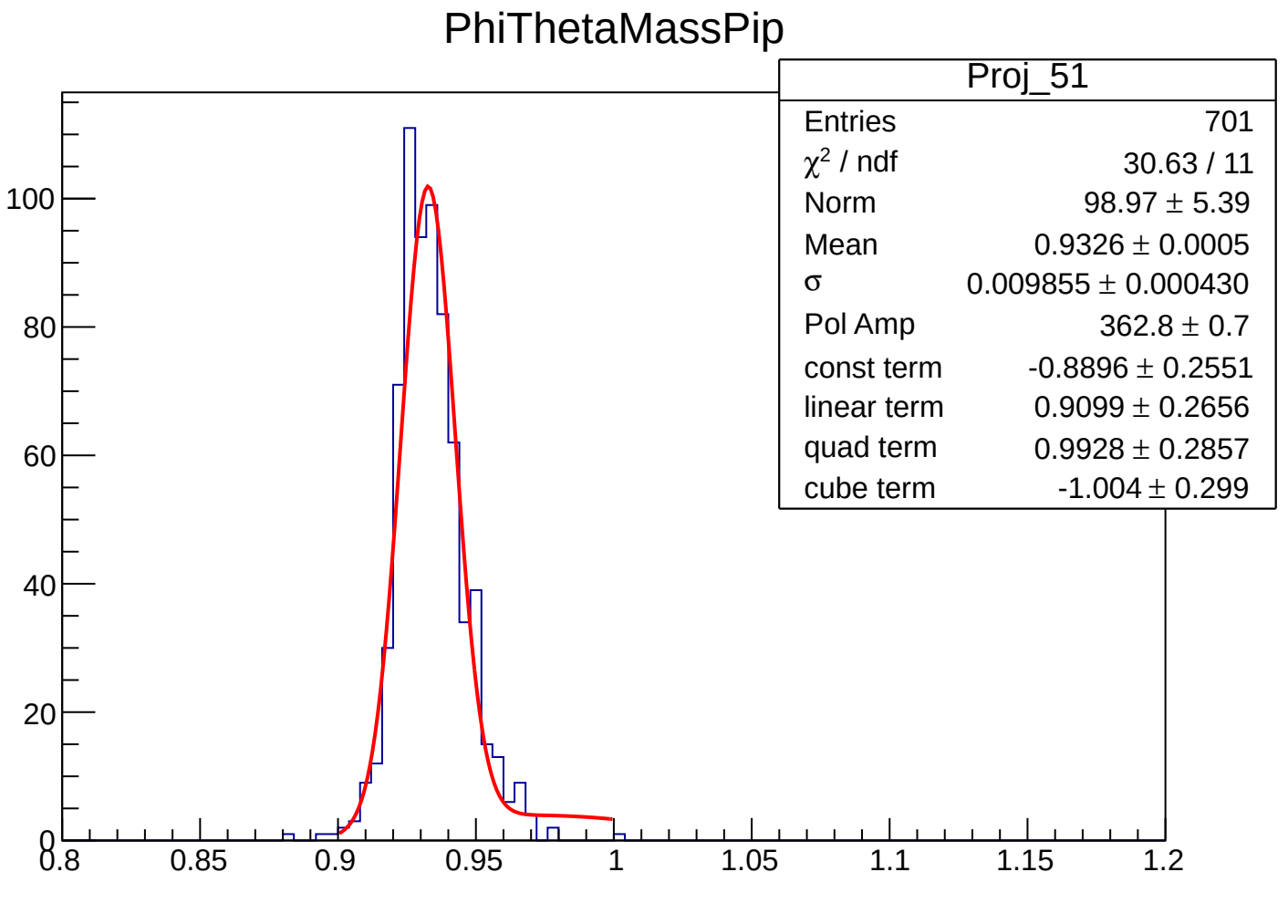

PhiThetaMassPip
Proj_411
Entries 740
χ² / ndf 46.14 / 15
Norm 94.89 ± 4.86
Mean 0.9281 ± 0.0005
σ 0.01135 ± 0.00050
Pol Amp 371.6 ± 97.4
const term -2.961 ± 0.014
linear term 3.153 ± 0.015
quad term 3.065 ± 0.015
cube term -3.258 ± 0.015
0
20
40
60
80
100
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

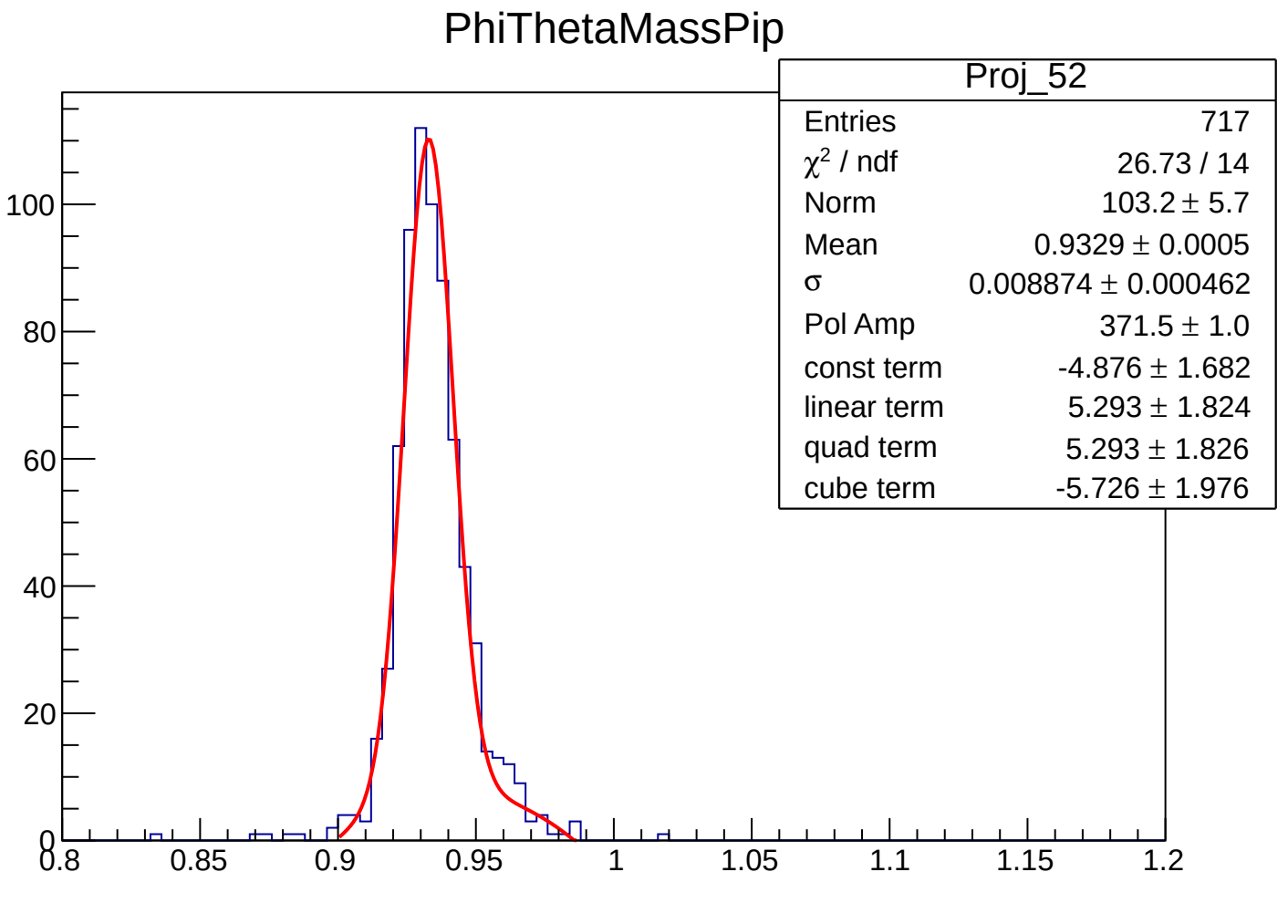

PhiThetaMassPip
Proj_412
Entries 747
χ² / ndf 26.57 / 15
Norm 112.1± 6.0
Mean 0.9266 ± 0.0004
σ 0.009487 ± 0.000424
Pol Amp 371.7 ± 109.5
const term -2.347 ± 0.014
linear term 2.525 ± 0.015
quad term 2.449 ± 0.015
cube term -2.627 ± 0.015
120
100
80
60
40
20
0
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

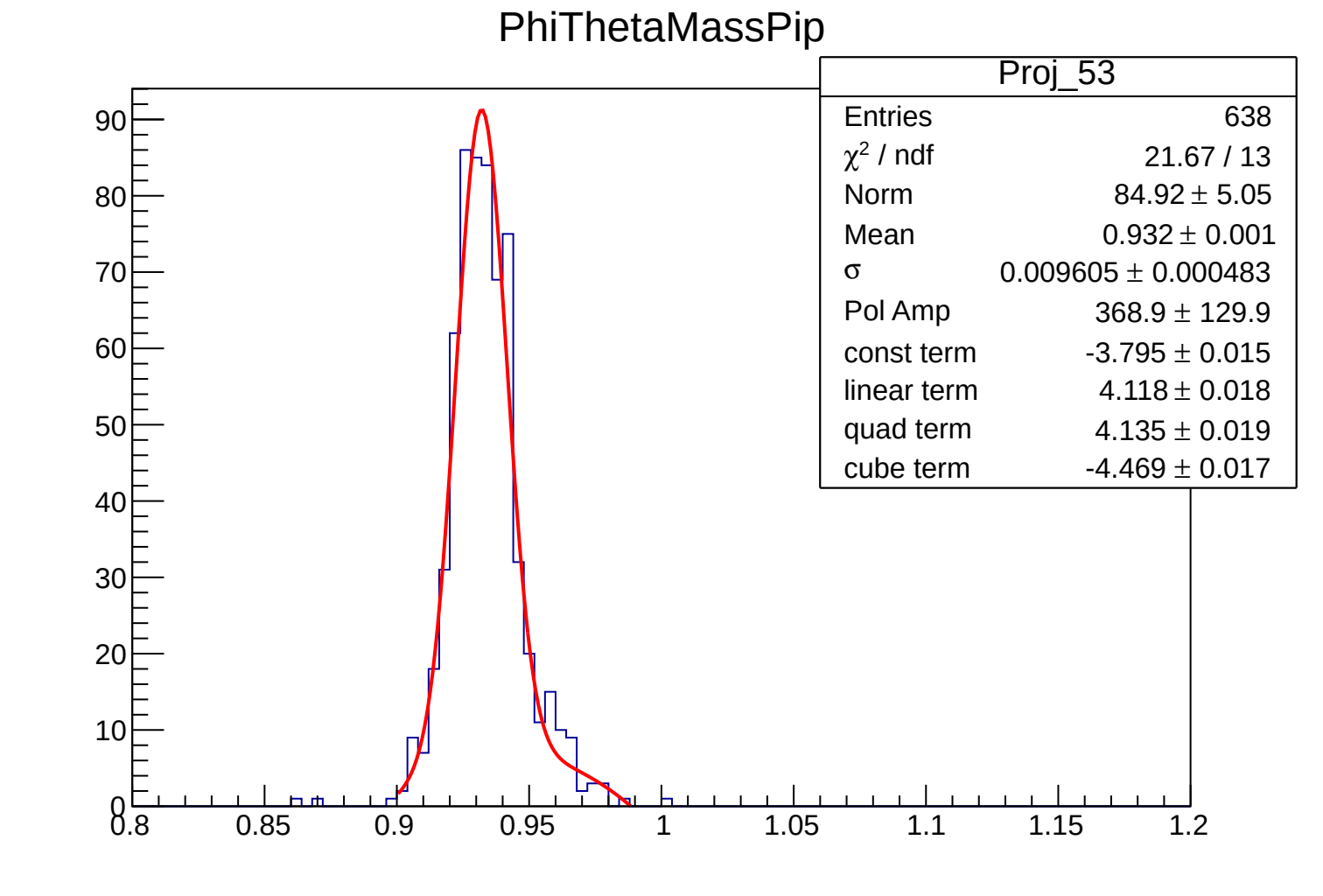

PhiThetaMassPip
Proj_413
Entries 608
χ² / ndf 34.35 / 15
Norm 82.4 ± 5.4
Mean 0.9265 ± 0.0006
σ 0.009575 ± 0.000566
Pol Amp 371.5 ± 124.9
const term -2.124 ± 0.013
linear term 2.353 ± 0.014
quad term 2.204 ± 0.014
cube term -2.436 ± 0.014
100
80
60
40
20
0
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

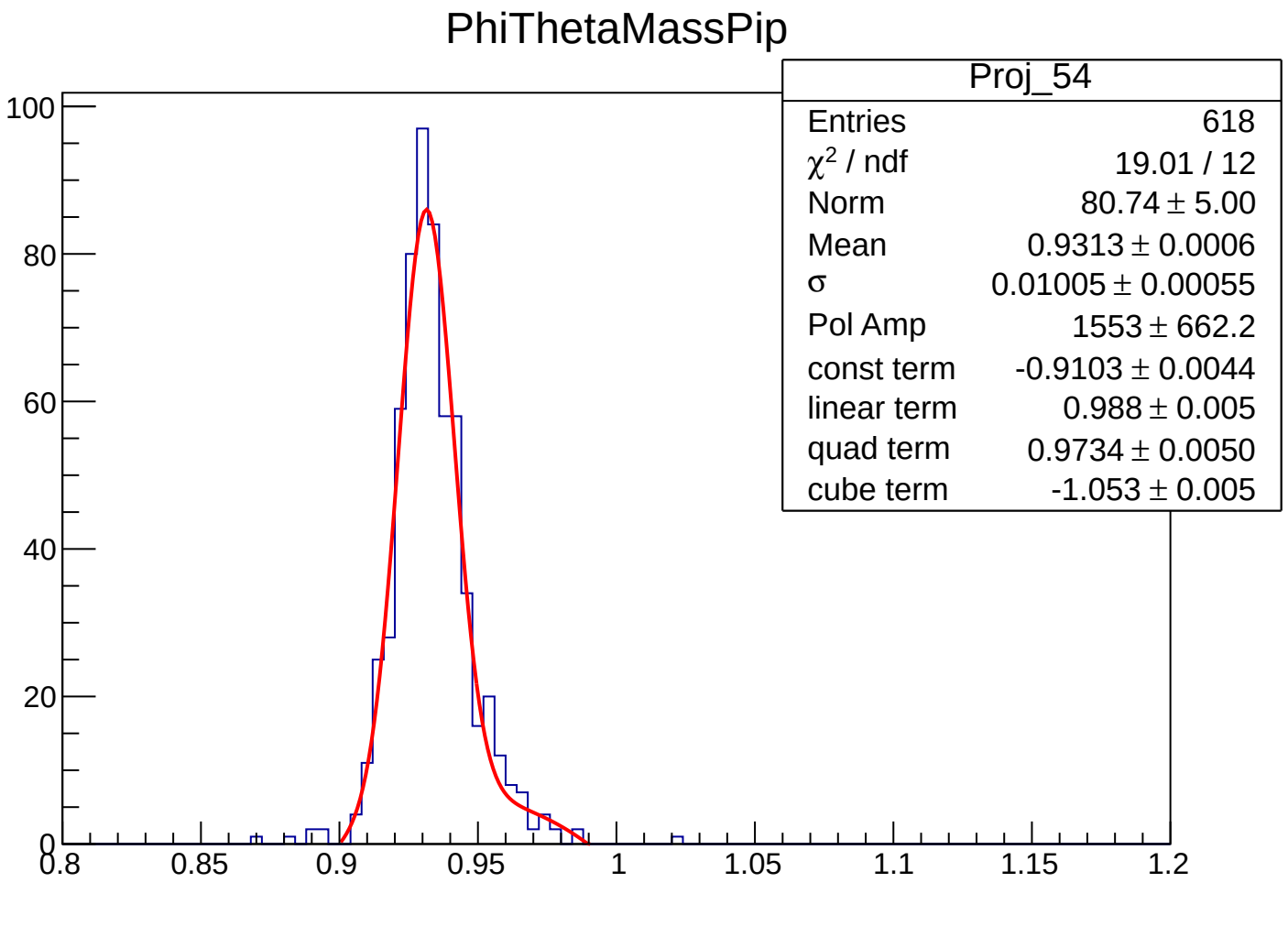

PhiThetaMassPip
Proj_414
Entries 46
χ² / ndf 4.221 / 8
Norm 3.97 ± 1.28
Mean 0.9221 ± 0.0043
σ -0.01018 ± 0.00423
Pol Amp 1.183 ± 10.120
const term -108.1 ± 3.3
linear term 112.7 ± 3.6
quad term 122.6 ± 3.9
cube term -126.6 ± 4.1
0
1
2
3
4
5
6
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

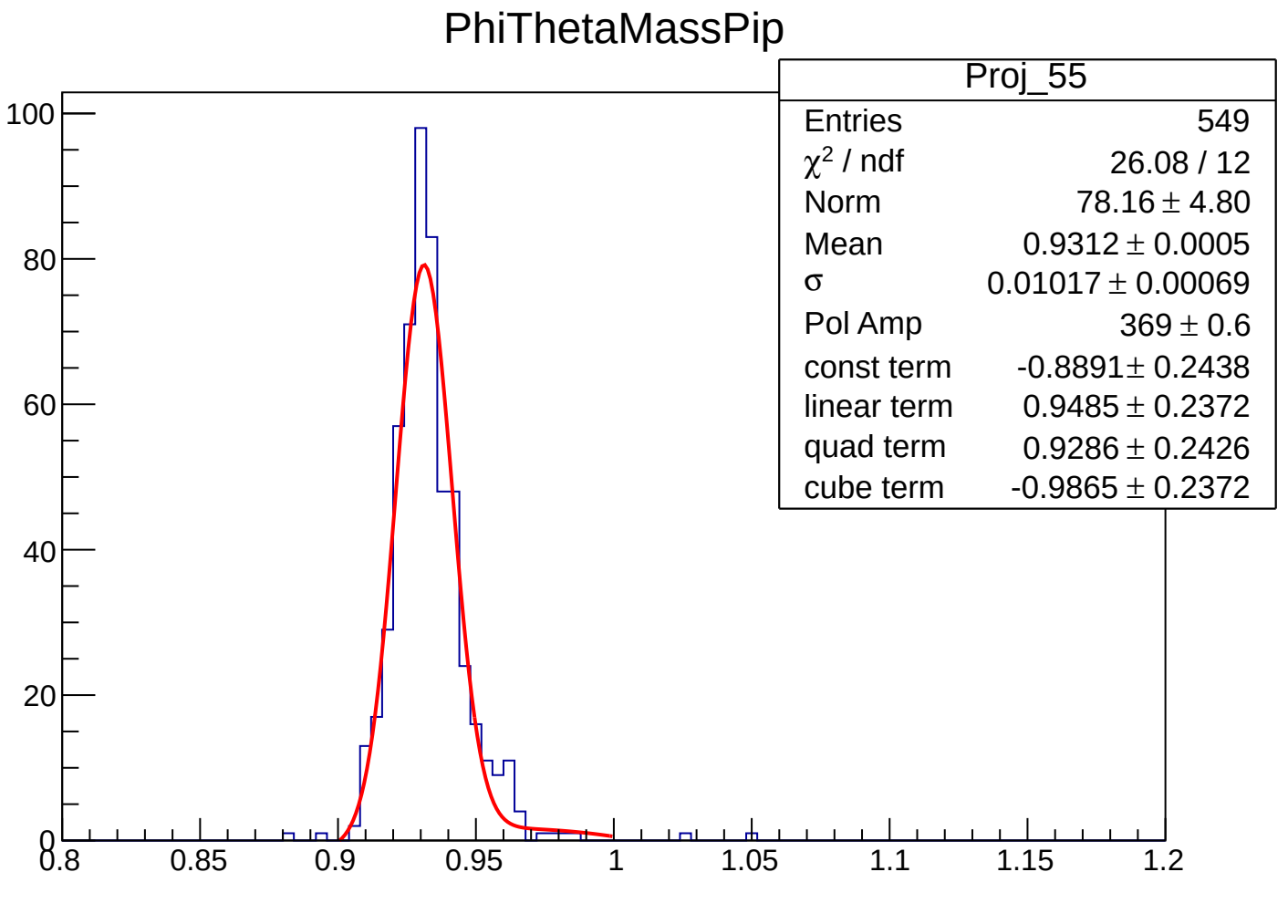

PhiThetaMassPip
Proj_50
Entries 44
χ² / ndf 9.171 / 8
Norm 4.836 ± 3.219
Mean 0.9305 ± 0.0000
σ -0.03742 ± 0.00005
Pol Amp 25.52 ± 0.21
const term -0.2185 ± 0.2109
linear term -0.1575 ± 0.0884
quad term 0.01832 ± 0.06606
cube term 0.3243 ± 0.2286
0
1
2
3
4
5
6
7
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

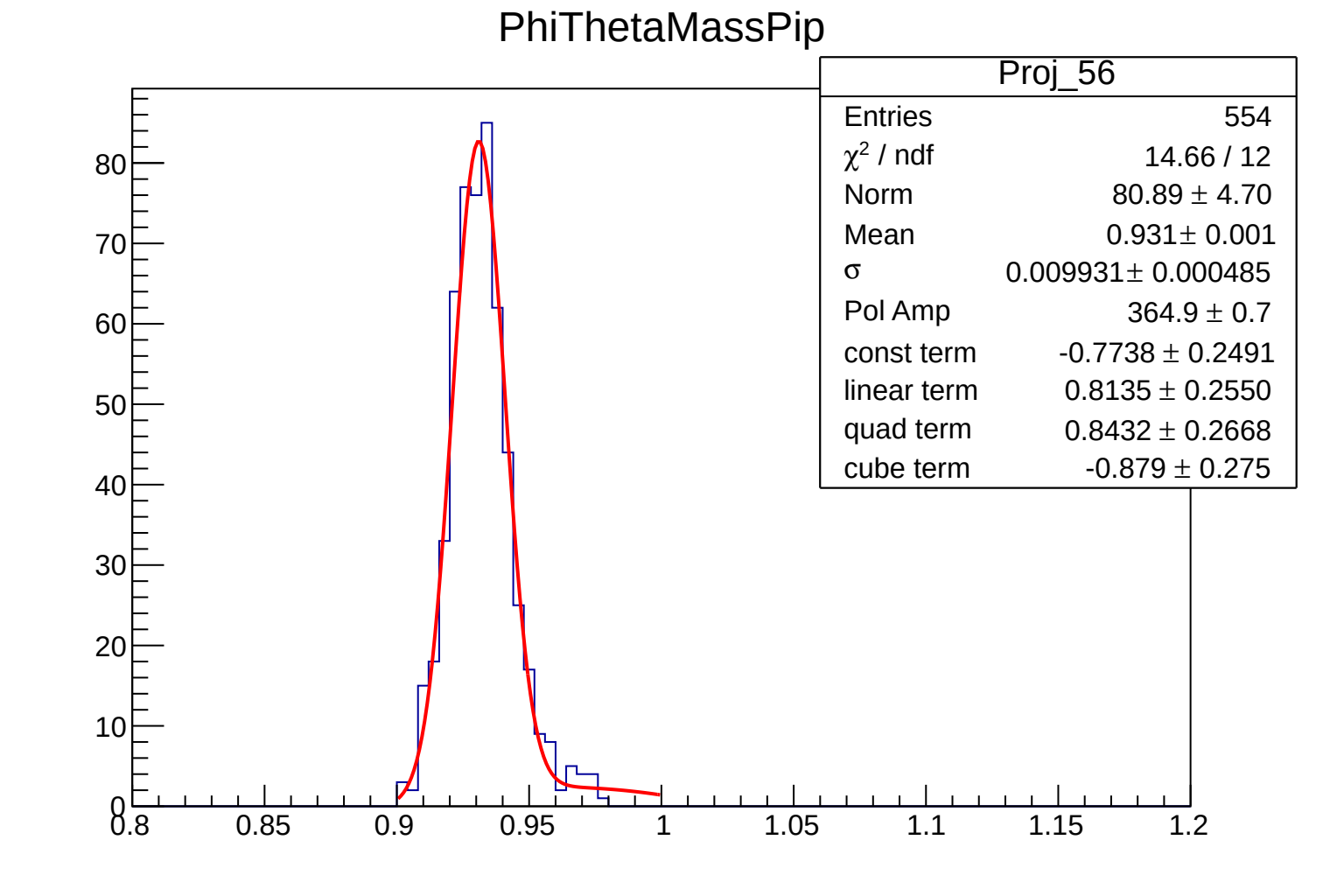

PhiThetaMassPip
Proj_51
Entries 701
χ² / ndf 30.63 / 11
Norm 98.97 ± 5.39
Mean 0.9326 ± 0.0005
σ 0.009855 ± 0.000430
Pol Amp 362.8 ± 0.7
const term -0.8896 ± 0.2551
linear term 0.9099 ± 0.2656
quad term 0.9928 ± 0.2857
cube term -1.004 ± 0.299
0
20
40
60
80
100
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

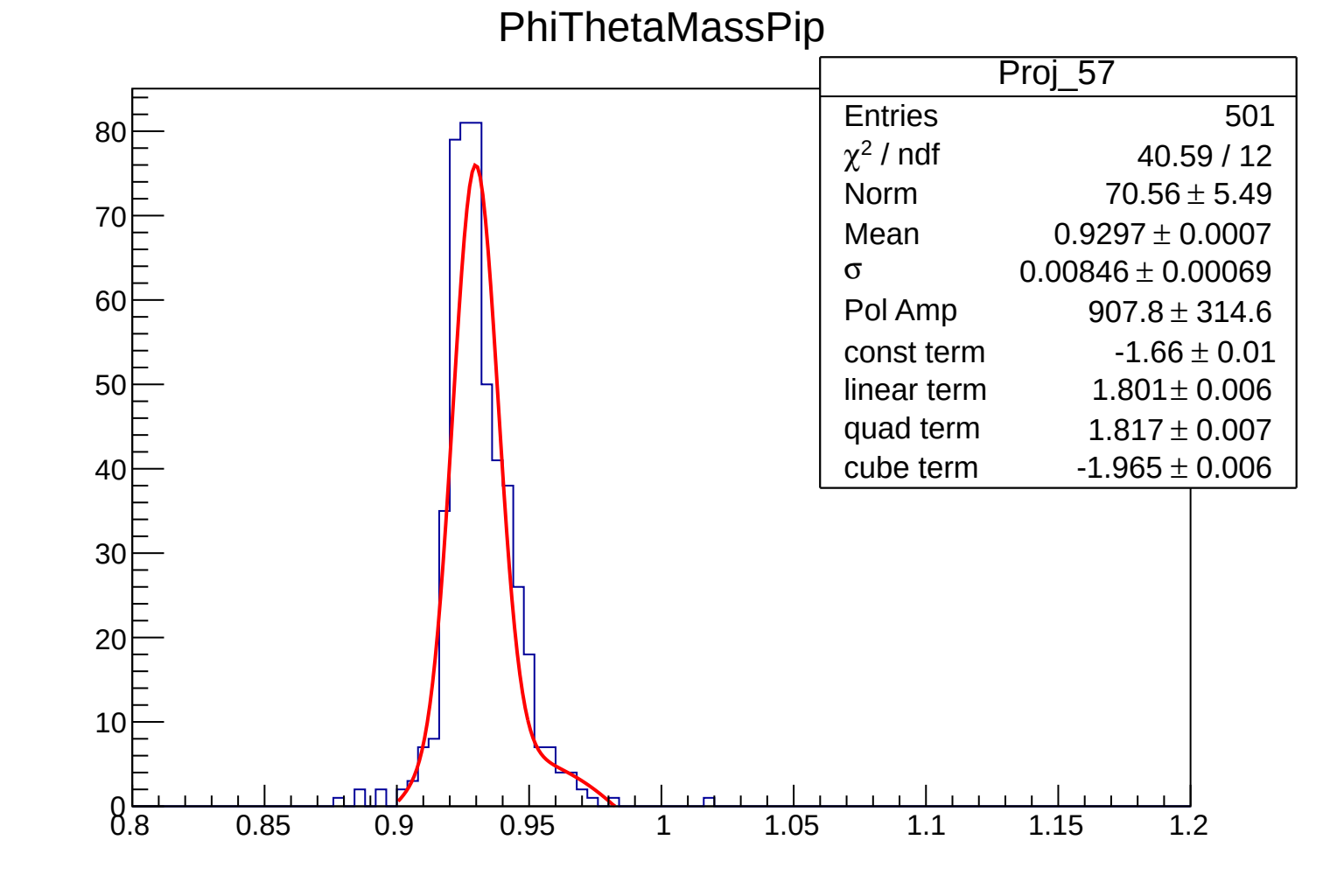

PhiThetaMassPip
Proj_52
Entries 717
χ² / ndf 26.73 / 14
Norm 103.2 ± 5.7
Mean 0.9329 ± 0.0005
σ 0.008874 ± 0.000462
Pol Amp 371.5 ± 1.0
const term -4.876 ± 1.682
linear term 5.293 ± 1.824
quad term 5.293 ± 1.826
cube term -5.726 ± 1.976
0
20
40
60
80
100
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

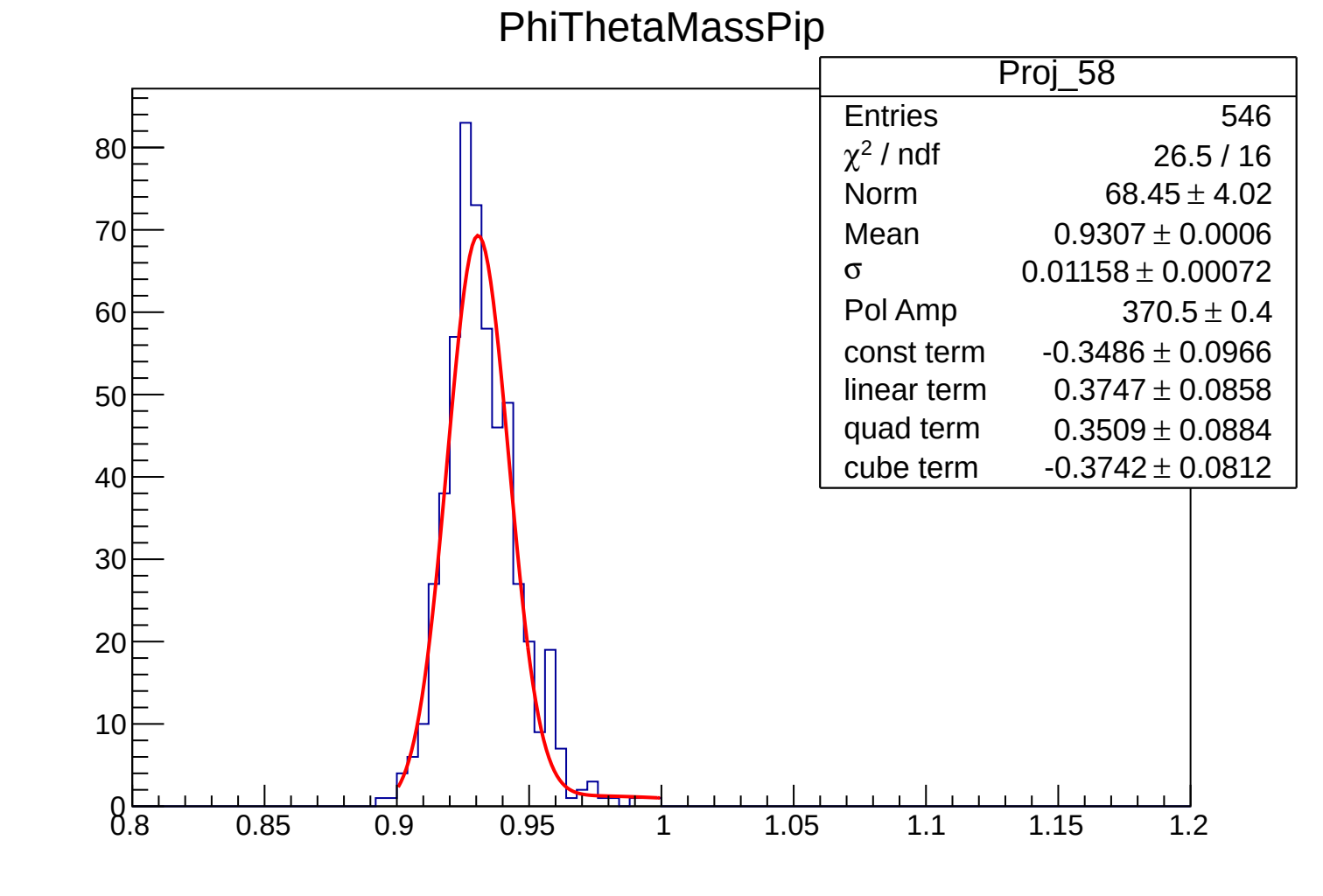

PhiThetaMassPip
Proj_53
Entries 638
χ² / ndf 21.67 / 13
Norm 84.92 ± 5.05
Mean 0.932 ± 0.001
σ 0.009605 ± 0.000483
Pol Amp 368.9 ± 129.9
const term -3.795 ± 0.015
linear term 4.118 ± 0.018
quad term 4.135 ± 0.019
cube term -4.469 ± 0.017
0 10 20 30 40 50 60 70 80 90
0.8 0.85 0.9 0.95 1 1.05 1.1 1.15 1.2

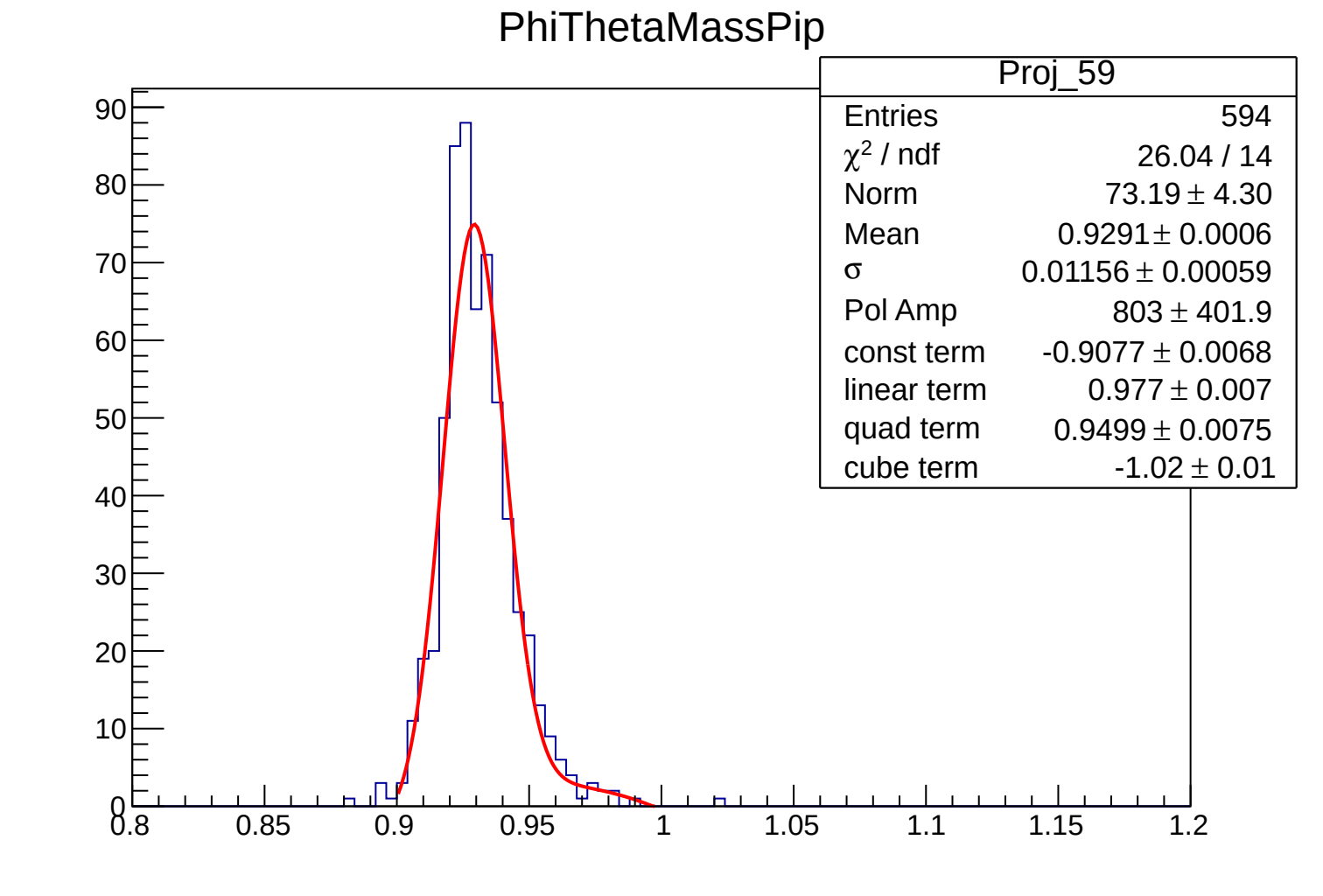

PhiThetaMassPip
Proj_54
Entries 618
χ² / ndf 19.01 / 12
Norm 80.74 ± 5.00
Mean 0.9313 ± 0.0006
σ 0.01005 ± 0.00055
Pol Amp 1553 ± 662.2
const term -0.9103 ± 0.0044
linear term 0.988 ± 0.005
quad term 0.9734 ± 0.0050
cube term -1.053 ± 0.005
100
80
60
40
20
0
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

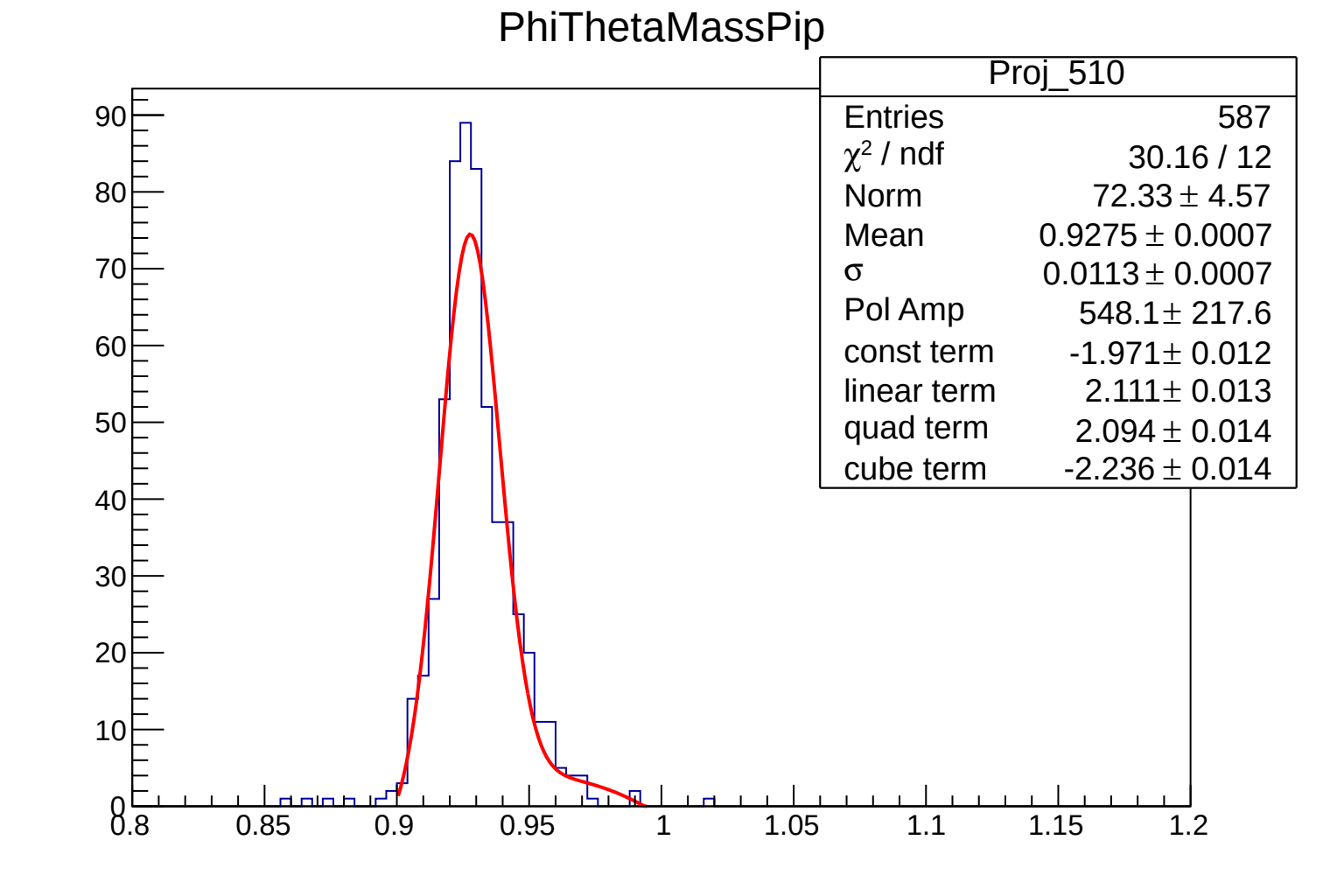

PhiThetaMassPip
Proj_55
Entries 549
χ² / ndf 26.08 / 12
Norm 78.16 ± 4.80
Mean 0.9312 ± 0.0005
σ 0.01017 ± 0.00069
Pol Amp 369 ± 0.6
const term -0.8891 ± 0.2438
linear term 0.9485 ± 0.2372
quad term 0.9286 ± 0.2426
cube term -0.9865 ± 0.2372
100
80
60
40
20
0
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

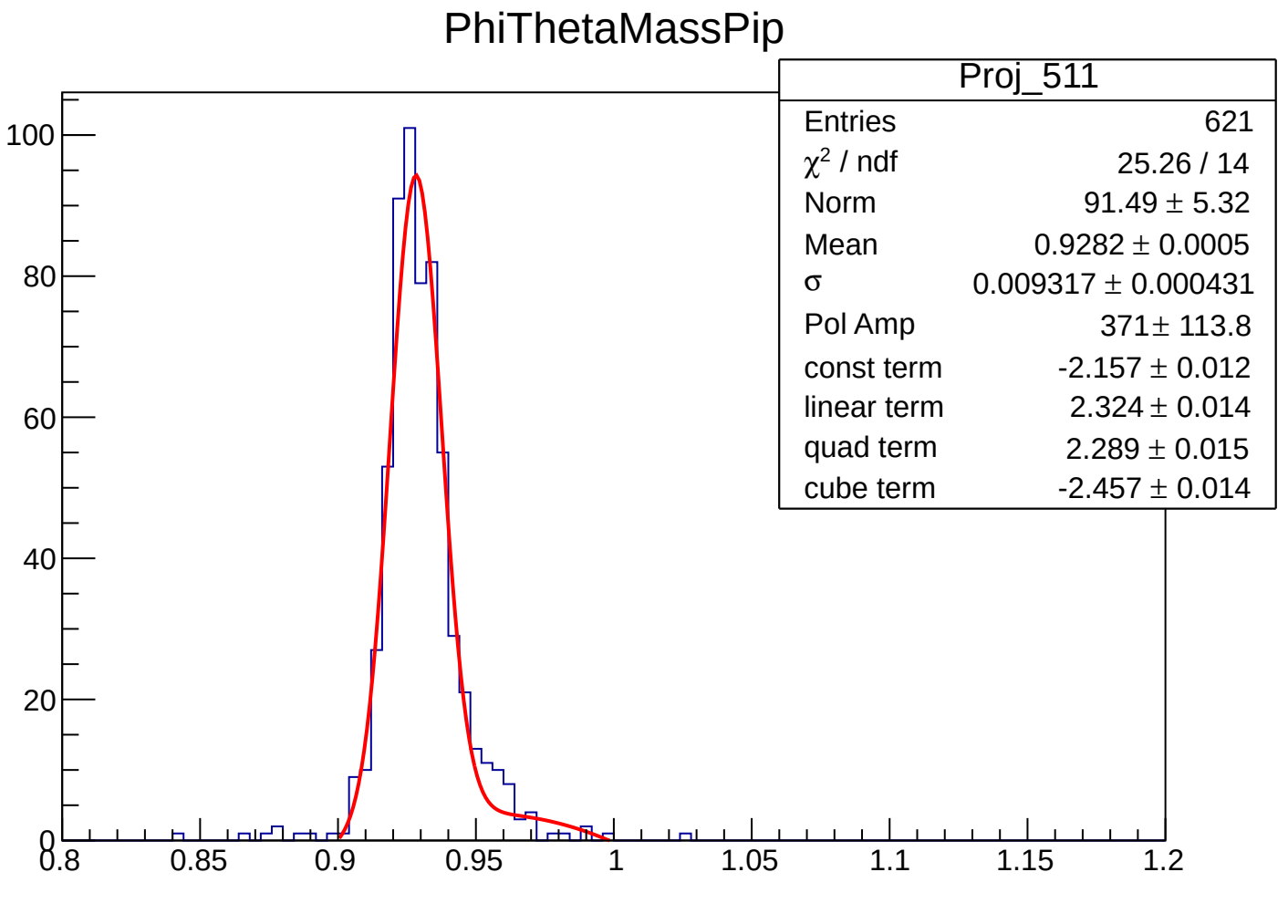

PhiThetaMassPip
Proj_56
Entries 554
χ² / ndf 14.66 / 12
Norm 80.89 ± 4.70
Mean 0.931± 0.001
σ 0.009931± 0.000485
Pol Amp 364.9 ± 0.7
const term -0.7738 ± 0.2491
linear term 0.8135 ± 0.2550
quad term 0.8432 ± 0.2668
cube term -0.879 ± 0.275
0
10
20
30
40
50
60
70
80
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

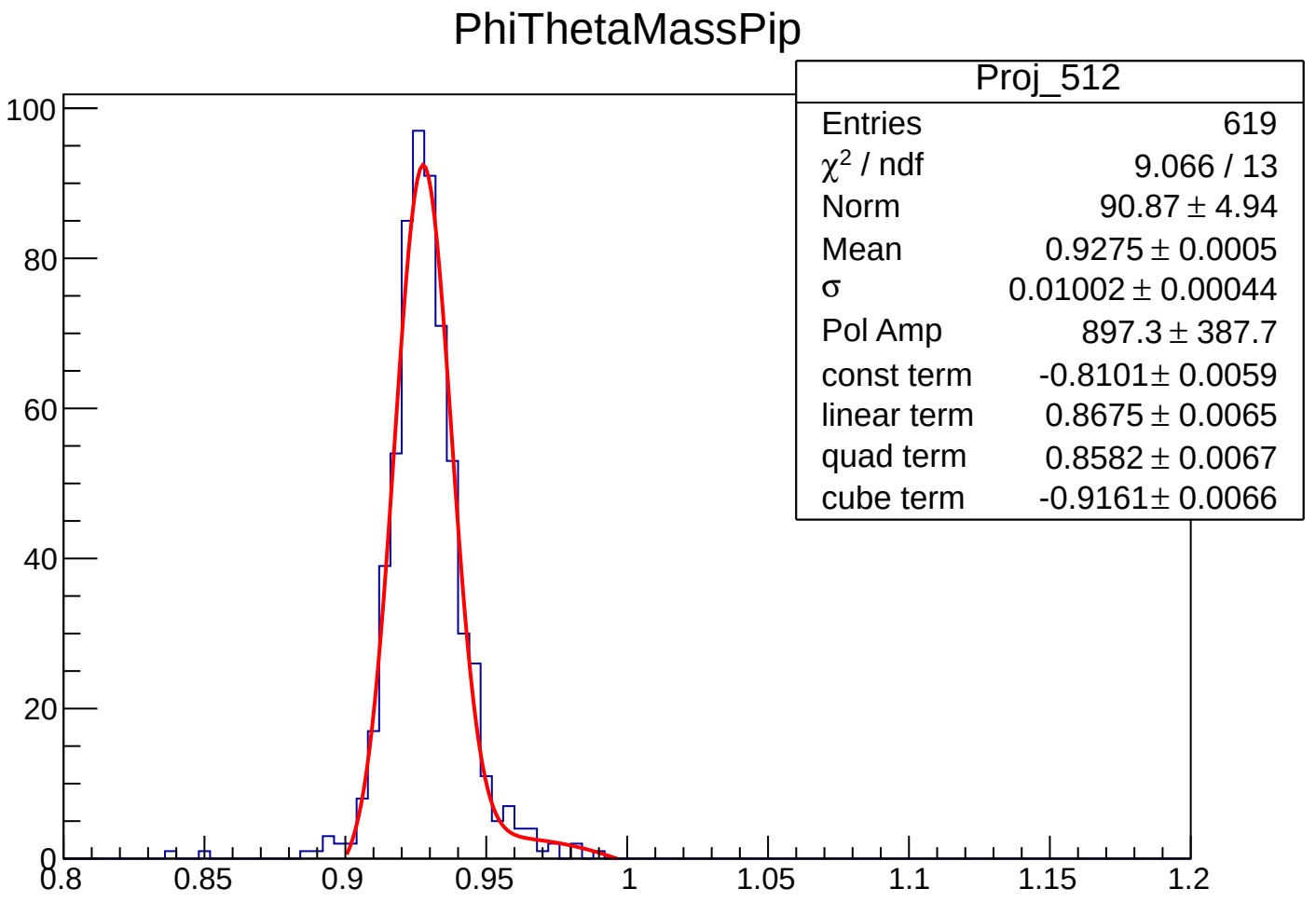

PhiThetaMassPip
Proj_57
Entries 501
χ² / ndf 40.59 / 12
Norm 70.56 ± 5.49
Mean 0.9297 ± 0.0007
σ 0.00846 ± 0.00069
Pol Amp 907.8 ± 314.6
const term -1.66 ± 0.01
linear term 1.801 ± 0.006
quad term 1.817 ± 0.007
cube term -1.965 ± 0.006
0
10
20
30
40
50
60
70
80
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

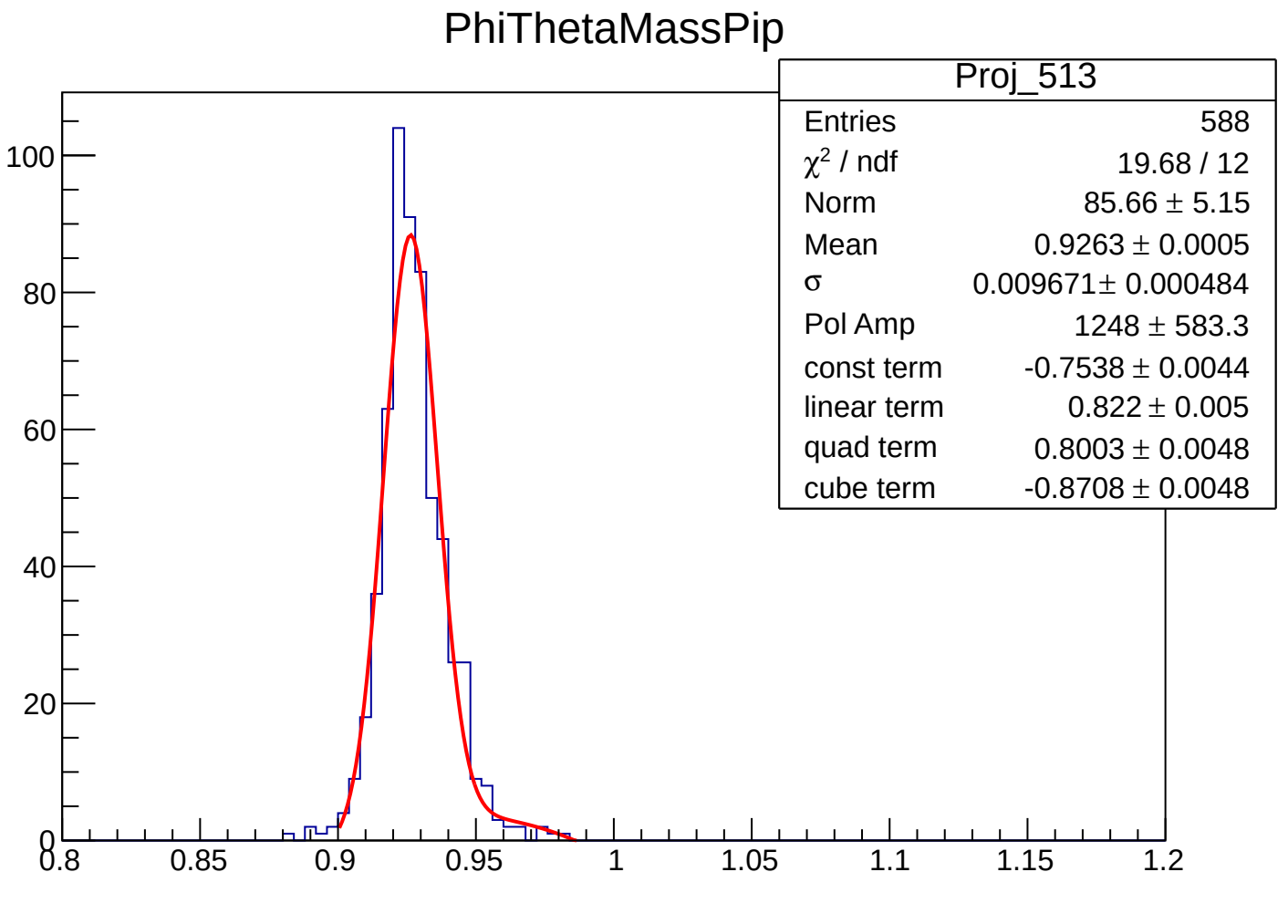

PhiThetaMassPip
Proj_58
Entries 546
χ² / ndf 26.5 / 16
Norm 68.45 ± 4.02
Mean 0.9307 ± 0.0006
σ 0.01158 ± 0.00072
Pol Amp 370.5 ± 0.4
const term -0.3486 ± 0.0966
linear term 0.3747 ± 0.0858
quad term 0.3509 ± 0.0884
cube term -0.3742 ± 0.0812
0
10
20
30
40
50
60
70
80
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

