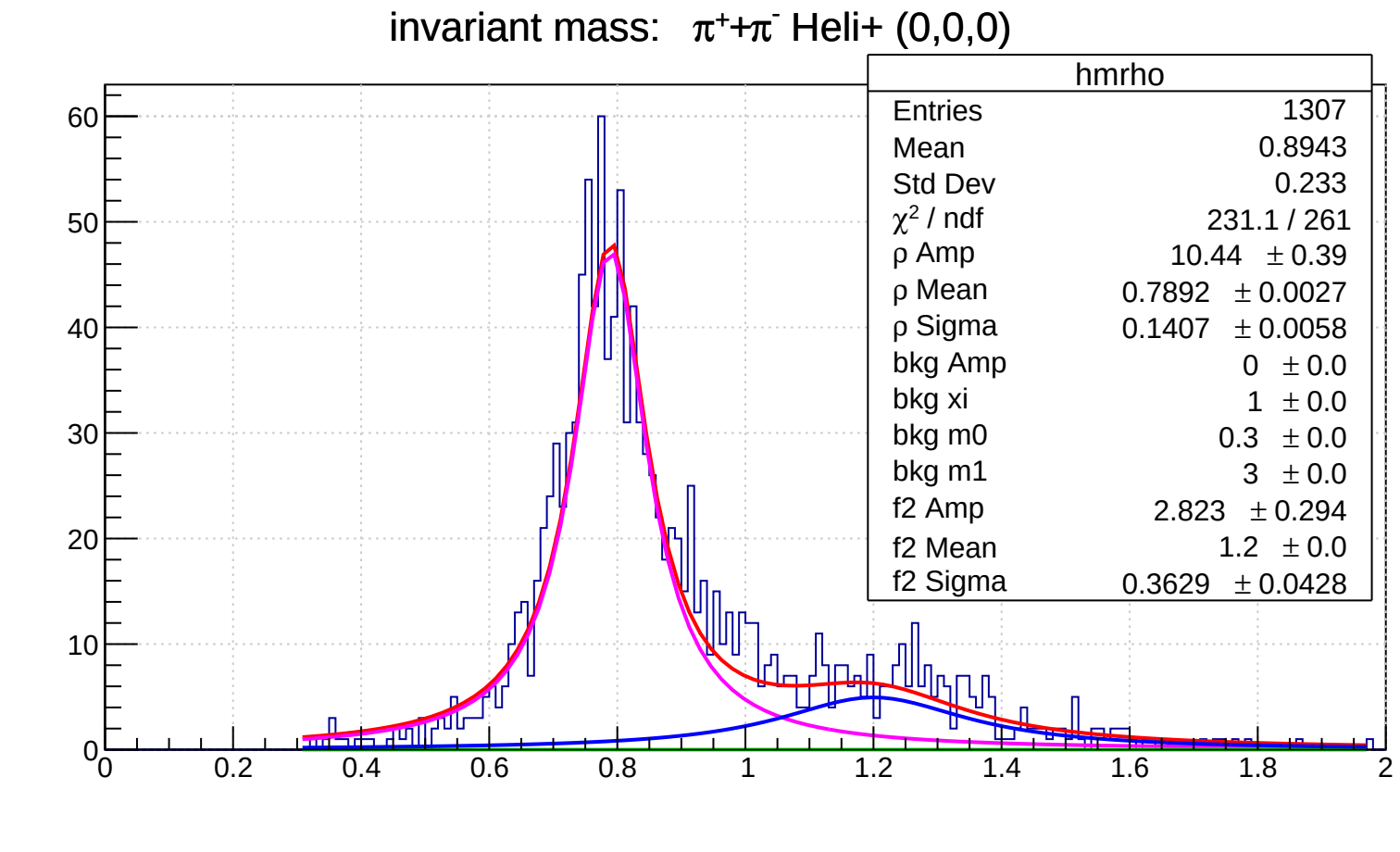