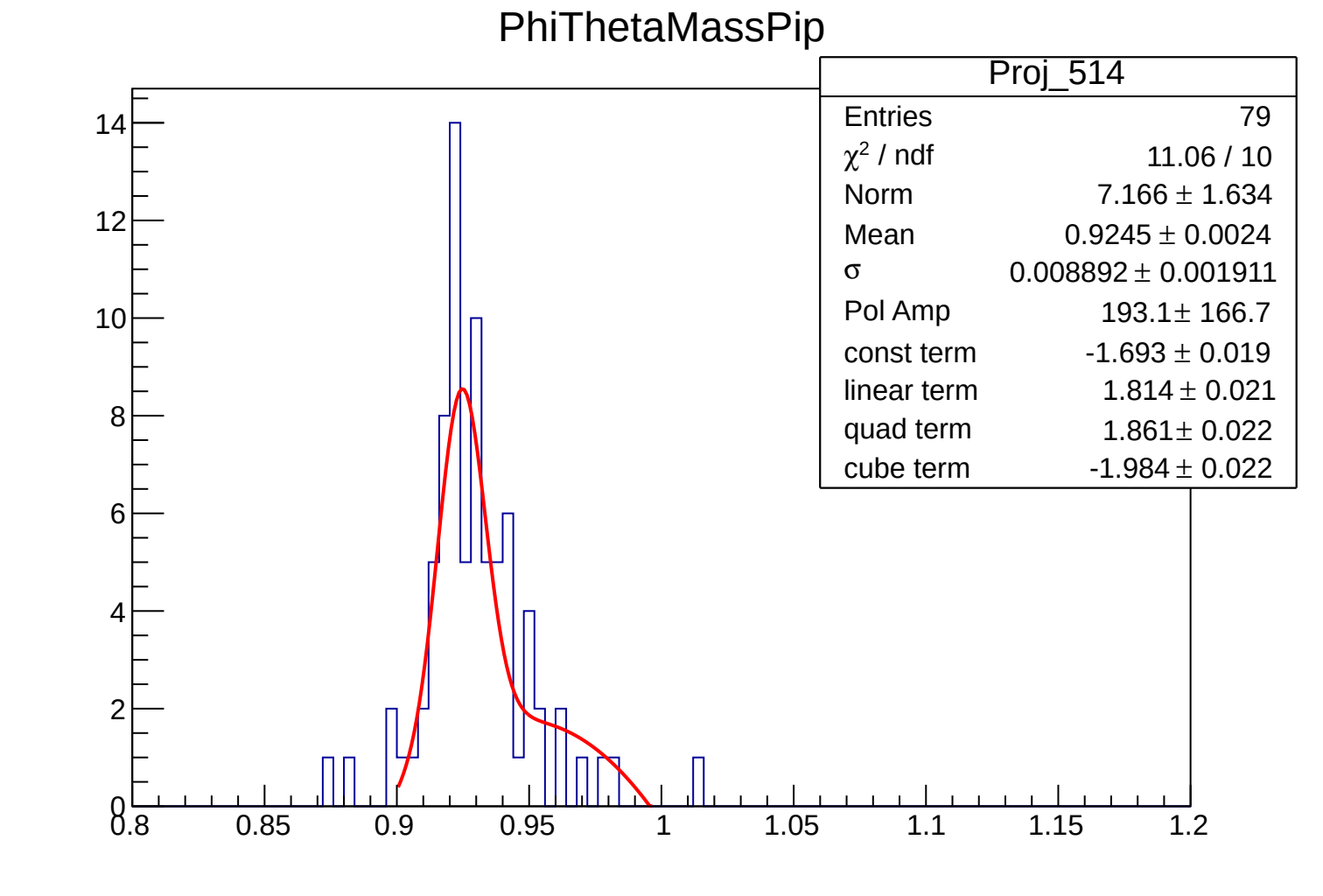

PhiThetaMassPip
Proj_59
Entries 594
χ² / ndf 26.04 / 14
Norm 73.19 ± 4.30
Mean 0.9291 ± 0.0006
σ 0.01156 ± 0.00059
Pol Amp 803 ± 401.9
const term -0.9077 ± 0.0068
linear term 0.977 ± 0.007
quad term 0.9499 ± 0.0075
cube term -1.02 ± 0.01
0
10
20
30
40
50
60
70
80
90
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

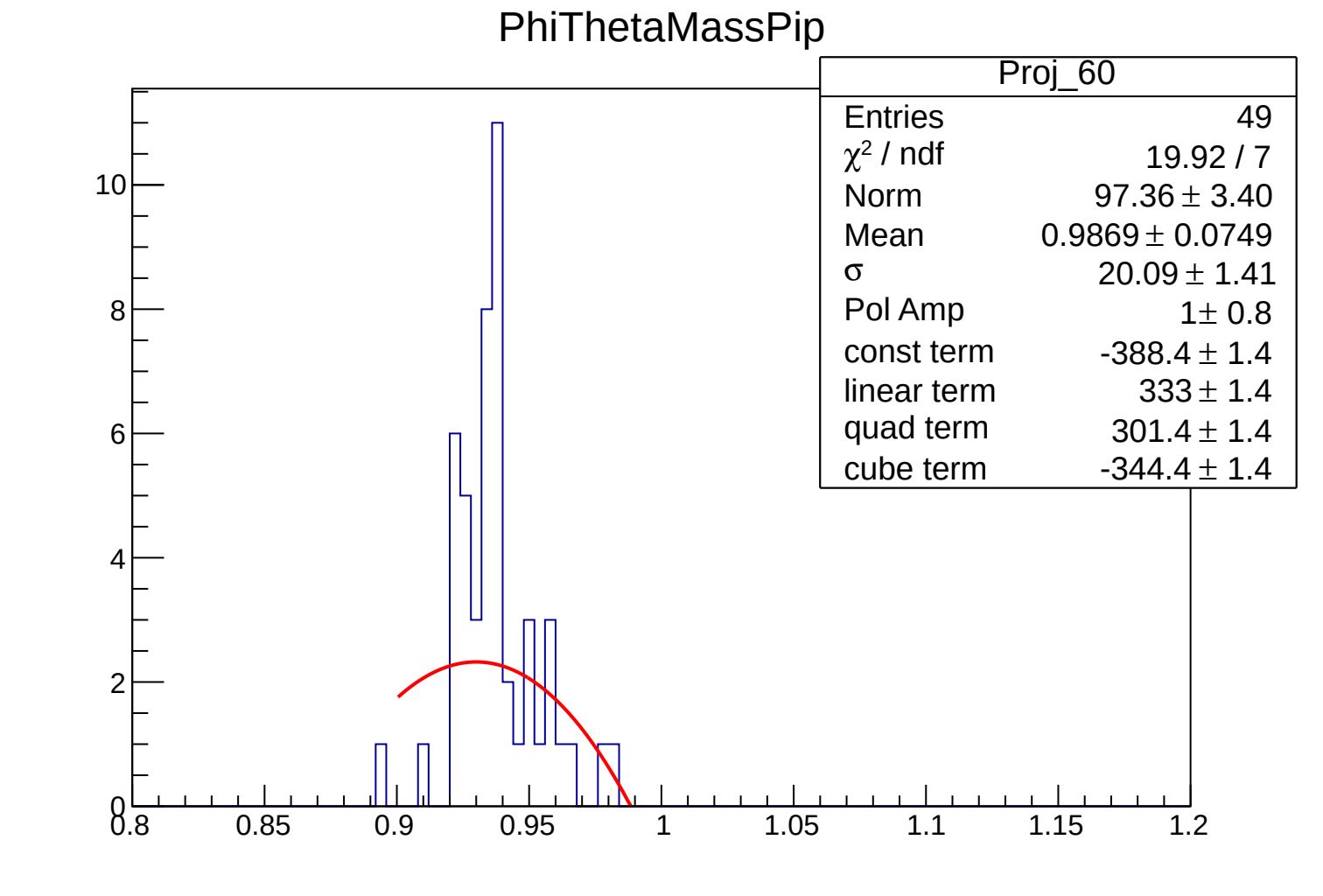

PhiThetaMassPip
Proj_510
Entries 587
χ² / ndf 30.16 / 12
Norm 72.33 ± 4.57
Mean 0.9275 ± 0.0007
σ 0.0113 ± 0.0007
Pol Amp 548.1 ± 217.6
const term -1.971 ± 0.012
linear term 2.111 ± 0.013
quad term 2.094 ± 0.014
cube term -2.236 ± 0.014
0
10
20
30
40
50
60
70
80
90
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

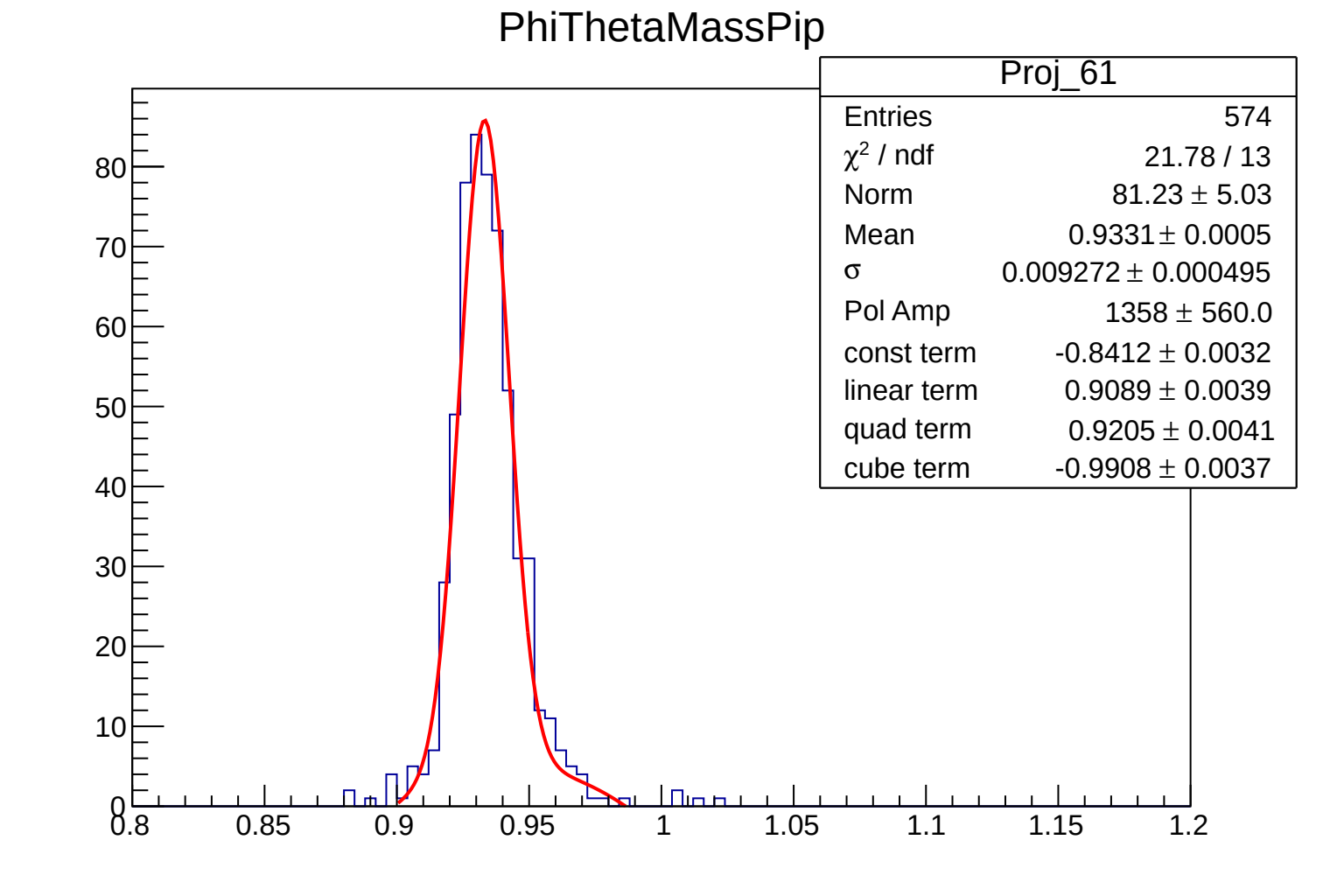

PhiThetaMassPip
Proj_511
Entries 621
χ² / ndf 25.26 / 14
Norm 91.49 ± 5.32
Mean 0.9282 ± 0.0005
σ 0.009317 ± 0.000431
Pol Amp 371 ± 113.8
const term -2.157 ± 0.012
linear term 2.324 ± 0.014
quad term 2.289 ± 0.015
cube term -2.457 ± 0.014
100
80
60
40
20
0
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

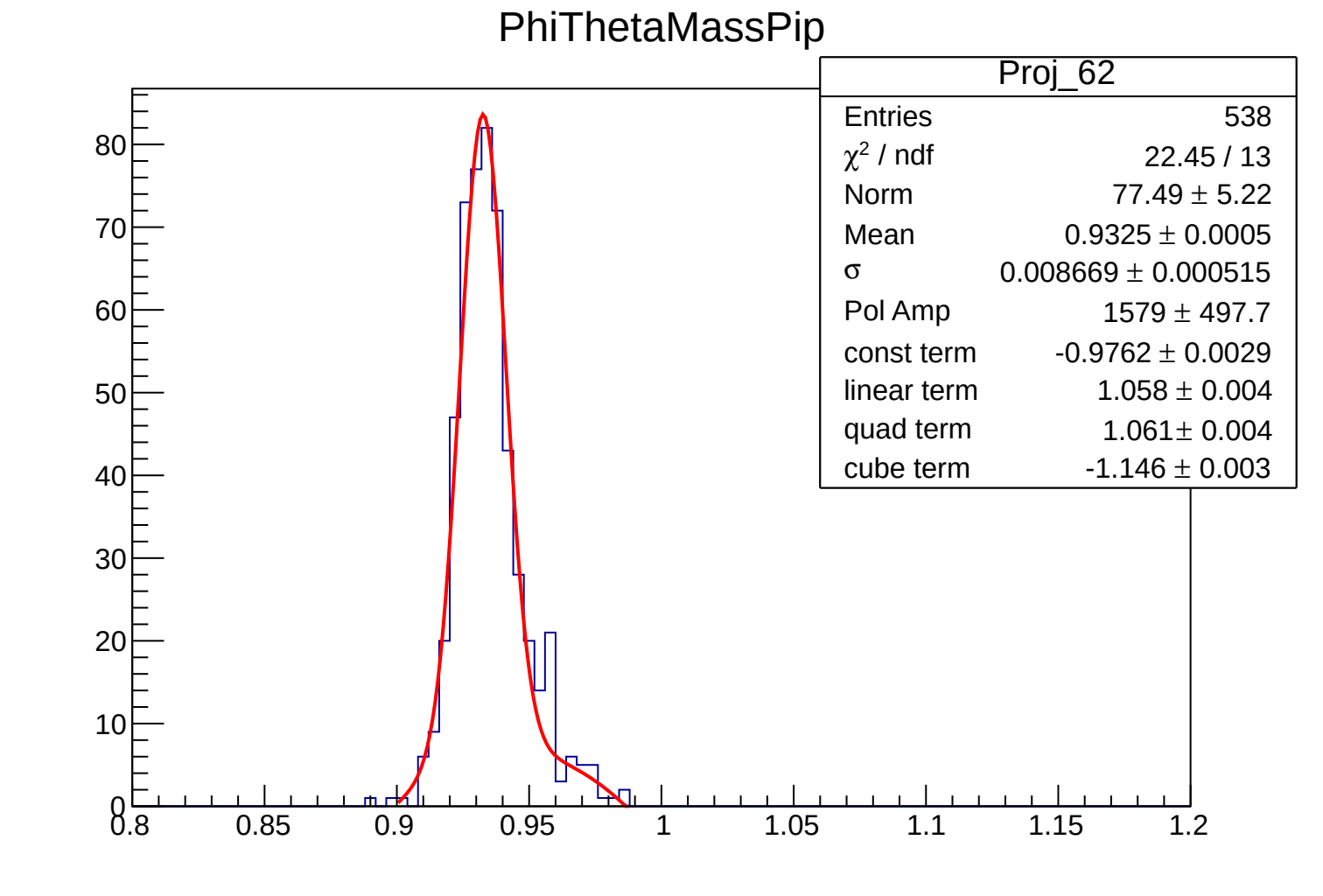

PhiThetaMassPip
Proj_512
Entries 619
χ² / ndf 9.066 / 13
Norm 90.87 ± 4.94
Mean 0.9275 ± 0.0005
σ 0.01002 ± 0.00044
Pol Amp 897.3 ± 387.7
const term -0.8101 ± 0.0059
linear term 0.8675 ± 0.0065
quad term 0.8582 ± 0.0067
cube term -0.9161 ± 0.0066
100
80
60
40
20
0
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

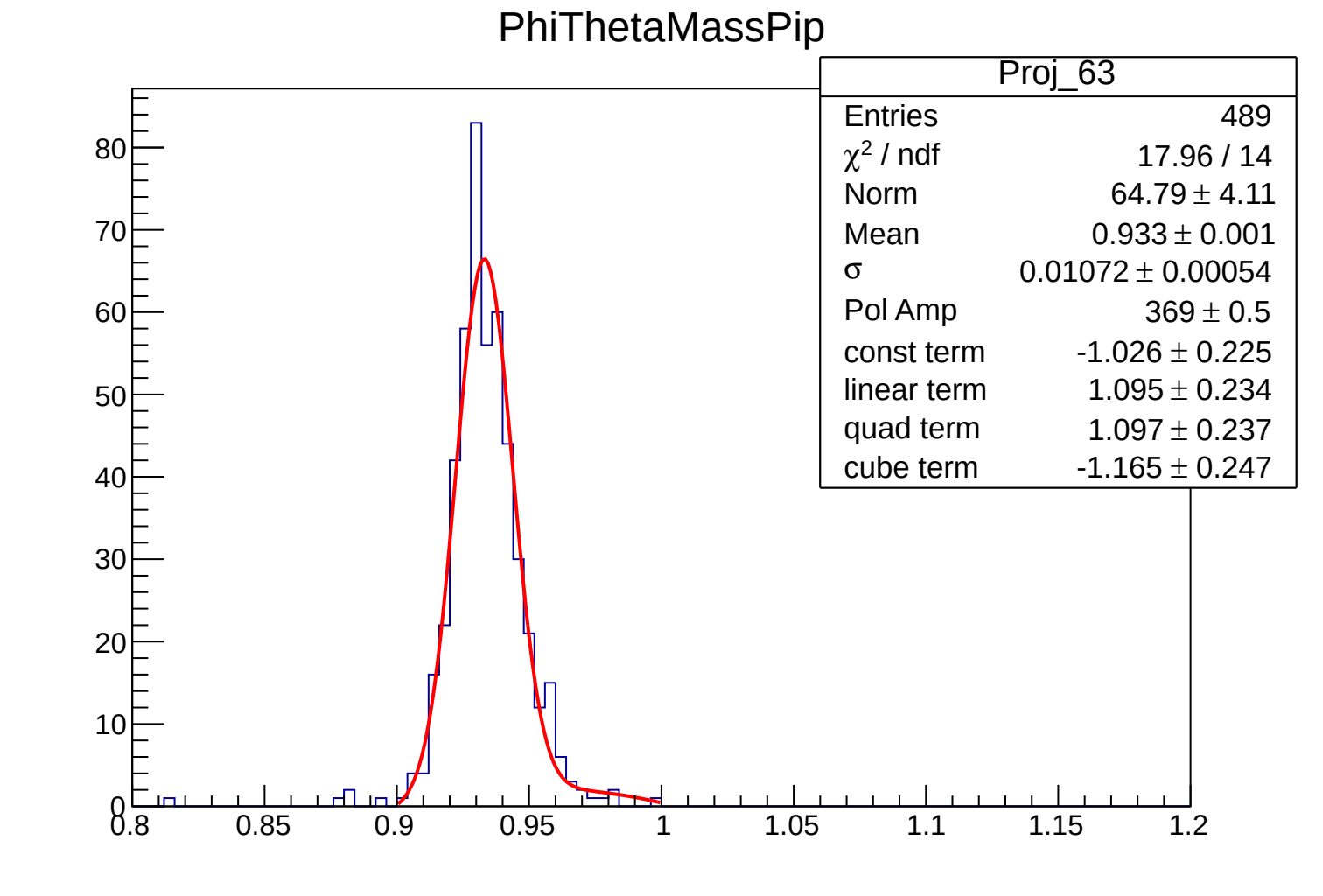

PhiThetaMassPip
Proj_513
Entries 588
χ² / ndf 19.68 / 12
Norm 85.66 ± 5.15
Mean 0.9263 ± 0.0005
σ 0.009671± 0.000484
Pol Amp 1248 ± 583.3
const term -0.7538 ± 0.0044
linear term 0.822 ± 0.005
quad term 0.8003 ± 0.0048
cube term -0.8708 ± 0.0048
0
20
40
60
80
100
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

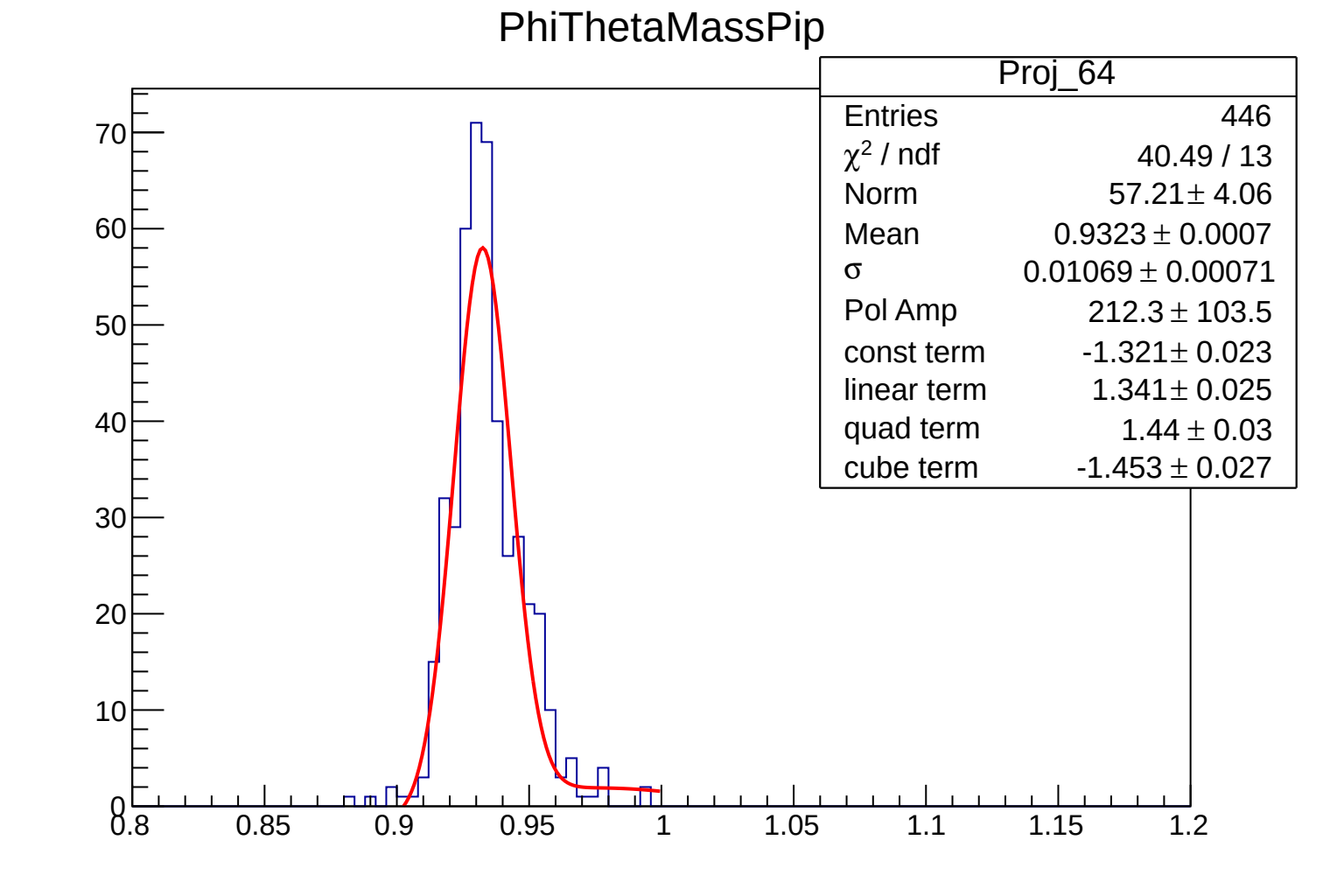

PhiThetaMassPip
Proj_514
Entries 79
χ² / ndf 11.06 / 10
Norm 7.166 ± 1.634
Mean 0.9245 ± 0.0024
σ 0.008892 ± 0.001911
Pol Amp 193.1 ± 166.7
const term -1.693 ± 0.019
linear term 1.814 ± 0.021
quad term 1.861 ± 0.022
cube term -1.984 ± 0.022
0
2
4
6
8
10
12
14
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

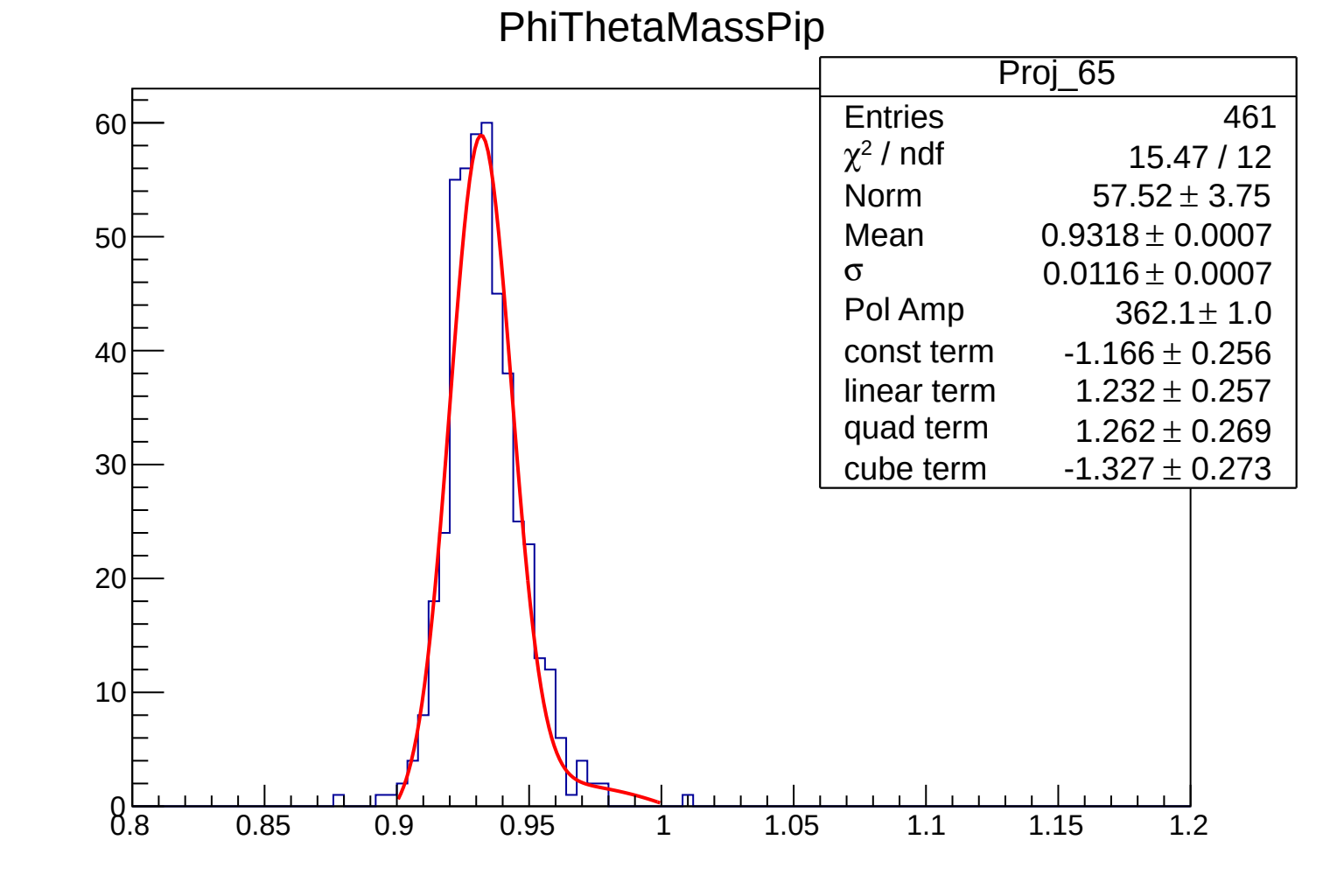

PhiThetaMassPip
Proj_60
Entries 49
χ² / ndf 19.92 / 7
Norm 97.36 ± 3.40
Mean 0.9869 ± 0.0749
σ 20.09 ± 1.41
Pol Amp 1 ± 0.8
const term -388.4 ± 1.4
linear term 333 ± 1.4
quad term 301.4 ± 1.4
cube term -344.4 ± 1.4
0
2
4
6
8
10
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

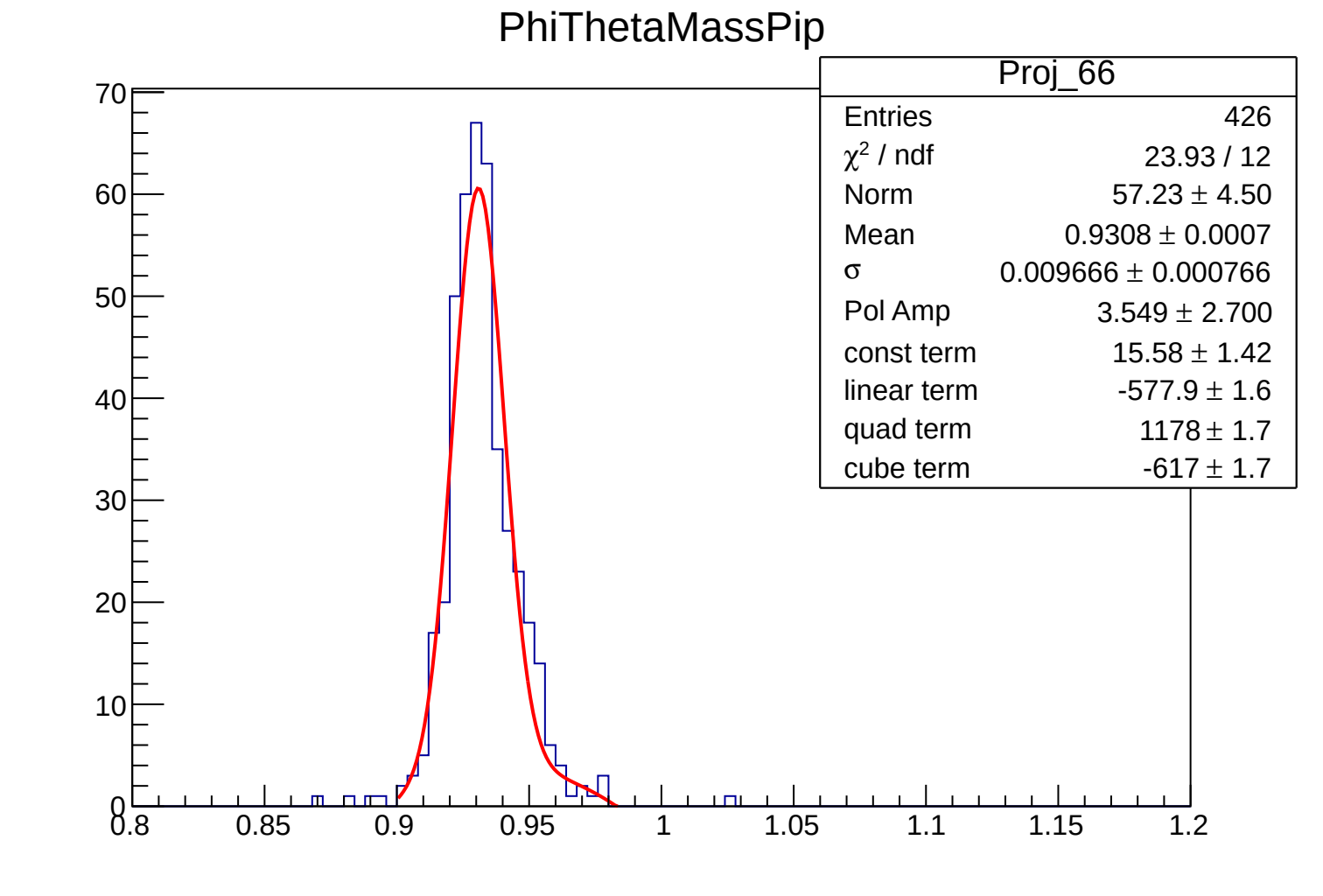

PhiThetaMassPip
Proj_61
Entries 574
χ² / ndf 21.78 / 13
Norm 81.23 ± 5.03
Mean 0.9331 ± 0.0005
σ 0.009272 ± 0.000495
Pol Amp 1358 ± 560.0
const term -0.8412 ± 0.0032
linear term 0.9089 ± 0.0039
quad term 0.9205 ± 0.0041
cube term -0.9908 ± 0.0037
0
10
20
30
40
50
60
70
80
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

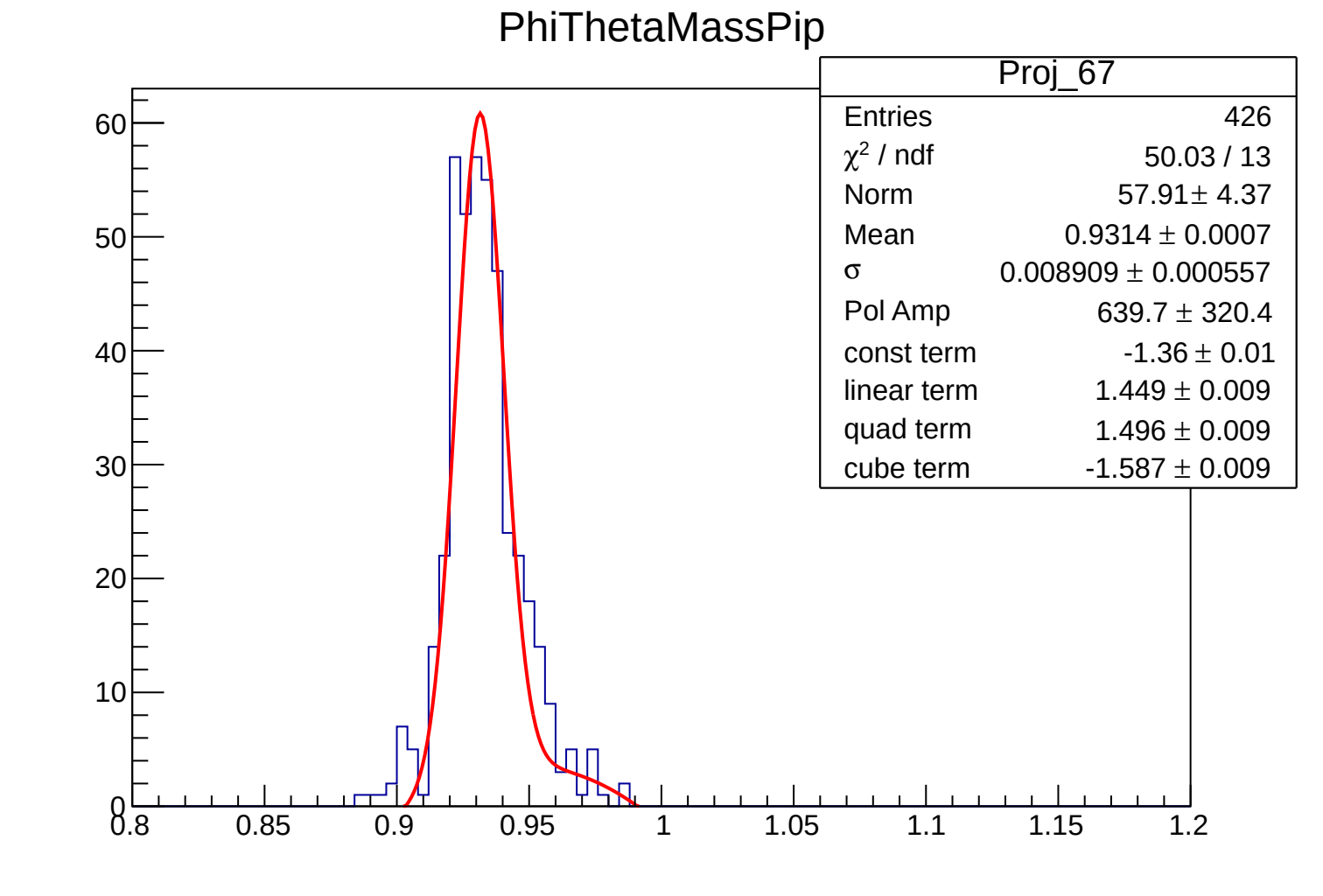

PhiThetaMassPip
Proj_62
Entries 538
χ² / ndf 22.45 / 13
Norm 77.49 ± 5.22
Mean 0.9325 ± 0.0005
σ 0.008669 ± 0.000515
Pol Amp 1579 ± 497.7
const term -0.9762 ± 0.0029
linear term 1.058 ± 0.004
quad term 1.061± 0.004
cube term -1.146 ± 0.003
0
10
20
30
40
50
60
70
80
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

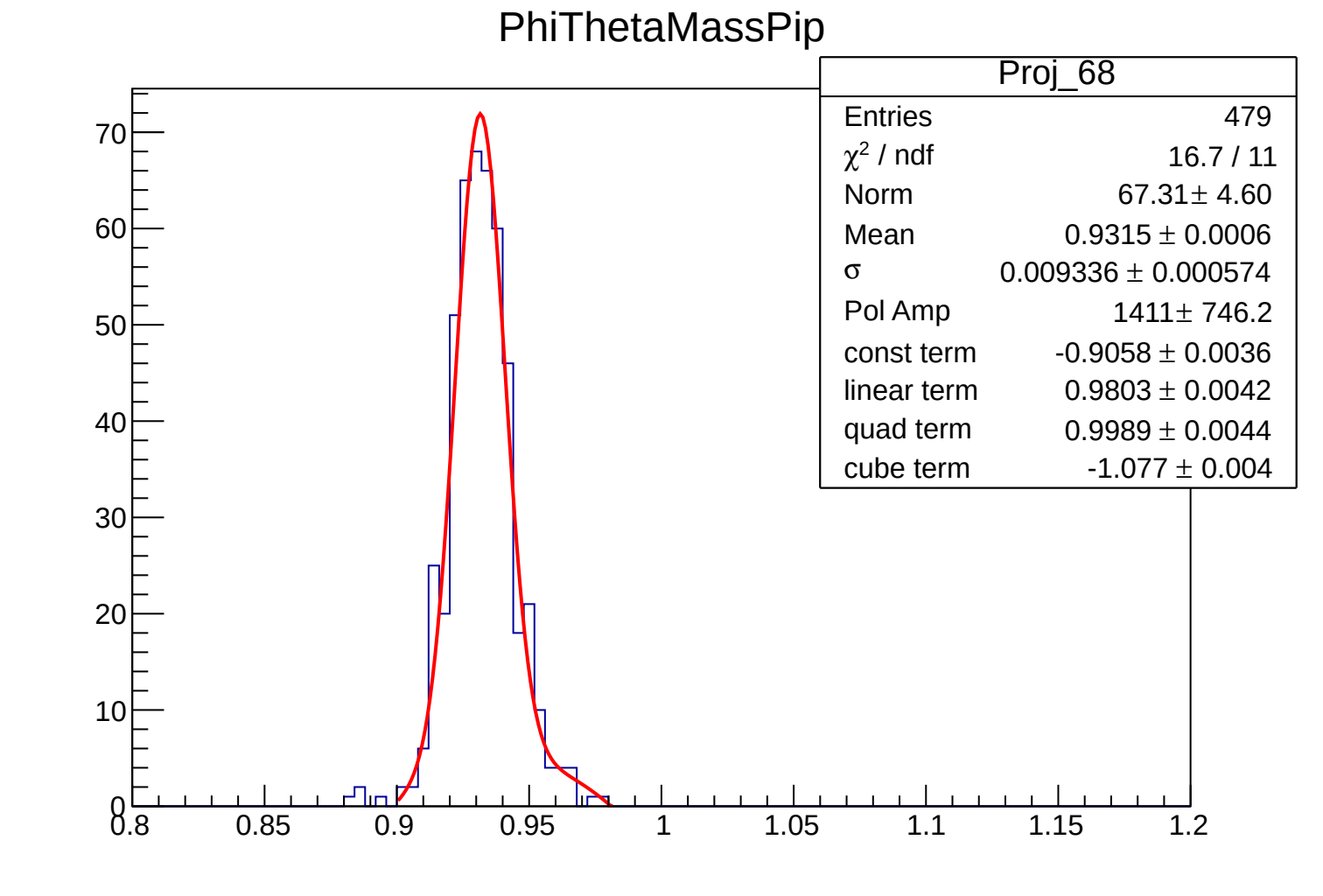

PhiThetaMassPip
Proj_63
Entries 489
χ² / ndf 17.96 / 14
Norm 64.79 ± 4.11
Mean 0.933 ± 0.001
σ 0.01072 ± 0.00054
Pol Amp 369 ± 0.5
const term -1.026 ± 0.225
linear term 1.095 ± 0.234
quad term 1.097 ± 0.237
cube term -1.165 ± 0.247
0
10
20
30
40
50
60
70
80
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

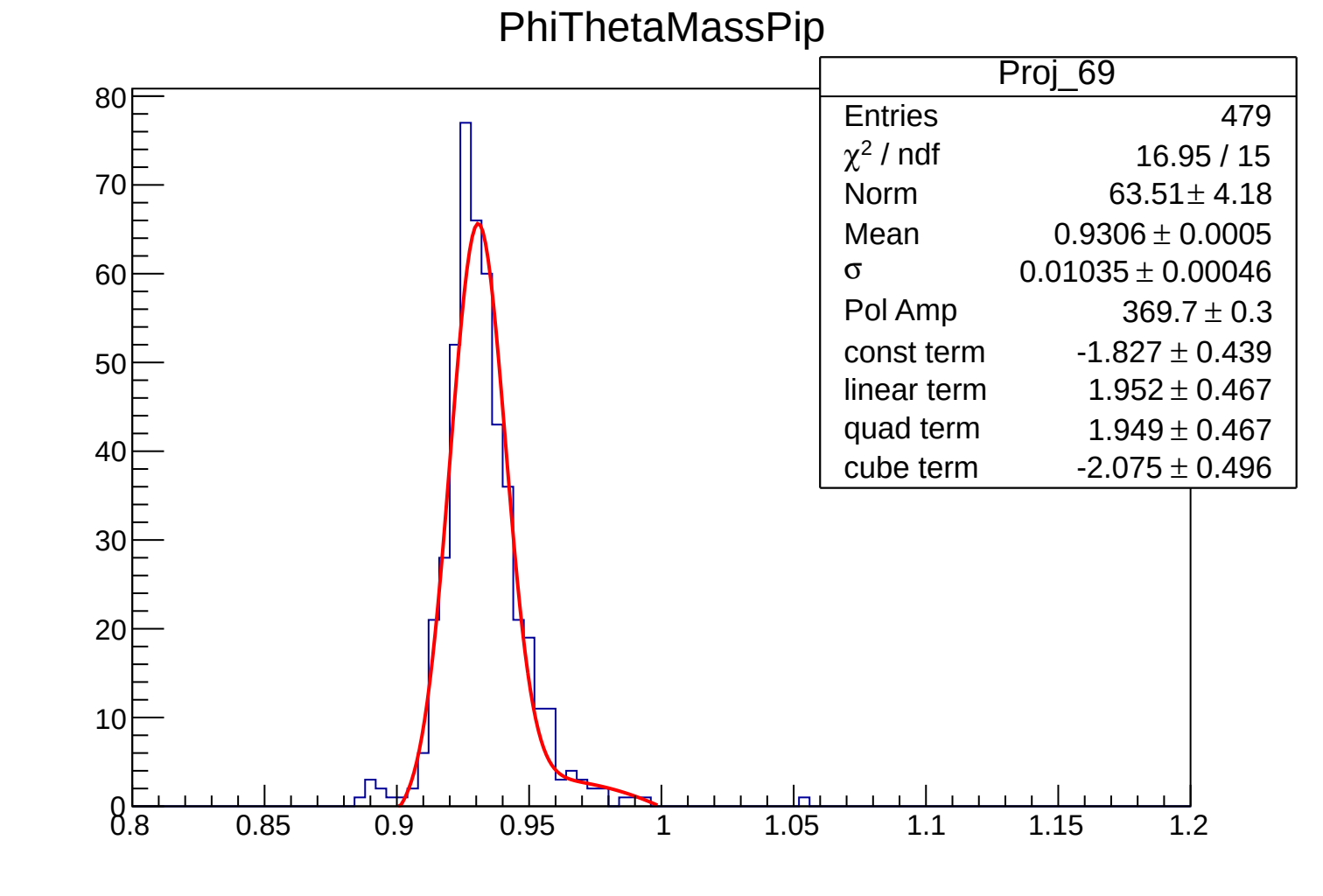

PhiThetaMassPip
Proj_64
Entries 446
χ² / ndf 40.49 / 13
Norm 57.21 ± 4.06
Mean 0.9323 ± 0.0007
σ 0.01069 ± 0.00071
Pol Amp 212.3 ± 103.5
const term -1.321 ± 0.023
linear term 1.341 ± 0.025
quad term 1.44 ± 0.03
cube term -1.453 ± 0.027
0
10
20
30
40
50
60
70
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

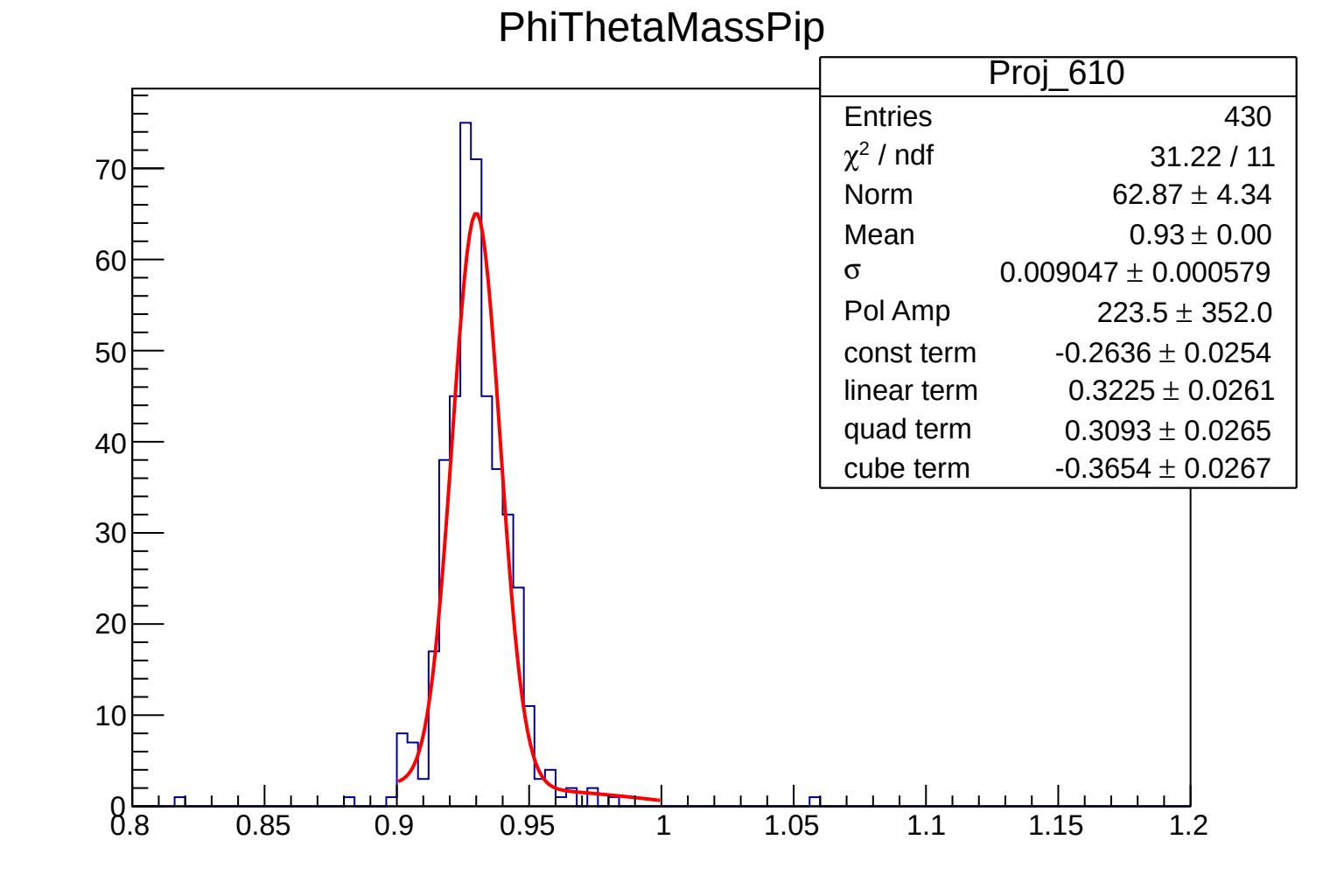

PhiThetaMassPip
Proj_65
Entries 461
χ² / ndf 15.47 / 12
Norm 57.52 ± 3.75
Mean 0.9318 ± 0.0007
σ 0.0116 ± 0.0007
Pol Amp 362.1 ± 1.0
const term -1.166 ± 0.256
linear term 1.232 ± 0.257
quad term 1.262 ± 0.269
cube term -1.327 ± 0.273
0
10
20
30
40
50
60
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

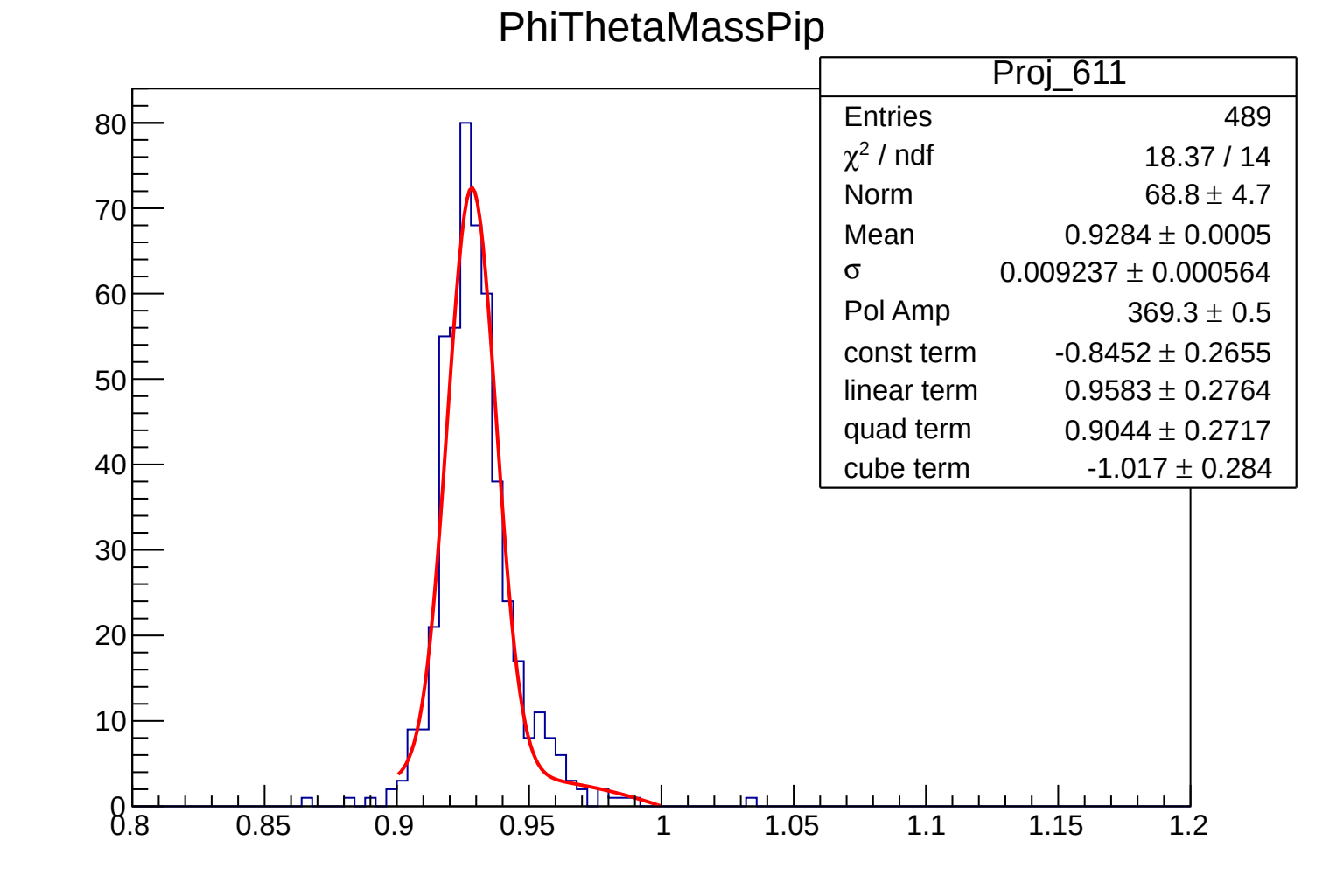

PhiThetaMassPip
Proj_66
Entries 426
χ² / ndf 23.93 / 12
Norm 57.23 ± 4.50
Mean 0.9308 ± 0.0007
σ 0.009666 ± 0.000766
Pol Amp 3.549 ± 2.700
const term 15.58 ± 1.42
linear term -577.9 ± 1.6
quad term 1178 ± 1.7
cube term -617 ± 1.7
70
60
50
40
30
20
10
0
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

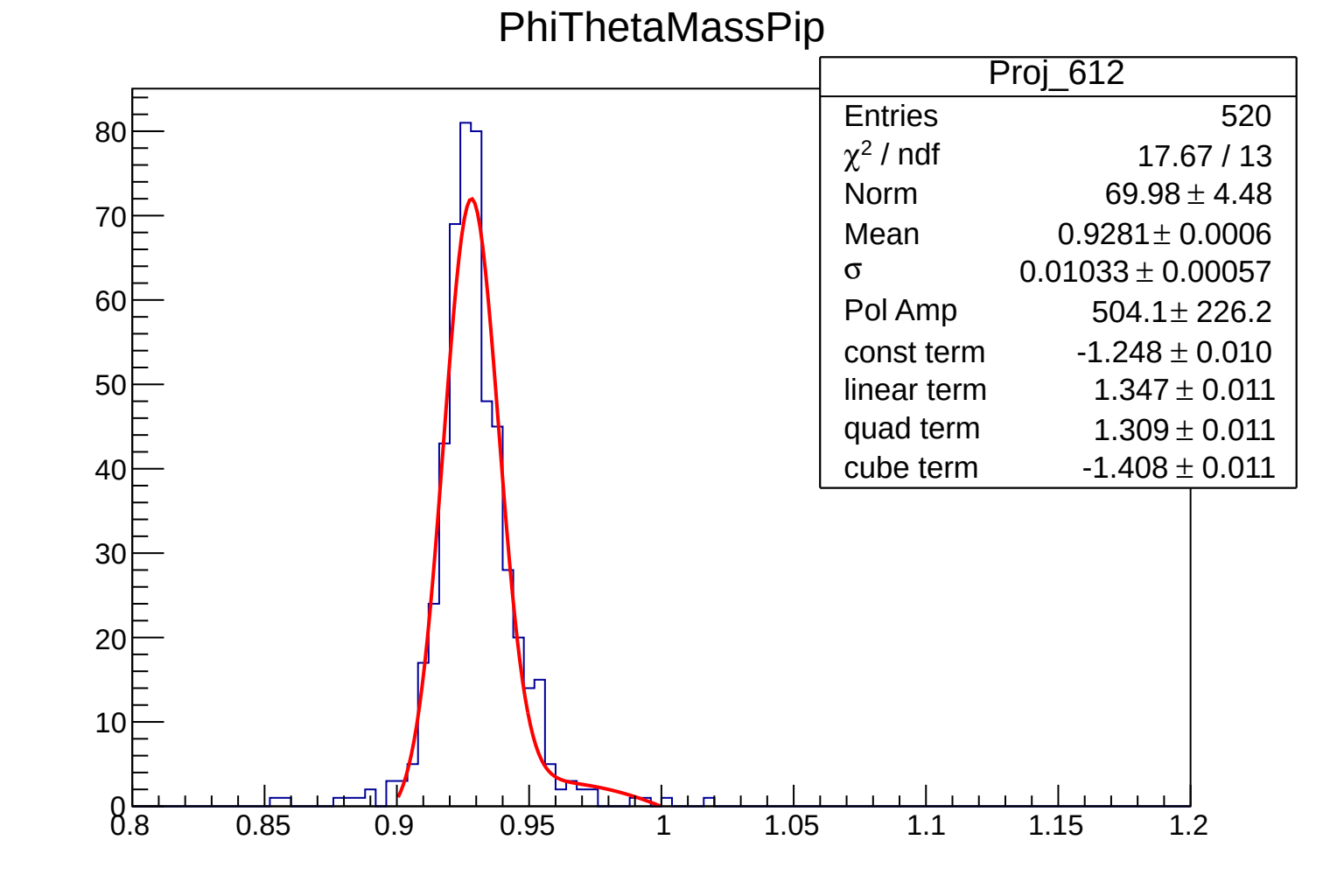

PhiThetaMassPip
Proj_67
Entries 426
χ² / ndf 50.03 / 13
Norm 57.91 ± 4.37
Mean 0.9314 ± 0.0007
σ 0.008909 ± 0.000557
Pol Amp 639.7 ± 320.4
const term -1.36 ± 0.01
linear term 1.449 ± 0.009
quad term 1.496 ± 0.009
cube term -1.587 ± 0.009
0
10
20
30
40
50
60
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

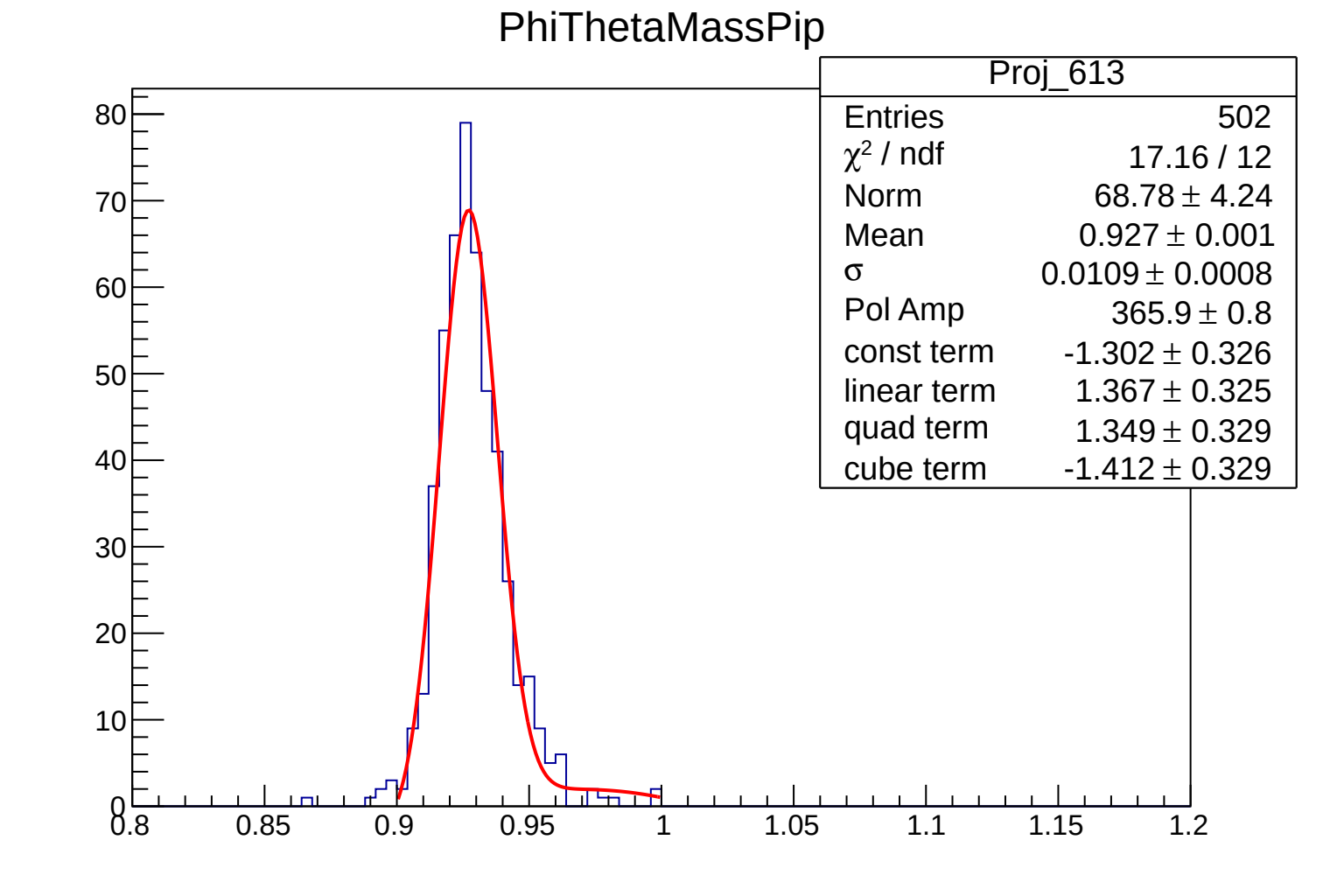

PhiThetaMassPip
Proj_68
Entries 479
χ² / ndf 16.7 / 11
Norm 67.31 ± 4.60
Mean 0.9315 ± 0.0006
σ 0.009336 ± 0.000574
Pol Amp 1411 ± 746.2
const term -0.9058 ± 0.0036
linear term 0.9803 ± 0.0042
quad term 0.9989 ± 0.0044
cube term -1.077 ± 0.004
0
10
20
30
40
50
60
70
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

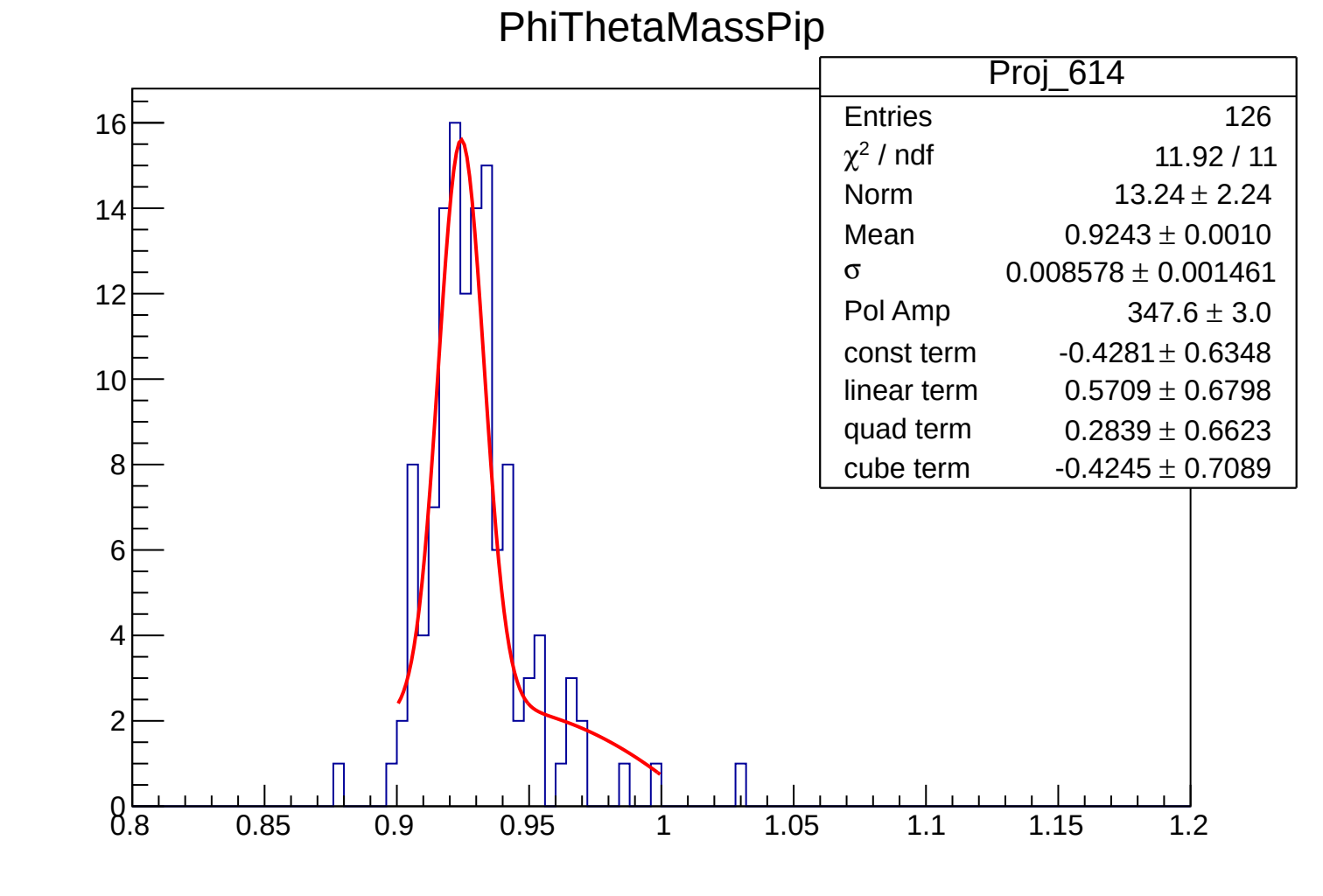

PhiThetaMassPip
Proj_69
Entries 479
χ² / ndf 16.95 / 15
Norm 63.51 ± 4.18
Mean 0.9306 ± 0.0005
σ 0.01035 ± 0.00046
Pol Amp 369.7 ± 0.3
const term -1.827 ± 0.439
linear term 1.952 ± 0.467
quad term 1.949 ± 0.467
cube term -2.075 ± 0.496
0
10
20
30
40
50
60
70
80
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

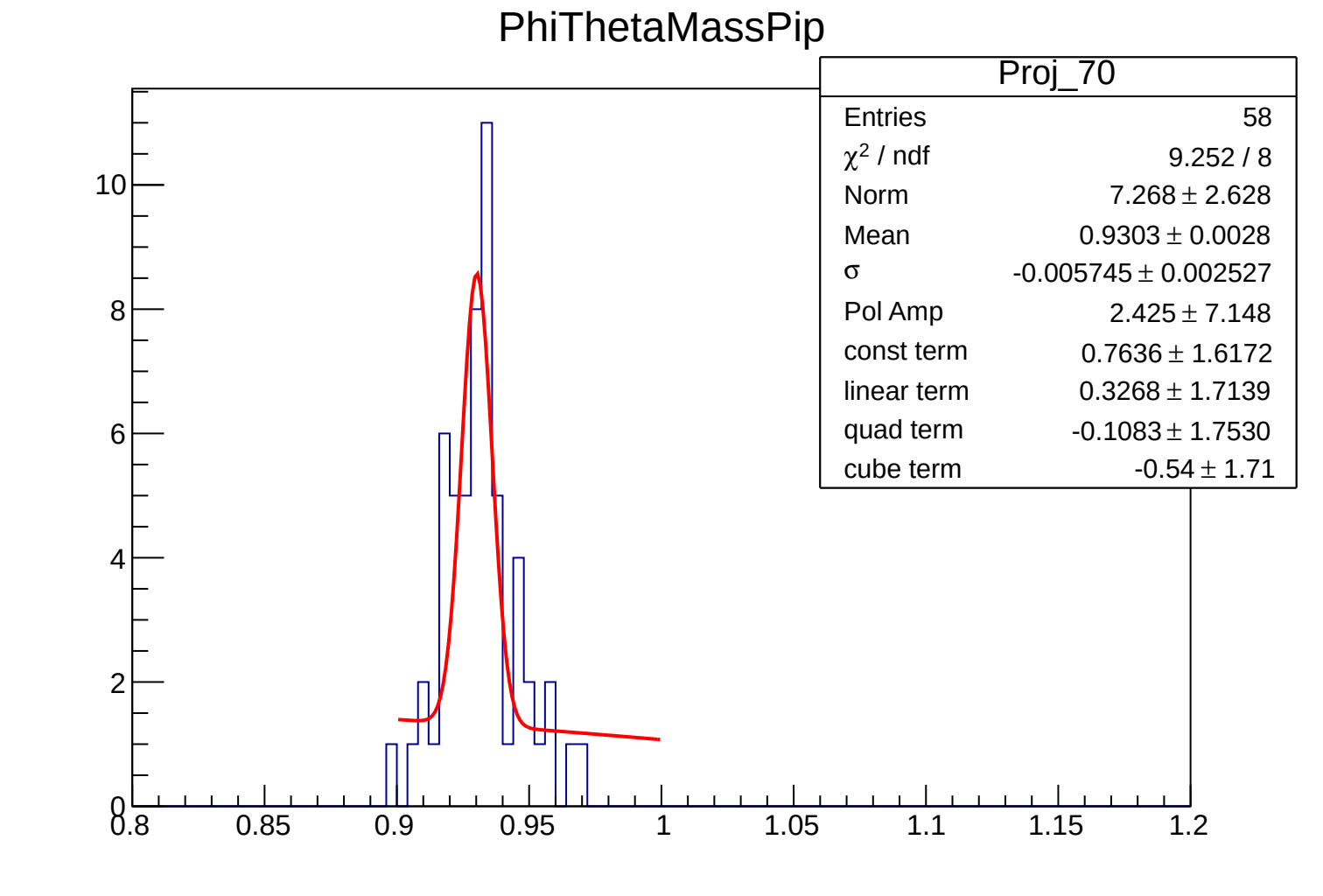

PhiThetaMassPip
Proj_610
Entries 430
χ² / ndf 31.22 / 11
Norm 62.87 ± 4.34
Mean 0.93 ± 0.00
σ 0.009047 ± 0.000579
Pol Amp 223.5 ± 352.0
const term -0.2636 ± 0.0254
linear term 0.3225 ± 0.0261
quad term 0.3093 ± 0.0265
cube term -0.3654 ± 0.0267
0
10
20
30
40
50
60
70
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

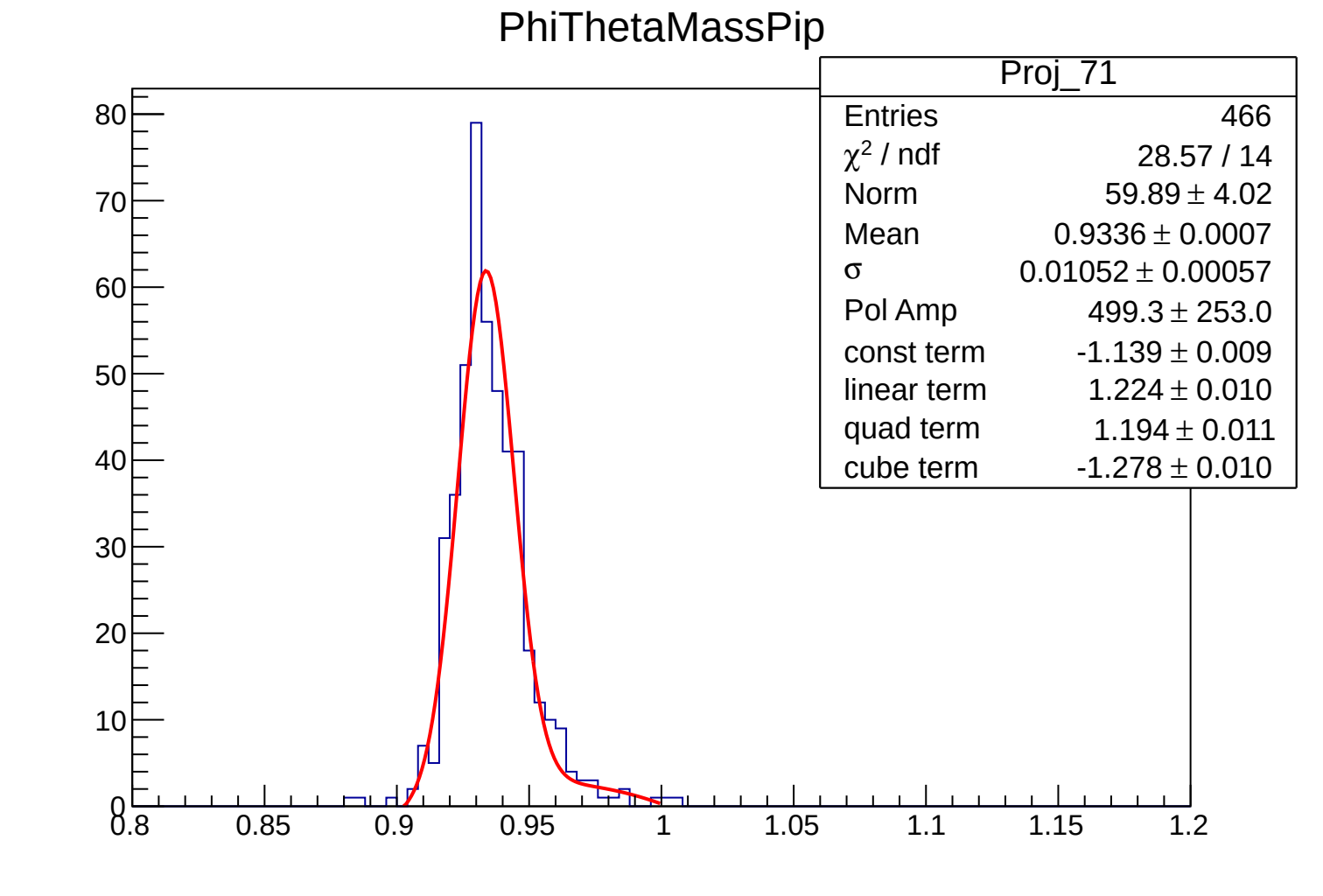

PhiThetaMassPip
Proj_611
Entries 489
χ² / ndf 18.37 / 14
Norm 68.8 ± 4.7
Mean 0.9284 ± 0.0005
σ 0.009237 ± 0.000564
Pol Amp 369.3 ± 0.5
const term -0.8452 ± 0.2655
linear term 0.9583 ± 0.2764
quad term 0.9044 ± 0.2717
cube term -1.017 ± 0.284
0
10
20
30
40
50
60
70
80
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2


PhiThetaMassPip
Proj_612
Entries 520
χ² / ndf 17.67 / 13
Norm 69.98 ± 4.48
Mean 0.9281 ± 0.0006
σ 0.01033 ± 0.00057
Pol Amp 504.1 ± 226.2
const term -1.248 ± 0.010
linear term 1.347 ± 0.011
quad term 1.309 ± 0.011
cube term -1.408 ± 0.011
0
10
20
30
40
50
60
70
80
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2


PhiThetaMassPip
Proj_613
Entries 502
χ² / ndf 17.16 / 12
Norm 68.78 ± 4.24
Mean 0.927 ± 0.001
σ 0.0109 ± 0.0008
Pol Amp 365.9 ± 0.8
const term -1.302 ± 0.326
linear term 1.367 ± 0.325
quad term 1.349 ± 0.329
cube term -1.412 ± 0.329
0
10
20
30
40
50
60
70
80
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2


PhiThetaMassPip
Proj_614
Entries 126
χ² / ndf 11.92 / 11
Norm 13.24 ± 2.24
Mean 0.9243 ± 0.0010
σ 0.008578 ± 0.001461
Pol Amp 347.6 ± 3.0
const term -0.4281 ± 0.6348
linear term 0.5709 ± 0.6798
quad term 0.2839 ± 0.6623
cube term -0.4245 ± 0.7089
0
2
4
6
8
10
12
14
16
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2


PhiThetaMassPip
Proj_70
Entries 58
χ² / ndf 9.252 / 8
Norm 7.268 ± 2.628
Mean 0.9303 ± 0.0028
σ -0.005745 ± 0.002527
Pol Amp 2.425 ± 7.148
const term 0.7636 ± 1.6172
linear term 0.3268 ± 1.7139
quad term -0.1083 ± 1.7530
cube term -0.54 ± 1.71
0
2
4
6
8
10
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2


PhiThetaMassPip
Proj_71
Entries 466
χ² / ndf 28.57 / 14
Norm 59.89 ± 4.02
Mean 0.9336 ± 0.0007
σ 0.01052 ± 0.00057
Pol Amp 499.3 ± 253.0
const term -1.139 ± 0.009
linear term 1.224 ± 0.010
quad term 1.194 ± 0.011
cube term -1.278 ± 0.010
0
10
20
30
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70
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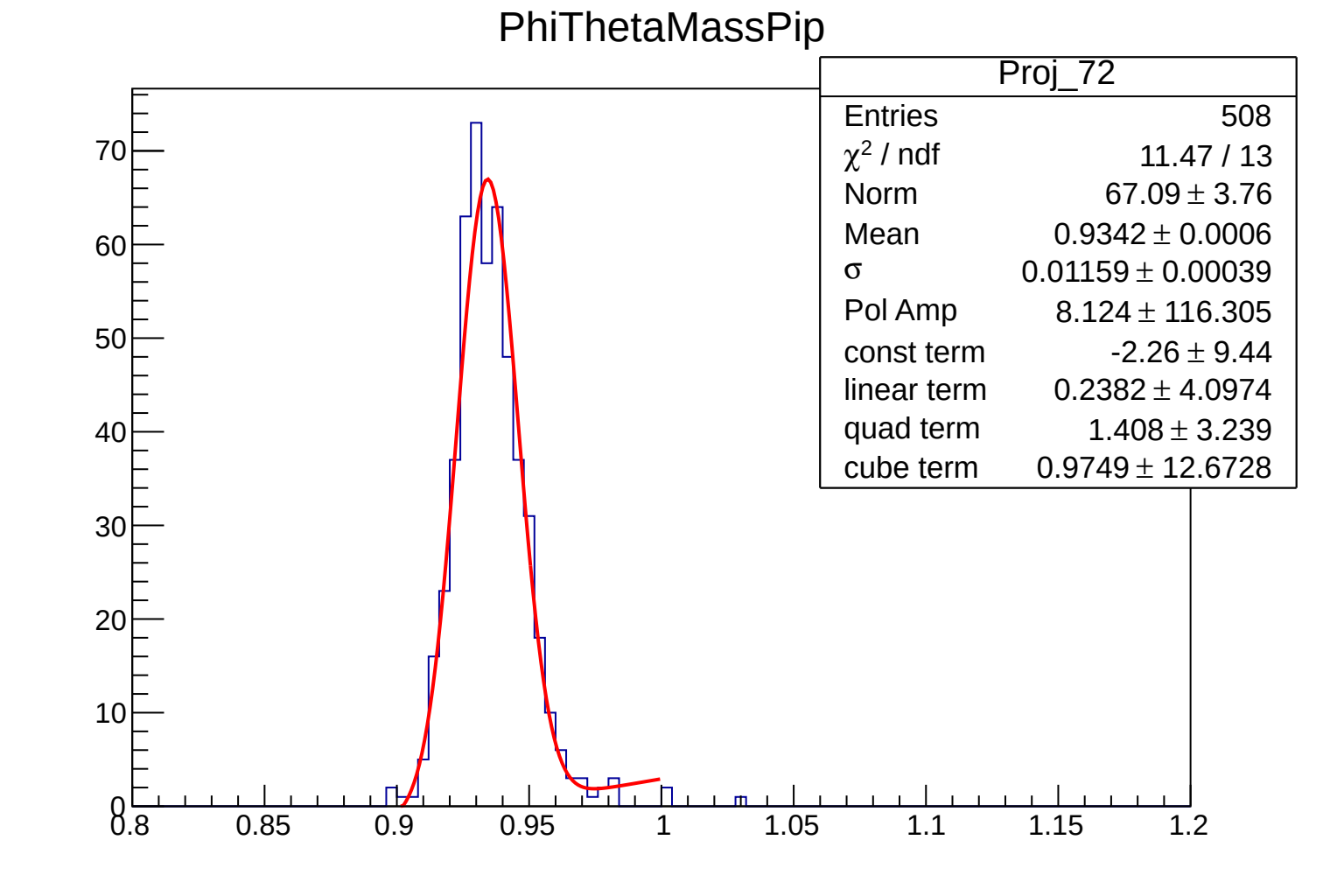
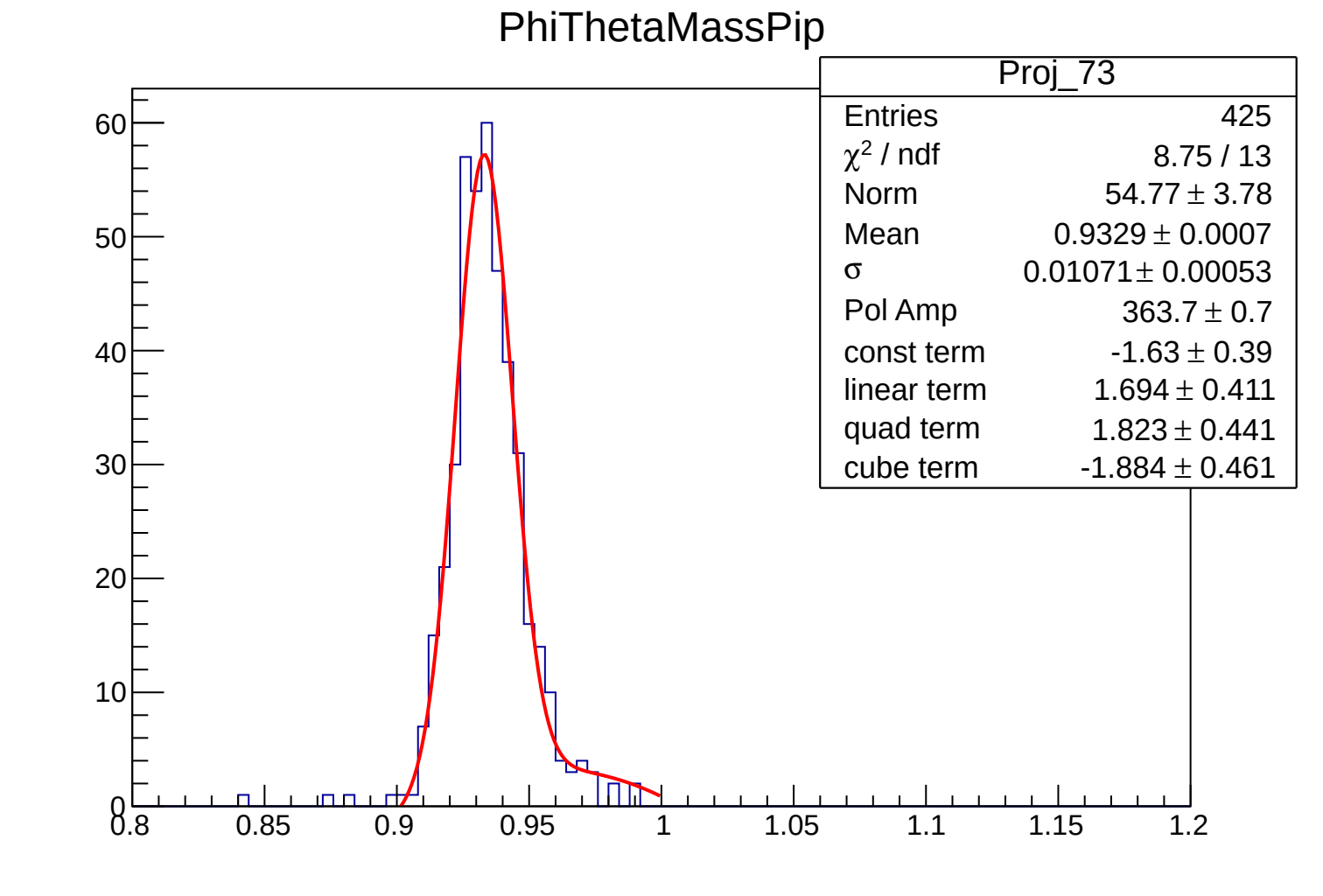
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2


PhiThetaMassPip
Proj_72
Entries 508
χ² / ndf 11.47 / 13
Norm 67.09 ± 3.76
Mean 0.9342 ± 0.0006
σ 0.01159 ± 0.00039
Pol Amp 8.124 ± 116.305
const term -2.26 ± 9.44
linear term 0.2382 ± 4.0974
quad term 1.408 ± 3.239
cube term 0.9749 ± 12.6728
0
10
20
30
40
50
60
70
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2


PhiThetaMassPip
Proj_73
Entries 425
χ² / ndf 8.75 / 13
Norm 54.77 ± 3.78
Mean 0.9329 ± 0.0007
σ 0.01071 ± 0.00053
Pol Amp 363.7 ± 0.7
const term -1.63 ± 0.39
linear term 1.694 ± 0.411
quad term 1.823 ± 0.441
cube term -1.884 ± 0.461
0
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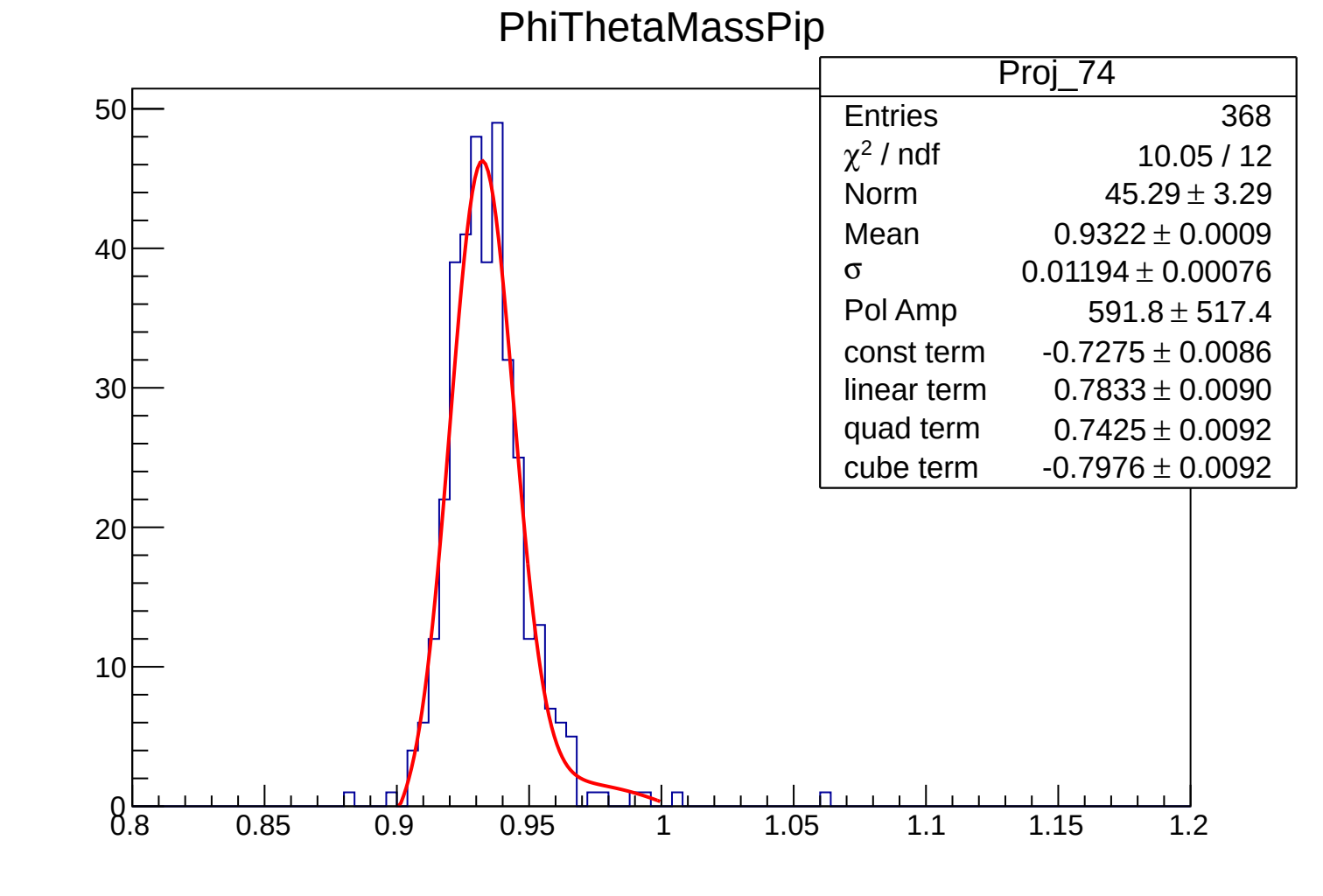
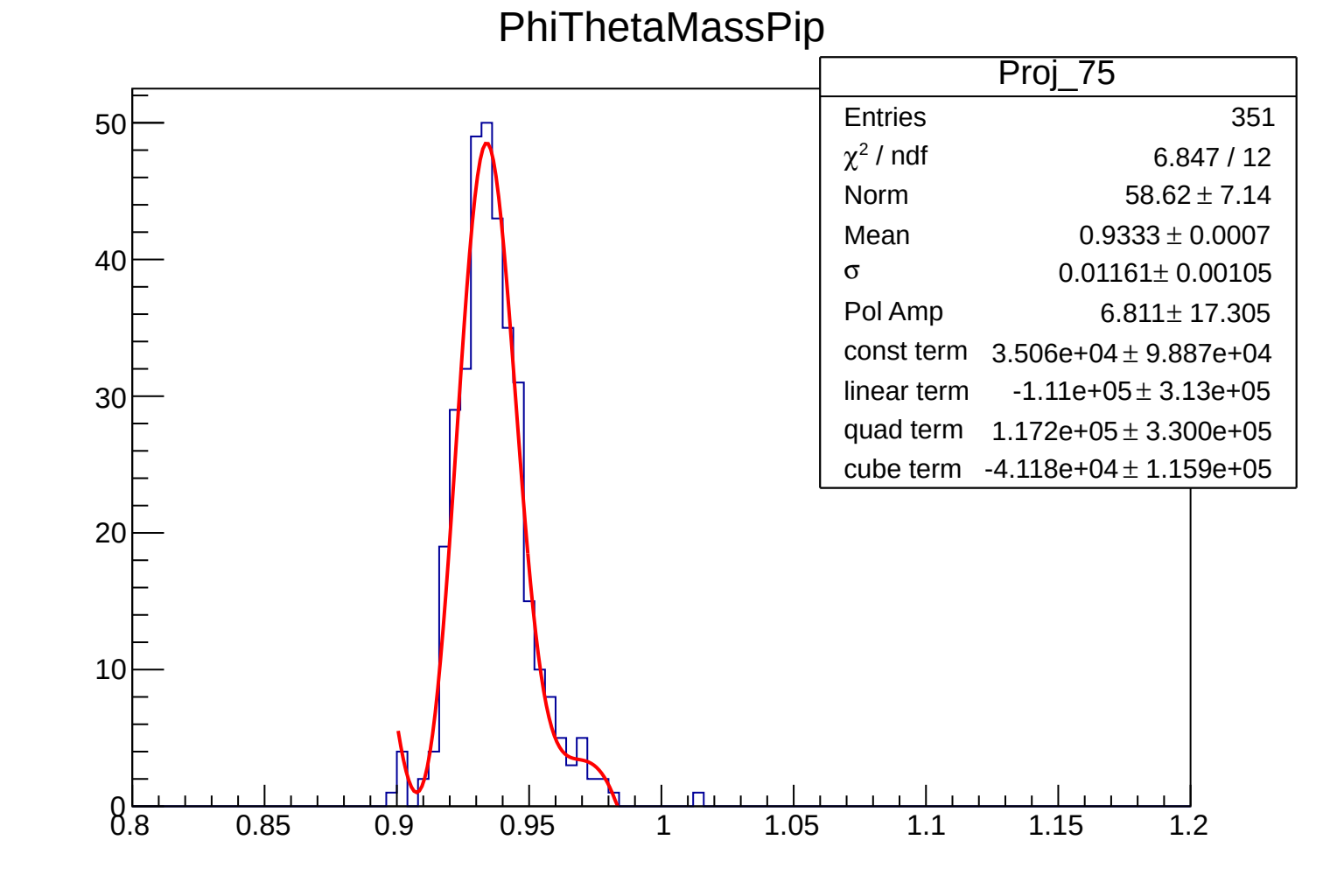
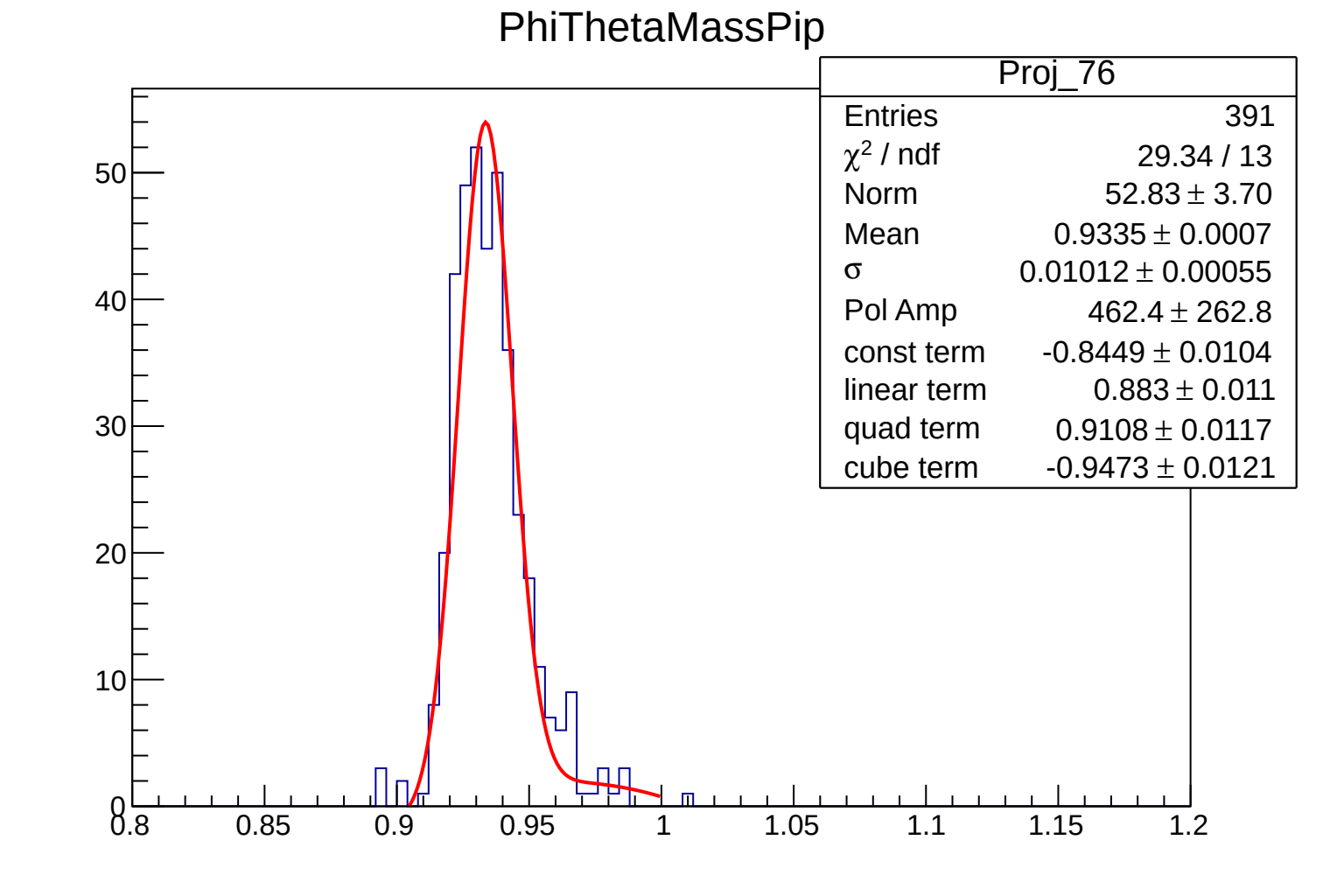
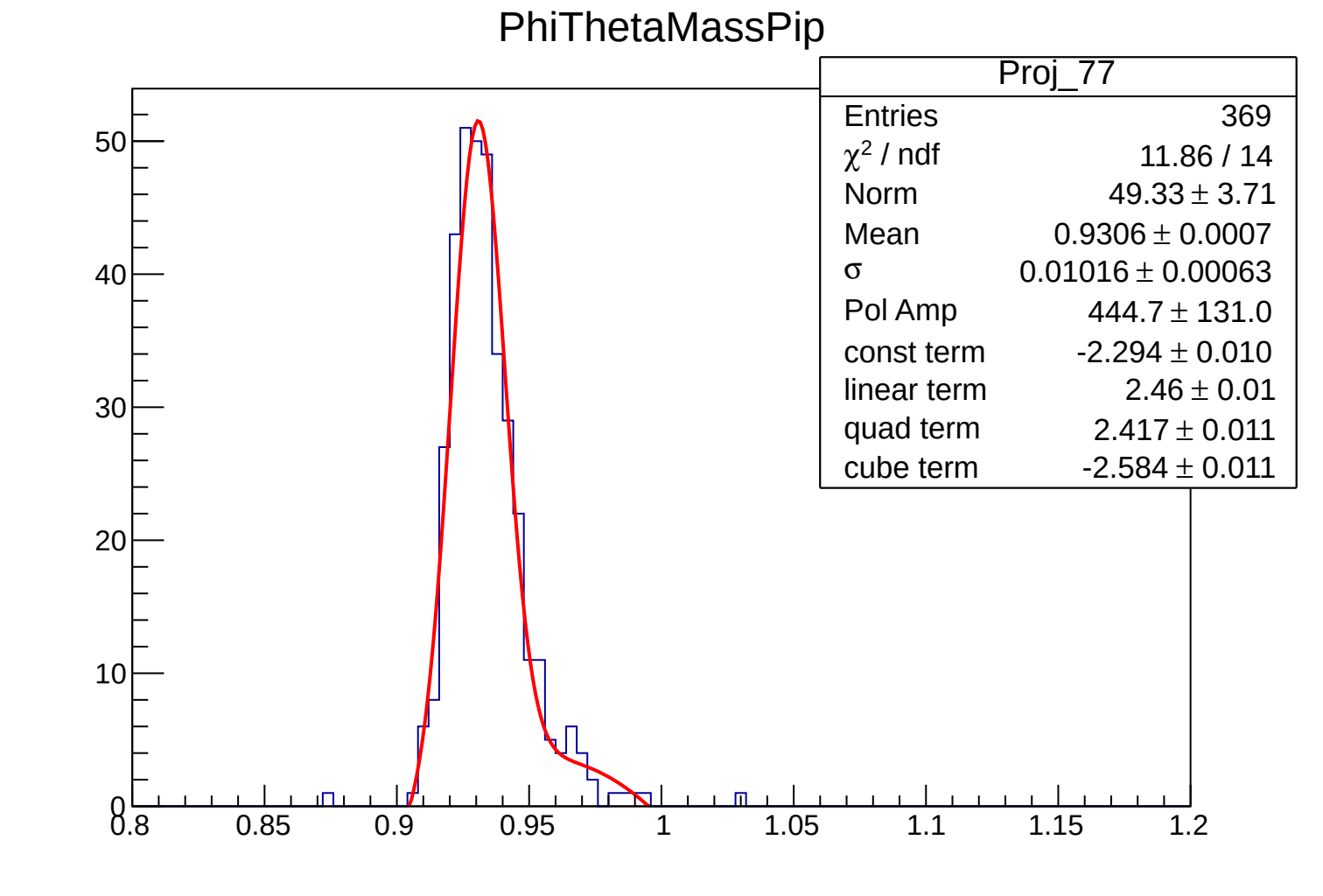
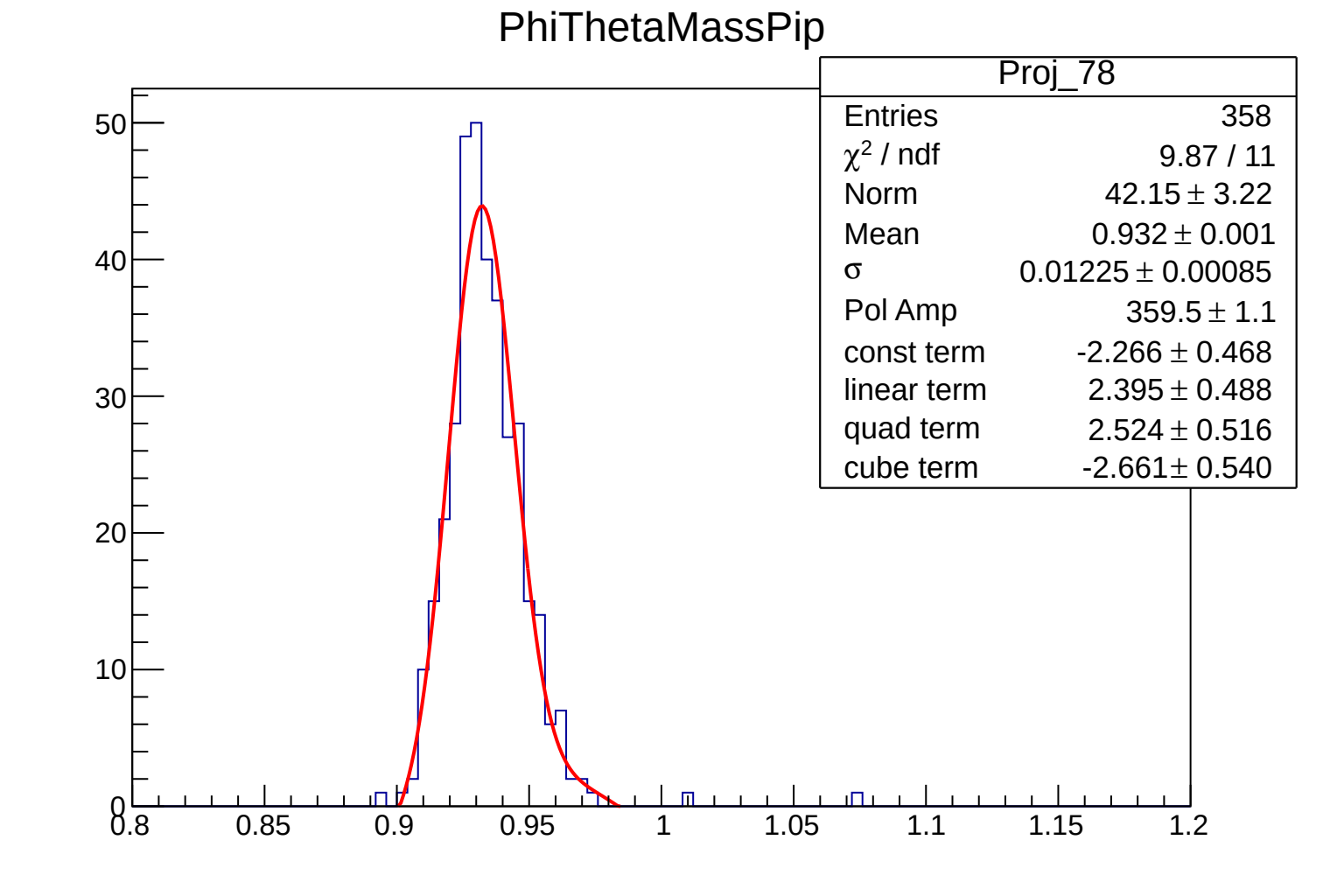
60
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

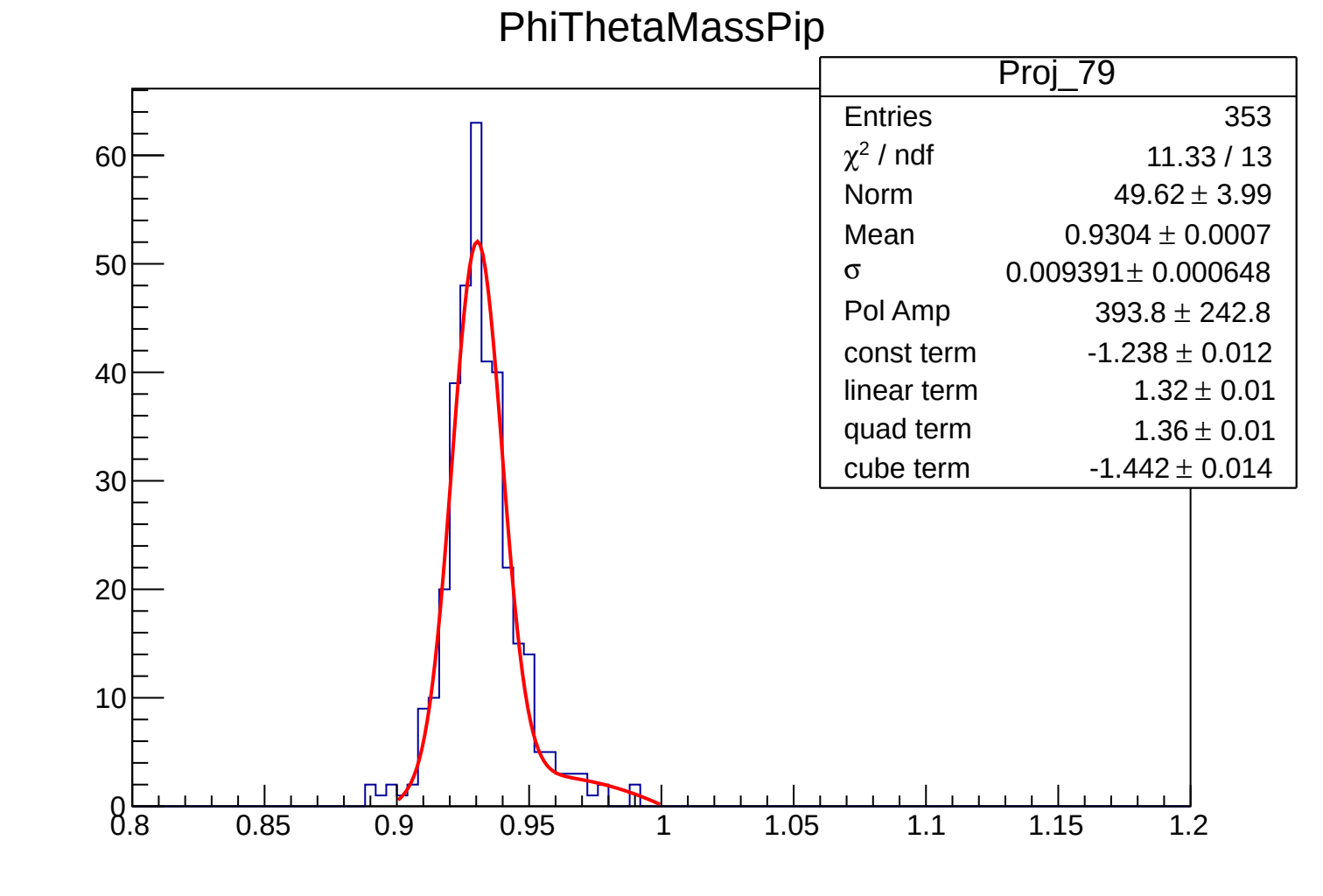

PhiThetaMassPip
Proj_74
Entries 368
χ² / ndf 10.05 / 12
Norm 45.29 ± 3.29
Mean 0.9322 ± 0.0009
σ 0.01194 ± 0.00076
Pol Amp 591.8 ± 517.4
const term -0.7275 ± 0.0086
linear term 0.7833 ± 0.0090
quad term 0.7425 ± 0.0092
cube term -0.7976 ± 0.0092
50
40
30
20
10
0
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

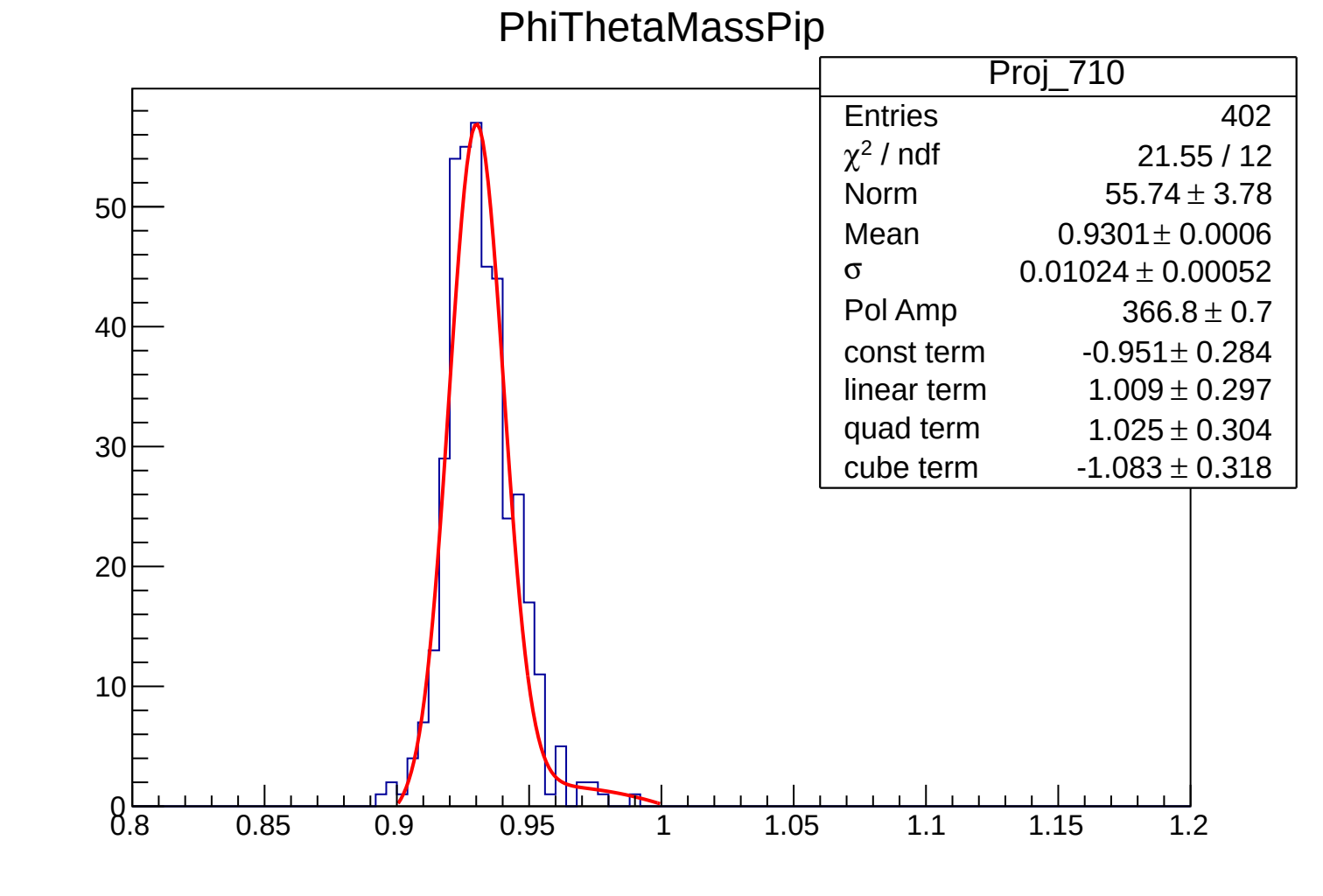

PhiThetaMassPip
Proj_75
Entries 351
χ² / ndf 6.847 / 12
Norm 58.62 ± 7.14
Mean 0.9333 ± 0.0007
σ 0.01161± 0.00105
Pol Amp 6.811± 17.305
const term 3.506e+04 ± 9.887e+04
linear term -1.11e+05 ± 3.13e+05
quad term 1.172e+05 ± 3.300e+05
cube term -4.118e+04 ± 1.159e+05
0
10
20
30
40
50
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

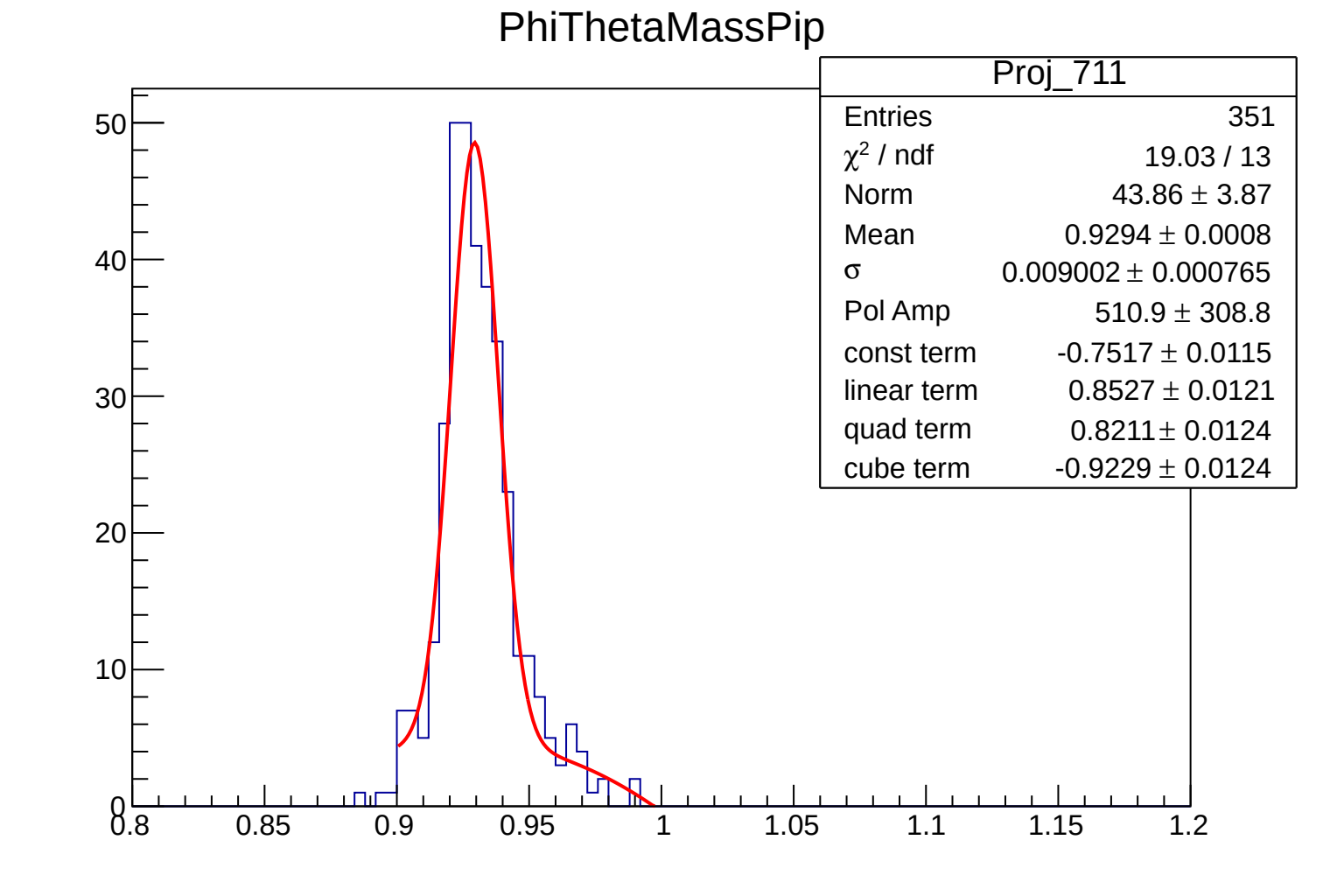

PhiThetaMassPip
Proj_76
Entries 391
χ² / ndf 29.34 / 13
Norm 52.83 ± 3.70
Mean 0.9335 ± 0.0007
σ 0.01012 ± 0.00055
Pol Amp 462.4 ± 262.8
const term -0.8449 ± 0.0104
linear term 0.883 ± 0.011
quad term 0.9108 ± 0.0117
cube term -0.9473 ± 0.0121
0
10
20
30
40
50
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

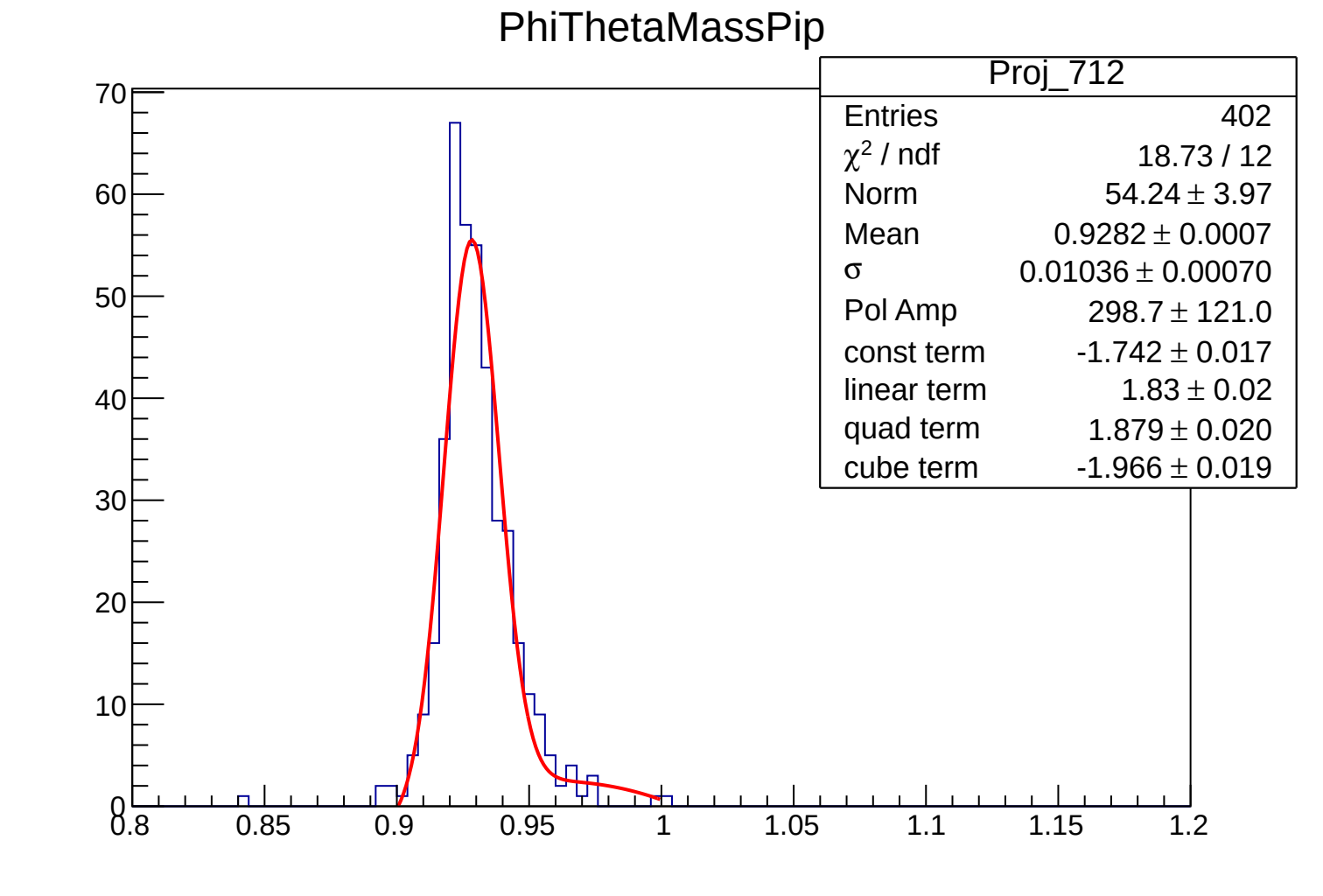

PhiThetaMassPip
Proj_77
Entries 369
χ² / ndf 11.86 / 14
Norm 49.33 ± 3.71
Mean 0.9306 ± 0.0007
σ 0.01016 ± 0.00063
Pol Amp 444.7 ± 131.0
const term -2.294 ± 0.010
linear term 2.46 ± 0.01
quad term 2.417 ± 0.011
cube term -2.584 ± 0.011
0
10
20
30
40
50
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

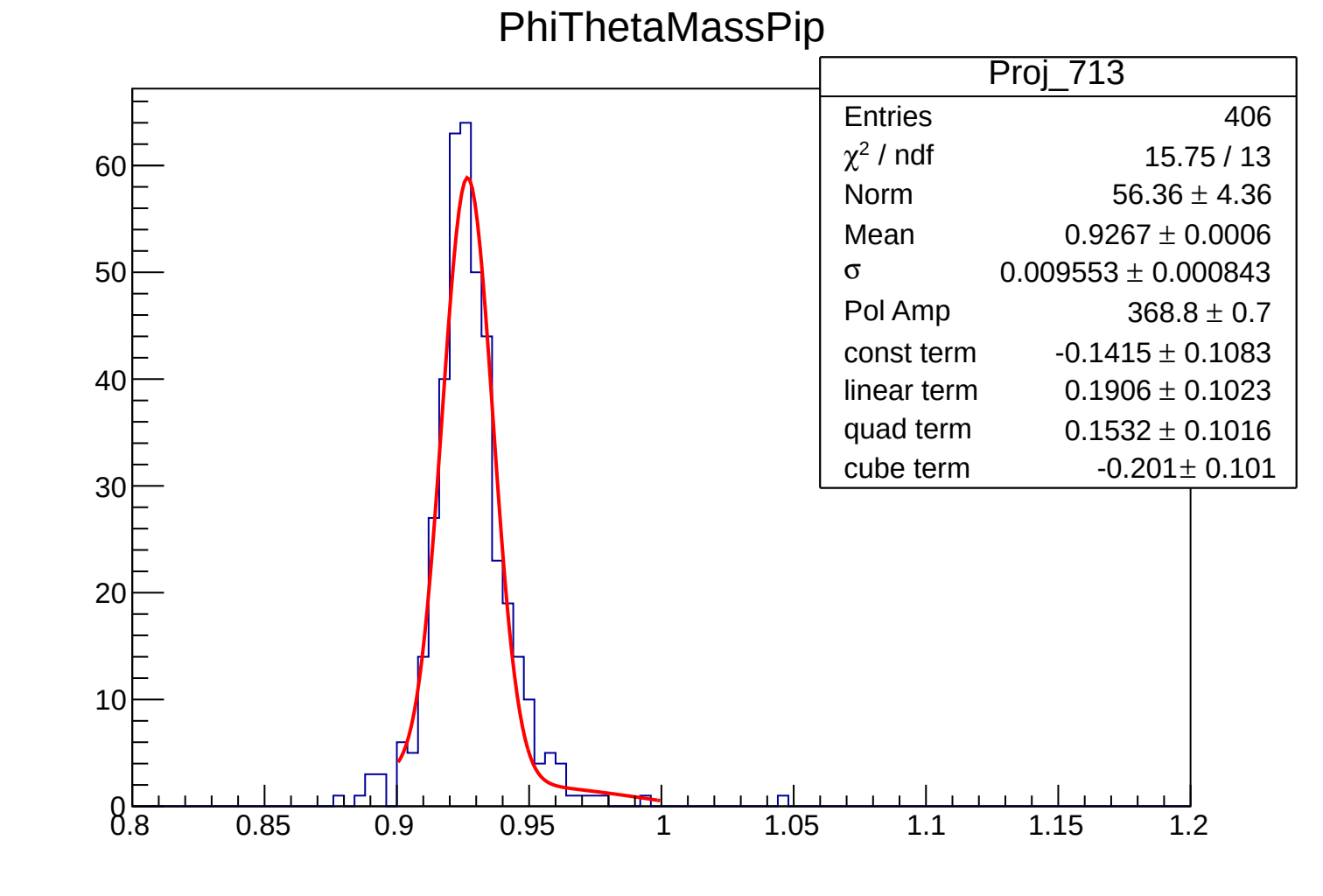

PhiThetaMassPip
Proj_78
Entries 358
χ² / ndf 9.87 / 11
Norm 42.15 ± 3.22
Mean 0.932 ± 0.001
σ 0.01225 ± 0.00085
Pol Amp 359.5 ± 1.1
const term -2.266 ± 0.468
linear term 2.395 ± 0.488
quad term 2.524 ± 0.516
cube term -2.661 ± 0.540
0
10
20
30
40
50
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

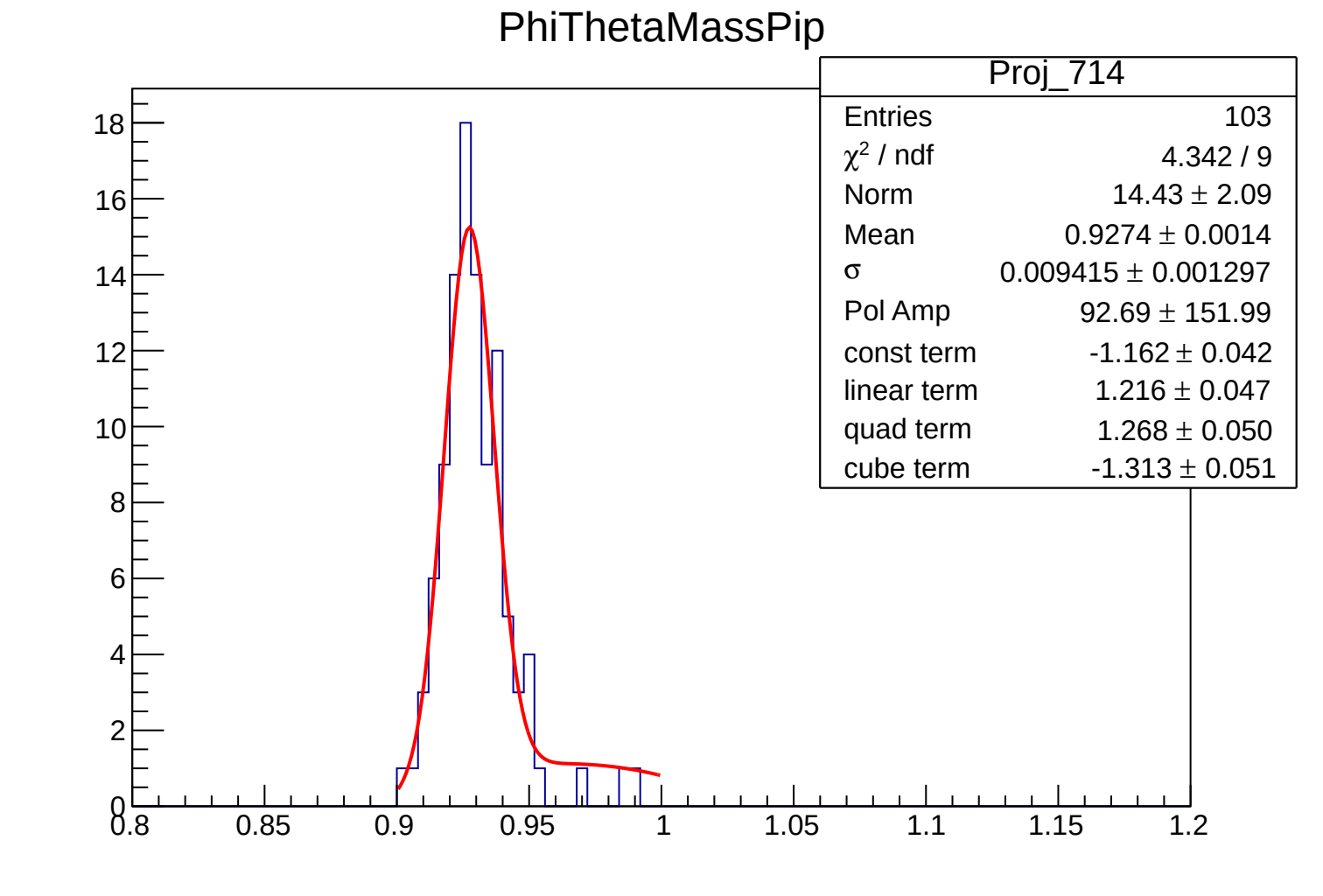

PhiThetaMassPip
Proj_79
Entries 353
χ² / ndf 11.33 / 13
Norm 49.62 ± 3.99
Mean 0.9304 ± 0.0007
σ 0.009391 ± 0.000648
Pol Amp 393.8 ± 242.8
const term -1.238 ± 0.012
linear term 1.32 ± 0.01
quad term 1.36 ± 0.01
cube term -1.442 ± 0.014
0
10
20
30
40
50
60
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

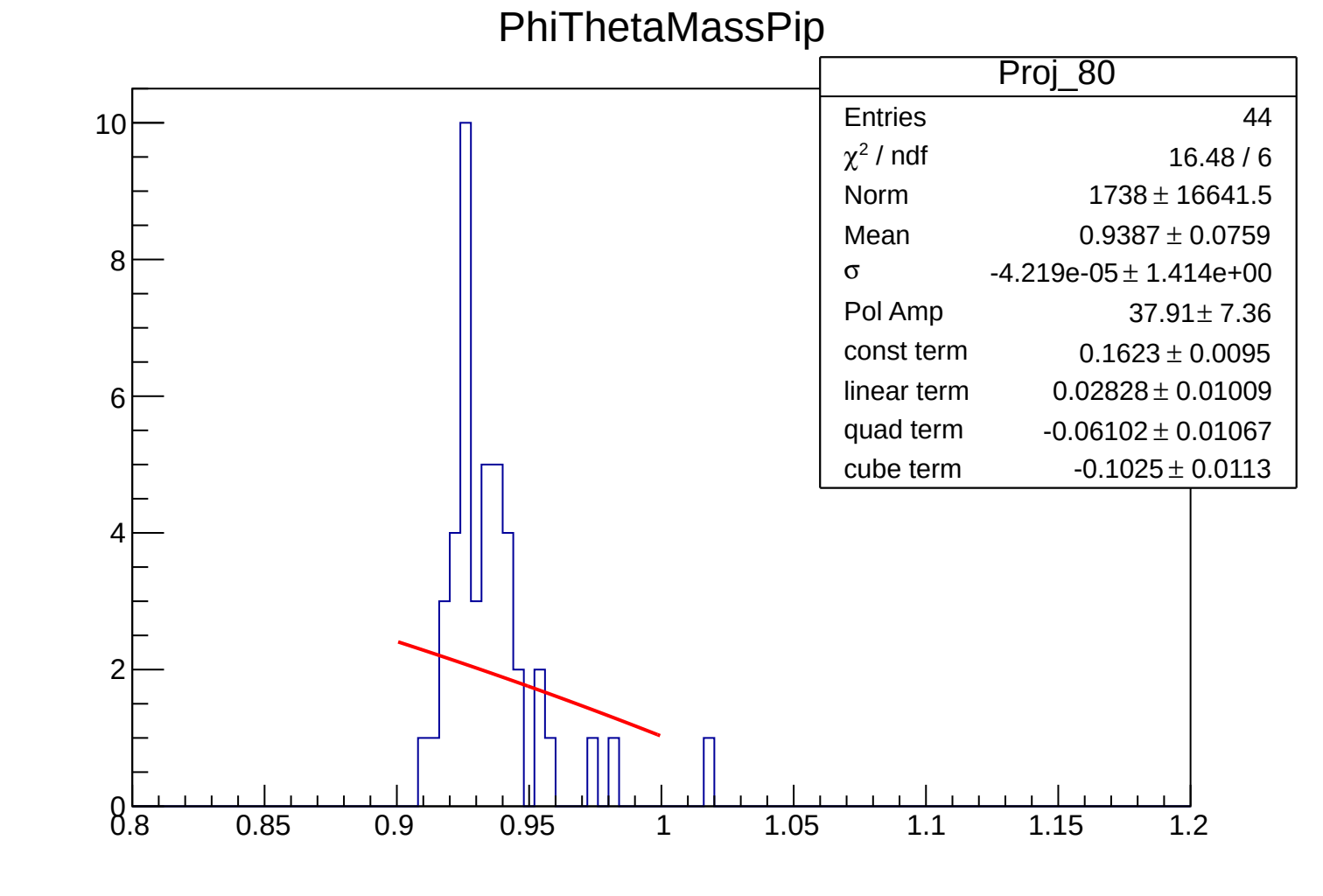

PhiThetaMassPip
Proj_710
Entries 402
χ² / ndf 21.55 / 12
Norm 55.74 ± 3.78
Mean 0.9301 ± 0.0006
σ 0.01024 ± 0.00052
Pol Amp 366.8 ± 0.7
const term -0.951 ± 0.284
linear term 1.009 ± 0.297
quad term 1.025 ± 0.304
cube term -1.083 ± 0.318
0
10
20
30
40
50
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

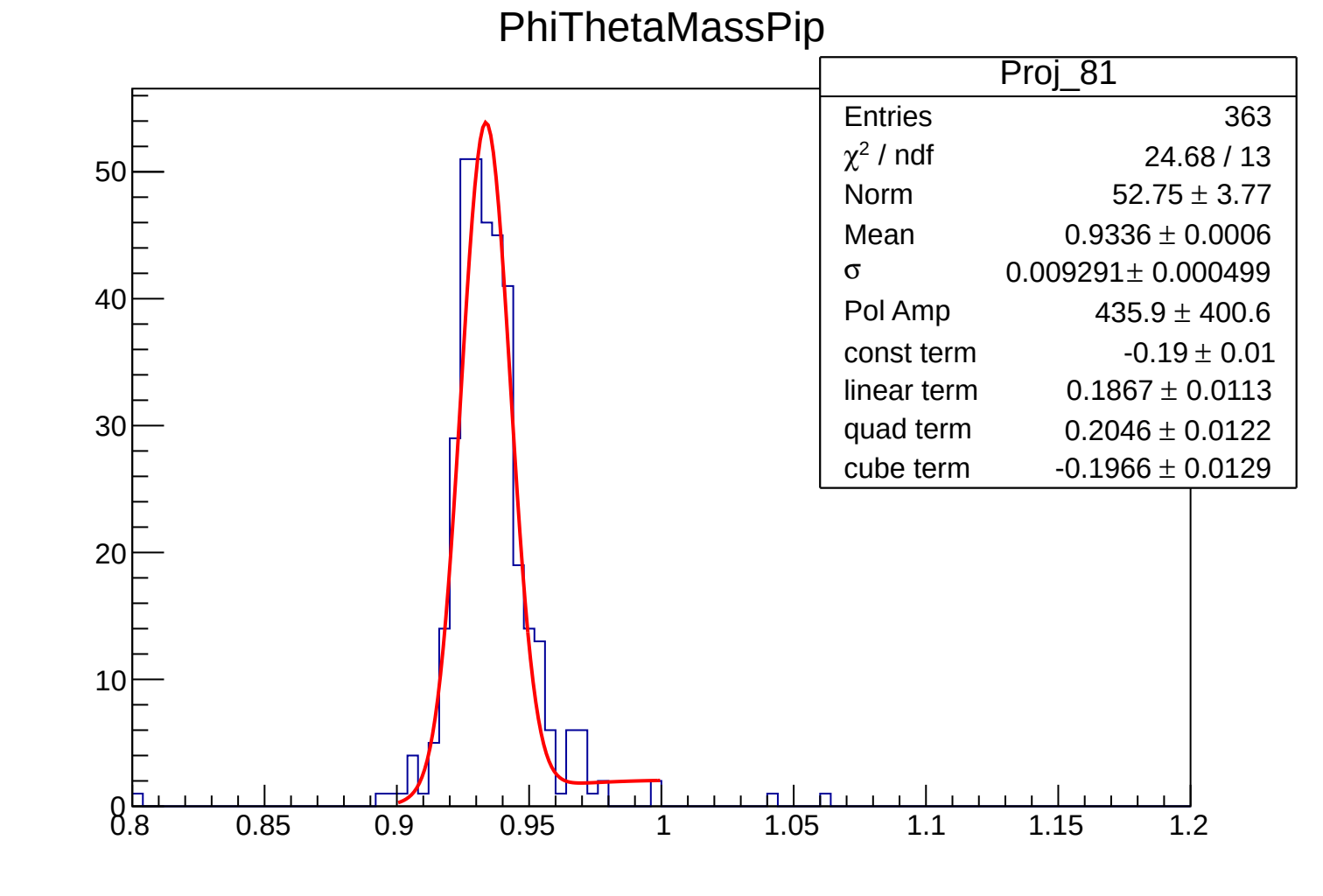

PhiThetaMassPip
Proj_711
Entries 351
χ² / ndf 19.03 / 13
Norm 43.86 ± 3.87
Mean 0.9294 ± 0.0008
σ 0.009002 ± 0.000765
Pol Amp 510.9 ± 308.8
const term -0.7517 ± 0.0115
linear term 0.8527 ± 0.0121
quad term 0.8211 ± 0.0124
cube term -0.9229 ± 0.0124
0
10
20
30
40
50
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

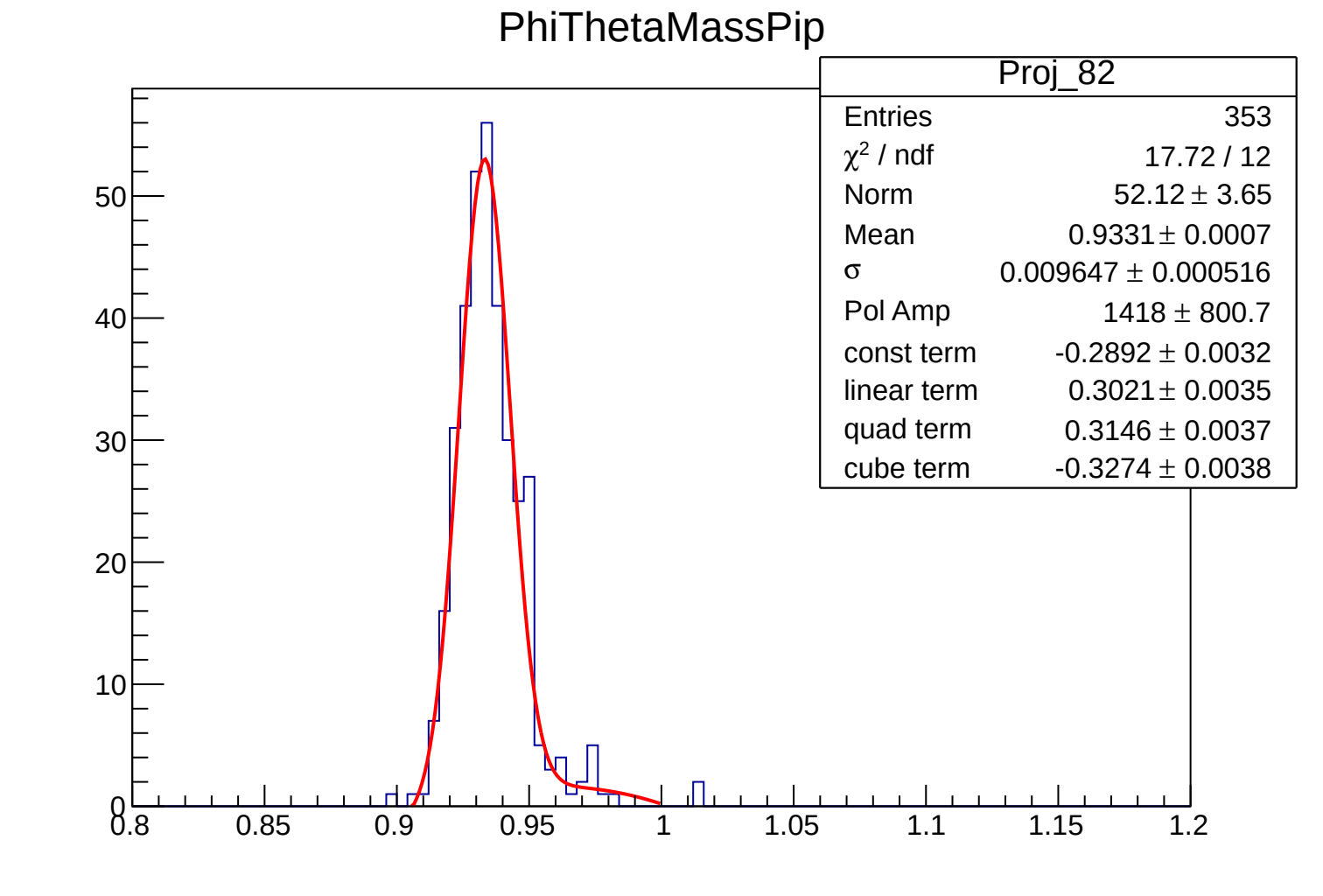

PhiThetaMassPip
Proj_712
Entries 402
χ² / ndf 18.73 / 12
Norm 54.24 ± 3.97
Mean 0.9282 ± 0.0007
σ 0.01036 ± 0.00070
Pol Amp 298.7 ± 121.0
const term -1.742 ± 0.017
linear term 1.83 ± 0.02
quad term 1.879 ± 0.020
cube term -1.966 ± 0.019
70
60
50
40
30
20
10
0
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

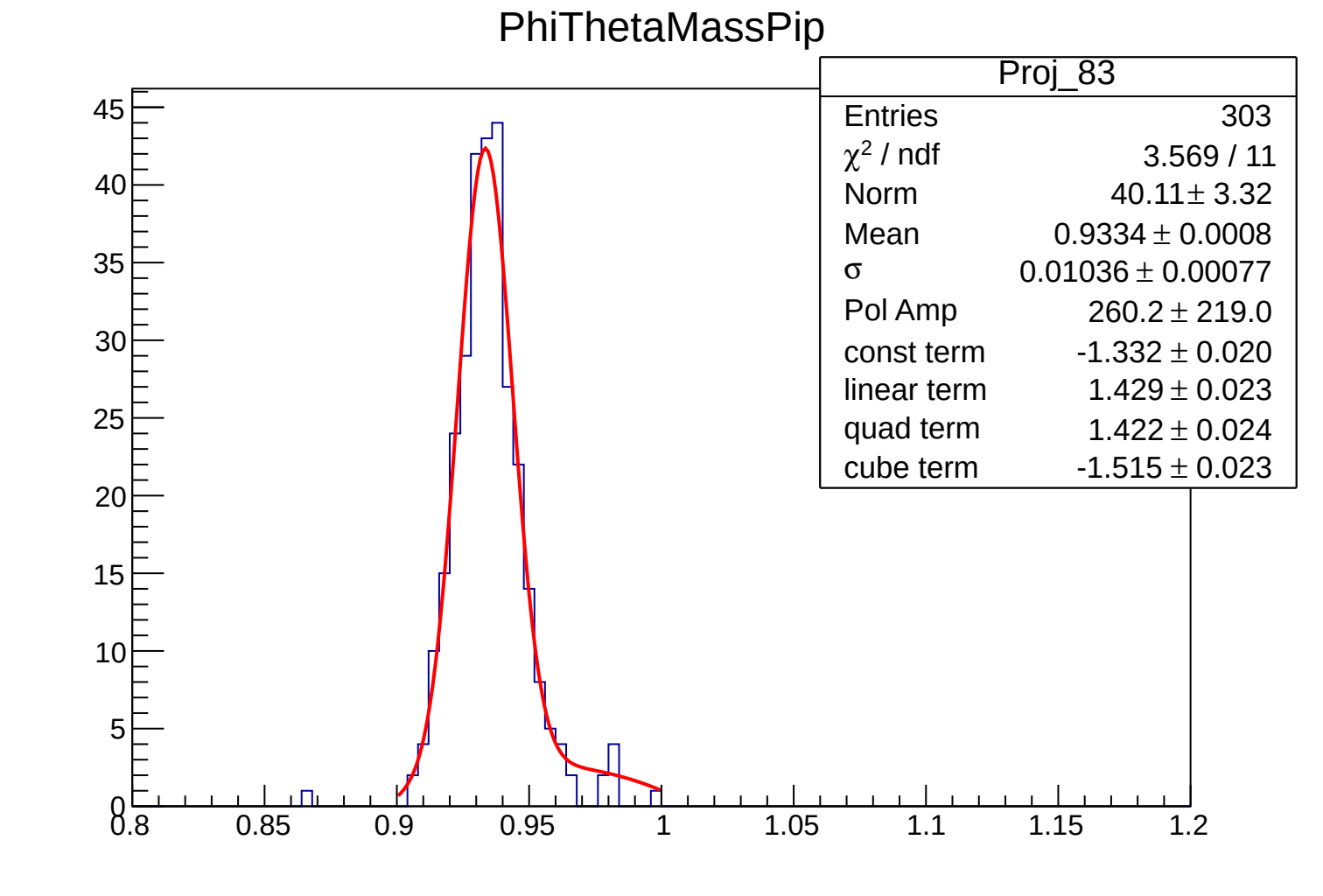

PhiThetaMassPip
Proj_713
Entries 406
χ² / ndf 15.75 / 13
Norm 56.36 ± 4.36
Mean 0.9267 ± 0.0006
σ 0.009553 ± 0.000843
Pol Amp 368.8 ± 0.7
const term -0.1415 ± 0.1083
linear term 0.1906 ± 0.1023
quad term 0.1532 ± 0.1016
cube term -0.201± 0.101
0
10
20
30
40
50
60
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

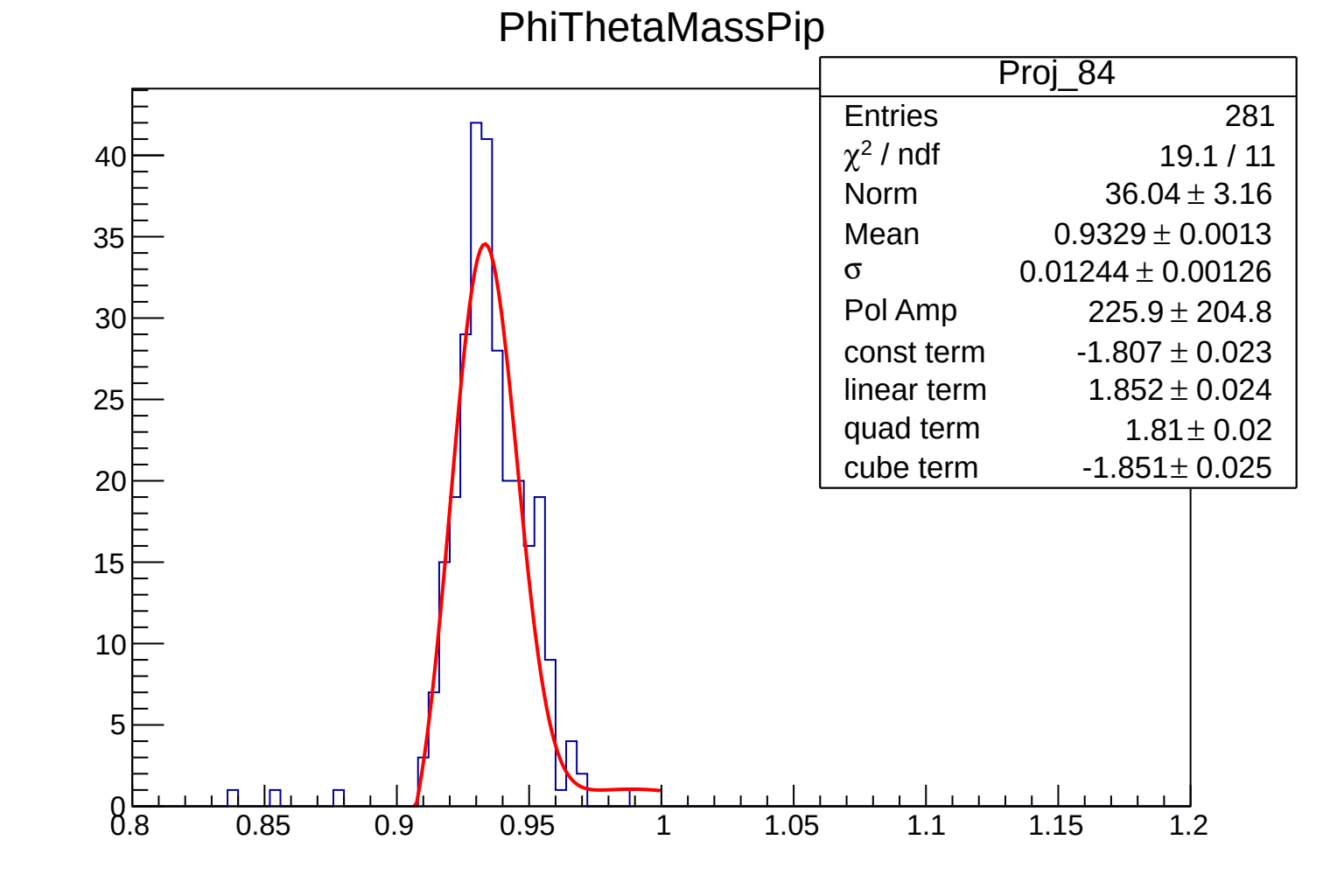

PhiThetaMassPip
Proj_714
Entries 103
χ² / ndf 4.342 / 9
Norm 14.43 ± 2.09
Mean 0.9274 ± 0.0014
σ 0.009415 ± 0.001297
Pol Amp 92.69 ± 151.99
const term -1.162 ± 0.042
linear term 1.216 ± 0.047
quad term 1.268 ± 0.050
cube term -1.313 ± 0.051
0 2 4 6 8 10 12 14 16 18
0.8 0.85 0.9 0.95 1 1.05 1.1 1.15 1.2

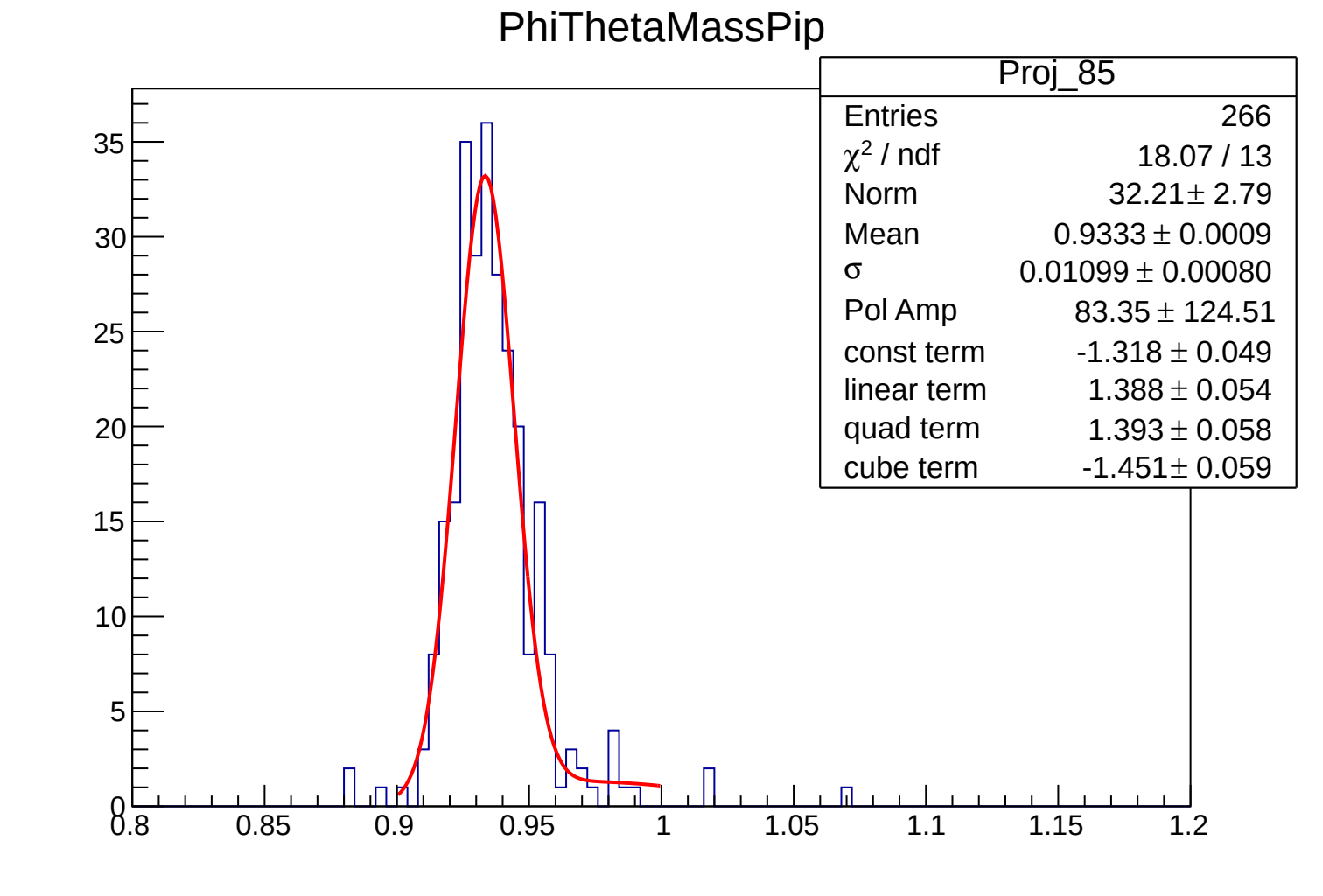

PhiThetaMassPip
Proj_80
Entries 44
χ² / ndf 16.48 / 6
Norm 1738 ± 16641.5
Mean 0.9387 ± 0.0759
σ -4.219e-05 ± 1.414e+00
Pol Amp 37.91 ± 7.36
const term 0.1623 ± 0.0095
linear term 0.02828 ± 0.01009
quad term -0.06102 ± 0.01067
cube term -0.1025 ± 0.0113
0
2
4
6
8
10
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

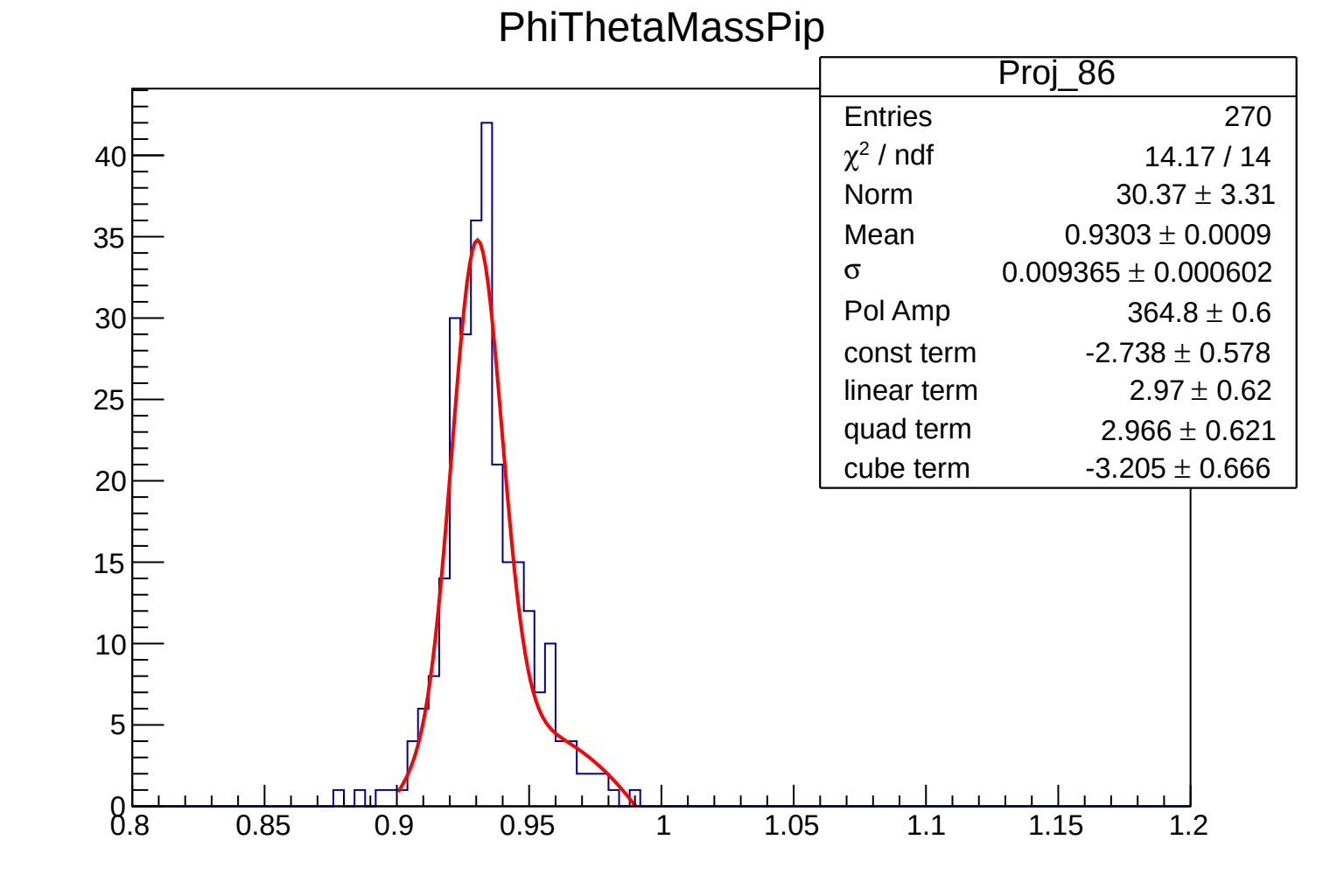

PhiThetaMassPip
Proj_81
Entries 363
χ² / ndf 24.68 / 13
Norm 52.75 ± 3.77
Mean 0.9336 ± 0.0006
σ 0.009291± 0.000499
Pol Amp 435.9 ± 400.6
const term -0.19 ± 0.01
linear term 0.1867 ± 0.0113
quad term 0.2046 ± 0.0122
cube term -0.1966 ± 0.0129
0
10
20
30
40
50
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

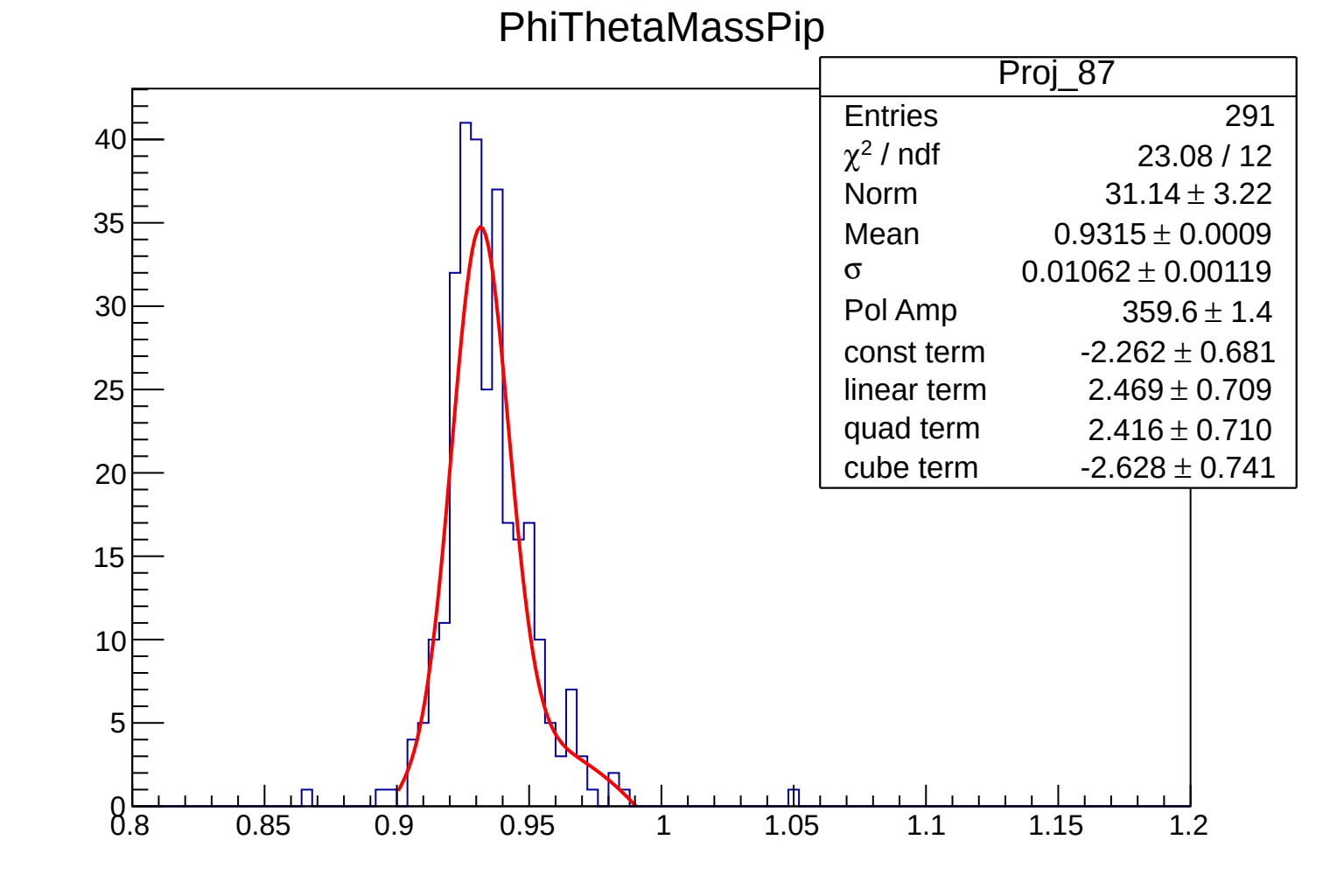

PhiThetaMassPip
Proj_82
Entries 353
χ² / ndf 17.72 / 12
Norm 52.12 ± 3.65
Mean 0.9331 ± 0.0007
σ 0.009647 ± 0.000516
Pol Amp 1418 ± 800.7
const term -0.2892 ± 0.0032
linear term 0.3021 ± 0.0035
quad term 0.3146 ± 0.0037
cube term -0.3274 ± 0.0038
0
10
20
30
40
50
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

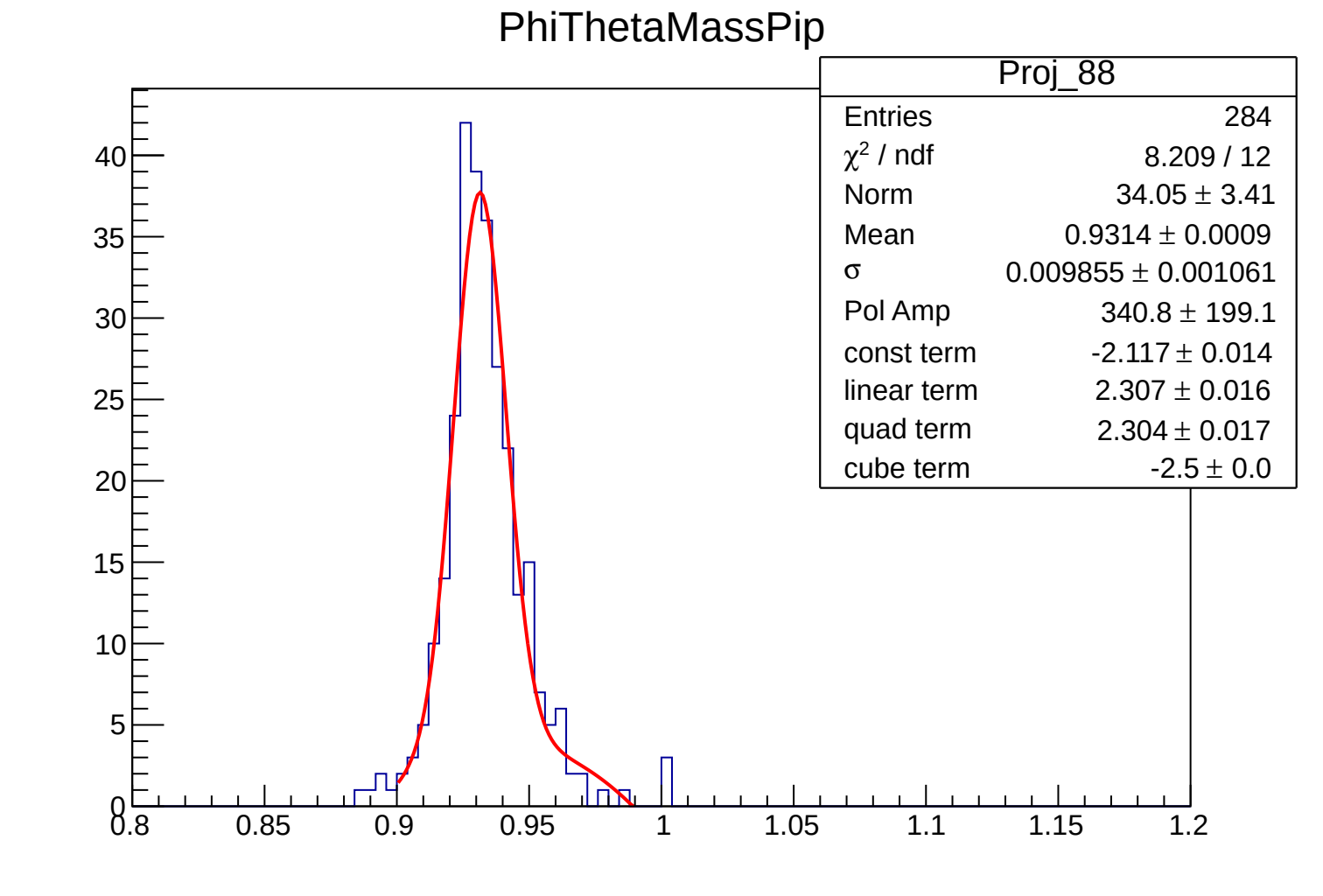

PhiThetaMassPip
Proj_83
Entries 303
χ² / ndf 3.569 / 11
Norm 40.11 ± 3.32
Mean 0.9334 ± 0.0008
σ 0.01036 ± 0.00077
Pol Amp 260.2 ± 219.0
const term -1.332 ± 0.020
linear term 1.429 ± 0.023
quad term 1.422 ± 0.024
cube term -1.515 ± 0.023
0 5 10 15 20 25 30 35 40 45
0.8 0.85 0.9 0.95 1 1.05 1.1 1.15 1.2

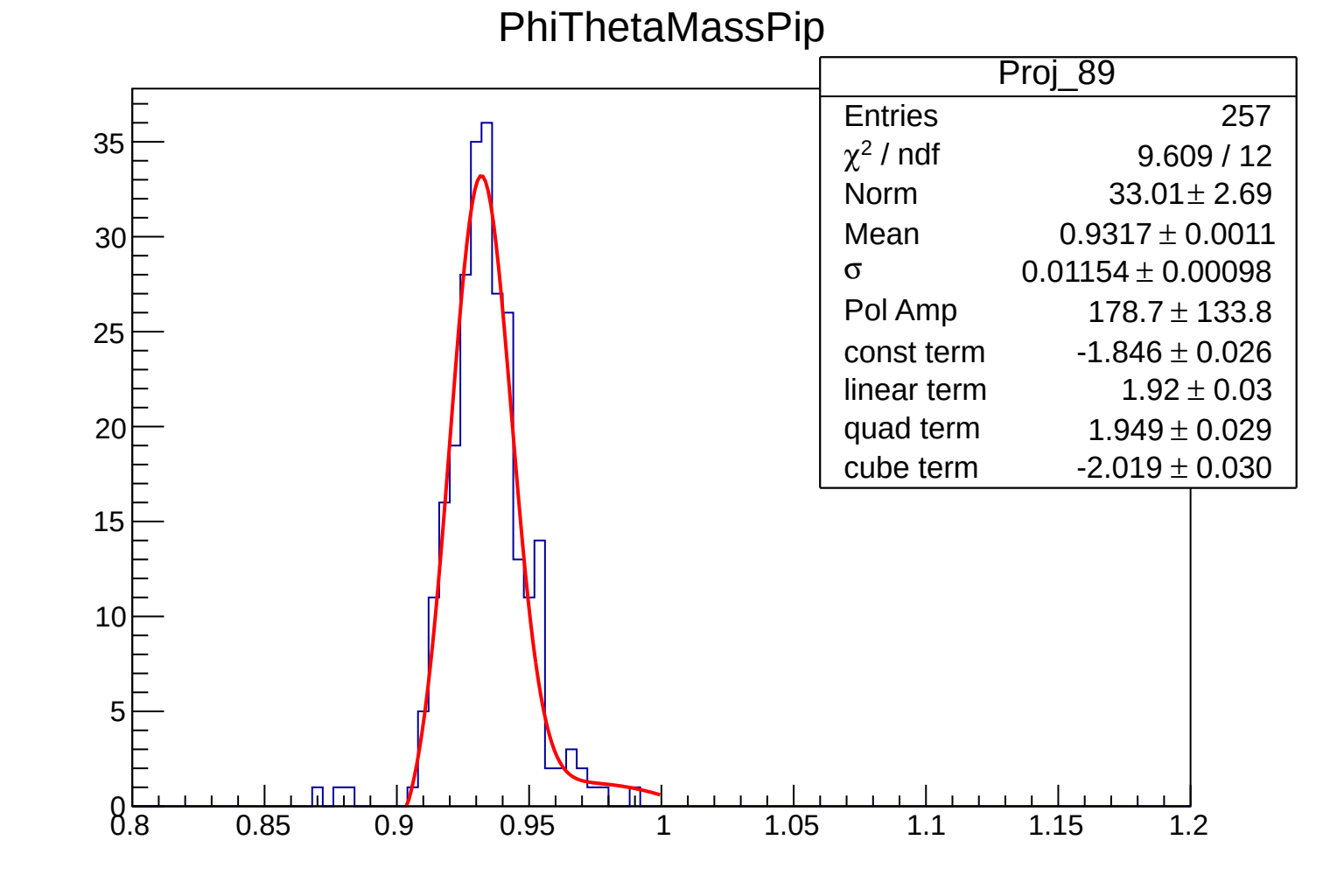

PhiThetaMassPip
Proj_84
Entries 281
χ² / ndf 19.1 / 11
Norm 36.04 ± 3.16
Mean 0.9329 ± 0.0013
σ 0.01244 ± 0.00126
Pol Amp 225.9 ± 204.8
const term -1.807 ± 0.023
linear term 1.852 ± 0.024
quad term 1.81 ± 0.02
cube term -1.851 ± 0.025
0
5
10
15
20
25
30
35
40
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

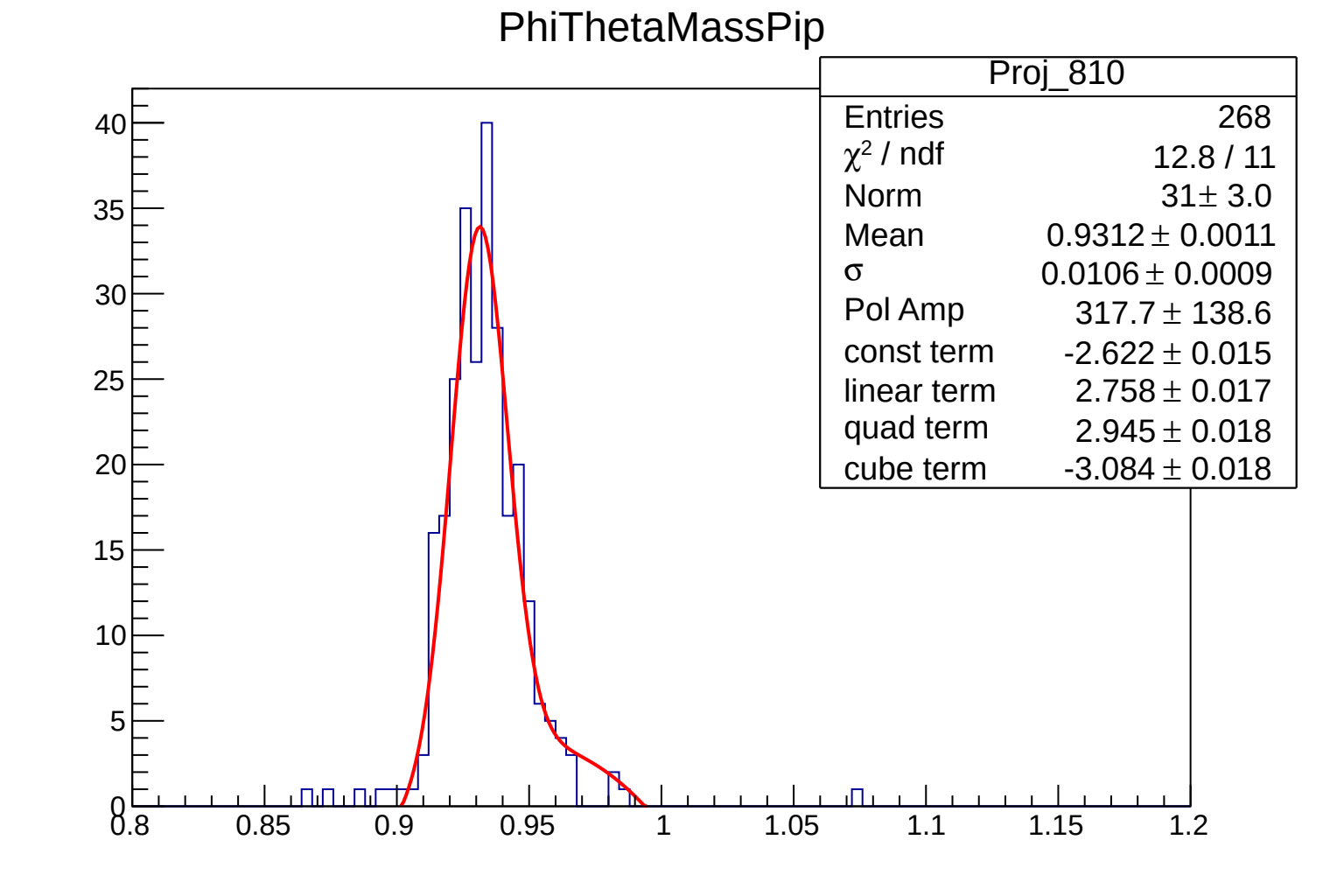

PhiThetaMassPip
Proj_85
Entries 266
χ² / ndf 18.07 / 13
Norm 32.21 ± 2.79
Mean 0.9333 ± 0.0009
σ 0.01099 ± 0.00080
Pol Amp 83.35 ± 124.51
const term -1.318 ± 0.049
linear term 1.388 ± 0.054
quad term 1.393 ± 0.058
cube term -1.451 ± 0.059
0
5
10
15
20
25
30
35
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

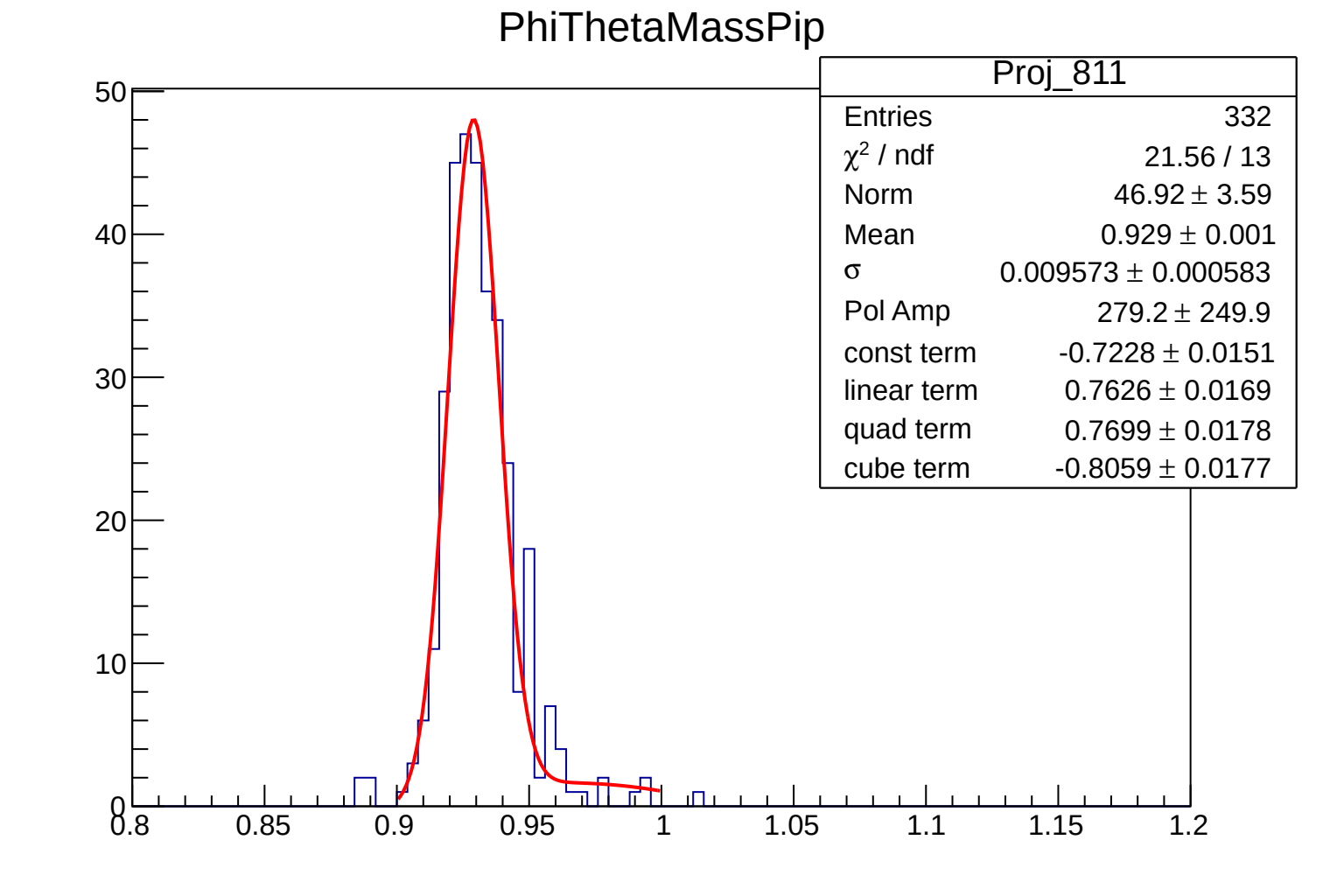

PhiThetaMassPip
Proj_86
Entries 270
χ² / ndf 14.17 / 14
Norm 30.37 ± 3.31
Mean 0.9303 ± 0.0009
σ 0.009365 ± 0.000602
Pol Amp 364.8 ± 0.6
const term -2.738 ± 0.578
linear term 2.97 ± 0.62
quad term 2.966 ± 0.621
cube term -3.205 ± 0.666
0
5
10
15
20
25
30
35
40
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2


PhiThetaMassPip
Proj_87
Entries 291
χ² / ndf 23.08 / 12
Norm 31.14 ± 3.22
Mean 0.9315 ± 0.0009
σ 0.01062 ± 0.00119
Pol Amp 359.6 ± 1.4
const term -2.262 ± 0.681
linear term 2.469 ± 0.709
quad term 2.416 ± 0.710
cube term -2.628 ± 0.741
0
5
10
15
20
25
30
35
40
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2


PhiThetaMassPip
Proj_88
Entries 284
χ² / ndf 8.209 / 12
Norm 34.05 ± 3.41
Mean 0.9314 ± 0.0009
σ 0.009855 ± 0.001061
Pol Amp 340.8 ± 199.1
const term -2.117 ± 0.014
linear term 2.307 ± 0.016
quad term 2.304 ± 0.017
cube term -2.5 ± 0.0
0
5
10
15
20
25
30
35
40
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2


PhiThetaMassPip
Proj_89
Entries 257
χ² / ndf 9.609 / 12
Norm 33.01 ± 2.69
Mean 0.9317 ± 0.0011
σ 0.01154 ± 0.00098
Pol Amp 178.7 ± 133.8
const term -1.846 ± 0.026
linear term 1.92 ± 0.03
quad term 1.949 ± 0.029
cube term -2.019 ± 0.030
0
5
10
15
20
25
30
35
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2


PhiThetaMassPip
Proj_810
Entries 268
χ² / ndf 12.8 / 11
Norm 31 ± 3.0
Mean 0.9312 ± 0.0011
σ 0.0106 ± 0.0009
Pol Amp 317.7 ± 138.6
const term -2.622 ± 0.015
linear term 2.758 ± 0.017
quad term 2.945 ± 0.018
cube term -3.084 ± 0.018
0
5
10
15
20
25
30
35
40
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2


PhiThetaMassPip
Proj_811
Entries 332
χ² / ndf 21.56 / 13
Norm 46.92 ± 3.59
Mean 0.929 ± 0.001
σ 0.009573 ± 0.000583
Pol Amp 279.2 ± 249.9
const term -0.7228 ± 0.0151
linear term 0.7626 ± 0.0169
quad term 0.7699 ± 0.0178
cube term -0.8059 ± 0.0177
50
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0.8
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0.9
0.95
1
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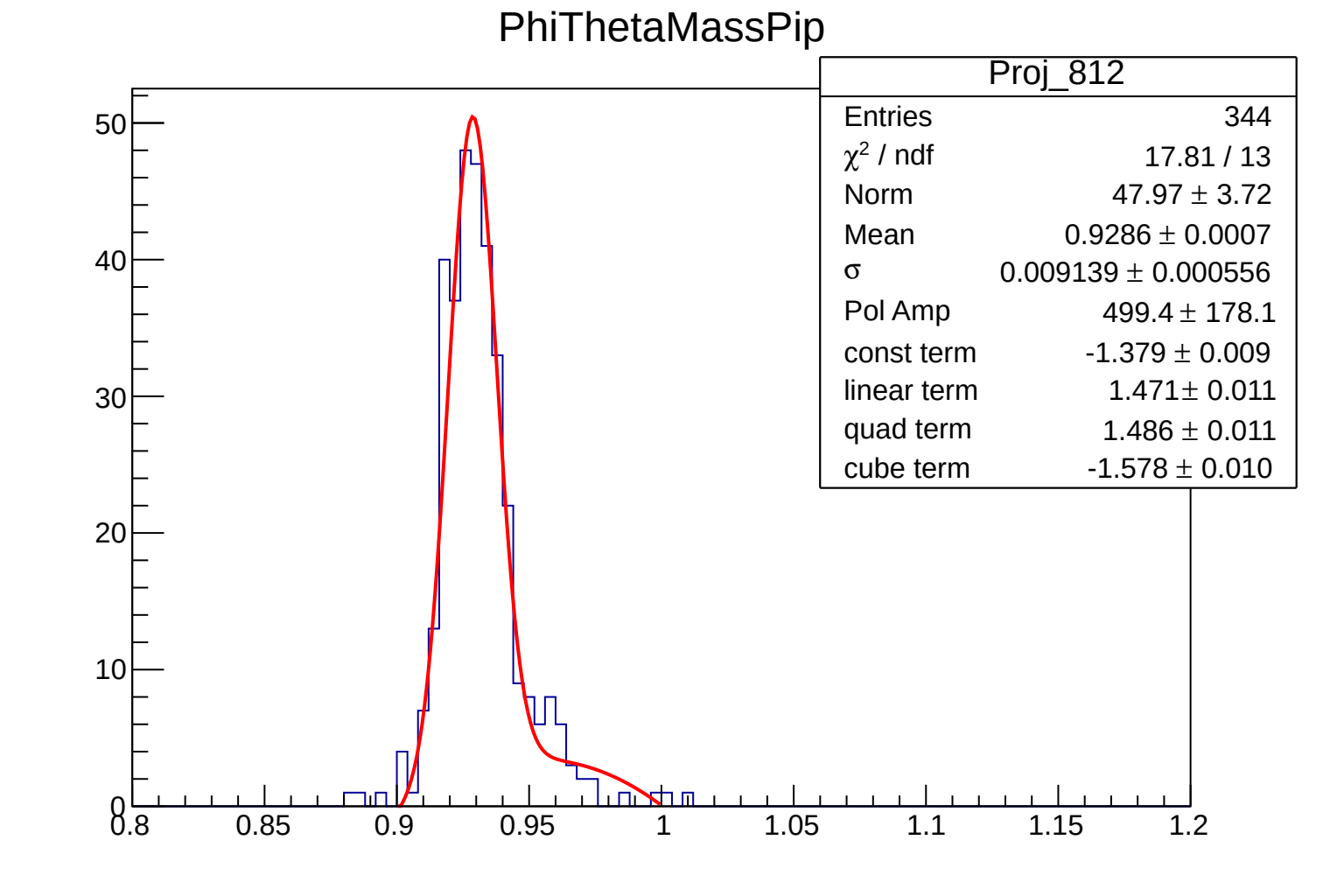
1.1
1.15
1.2


PhiThetaMassPip
Proj_812
Entries 344
χ² / ndf 17.81 / 13
Norm 47.97 ± 3.72
Mean 0.9286 ± 0.0007
σ 0.009139 ± 0.000556
Pol Amp 499.4 ± 178.1
const term -1.379 ± 0.009
linear term 1.471± 0.011
quad term 1.486 ± 0.011
cube term -1.578 ± 0.010
50
40
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10
0
0.8
0.85
0.9
0.95
1
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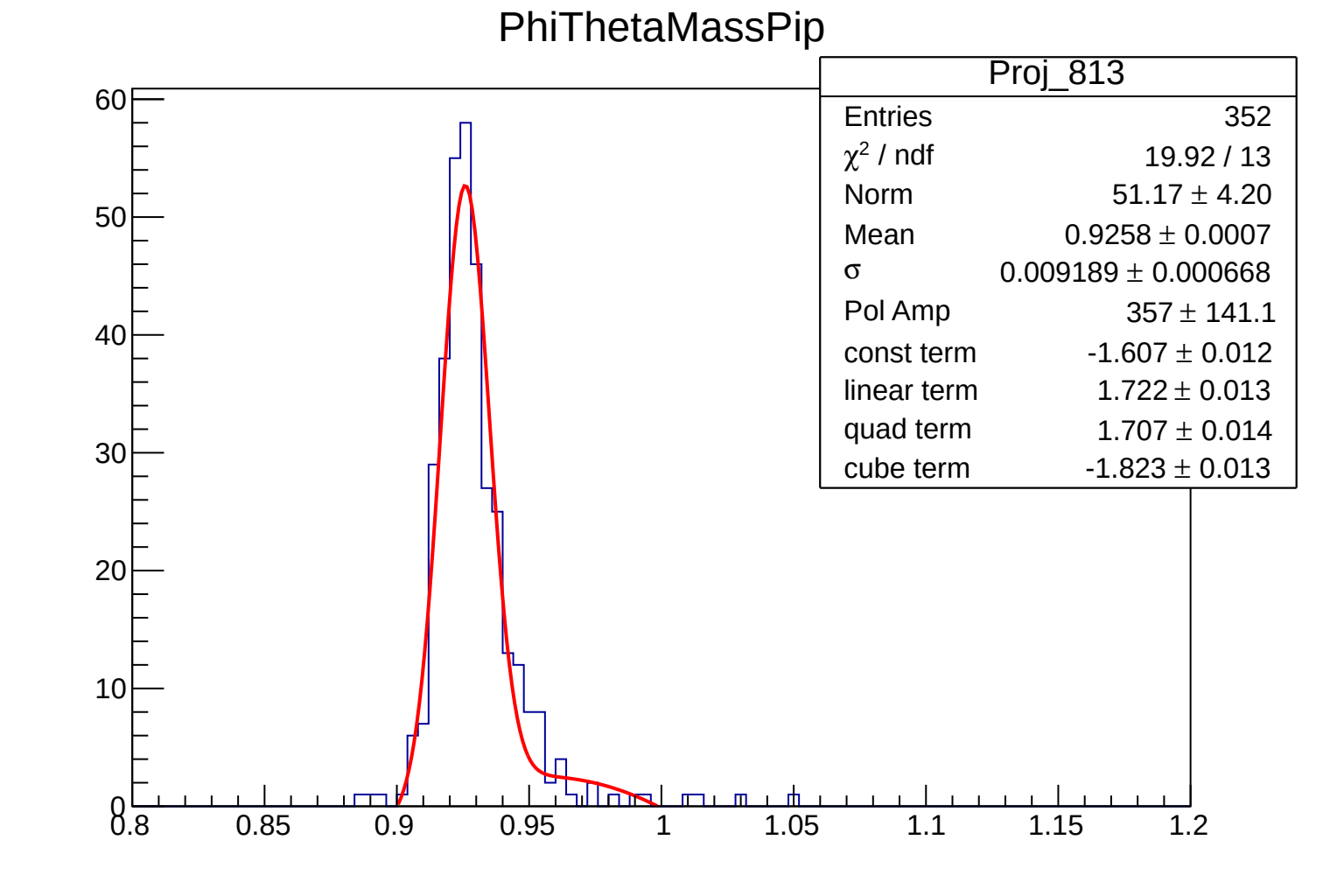
1.1
1.15
1.2


PhiThetaMassPip
Proj_813
Entries 352
χ² / ndf 19.92 / 13
Norm 51.17 ± 4.20
Mean 0.9258 ± 0.0007
σ 0.009189 ± 0.000668
Pol Amp 357 ± 141.1
const term -1.607 ± 0.012
linear term 1.722 ± 0.013
quad term 1.707 ± 0.014
cube term -1.823 ± 0.013
60
50
40
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10
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0.8
0.85
0.9
0.95
1
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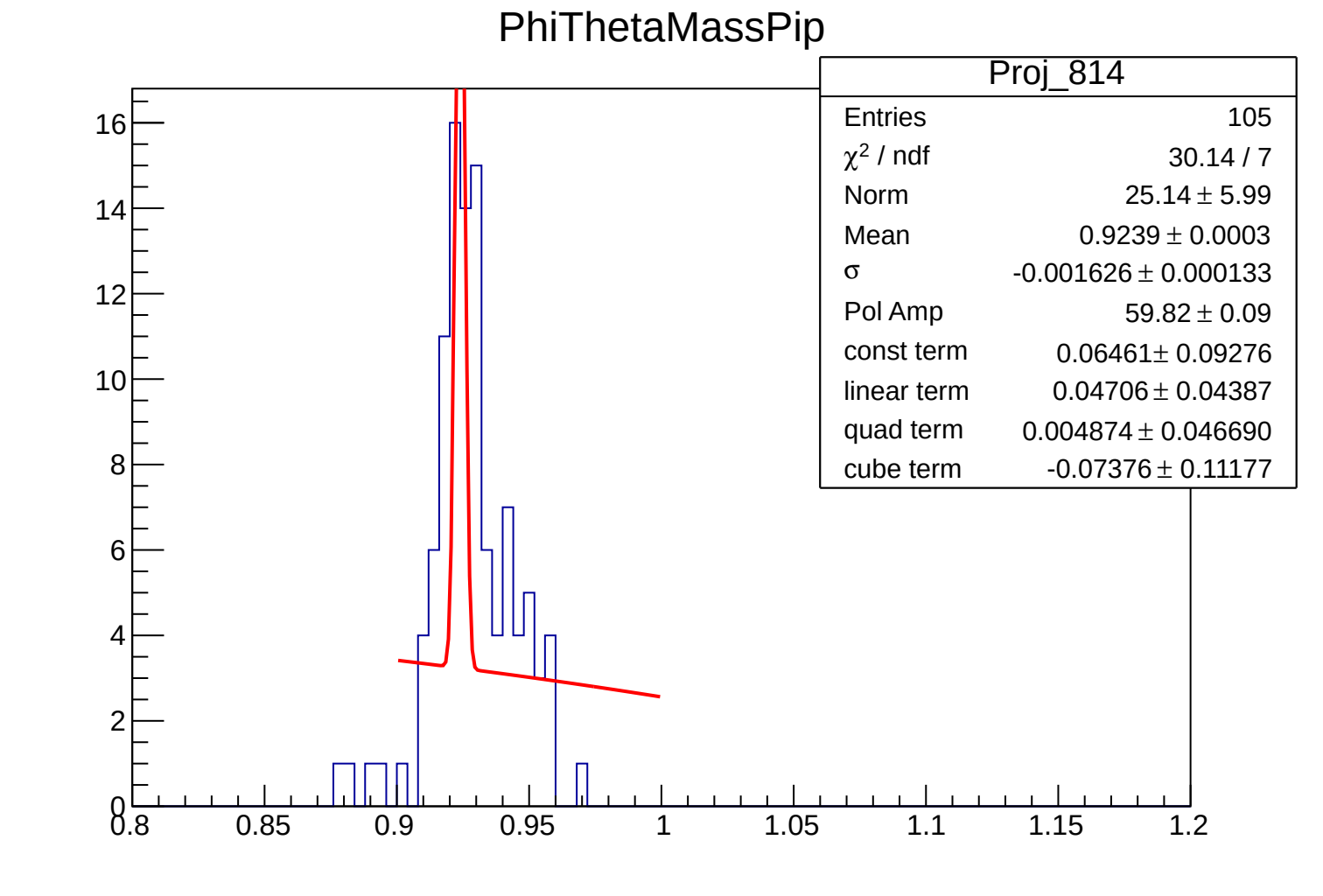
1.1
1.15
1.2


PhiThetaMassPip
Proj_814
Entries 105
χ² / ndf 30.14 / 7
Norm 25.14 ± 5.99
Mean 0.9239 ± 0.0003
σ -0.001626 ± 0.000133
Pol Amp 59.82 ± 0.09
const term 0.06461 ± 0.09276
linear term 0.04706 ± 0.04387
quad term 0.004874 ± 0.046690
cube term -0.07376 ± 0.11177
0
2
4
6
8
10
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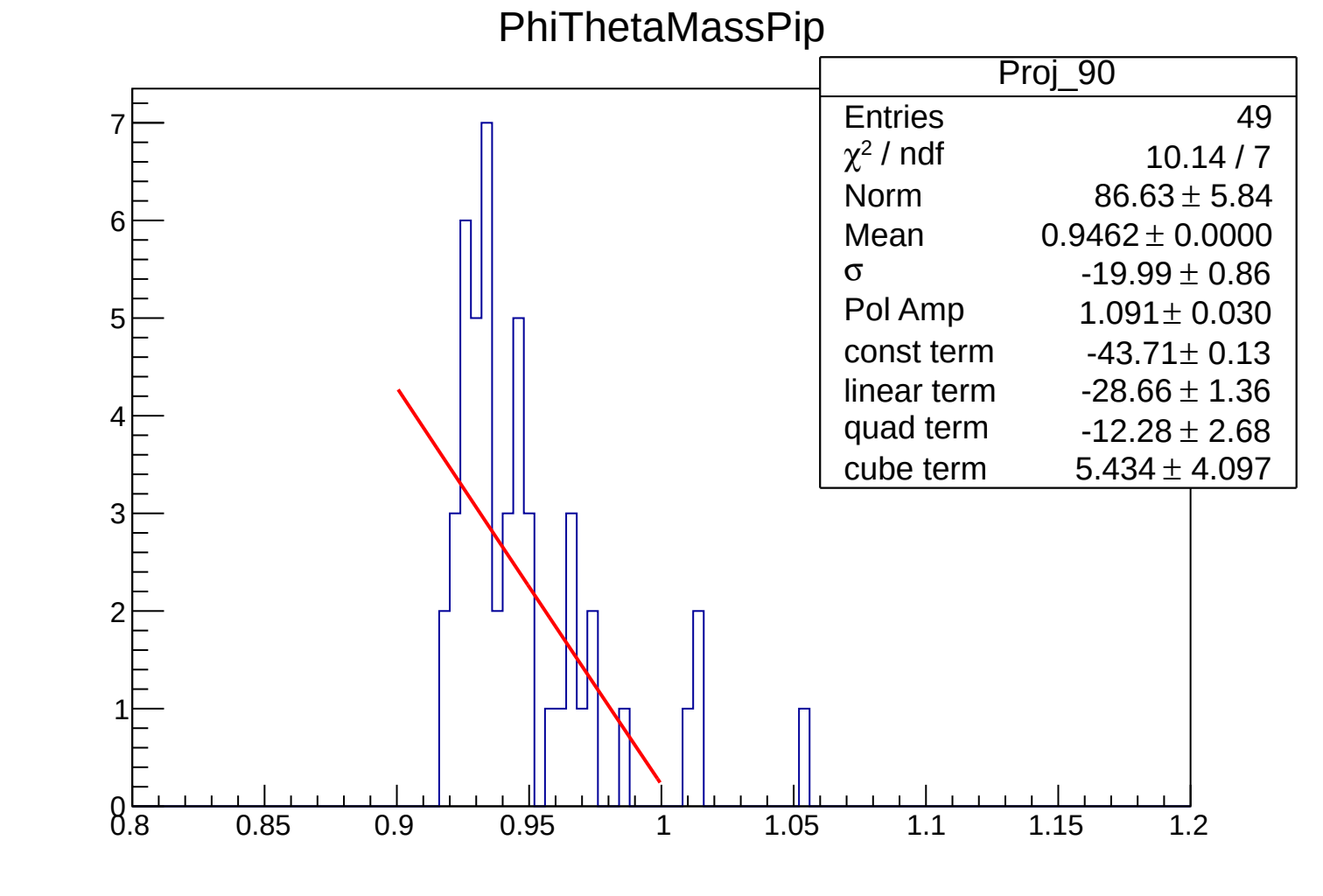
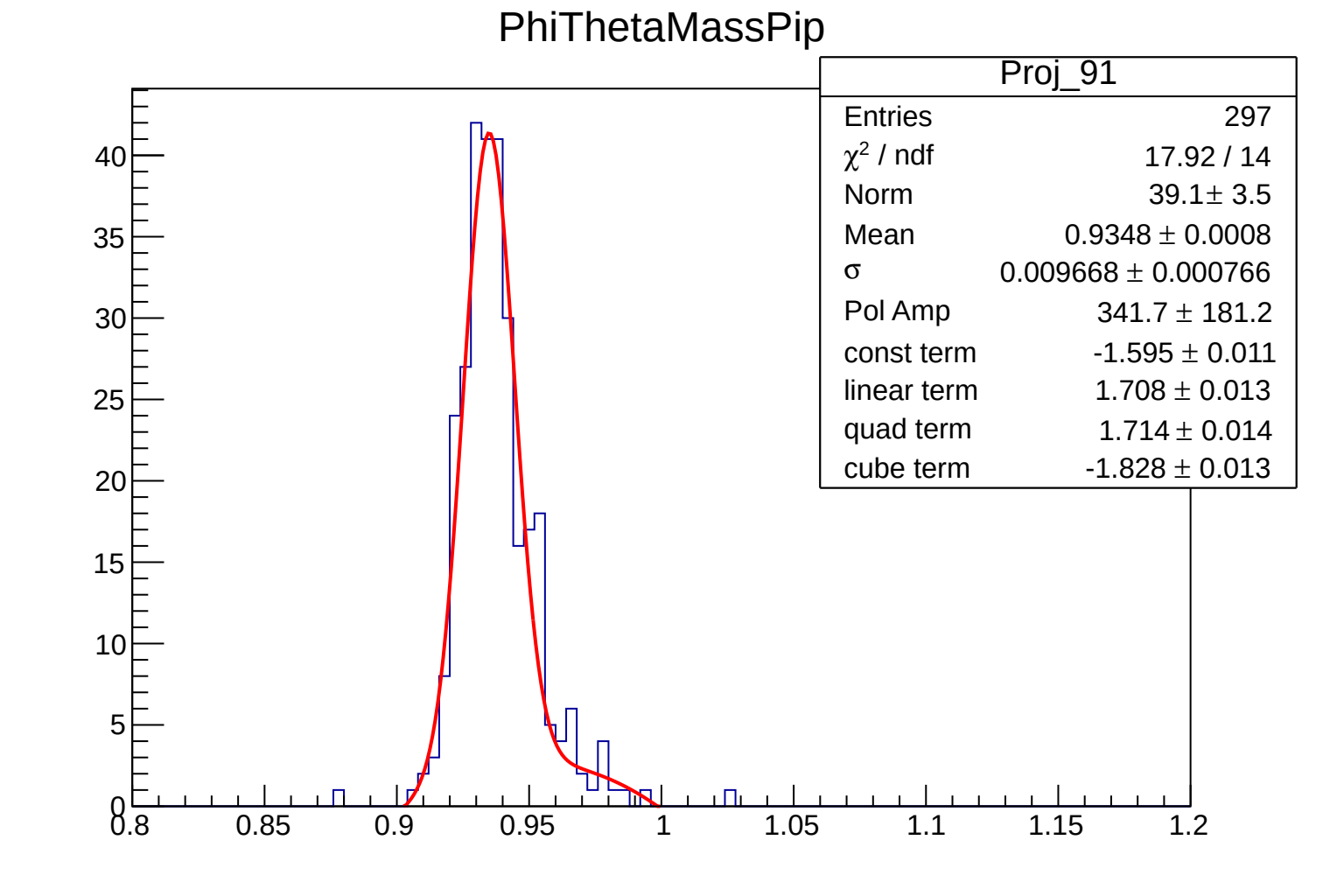
14
16
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2


PhiThetaMassPip
Proj_90
Entries 49
χ² / ndf 10.14 / 7
Norm 86.63 ± 5.84
Mean 0.9462 ± 0.0000
σ -19.99 ± 0.86
Pol Amp 1.091 ± 0.030
const term -43.71 ± 0.13
linear term -28.66 ± 1.36
quad term -12.28 ± 2.68
cube term 5.434 ± 4.097
0
1
2
3
4
5
6
7
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2


PhiThetaMassPip
Proj_91
Entries 297
χ² / ndf 17.92 / 14
Norm 39.1± 3.5
Mean 0.9348 ± 0.0008
σ 0.009668 ± 0.000766
Pol Amp 341.7 ± 181.2
const term -1.595 ± 0.011
linear term 1.708 ± 0.013
quad term 1.714 ± 0.014
cube term -1.828 ± 0.013
0
5
10
15
20
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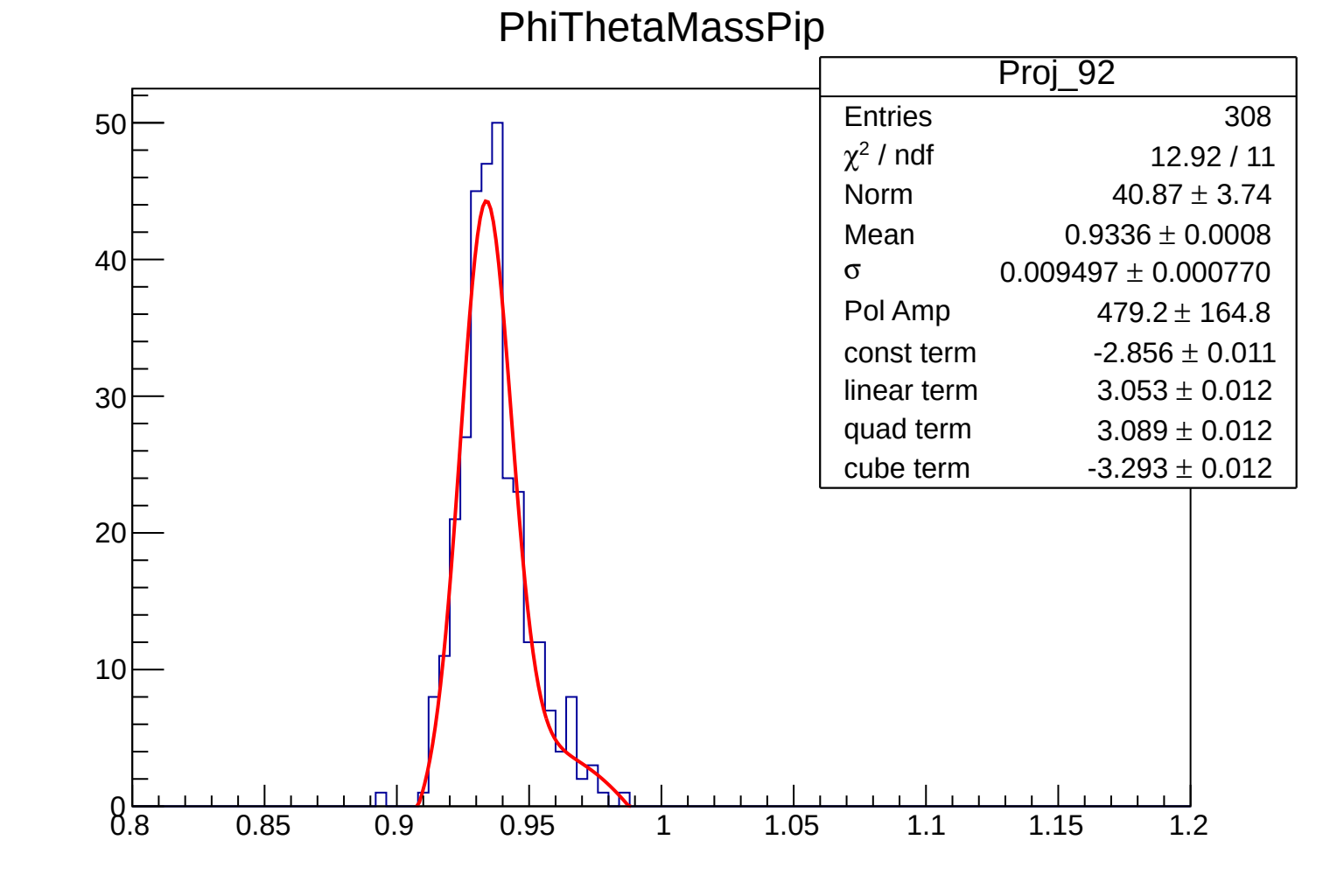
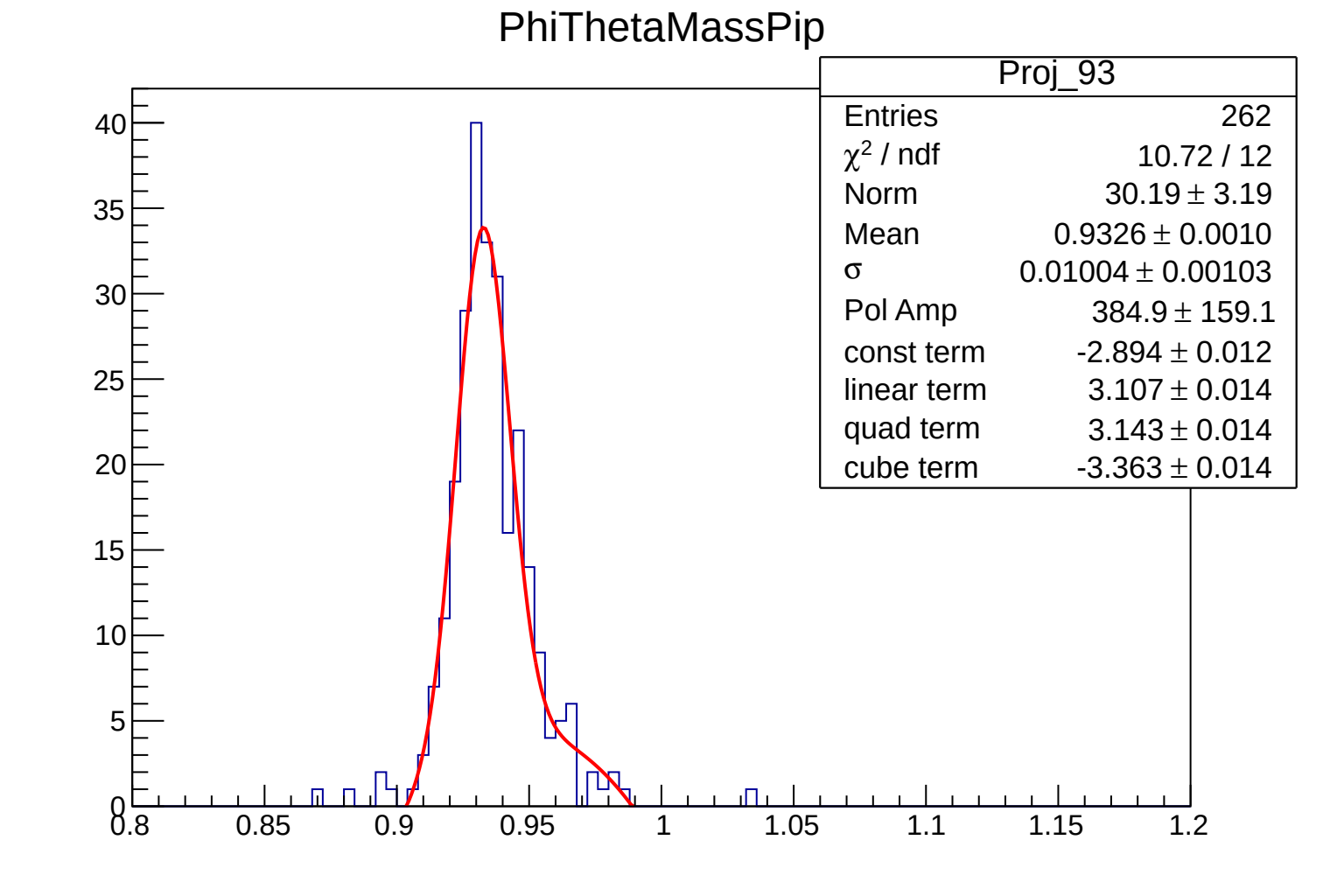
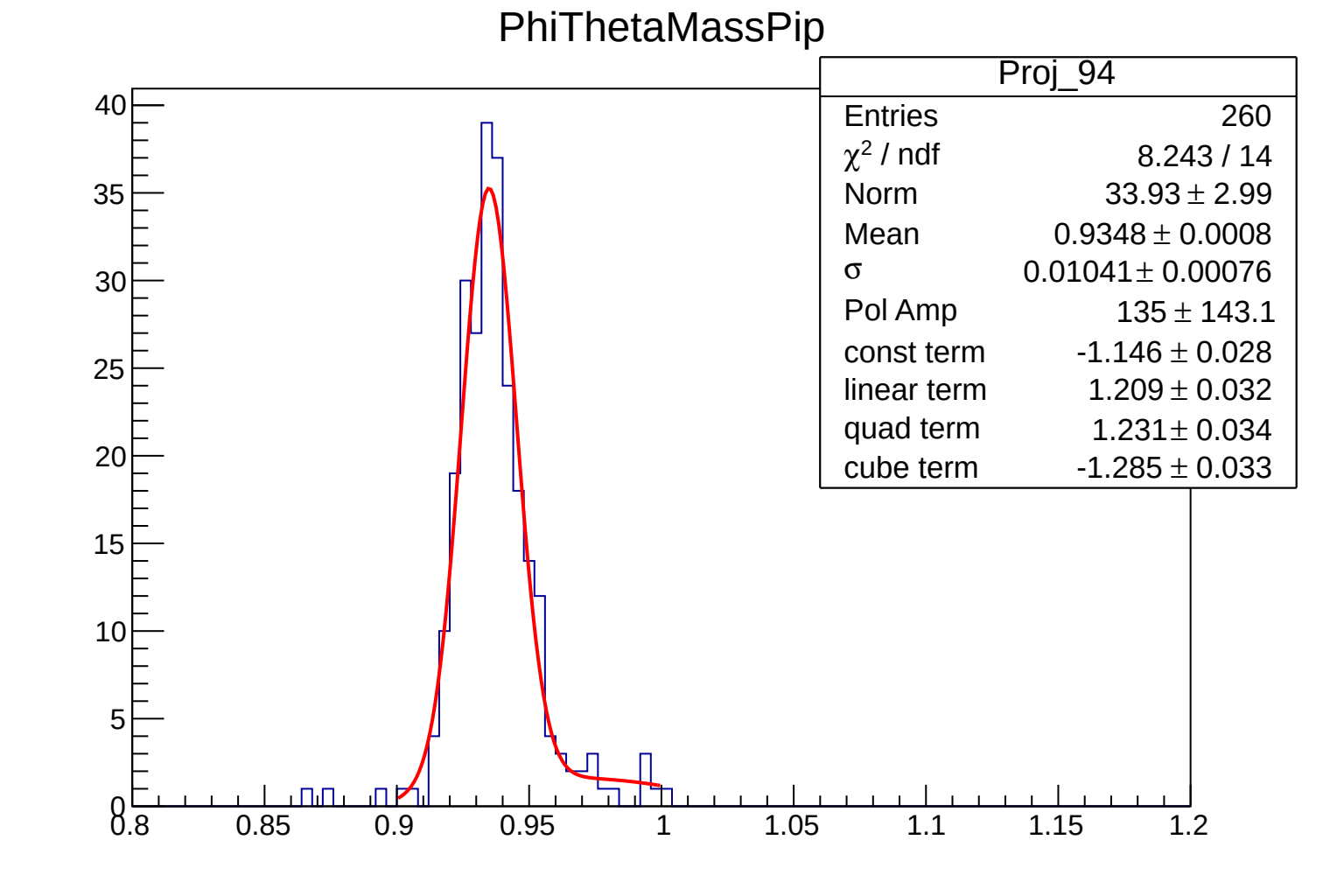
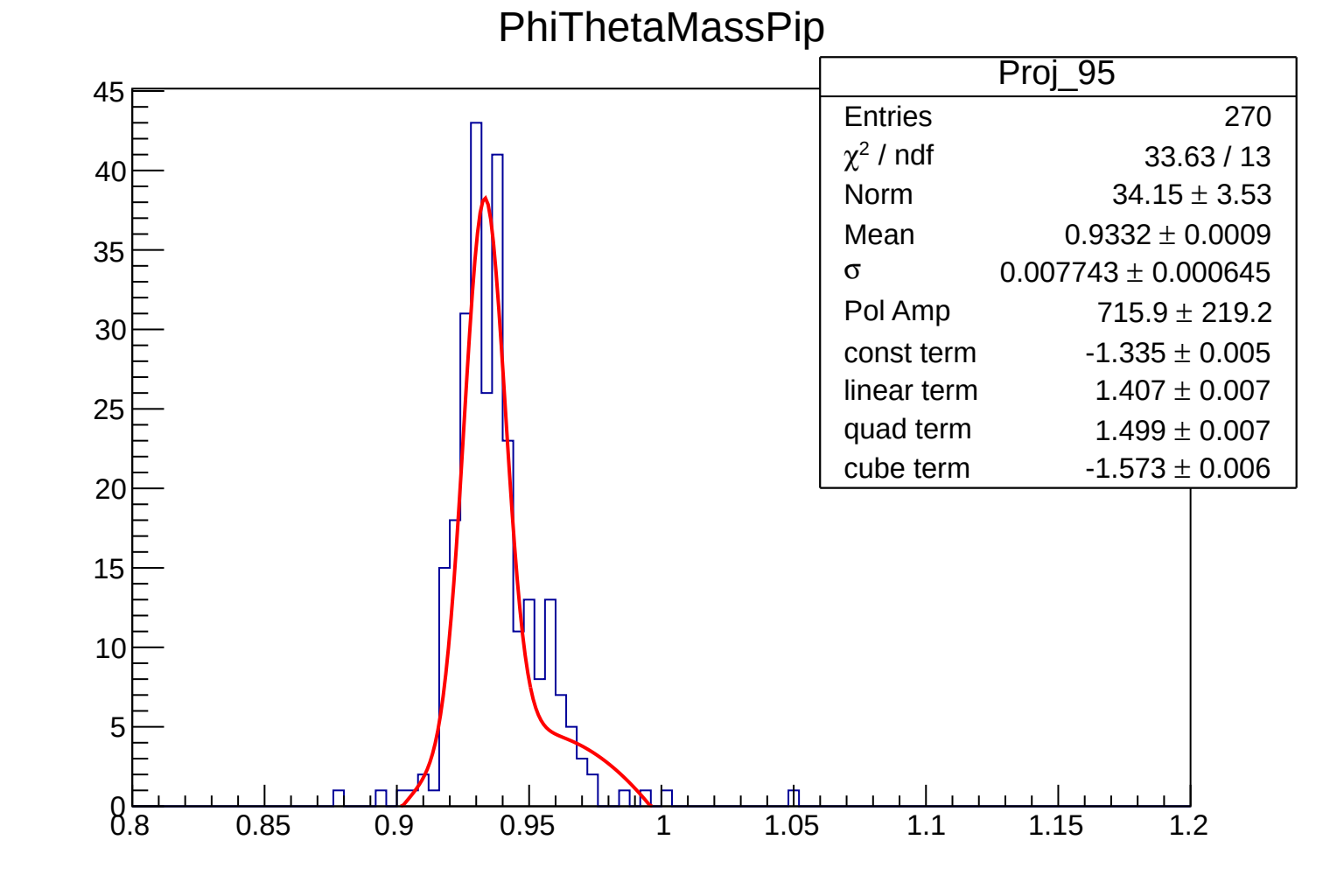
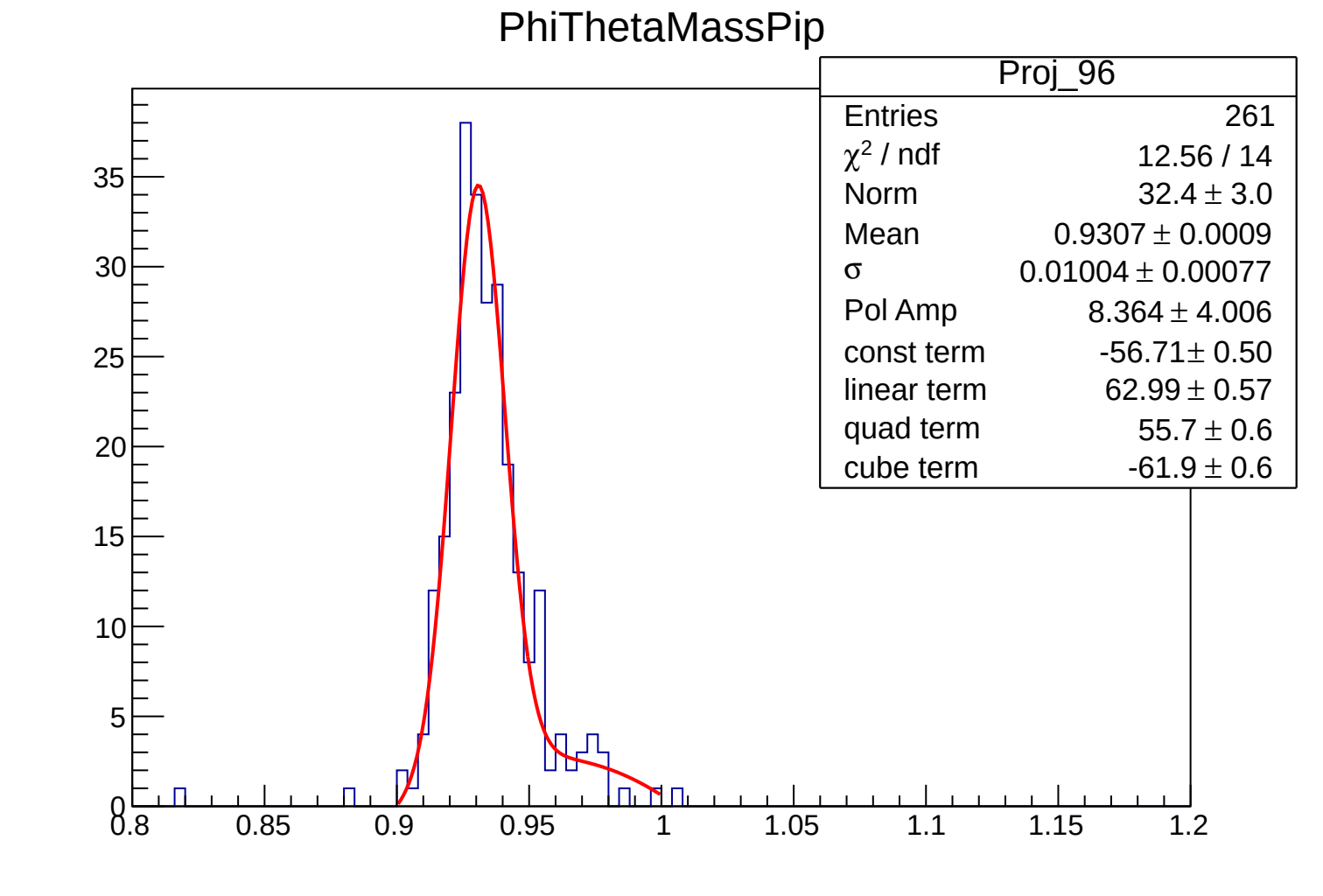
30
35
40
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

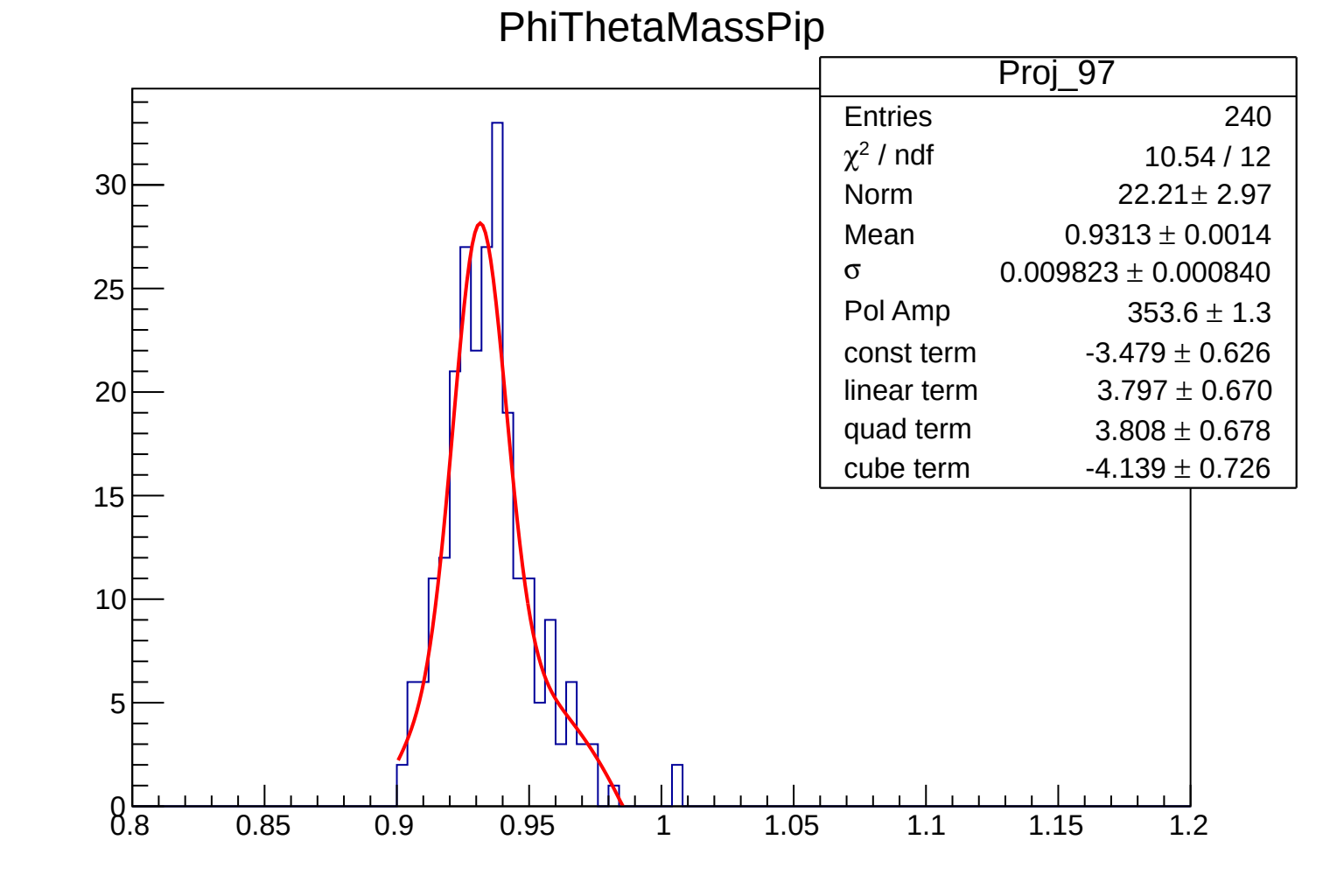

PhiThetaMassPip
Proj_92
Entries 308
χ² / ndf 12.92 / 11
Norm 40.87 ± 3.74
Mean 0.9336 ± 0.0008
σ 0.009497 ± 0.000770
Pol Amp 479.2 ± 164.8
const term -2.856 ± 0.011
linear term 3.053 ± 0.012
quad term 3.089 ± 0.012
cube term -3.293 ± 0.012
0
10
20
30
40
50
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

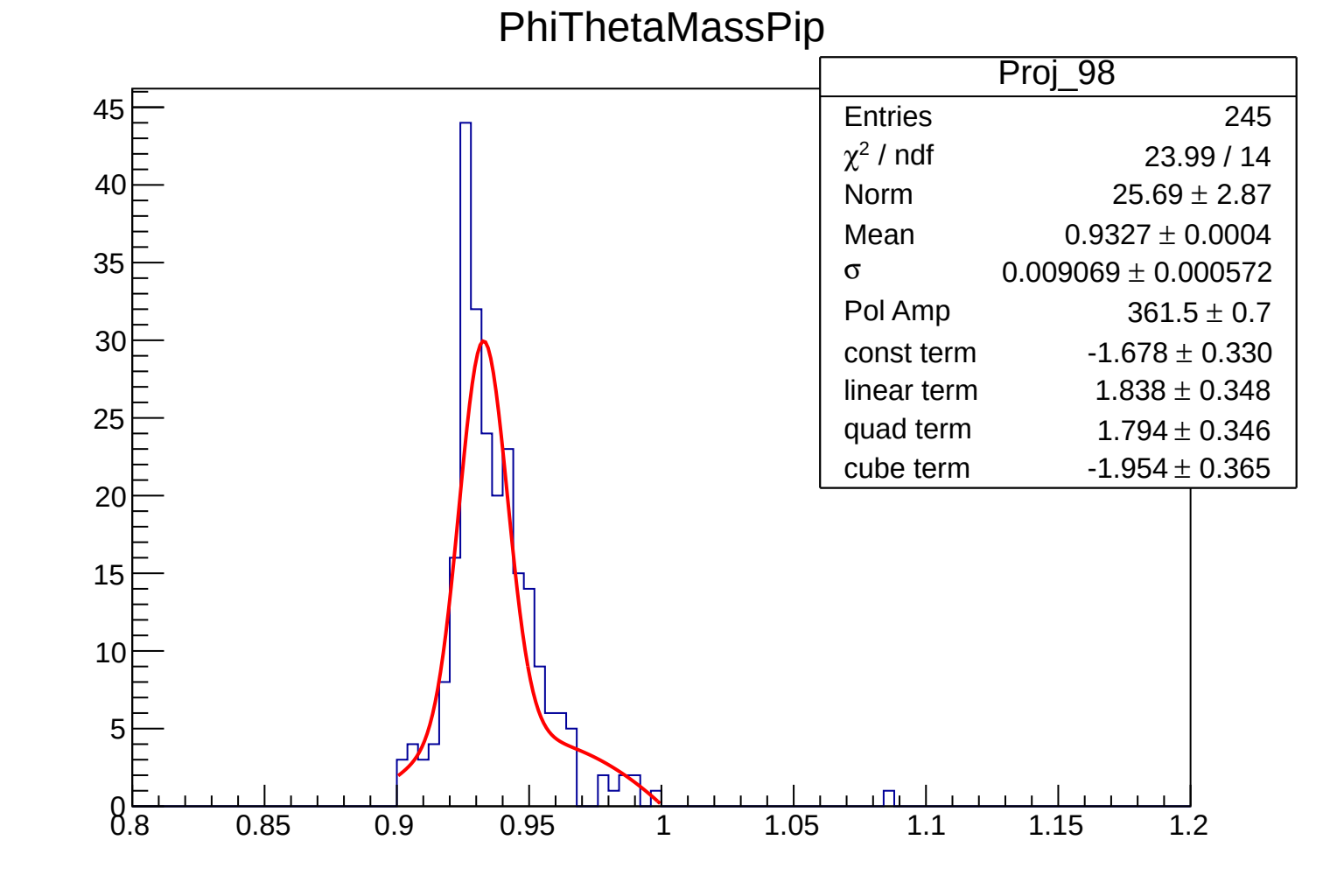

PhiThetaMassPip
Proj_93
Entries 262
χ² / ndf 10.72 / 12
Norm 30.19 ± 3.19
Mean 0.9326 ± 0.0010
σ 0.01004 ± 0.00103
Pol Amp 384.9 ± 159.1
const term -2.894 ± 0.012
linear term 3.107 ± 0.014
quad term 3.143 ± 0.014
cube term -3.363 ± 0.014
0
5
10
15
20
25
30
35
40
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

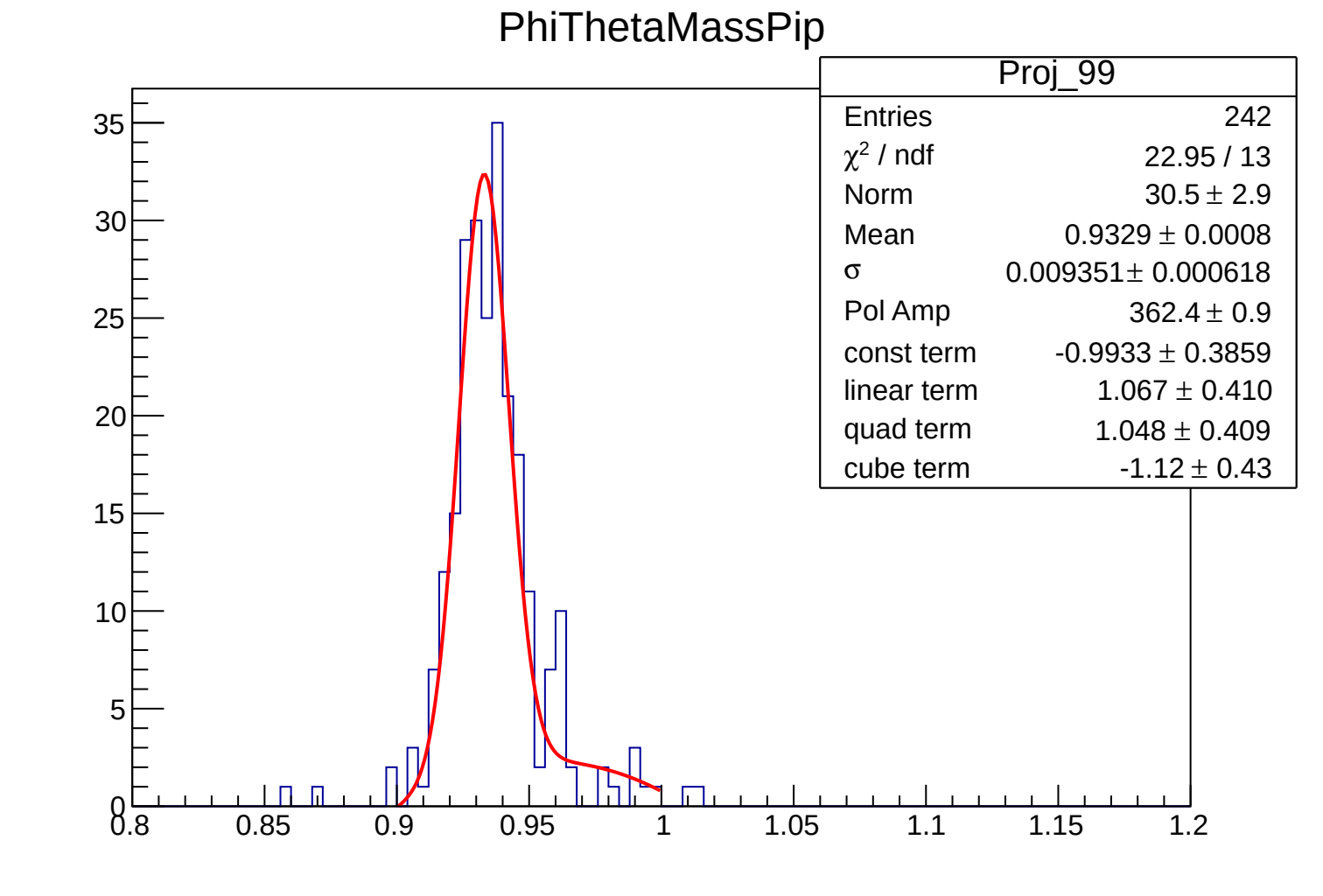

PhiThetaMassPip
Proj_94
Entries 260
χ² / ndf 8.243 / 14
Norm 33.93 ± 2.99
Mean 0.9348 ± 0.0008
σ 0.01041 ± 0.00076
Pol Amp 135 ± 143.1
const term -1.146 ± 0.028
linear term 1.209 ± 0.032
quad term 1.231 ± 0.034
cube term -1.285 ± 0.033
0
5
10
15
20
25
30
35
40
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

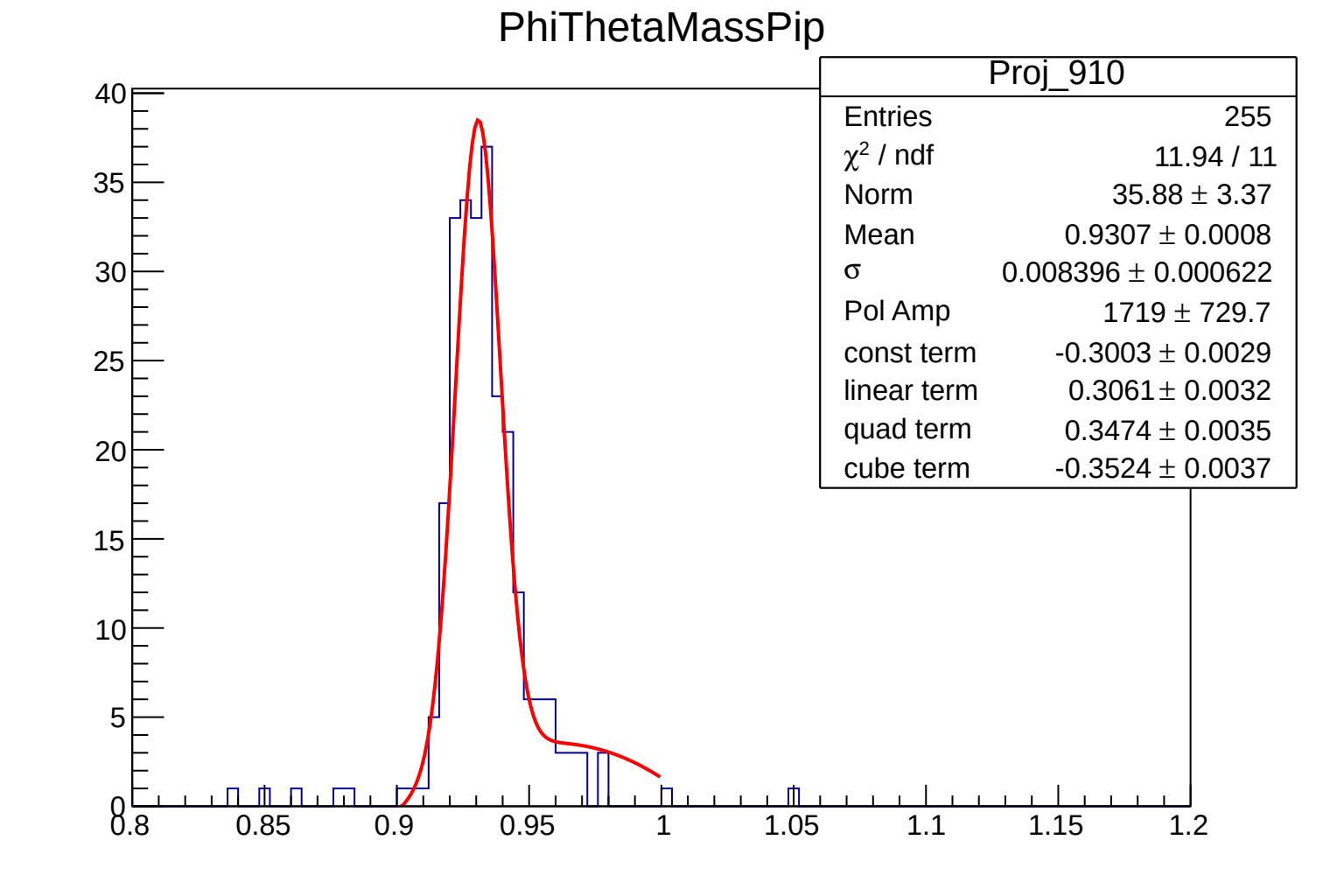

PhiThetaMassPip
Proj_95
Entries 270
χ² / ndf 33.63 / 13
Norm 34.15 ± 3.53
Mean 0.9332 ± 0.0009
σ 0.007743 ± 0.000645
Pol Amp 715.9 ± 219.2
const term -1.335 ± 0.005
linear term 1.407 ± 0.007
quad term 1.499 ± 0.007
cube term -1.573 ± 0.006
0 5 10 15 20 25 30 35 40 45
0.8 0.85 0.9 0.95 1 1.05 1.1 1.15 1.2

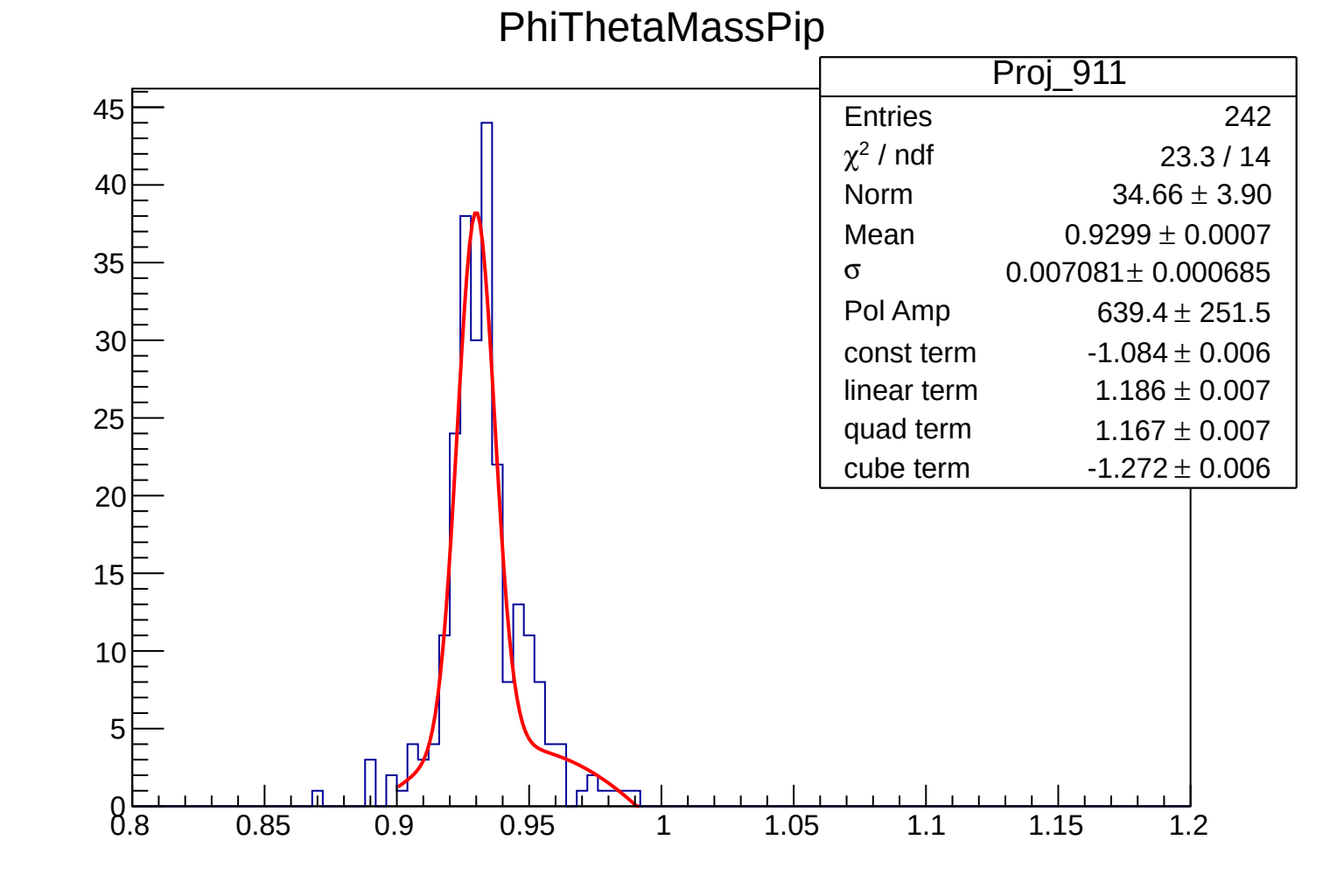

PhiThetaMassPip
Proj_96
Entries 261
χ² / ndf 12.56 / 14
Norm 32.4 ± 3.0
Mean 0.9307 ± 0.0009
σ 0.01004 ± 0.00077
Pol Amp 8.364 ± 4.006
const term -56.71 ± 0.50
linear term 62.99 ± 0.57
quad term 55.7 ± 0.6
cube term -61.9 ± 0.6
0
5
10
15
20
25
30
35
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2


PhiThetaMassPip
Proj_97
Entries 240
χ² / ndf 10.54 / 12
Norm 22.21 ± 2.97
Mean 0.9313 ± 0.0014
σ 0.009823 ± 0.000840
Pol Amp 353.6 ± 1.3
const term -3.479 ± 0.626
linear term 3.797 ± 0.670
quad term 3.808 ± 0.678
cube term -4.139 ± 0.726
0
5
10
15
20
25
30
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2


PhiThetaMassPip
Proj_98
Entries 245
χ² / ndf 23.99 / 14
Norm 25.69 ± 2.87
Mean 0.9327 ± 0.0004
σ 0.009069 ± 0.000572
Pol Amp 361.5 ± 0.7
const term -1.678 ± 0.330
linear term 1.838 ± 0.348
quad term 1.794 ± 0.346
cube term -1.954 ± 0.365
0 5 10 15 20 25 30 35 40 45
0.8 0.85 0.9 0.95 1 1.05 1.1 1.15 1.2


PhiThetaMassPip
Proj_99
Entries 242
χ² / ndf 22.95 / 13
Norm 30.5 ± 2.9
Mean 0.9329 ± 0.0008
σ 0.009351 ± 0.000618
Pol Amp 362.4 ± 0.9
const term -0.9933 ± 0.3859
linear term 1.067 ± 0.410
quad term 1.048 ± 0.409
cube term -1.12 ± 0.43
0
5
10
15
20
25
30
35
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2


PhiThetaMassPip
Proj_910
Entries 255
χ² / ndf 11.94 / 11
Norm 35.88 ± 3.37
Mean 0.9307 ± 0.0008
σ 0.008396 ± 0.000622
Pol Amp 1719 ± 729.7
const term -0.3003 ± 0.0029
linear term 0.3061 ± 0.0032
quad term 0.3474 ± 0.0035
cube term -0.3524 ± 0.0037
40
35
30
25
20
15
10
5
0
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2


PhiThetaMassPip
Proj_911
Entries 242
χ² / ndf 23.3 / 14
Norm 34.66 ± 3.90
Mean 0.9299 ± 0.0007
σ 0.007081 ± 0.000685
Pol Amp 639.4 ± 251.5
const term -1.084 ± 0.006
linear term 1.186 ± 0.007
quad term 1.167 ± 0.007
cube term -1.272 ± 0.006
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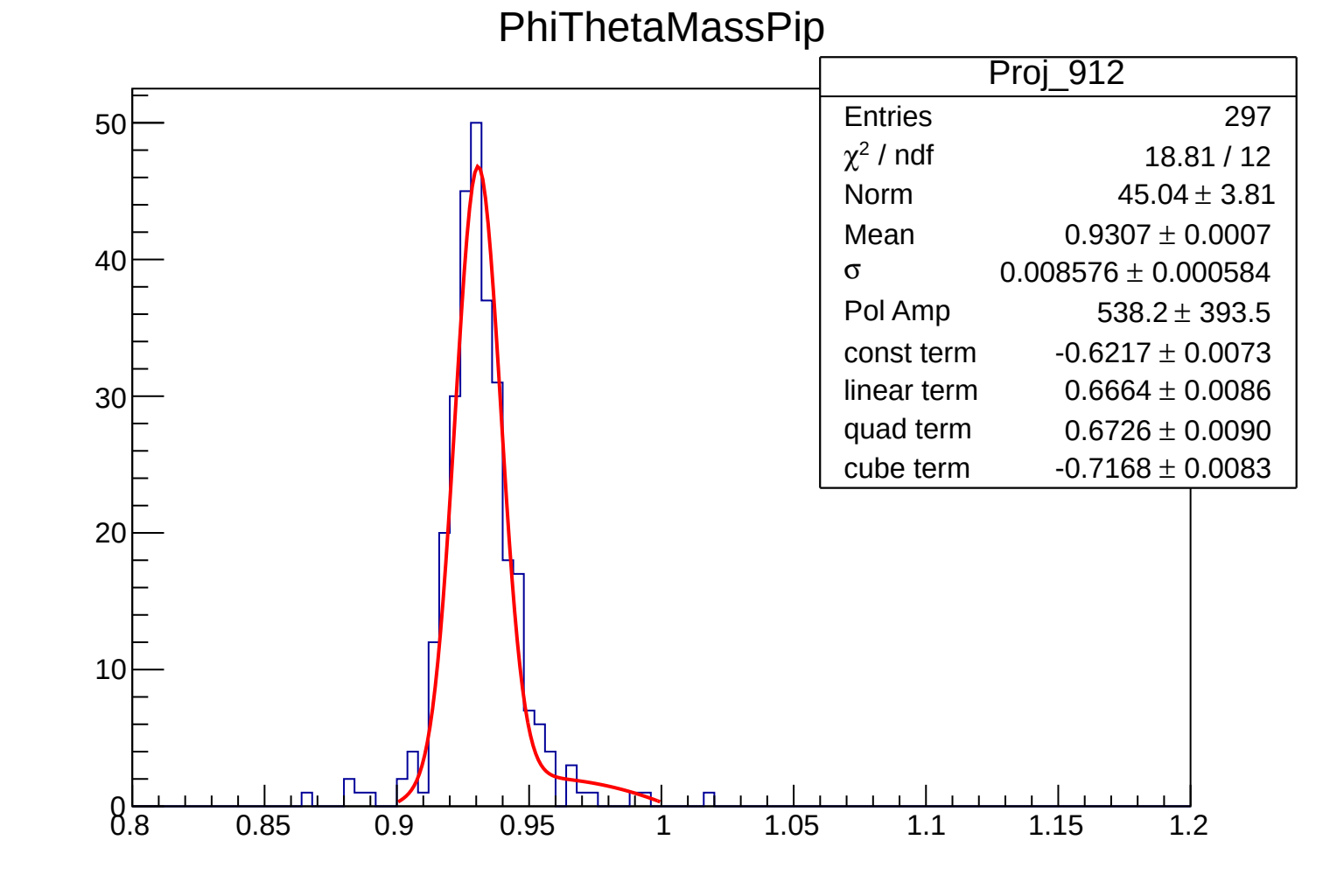
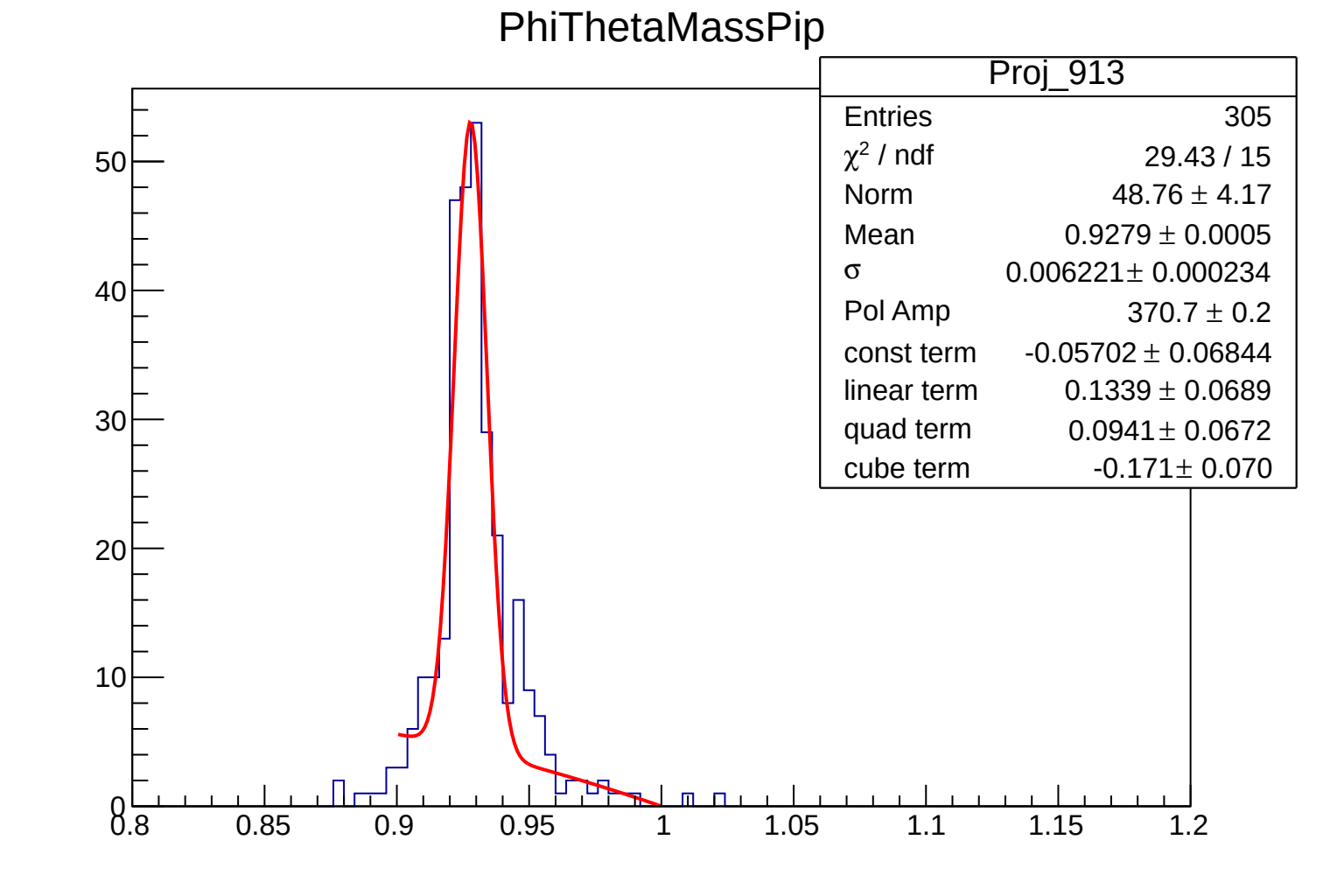
0.8 0.85 0.9 0.95 1 1.05 1.1 1.15 1.2


PhiThetaMassPip
Proj_912
Entries 297
χ² / ndf 18.81 / 12
Norm 45.04 ± 3.81
Mean 0.9307 ± 0.0007
σ 0.008576 ± 0.000584
Pol Amp 538.2 ± 393.5
const term -0.6217 ± 0.0073
linear term 0.6664 ± 0.0086
quad term 0.6726 ± 0.0090
cube term -0.7168 ± 0.0083
50
40
30
20
10
0
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2


PhiThetaMassPip
Proj_913
Entries 305
χ² / ndf 29.43 / 15
Norm 48.76 ± 4.17
Mean 0.9279 ± 0.0005
σ 0.006221± 0.000234
Pol Amp 370.7 ± 0.2
const term -0.05702 ± 0.06844
linear term 0.1339 ± 0.0689
quad term 0.0941± 0.0672
cube term -0.171± 0.070
0
10
20
30
40
50
0.8
0.85
0.9
0.95
1
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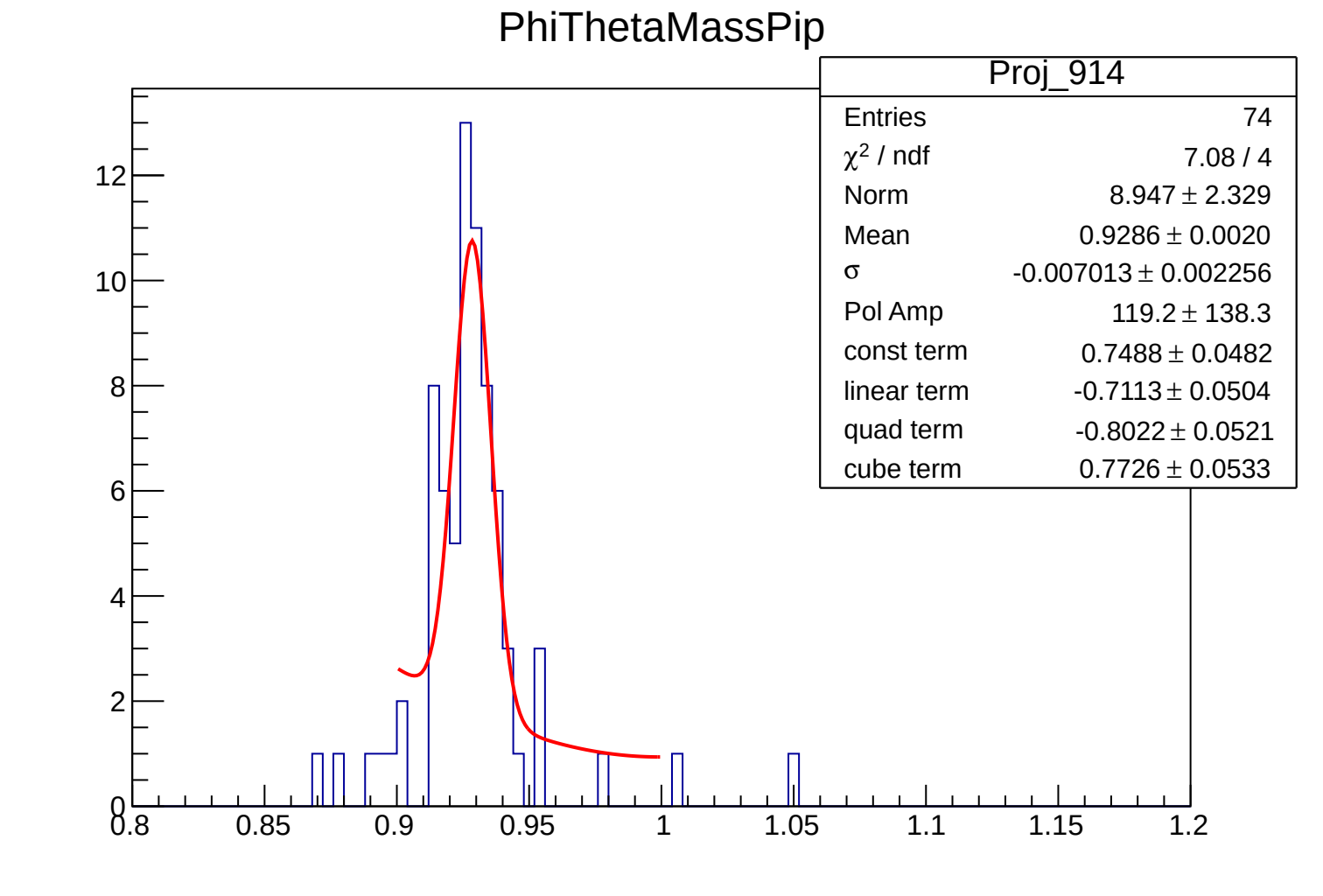
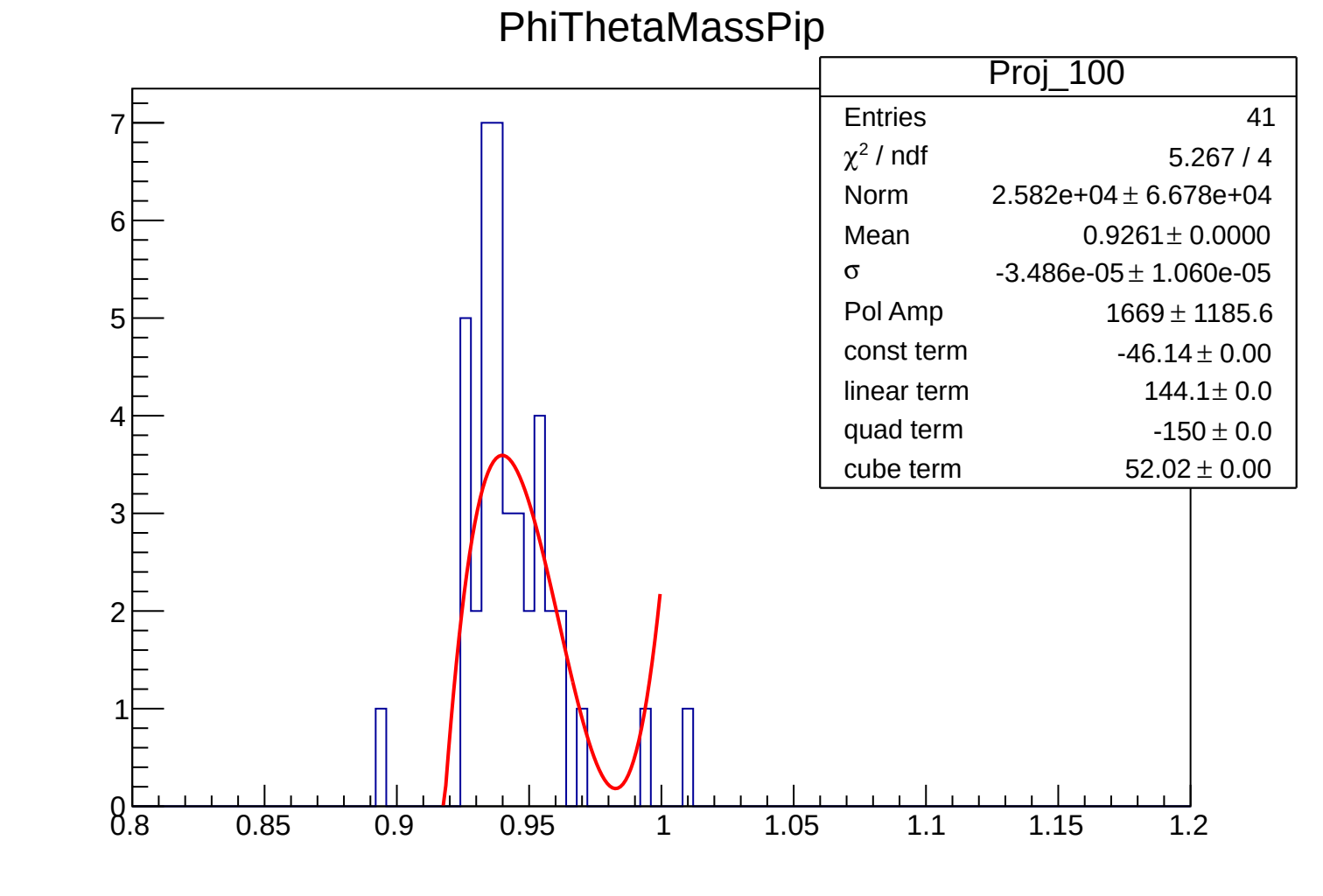
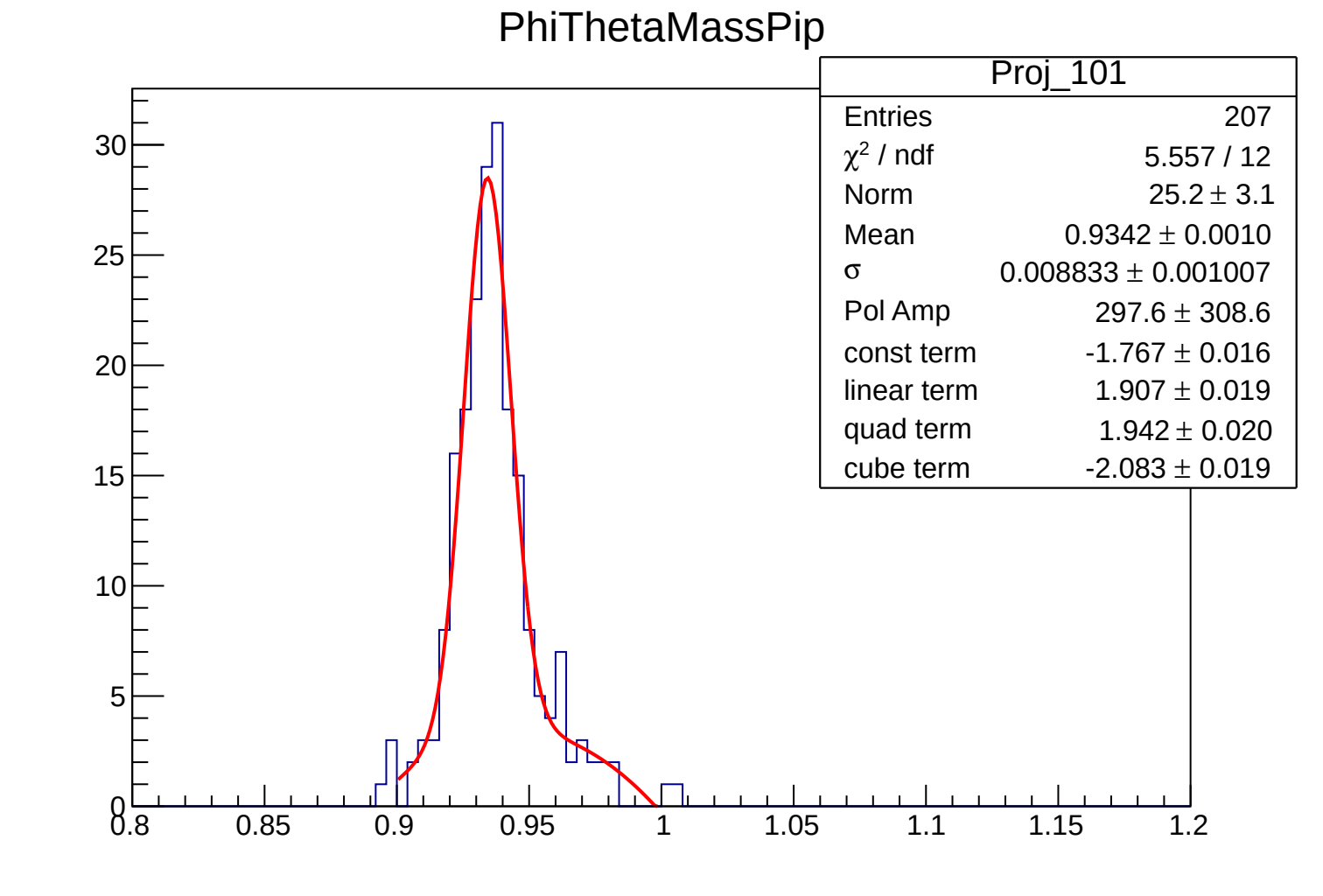
1.1
1.15
1.2


PhiThetaMassPip
Proj_914
Entries 74
χ² / ndf 7.08 / 4
Norm 8.947 ± 2.329
Mean 0.9286 ± 0.0020
σ -0.007013 ± 0.002256
Pol Amp 119.2 ± 138.3
const term 0.7488 ± 0.0482
linear term -0.7113 ± 0.0504
quad term -0.8022 ± 0.0521
cube term 0.7726 ± 0.0533
0
2
4
6
8
10
12
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2


PhiThetaMassPip
Proj_100
Entries 41
χ² / ndf 5.267 / 4
Norm 2.582e+04 ± 6.678e+04
Mean 0.9261 ± 0.0000
σ -3.486e-05 ± 1.060e-05
Pol Amp 1669 ± 1185.6
const term -46.14 ± 0.00
linear term 144.1 ± 0.0
quad term -150 ± 0.0
cube term 52.02 ± 0.00
0
1
2
3
4
5
6
7
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2


PhiThetaMassPip
Proj_101
Entries 207
χ² / ndf 5.557 / 12
Norm 25.2 ± 3.1
Mean 0.9342 ± 0.0010
σ 0.008833 ± 0.001007
Pol Amp 297.6 ± 308.6
const term -1.767 ± 0.016
linear term 1.907 ± 0.019
quad term 1.942 ± 0.020
cube term -2.083 ± 0.019
0
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25
30
0.8
0.85
0.9
0.95
1
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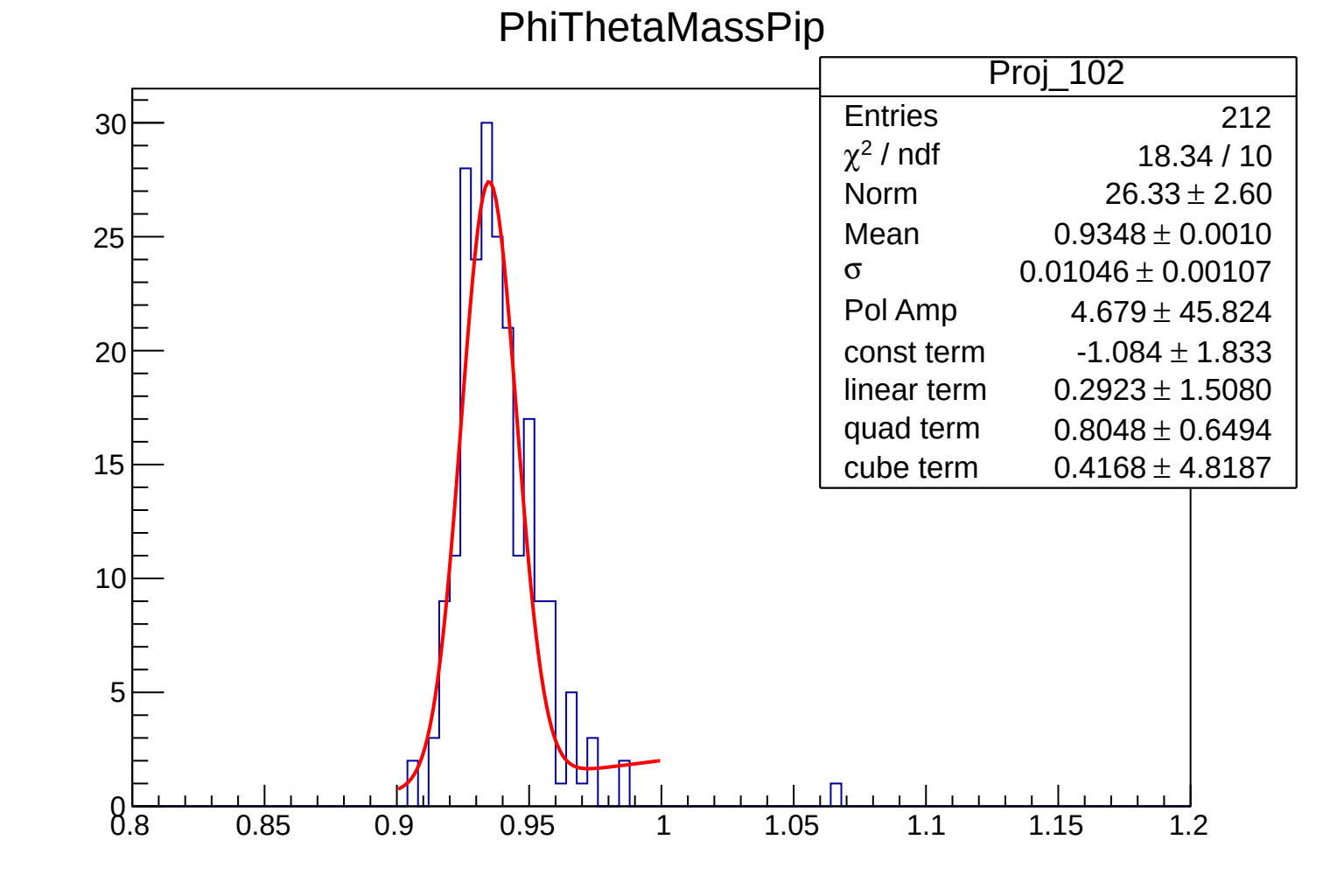
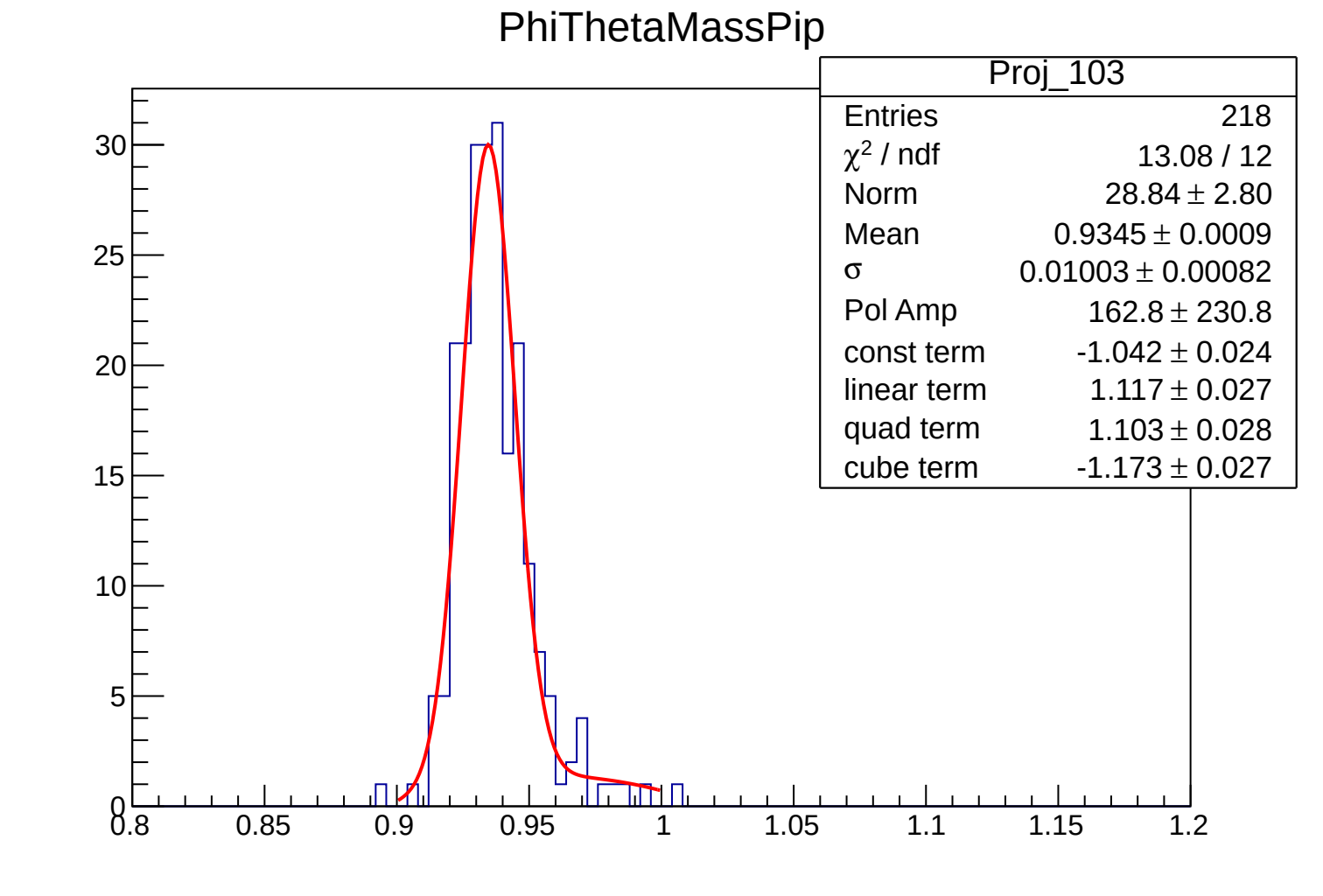
1.1
1.15
1.2


PhiThetaMassPip
Proj_102
Entries 212
χ² / ndf 18.34 / 10
Norm 26.33 ± 2.60
Mean 0.9348 ± 0.0010
σ 0.01046 ± 0.00107
Pol Amp 4.679 ± 45.824
const term -1.084 ± 1.833
linear term 0.2923 ± 1.5080
quad term 0.8048 ± 0.6494
cube term 0.4168 ± 4.8187
0
5
10
15
20
25
30
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2


PhiThetaMassPip
Proj_103
Entries 218
χ² / ndf 13.08 / 12
Norm 28.84 ± 2.80
Mean 0.9345 ± 0.0009
σ 0.01003 ± 0.00082
Pol Amp 162.8 ± 230.8
const term -1.042 ± 0.024
linear term 1.117 ± 0.027
quad term 1.103 ± 0.028
cube term -1.173 ± 0.027
0
5
10
15
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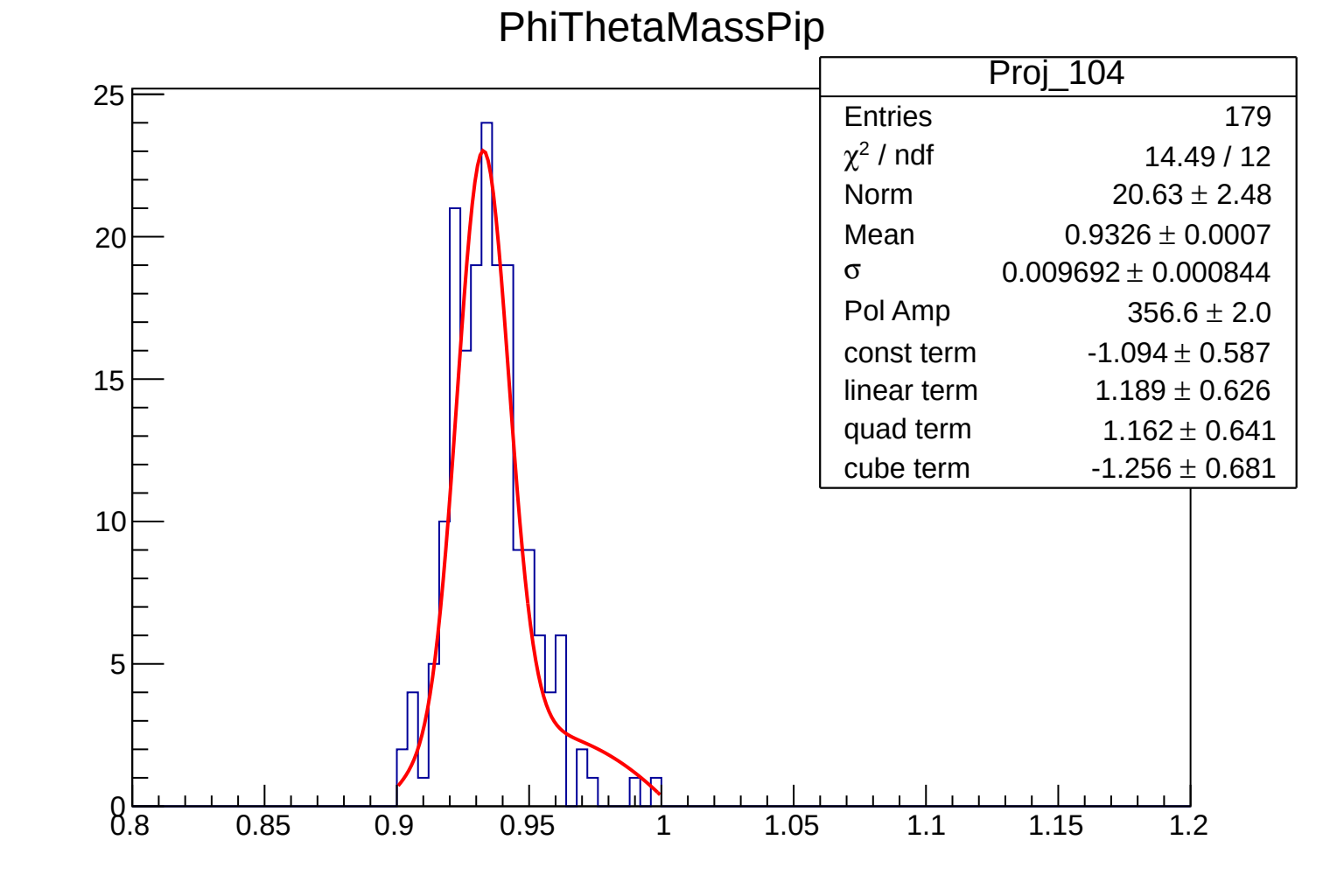
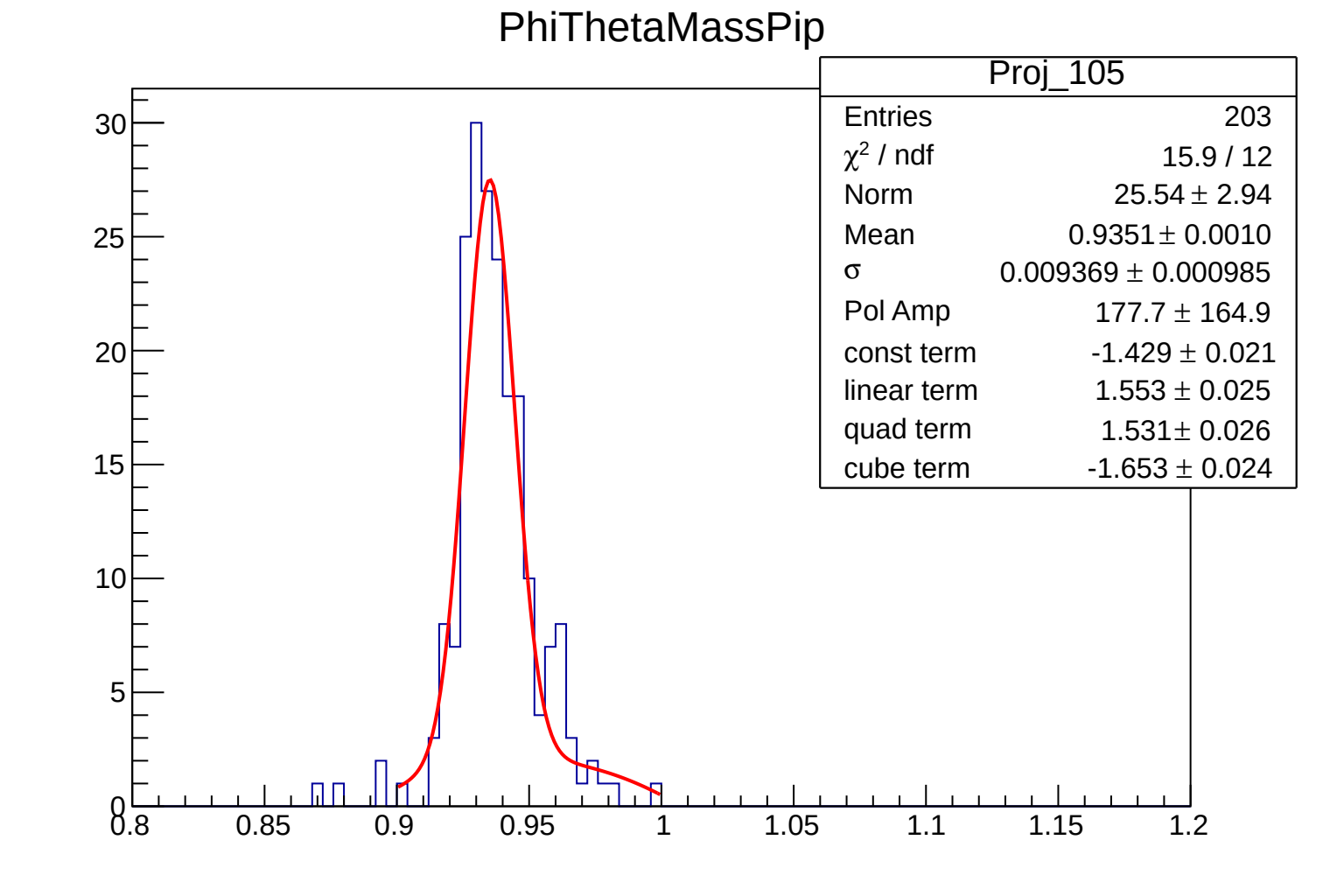
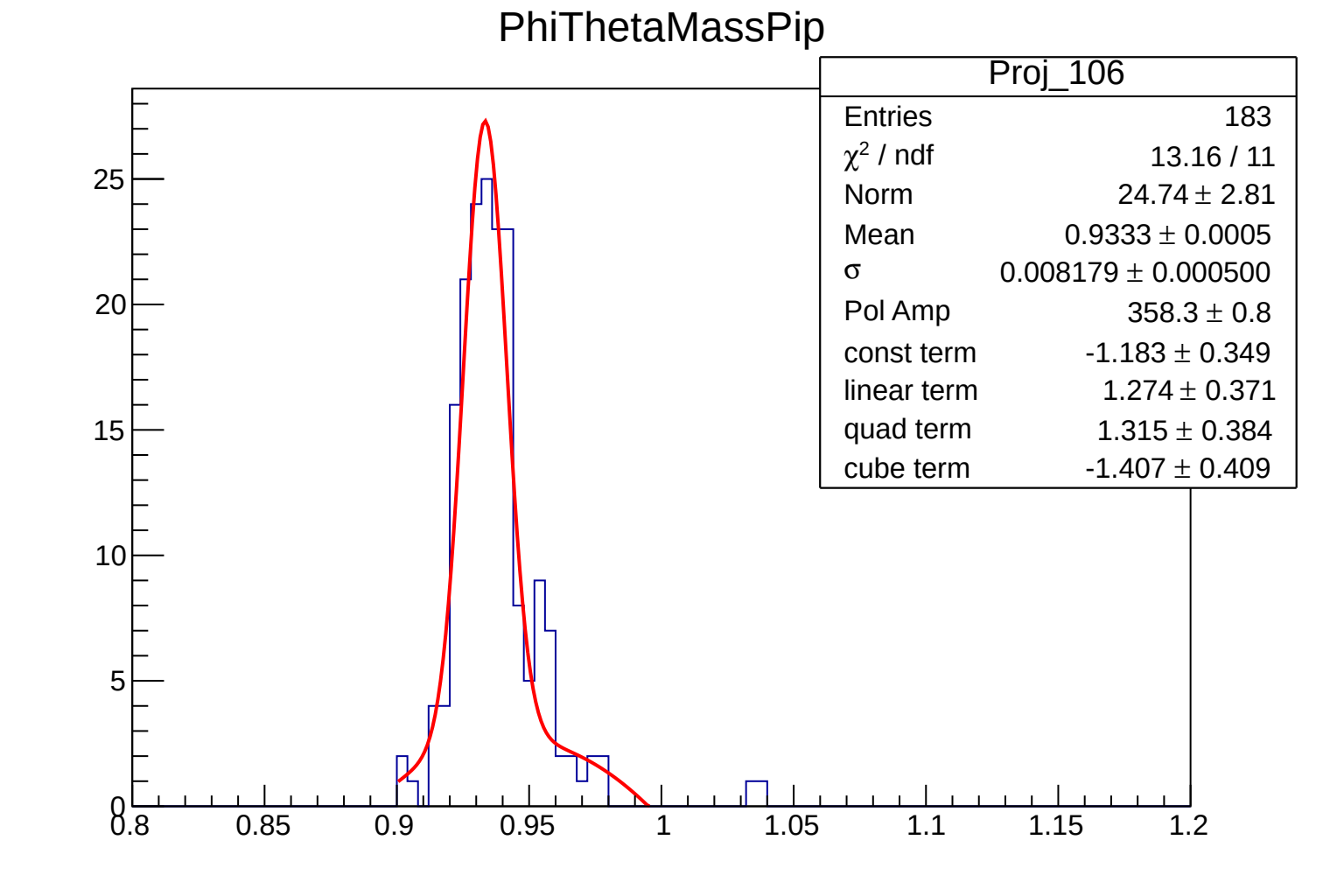
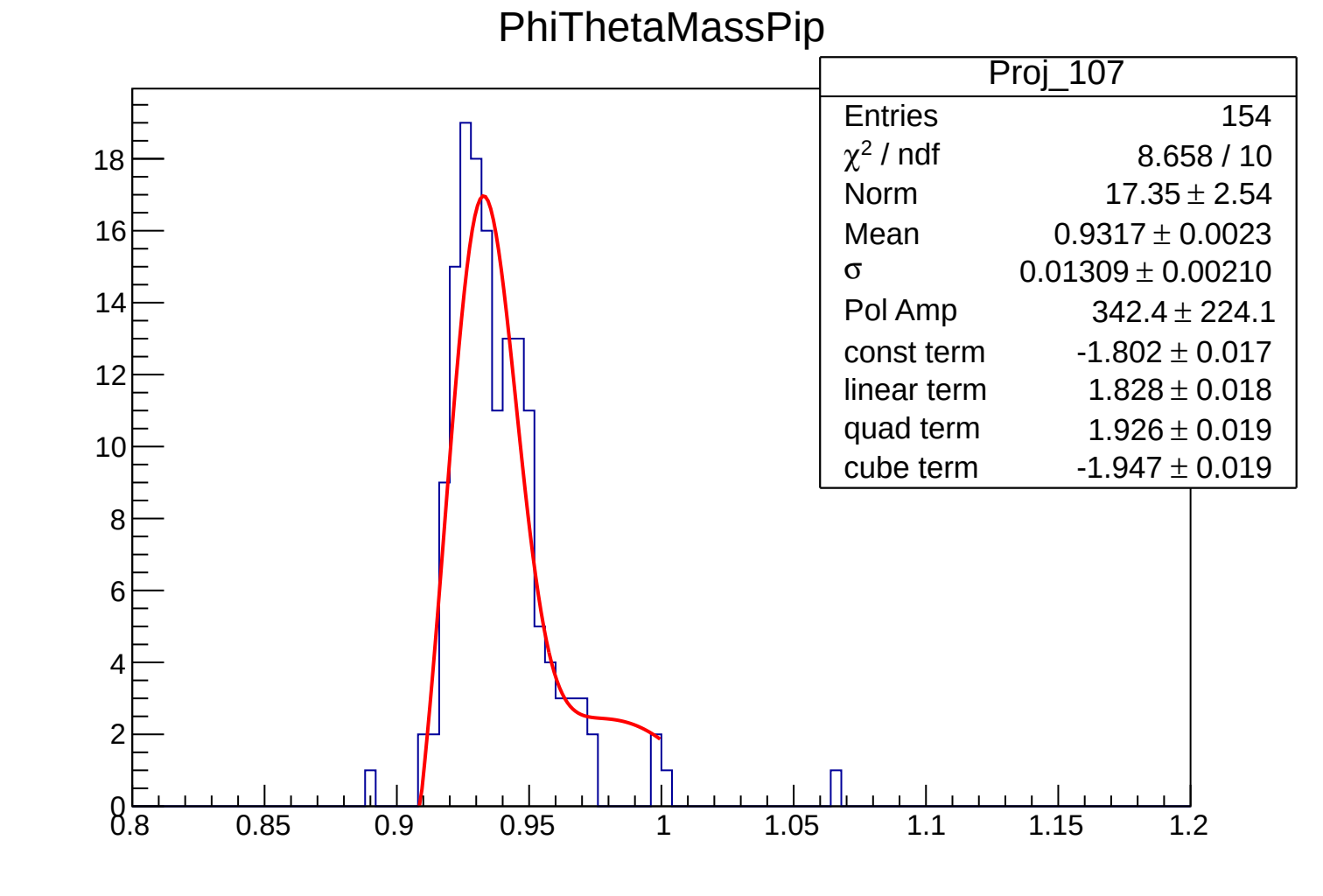
25
30
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2


PhiThetaMassPip
Proj_104
Entries 179
χ² / ndf 14.49 / 12
Norm 20.63 ± 2.48
Mean 0.9326 ± 0.0007
σ 0.009692 ± 0.000844
Pol Amp 356.6 ± 2.0
const term -1.094 ± 0.587
linear term 1.189 ± 0.626
quad term 1.162 ± 0.641
cube term -1.256 ± 0.681
25
20
15
10
5
0
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2


PhiThetaMassPip
Proj_105
Entries 203
χ² / ndf 15.9 / 12
Norm 25.54 ± 2.94
Mean 0.9351 ± 0.0010
σ 0.009369 ± 0.000985
Pol Amp 177.7 ± 164.9
const term -1.429 ± 0.021
linear term 1.553 ± 0.025
quad term 1.531 ± 0.026
cube term -1.653 ± 0.024
0
5
10
15
20
25
30
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2


PhiThetaMassPip
Proj_106
Entries 183
χ² / ndf 13.16 / 11
Norm 24.74 ± 2.81
Mean 0.9333 ± 0.0005
σ 0.008179 ± 0.000500
Pol Amp 358.3 ± 0.8
const term -1.183 ± 0.349
linear term 1.274 ± 0.371
quad term 1.315 ± 0.384
cube term -1.407 ± 0.409
0
5
10
15
20
25
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2


PhiThetaMassPip
Proj_107
Entries 154
χ² / ndf 8.658 / 10
Norm 17.35 ± 2.54
Mean 0.9317 ± 0.0023
σ 0.01309 ± 0.00210
Pol Amp 342.4 ± 224.1
const term -1.802 ± 0.017
linear term 1.828 ± 0.018
quad term 1.926 ± 0.019
cube term -1.947 ± 0.019
0
2
4
6
8
10
12
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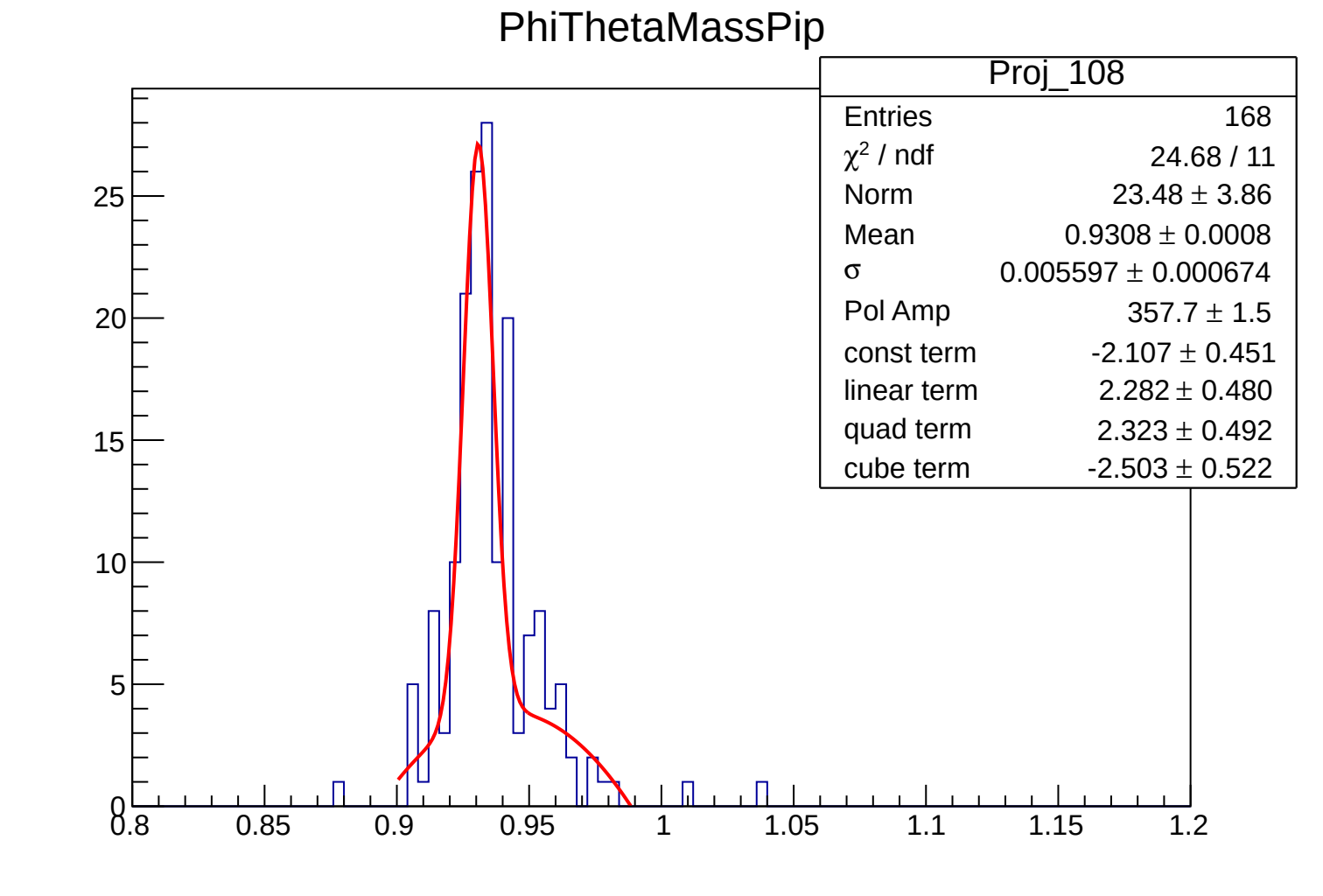
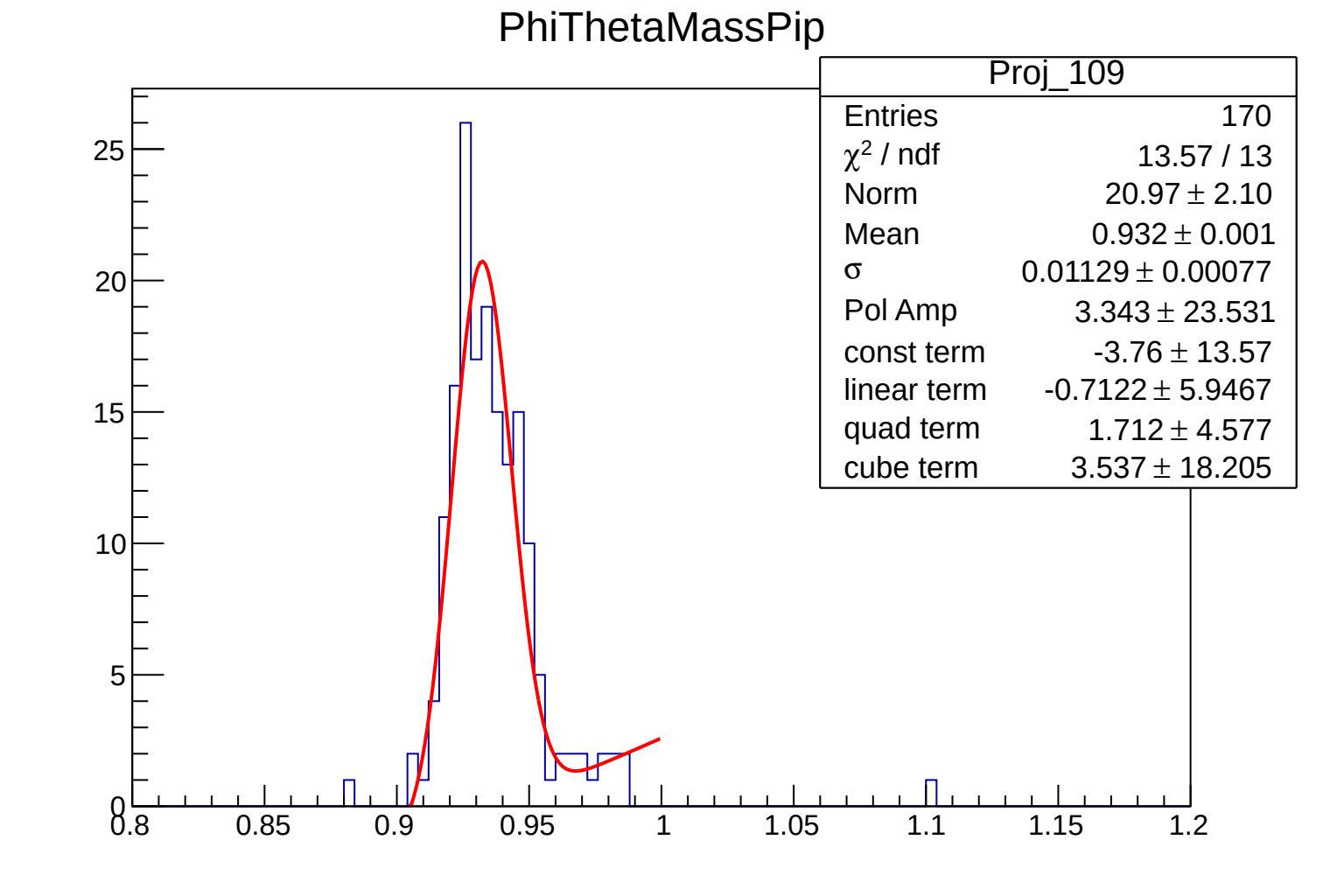
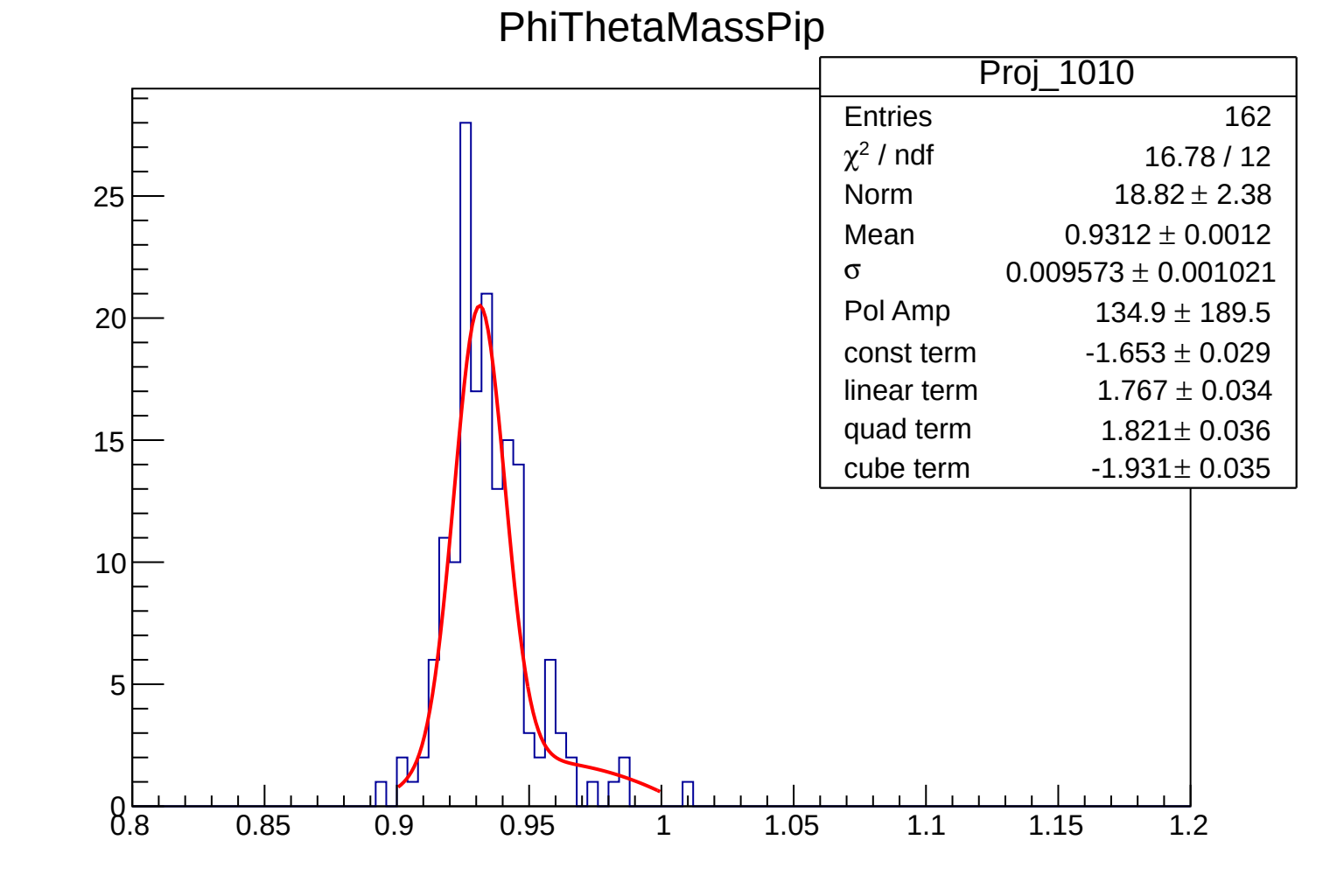
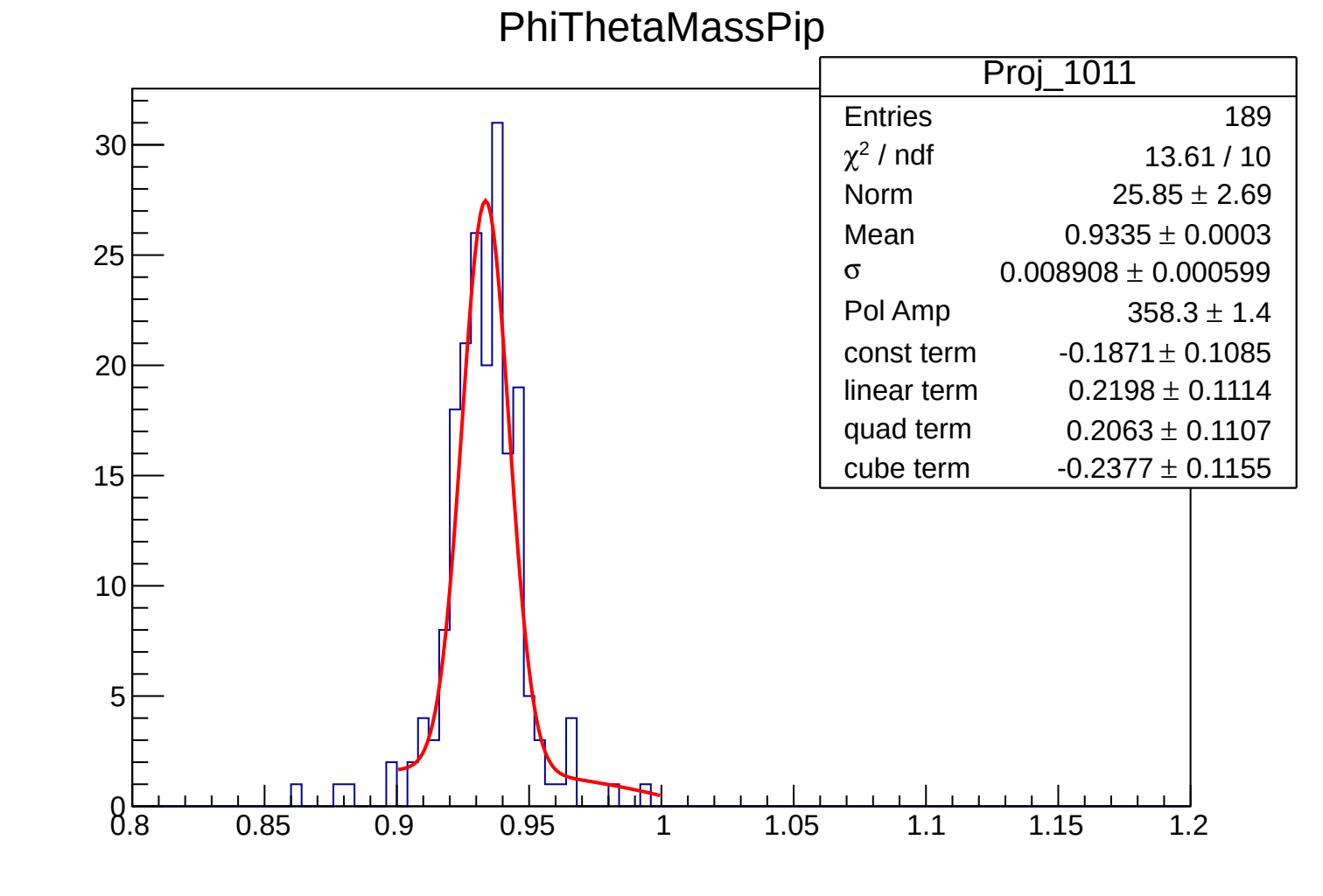
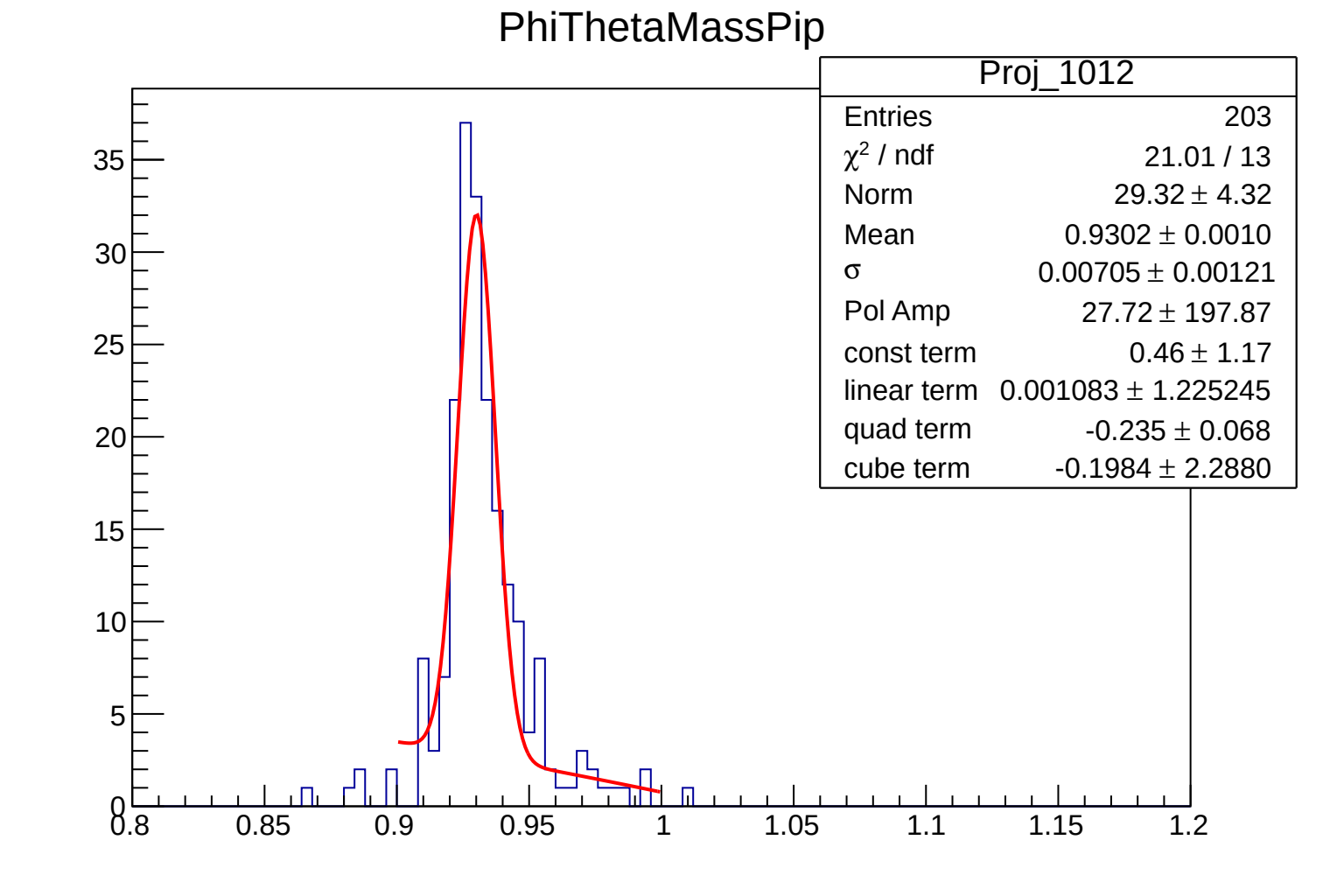
16
18
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

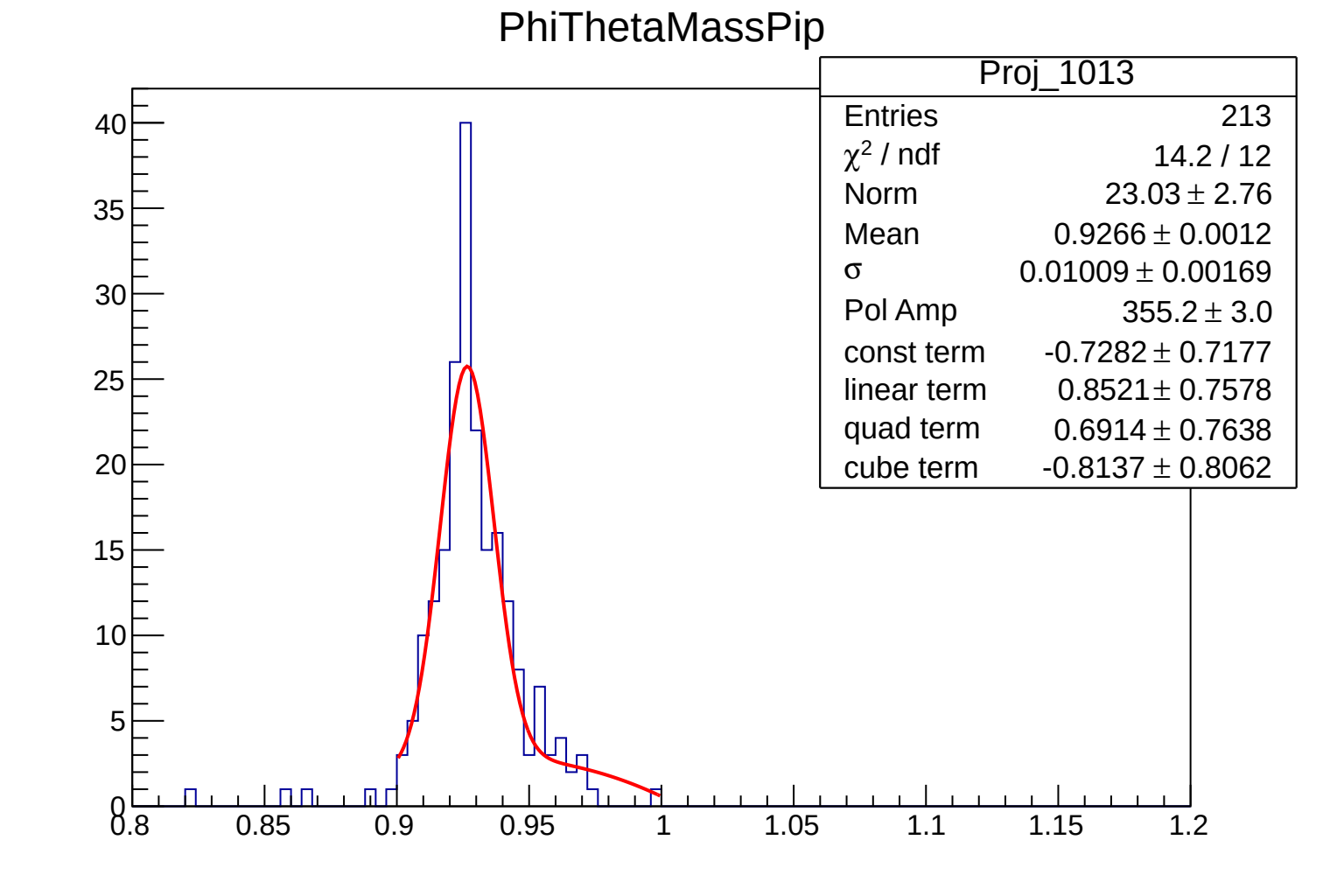

PhiThetaMassPip
Proj_108
Entries 168
χ² / ndf 24.68 / 11
Norm 23.48 ± 3.86
Mean 0.9308 ± 0.0008
σ 0.005597 ± 0.000674
Pol Amp 357.7 ± 1.5
const term -2.107 ± 0.451
linear term 2.282 ± 0.480
quad term 2.323 ± 0.492
cube term -2.503 ± 0.522
0
5
10
15
20
25
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

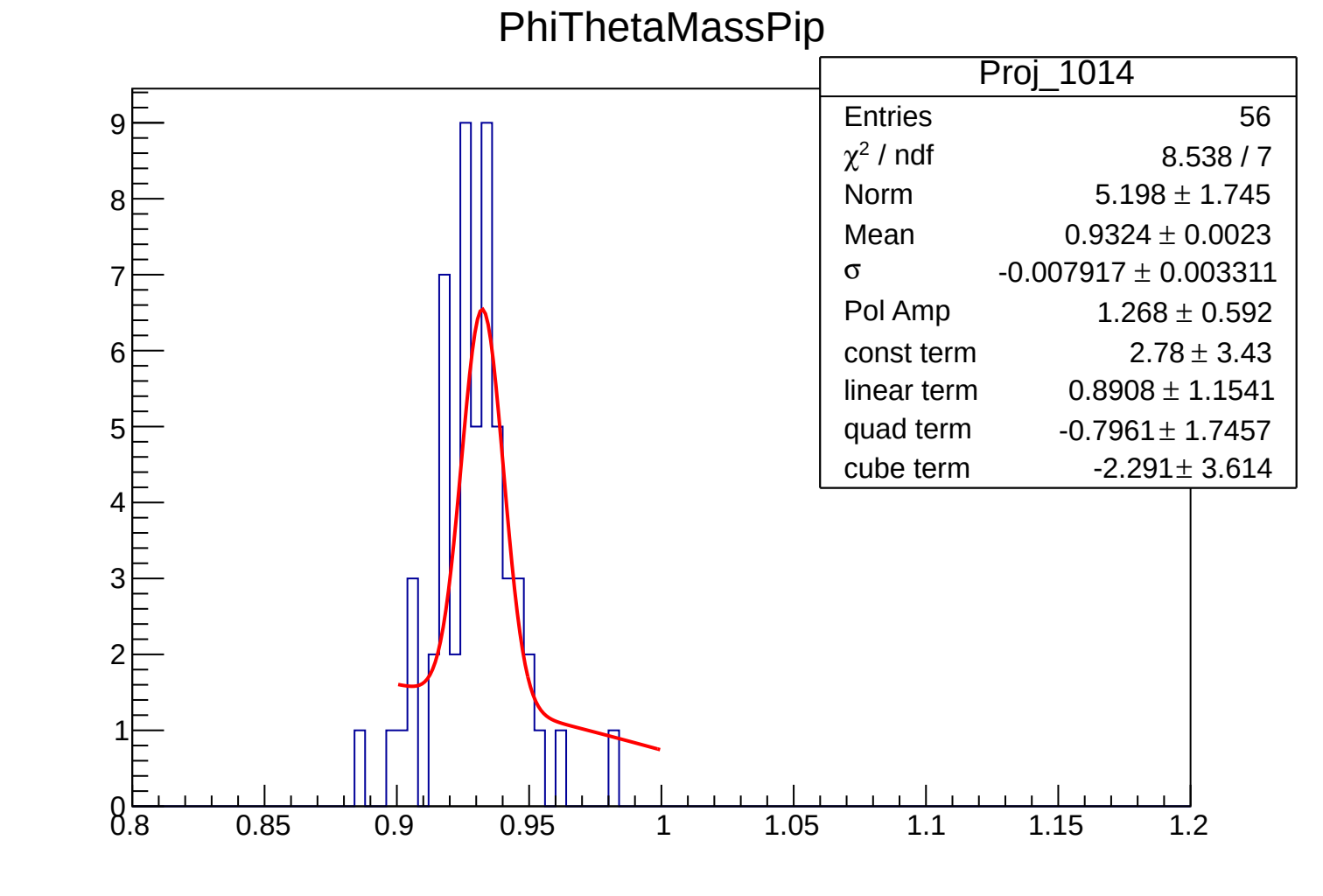

PhiThetaMassPip
Proj_109
Entries 170
χ² / ndf 13.57 / 13
Norm 20.97 ± 2.10
Mean 0.932 ± 0.001
σ 0.01129 ± 0.00077
Pol Amp 3.343 ± 23.531
const term -3.76 ± 13.57
linear term -0.7122 ± 5.9467
quad term 1.712 ± 4.577
cube term 3.537 ± 18.205
0
5
10
15
20
25
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

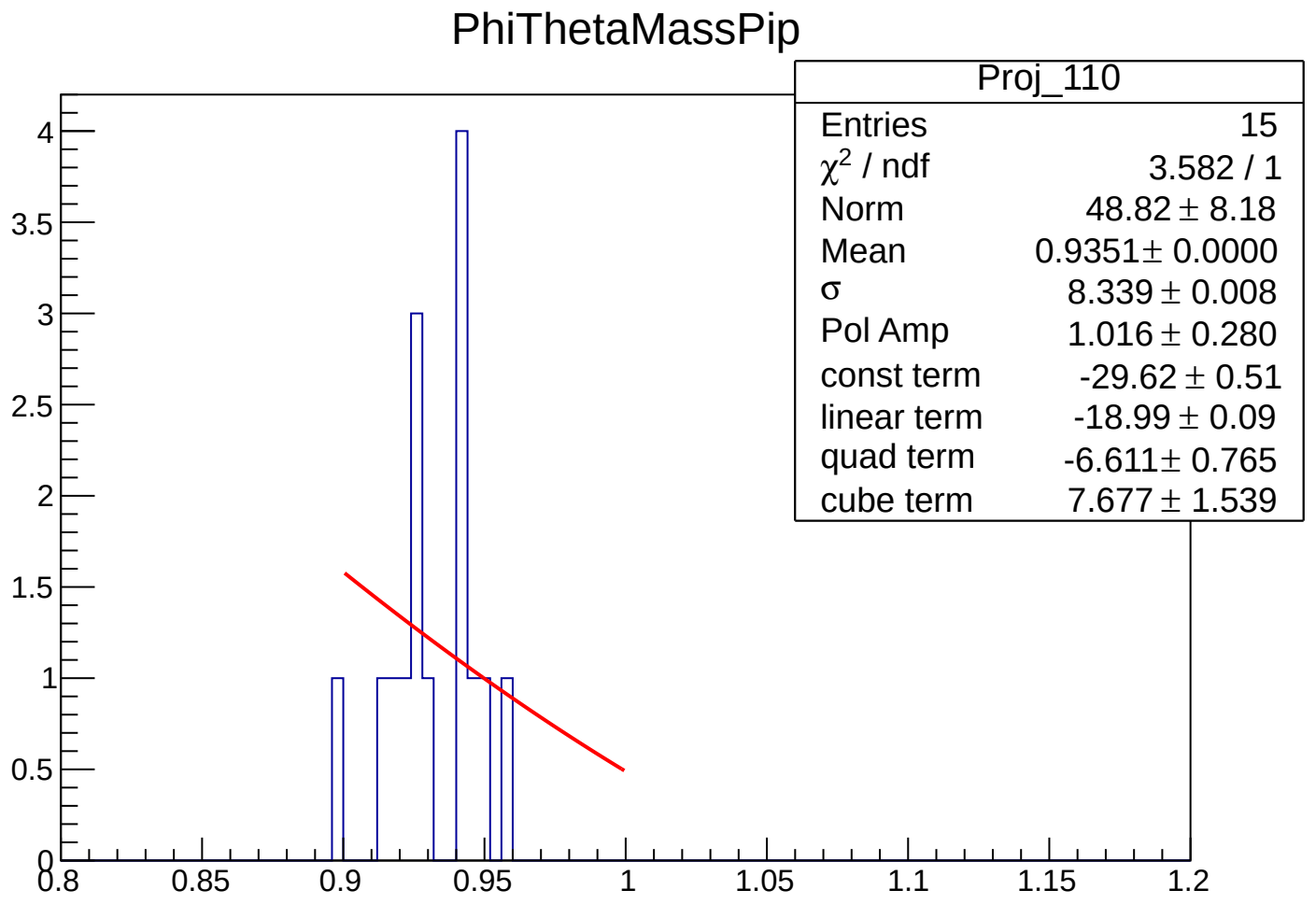

PhiThetaMassPip
Proj_1010
Entries 162
χ² / ndf 16.78 / 12
Norm 18.82 ± 2.38
Mean 0.9312 ± 0.0012
σ 0.009573 ± 0.001021
Pol Amp 134.9 ± 189.5
const term -1.653 ± 0.029
linear term 1.767 ± 0.034
quad term 1.821± 0.036
cube term -1.931± 0.035
0
5
10
15
20
25
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

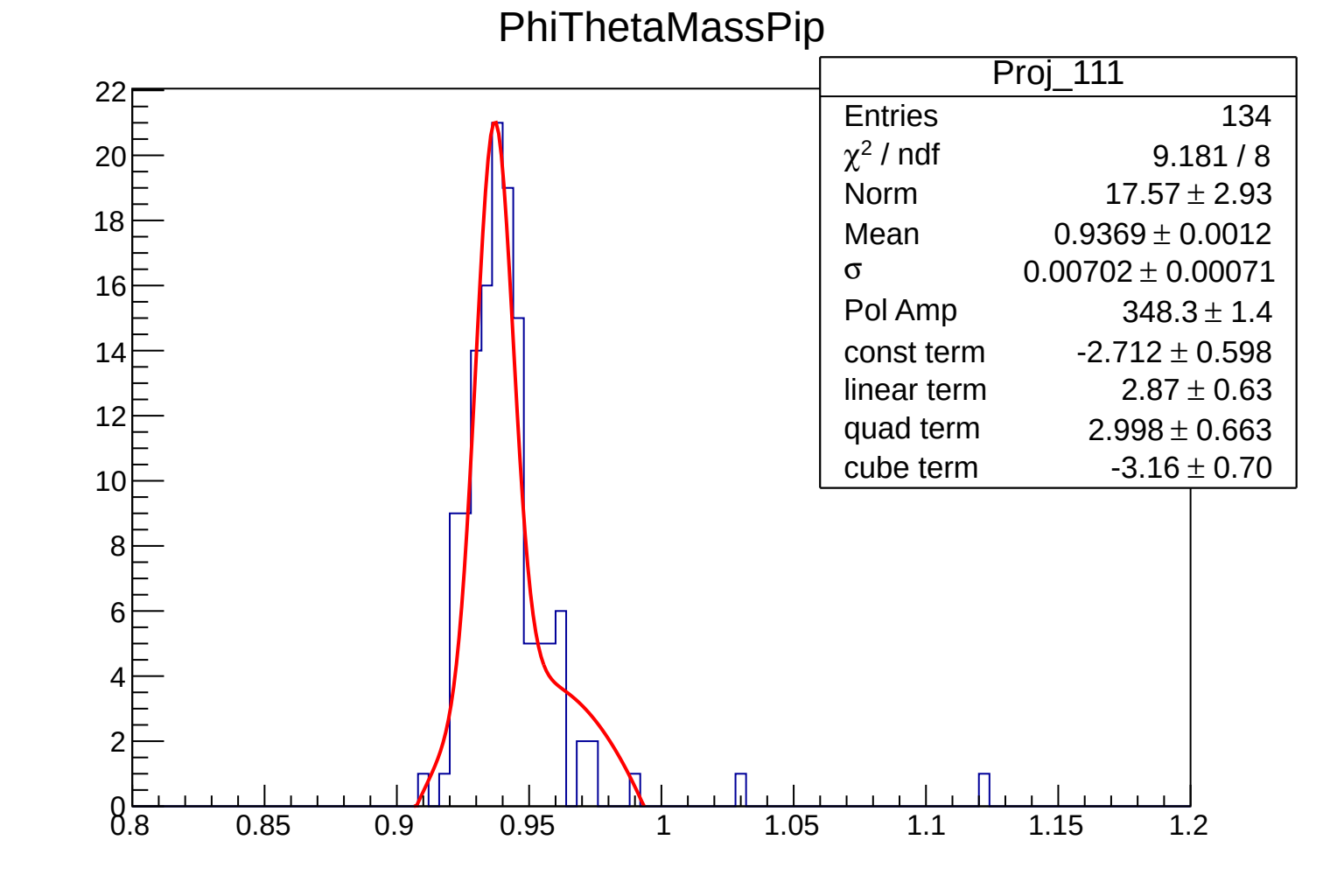

PhiThetaMassPip
Proj_1011
Entries 189
χ² / ndf 13.61 / 10
Norm 25.85 ± 2.69
Mean 0.9335 ± 0.0003
σ 0.008908 ± 0.000599
Pol Amp 358.3 ± 1.4
const term -0.1871 ± 0.1085
linear term 0.2198 ± 0.1114
quad term 0.2063 ± 0.1107
cube term -0.2377 ± 0.1155
0
5
10
15
20
25
30
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

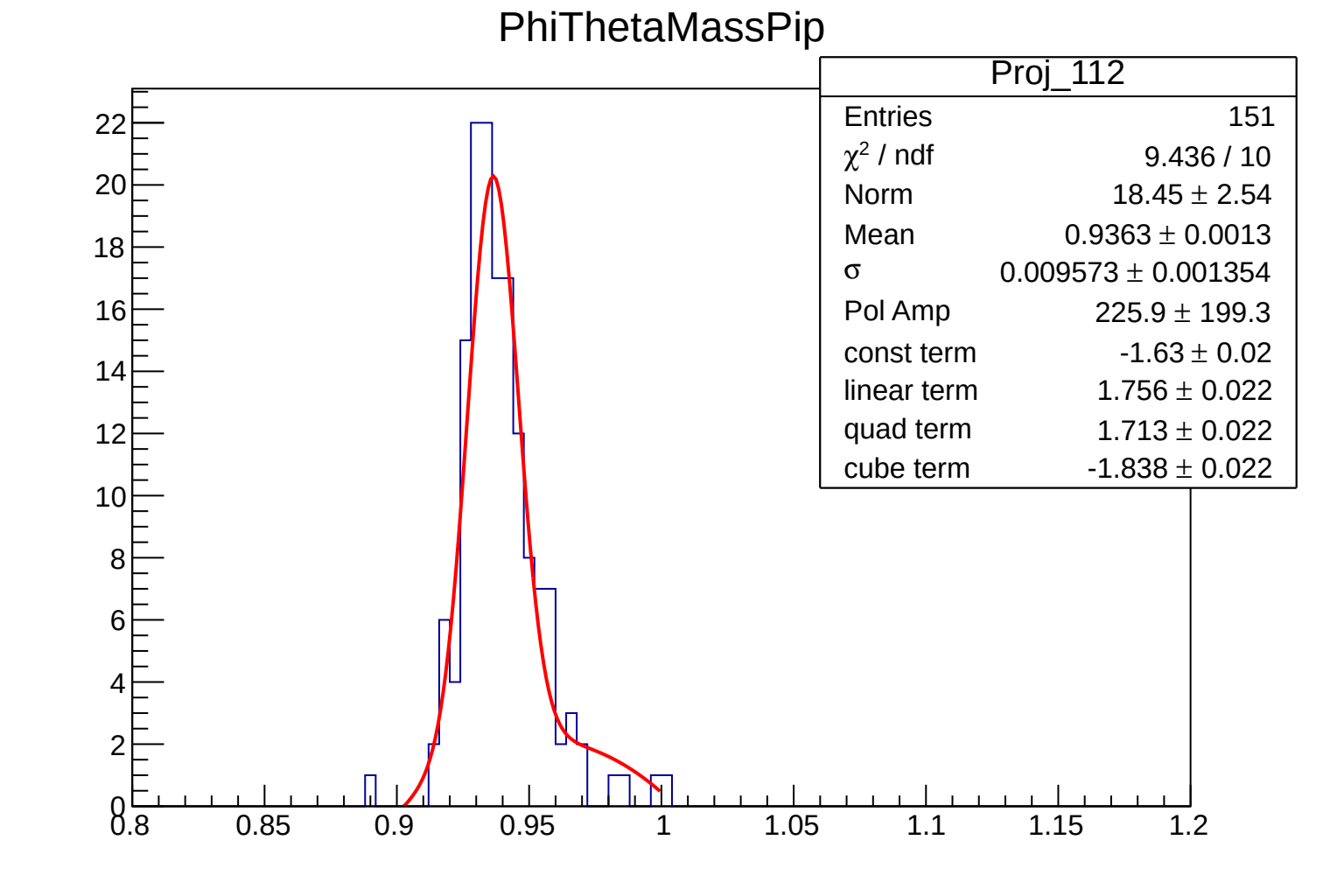

PhiThetaMassPip
Proj_1012
Entries 203
χ² / ndf 21.01 / 13
Norm 29.32 ± 4.32
Mean 0.9302 ± 0.0010
σ 0.00705 ± 0.00121
Pol Amp 27.72 ± 197.87
const term 0.46 ± 1.17
linear term 0.001083 ± 1.225245
quad term -0.235 ± 0.068
cube term -0.1984 ± 2.2880
0
5
10
15
20
25
30
35
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

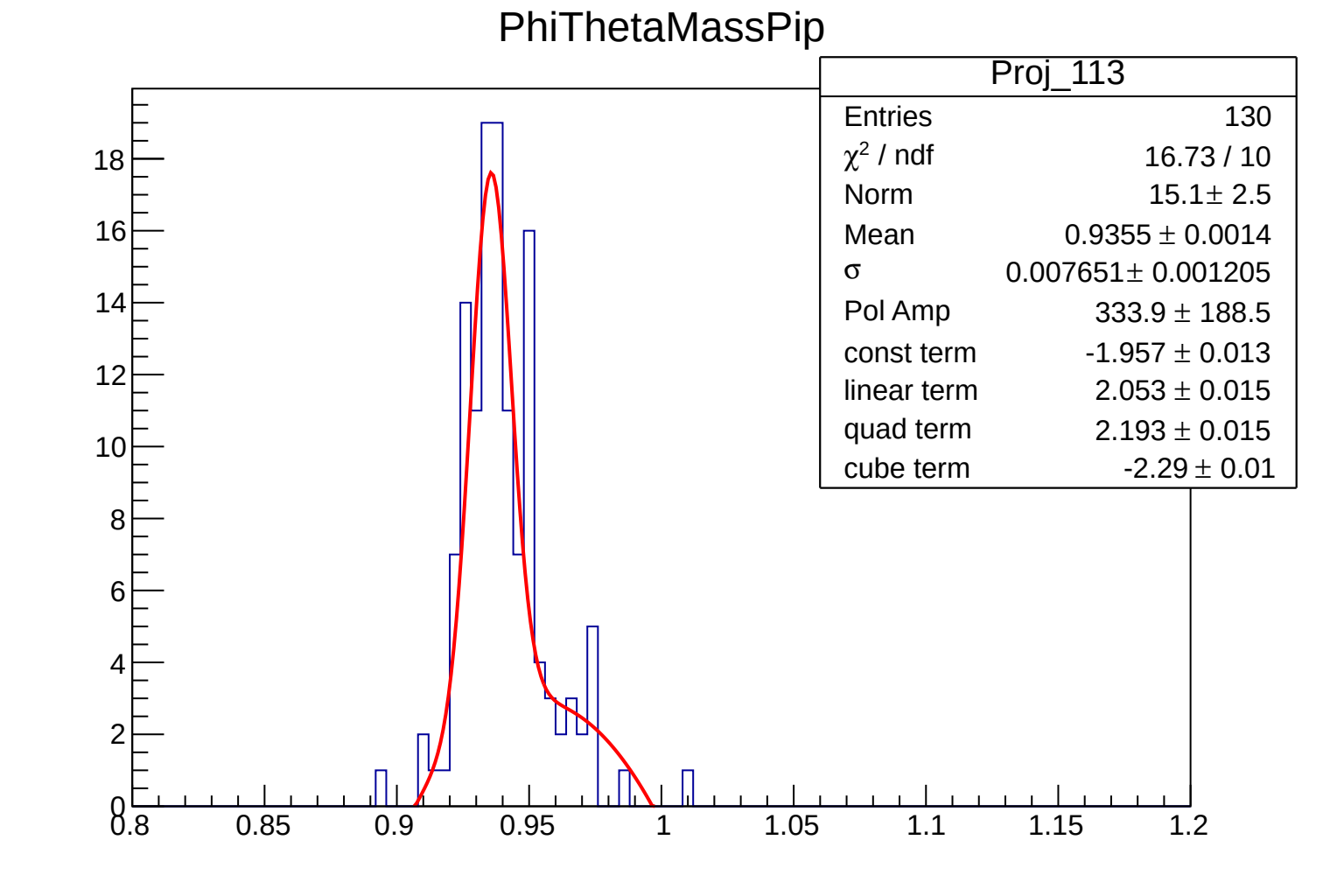

PhiThetaMassPip
Proj_1013
Entries 213
χ² / ndf 14.2 / 12
Norm 23.03 ± 2.76
Mean 0.9266 ± 0.0012
σ 0.01009 ± 0.00169
Pol Amp 355.2 ± 3.0
const term -0.7282 ± 0.7177
linear term 0.8521 ± 0.7578
quad term 0.6914 ± 0.7638
cube term -0.8137 ± 0.8062
0
5
10
15
20
25
30
35
40
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

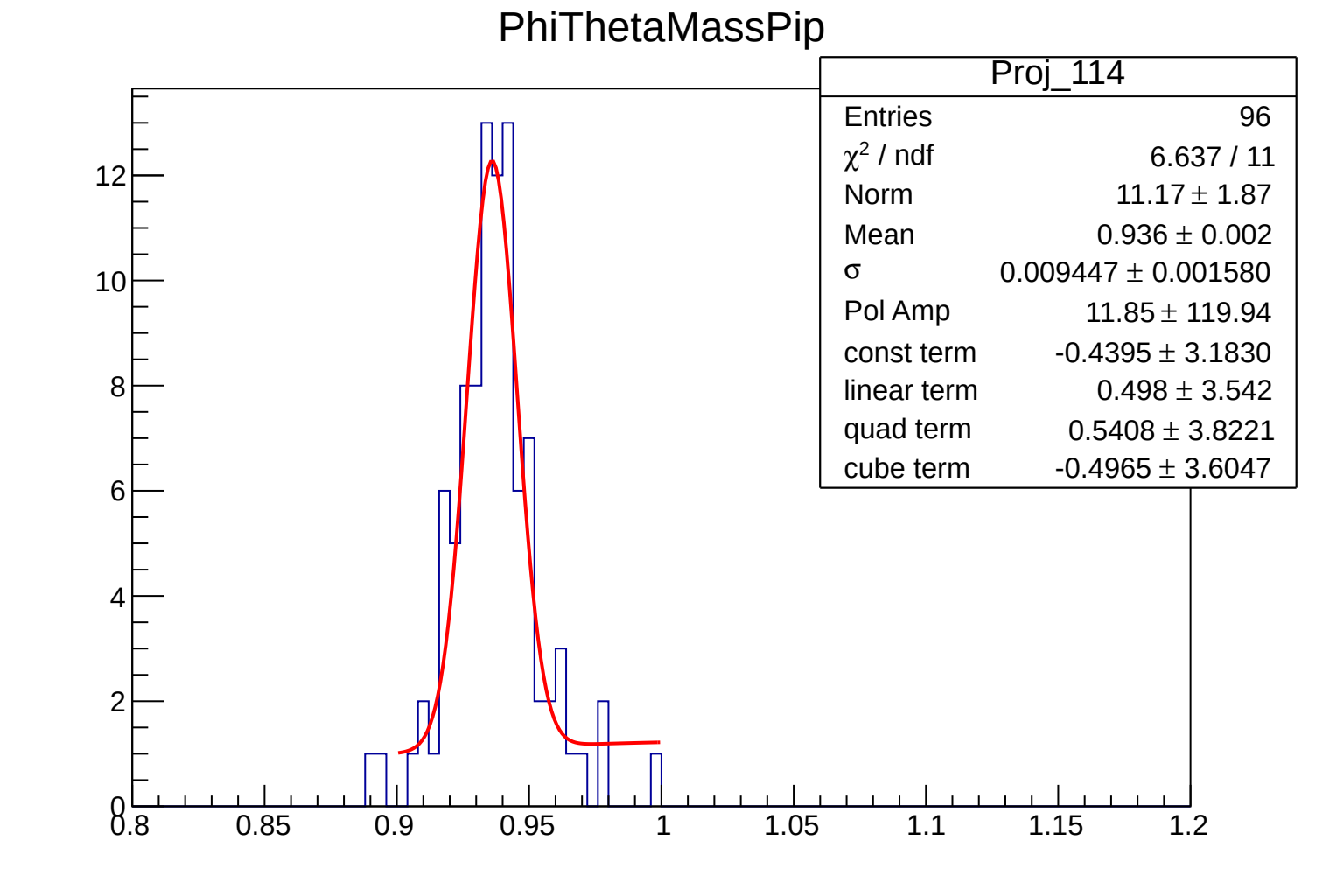

PhiThetaMassPip
Proj_1014
Entries 56
χ² / ndf 8.538 / 7
Norm 5.198 ± 1.745
Mean 0.9324 ± 0.0023
σ -0.007917 ± 0.003311
Pol Amp 1.268 ± 0.592
const term 2.78 ± 3.43
linear term 0.8908 ± 1.1541
quad term -0.7961 ± 1.7457
cube term -2.291 ± 3.614
0
1
2
3
4
5
6
7
8
9
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

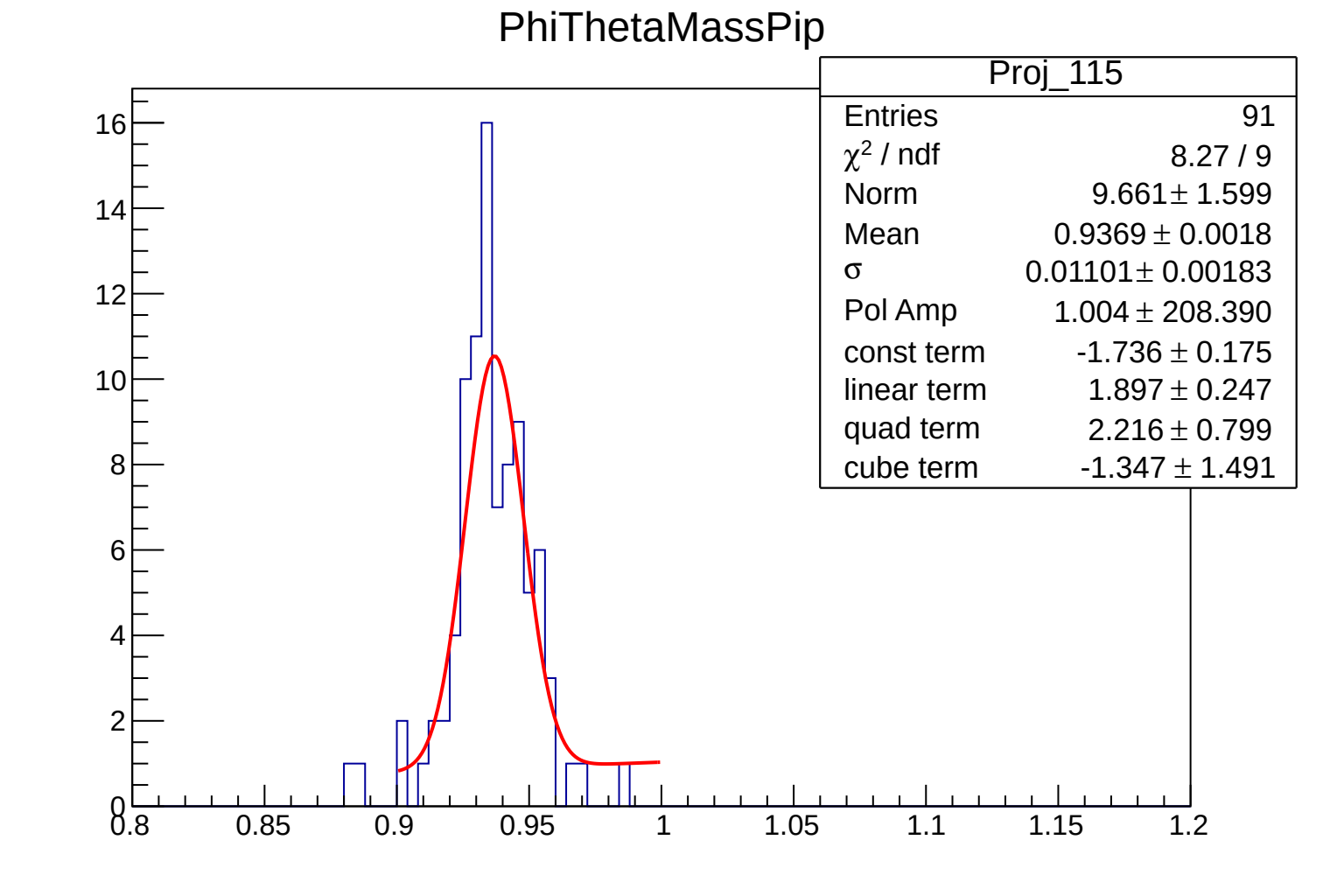

PhiThetaMassPip
Proj_110
Entries 15
χ² / ndf 3.582 / 1
Norm 48.82 ± 8.18
Mean 0.9351 ± 0.0000
σ 8.339 ± 0.008
Pol Amp 1.016 ± 0.280
const term -29.62 ± 0.51
linear term -18.99 ± 0.09
quad term -6.611 ± 0.765
cube term 7.677 ± 1.539
0
0.5
1
1.5
2
2.5
3
3.5
4
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

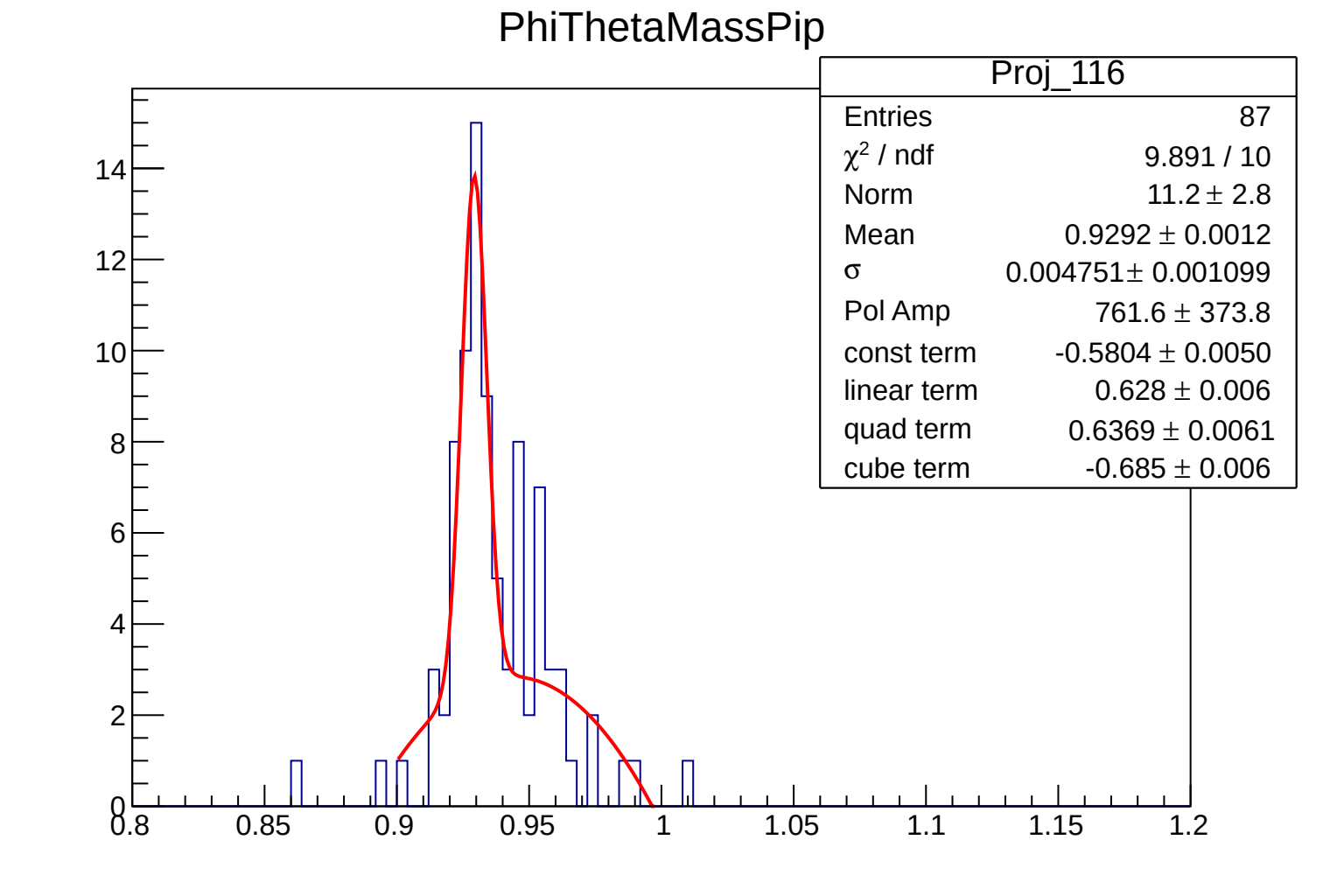

PhiThetaMassPip
Proj_111
Entries 134
χ² / ndf 9.181 / 8
Norm 17.57 ± 2.93
Mean 0.9369 ± 0.0012
σ 0.00702 ± 0.00071
Pol Amp 348.3 ± 1.4
const term -2.712 ± 0.598
linear term 2.87 ± 0.63
quad term 2.998 ± 0.663
cube term -3.16 ± 0.70
22
20
18
16
14
12
10
8
6
4
2
0
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

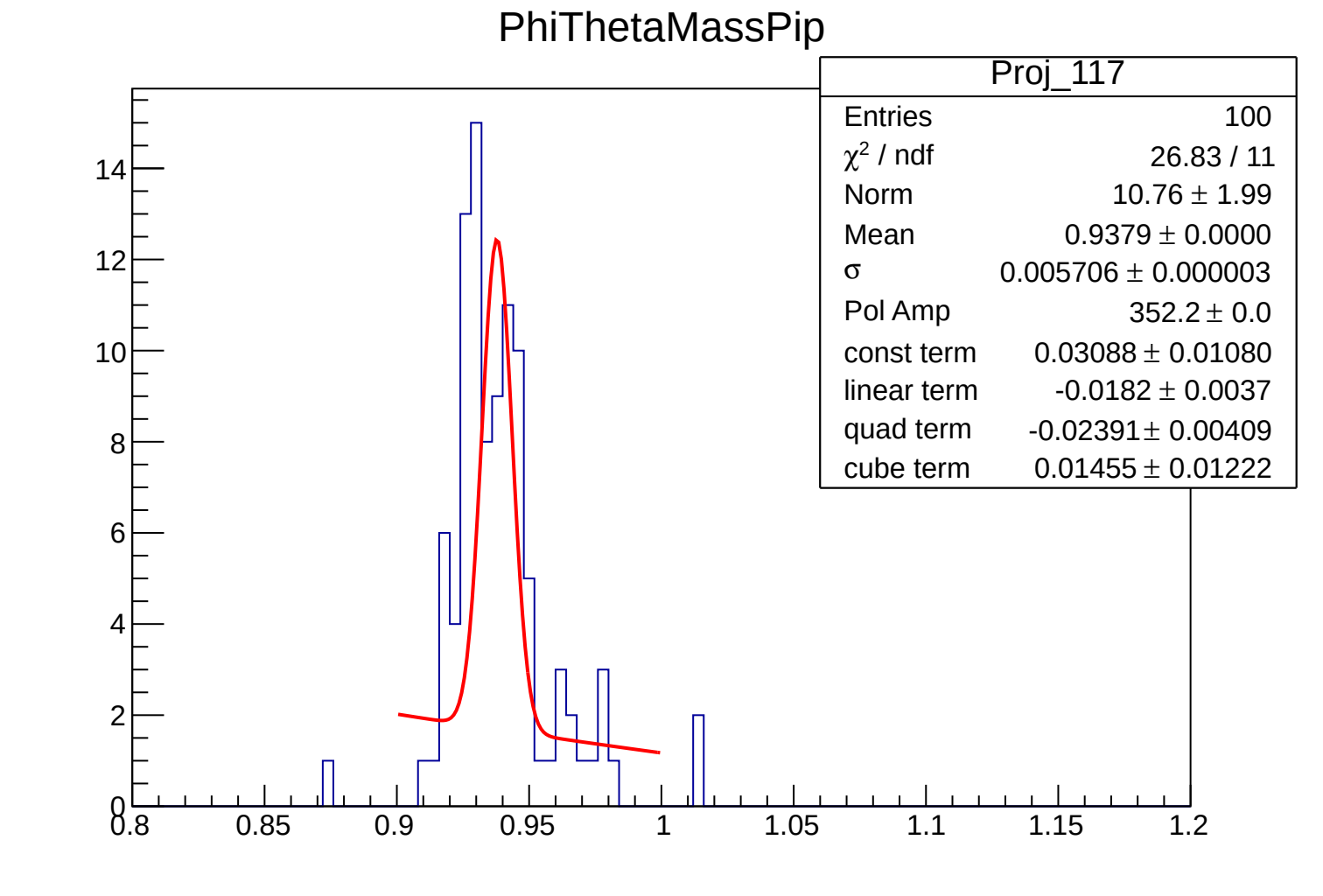

PhiThetaMassPip
Proj_112
Entries 151
χ² / ndf 9.436 / 10
Norm 18.45 ± 2.54
Mean 0.9363 ± 0.0013
σ 0.009573 ± 0.001354
Pol Amp 225.9 ± 199.3
const term -1.63 ± 0.02
linear term 1.756 ± 0.022
quad term 1.713 ± 0.022
cube term -1.838 ± 0.022
0 2 4 6 8 10 12 14 16 18 20 22
0.8 0.85 0.9 0.95 1 1.05 1.1 1.15 1.2

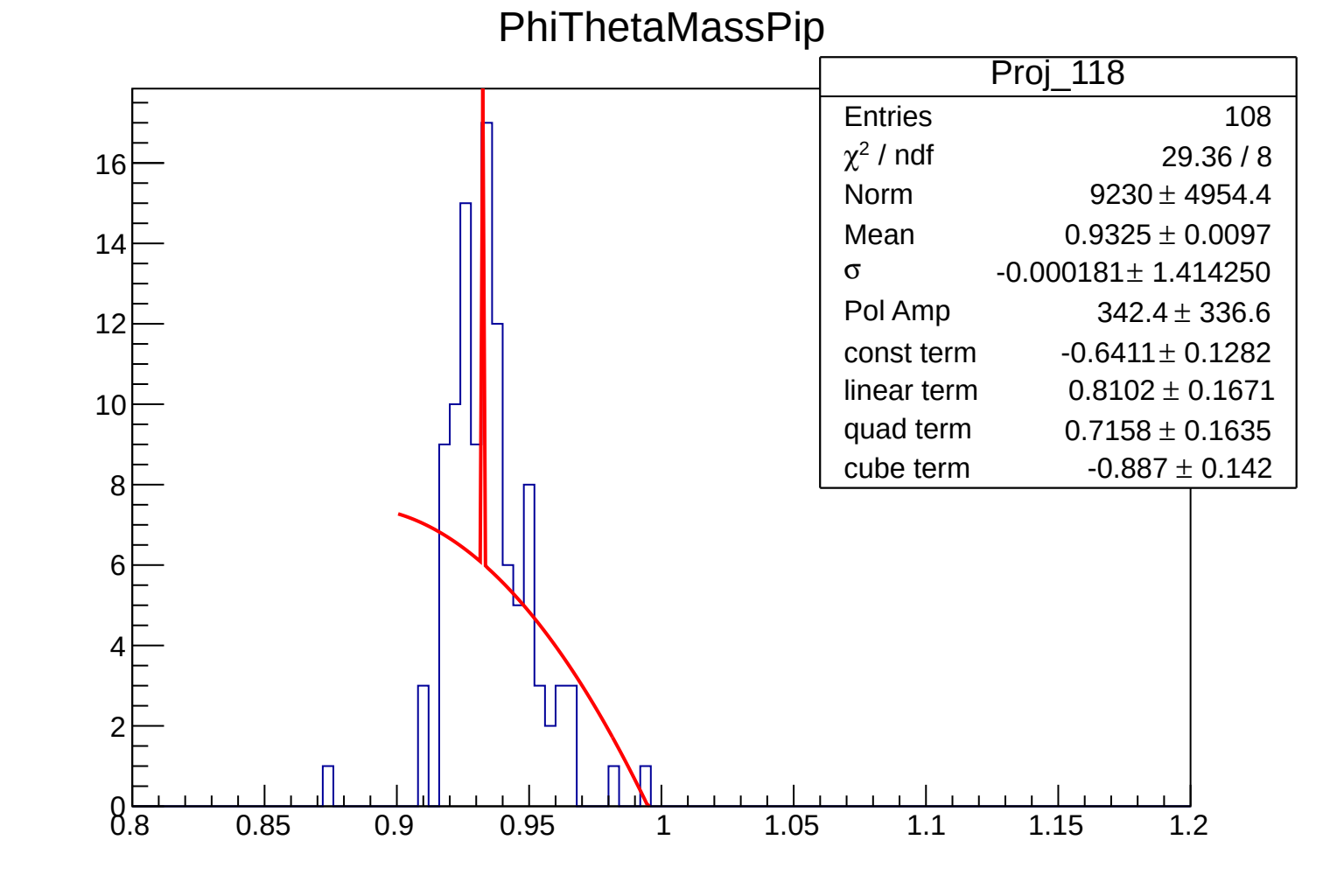

PhiThetaMassPip
Proj_113
Entries 130
χ² / ndf 16.73 / 10
Norm 15.1± 2.5
Mean 0.9355 ± 0.0014
σ 0.007651± 0.001205
Pol Amp 333.9 ± 188.5
const term -1.957 ± 0.013
linear term 2.053 ± 0.015
quad term 2.193 ± 0.015
cube term -2.29 ± 0.01
0
2
4
6
8
10
12
14
16
18
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

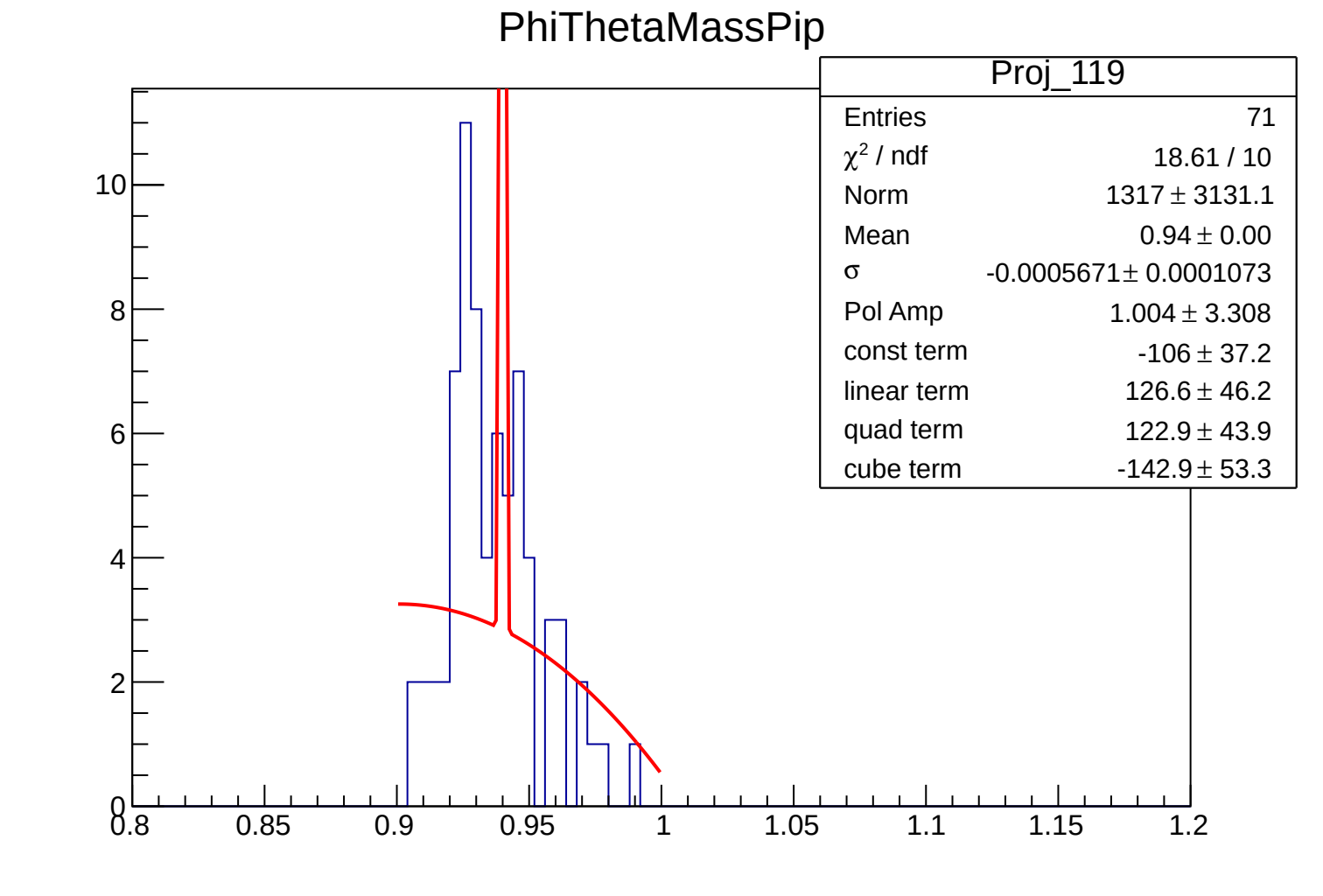

PhiThetaMassPip
Proj_114
Entries 96
χ² / ndf 6.637 / 11
Norm 11.17 ± 1.87
Mean 0.936 ± 0.002
σ 0.009447 ± 0.001580
Pol Amp 11.85 ± 119.94
const term -0.4395 ± 3.1830
linear term 0.498 ± 3.542
quad term 0.5408 ± 3.8221
cube term -0.4965 ± 3.6047
0
2
4
6
8
10
12
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

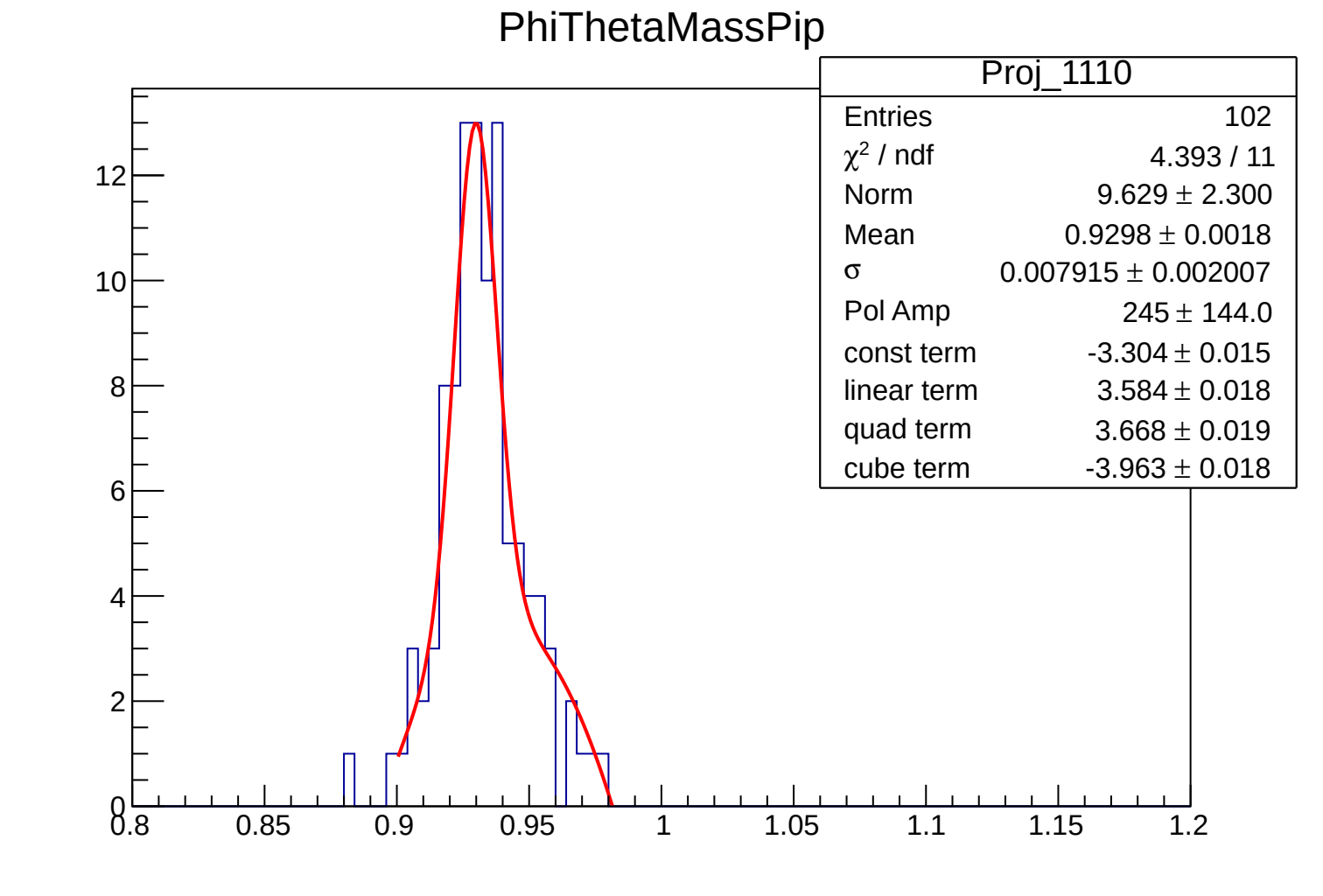

PhiThetaMassPip
Proj_115
Entries 91
χ² / ndf 8.27 / 9
Norm 9.661 ± 1.599
Mean 0.9369 ± 0.0018
σ 0.01101 ± 0.00183
Pol Amp 1.004 ± 208.390
const term -1.736 ± 0.175
linear term 1.897 ± 0.247
quad term 2.216 ± 0.799
cube term -1.347 ± 1.491
0
2
4
6
8
10
12
14
16
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

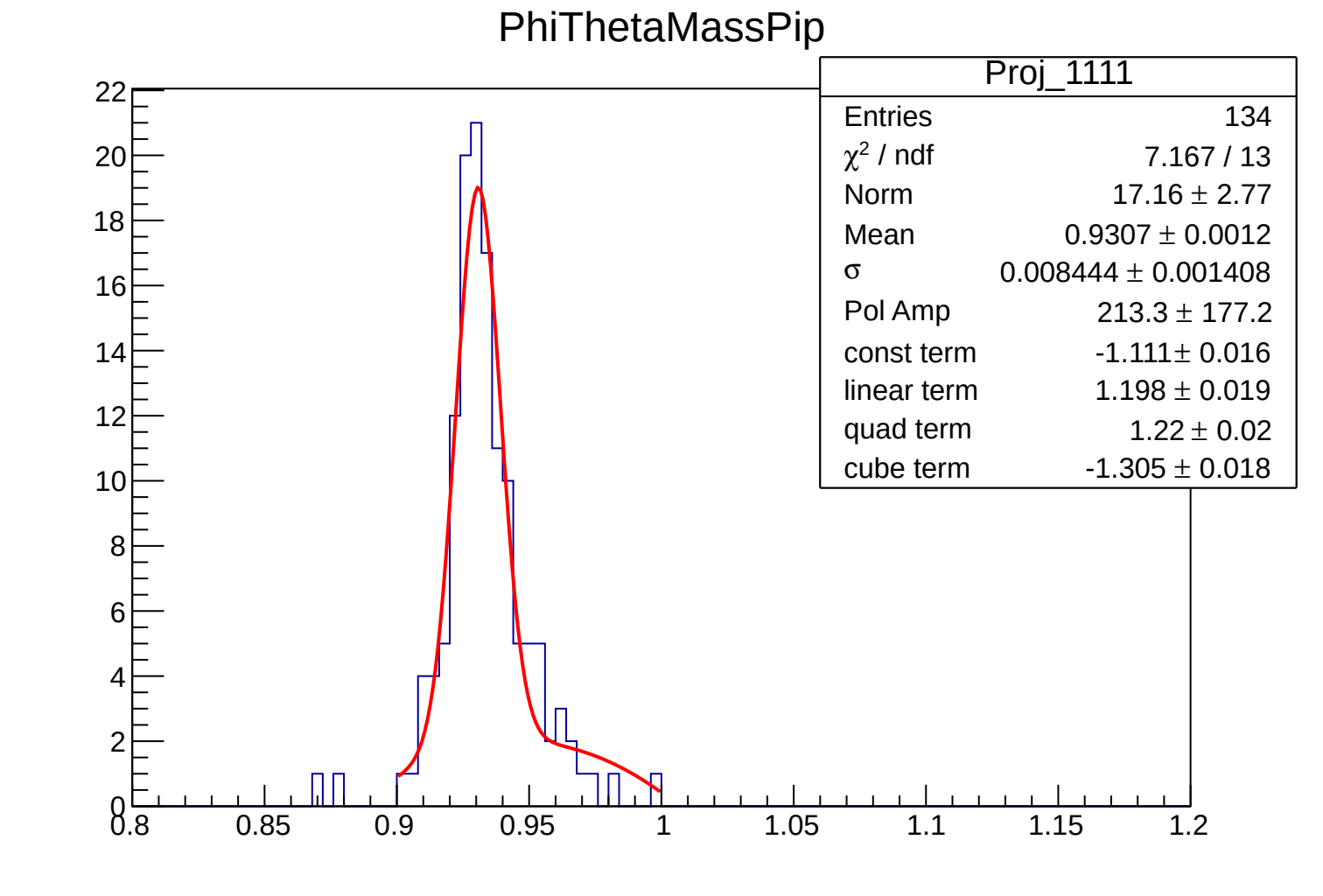

PhiThetaMassPip
Proj_116
Entries 87
χ² / ndf 9.891 / 10
Norm 11.2 ± 2.8
Mean 0.9292 ± 0.0012
σ 0.004751± 0.001099
Pol Amp 761.6 ± 373.8
const term -0.5804 ± 0.0050
linear term 0.628 ± 0.006
quad term 0.6369 ± 0.0061
cube term -0.685 ± 0.006
0
2
4
6
8
10
12
14
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

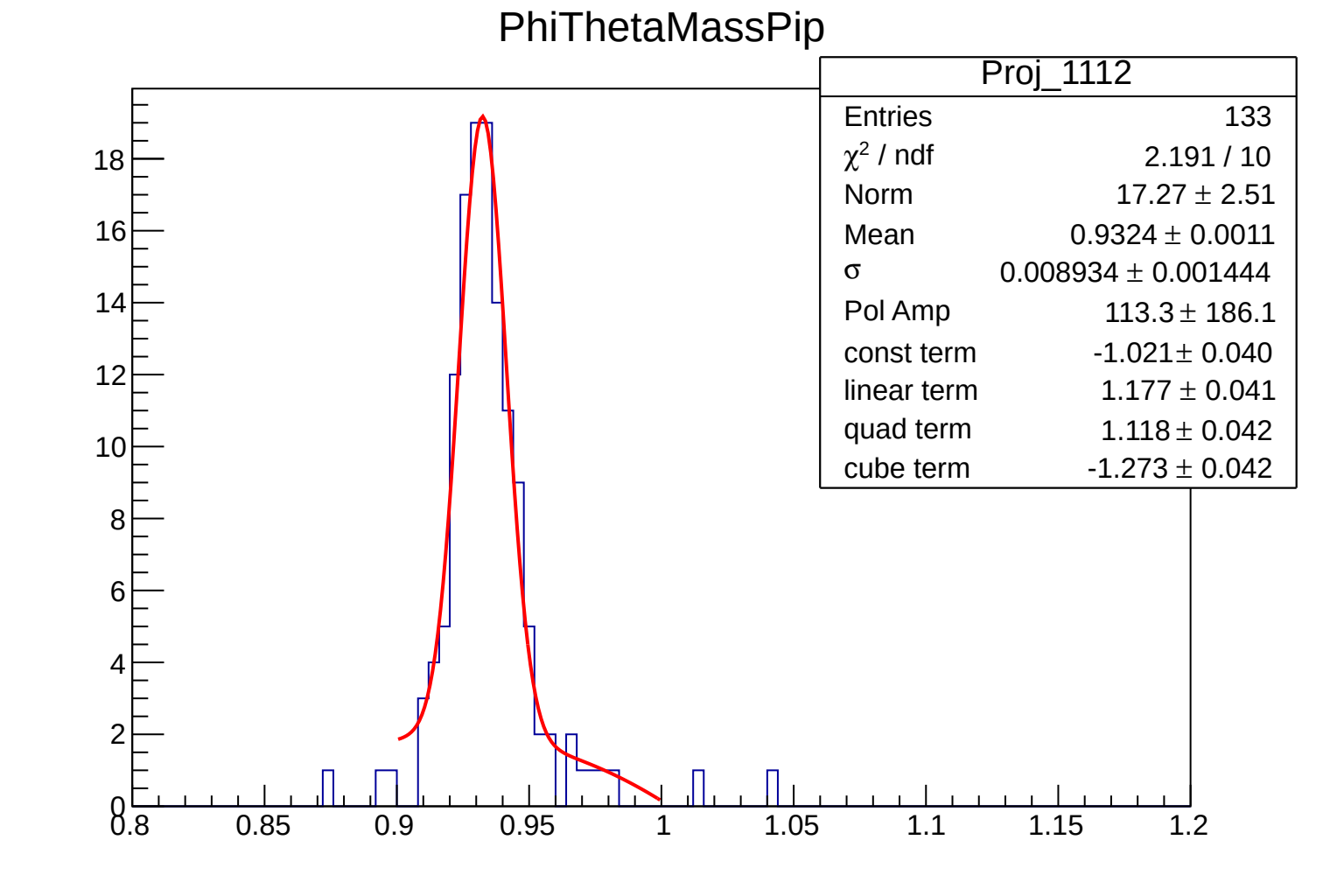

PhiThetaMassPip
Proj_117
Entries 100
χ² / ndf 26.83 / 11
Norm 10.76 ± 1.99
Mean 0.9379 ± 0.0000
σ 0.005706 ± 0.000003
Pol Amp 352.2 ± 0.0
const term 0.03088 ± 0.01080
linear term -0.0182 ± 0.0037
quad term -0.02391 ± 0.00409
cube term 0.01455 ± 0.01222
0
2
4
6
8
10
12
14
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

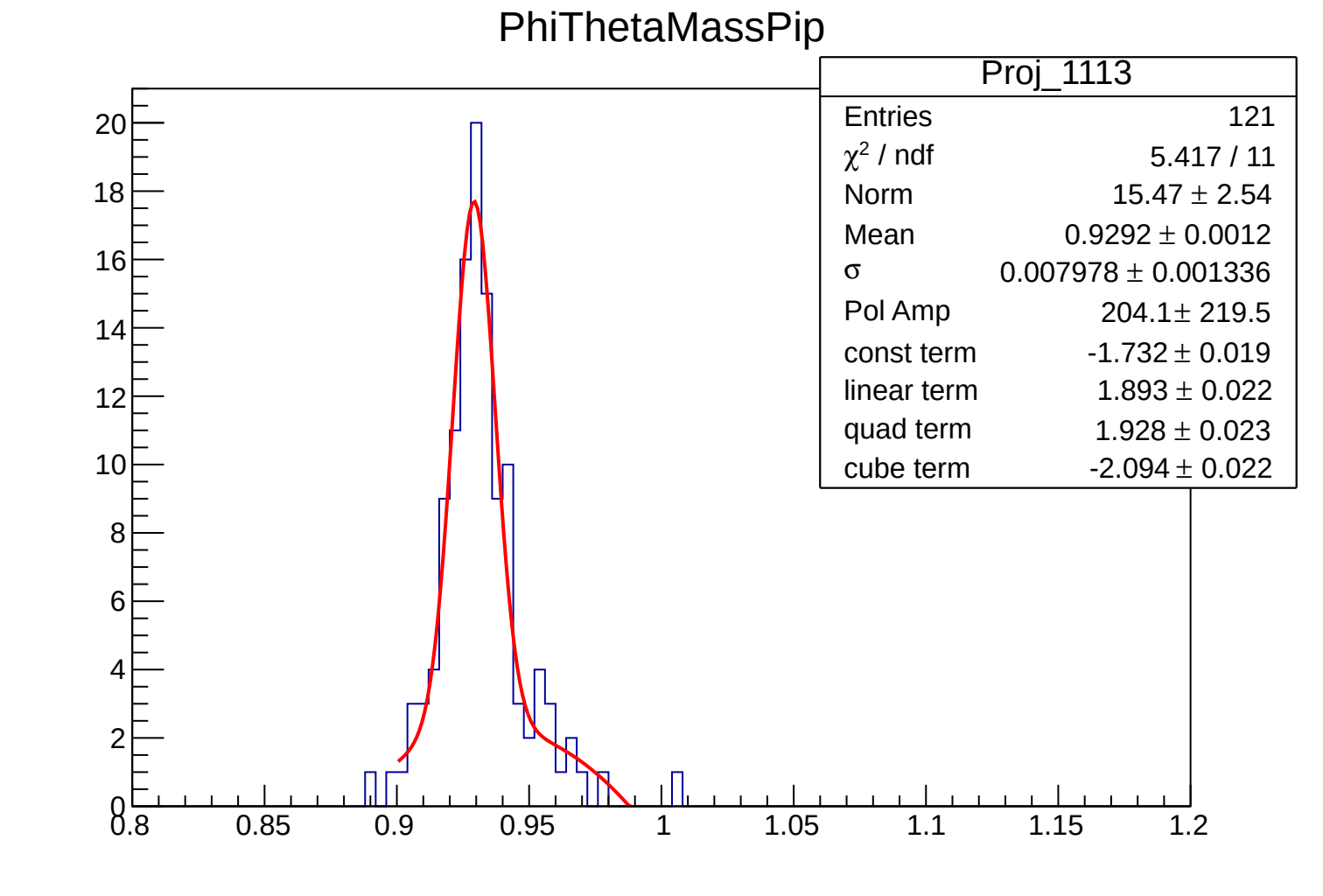

PhiThetaMassPip
Proj_118
Entries 108
χ² / ndf 29.36 / 8
Norm 9230 ± 4954.4
Mean 0.9325 ± 0.0097
σ -0.000181 ± 1.414250
Pol Amp 342.4 ± 336.6
const term -0.6411 ± 0.1282
linear term 0.8102 ± 0.1671
quad term 0.7158 ± 0.1635
cube term -0.887 ± 0.142
0
2
4
6
8
10
12
14
16
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2

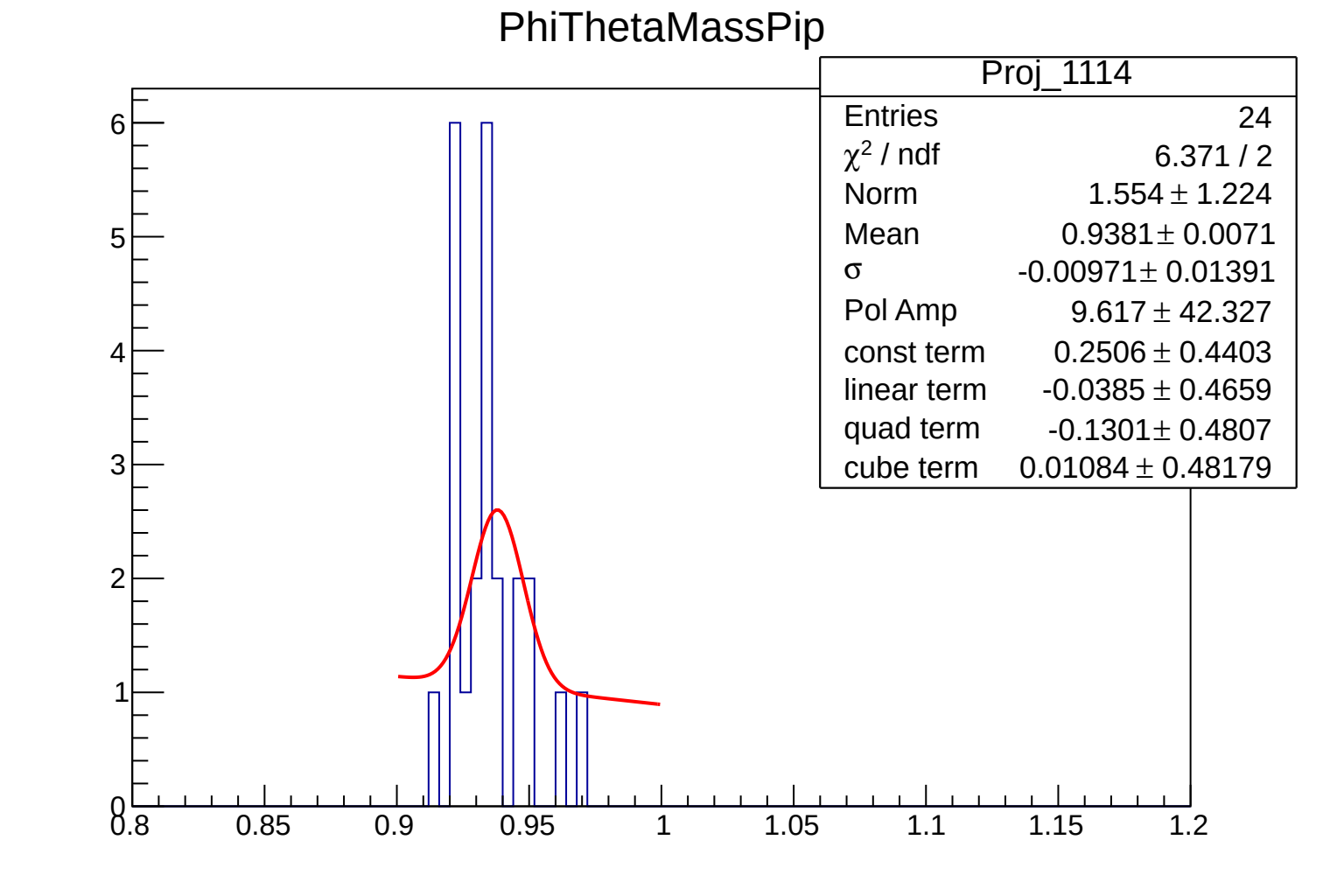

PhiThetaMassPip
Proj_119
Entries 71
χ² / ndf 18.61 / 10
Norm 1317 ± 3131.1
Mean 0.94 ± 0.00
σ -0.0005671 ± 0.0001073
Pol Amp 1.004 ± 3.308
const term -106 ± 37.2
linear term 126.6 ± 46.2
quad term 122.9 ± 43.9
cube term -142.9 ± 53.3
0
2
4
6
8
10
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2


PhiThetaMassPip
Proj_1110
Entries 102
χ² / ndf 4.393 / 11
Norm 9.629 ± 2.300
Mean 0.9298 ± 0.0018
σ 0.007915 ± 0.002007
Pol Amp 245 ± 144.0
const term -3.304 ± 0.015
linear term 3.584 ± 0.018
quad term 3.668 ± 0.019
cube term -3.963 ± 0.018
0
2
4
6
8
10
12
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2


PhiThetaMassPip
Proj_1111
Entries 134
χ² / ndf 7.167 / 13
Norm 17.16 ± 2.77
Mean 0.9307 ± 0.0012
σ 0.008444 ± 0.001408
Pol Amp 213.3 ± 177.2
const term -1.111± 0.016
linear term 1.198 ± 0.019
quad term 1.22 ± 0.02
cube term -1.305 ± 0.018
0 2 4 6 8 10 12 14 16 18 20 22
0.8 0.85 0.9 0.95 1 1.05 1.1 1.15 1.2


PhiThetaMassPip
Proj_1112
Entries 133
χ² / ndf 2.191 / 10
Norm 17.27 ± 2.51
Mean 0.9324 ± 0.0011
σ 0.008934 ± 0.001444
Pol Amp 113.3 ± 186.1
const term -1.021 ± 0.040
linear term 1.177 ± 0.041
quad term 1.118 ± 0.042
cube term -1.273 ± 0.042
0
2
4
6
8
10
12
14
16
18
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2


PhiThetaMassPip
Proj_1113
Entries 121
χ² / ndf 5.417 / 11
Norm 15.47 ± 2.54
Mean 0.9292 ± 0.0012
σ 0.007978 ± 0.001336
Pol Amp 204.1 ± 219.5
const term -1.732 ± 0.019
linear term 1.893 ± 0.022
quad term 1.928 ± 0.023
cube term -2.094 ± 0.022
0 2 4 6 8 10 12 14 16 18 20
0.8 0.85 0.9 0.95 1 1.05 1.1 1.15 1.2


PhiThetaMassPip
Proj_1114
Entries 24
χ² / ndf 6.371 / 2
Norm 1.554 ± 1.224
Mean 0.9381 ± 0.0071
σ -0.00971 ± 0.01391
Pol Amp 9.617 ± 42.327
const term 0.2506 ± 0.4403
linear term -0.0385 ± 0.4659
quad term -0.1301 ± 0.4807
cube term 0.01084 ± 0.48179
0
1
2
3
4
5
6
0.8
0.85
0.9
0.95
1
1.05
1.1
1.15
1.2