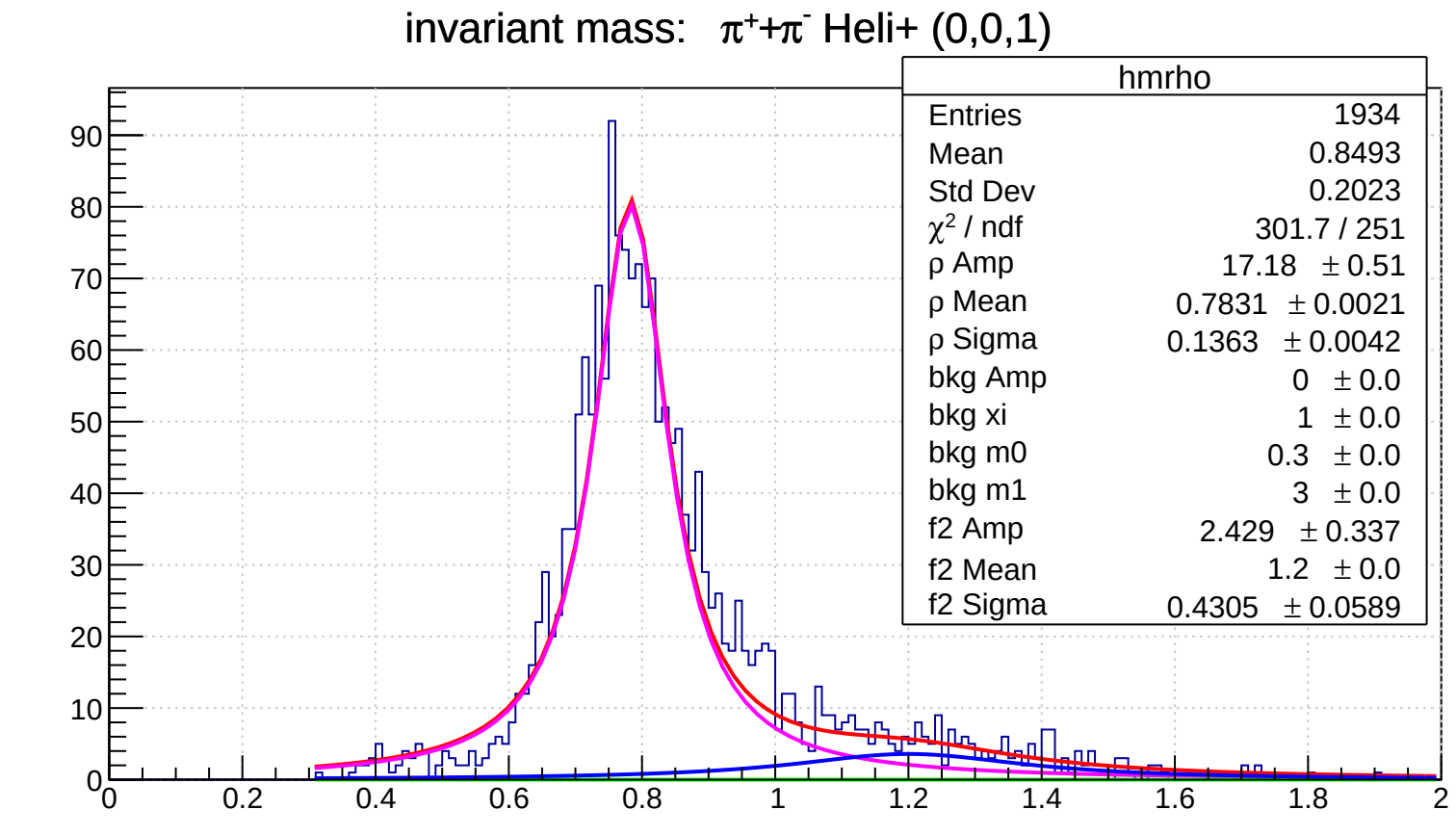
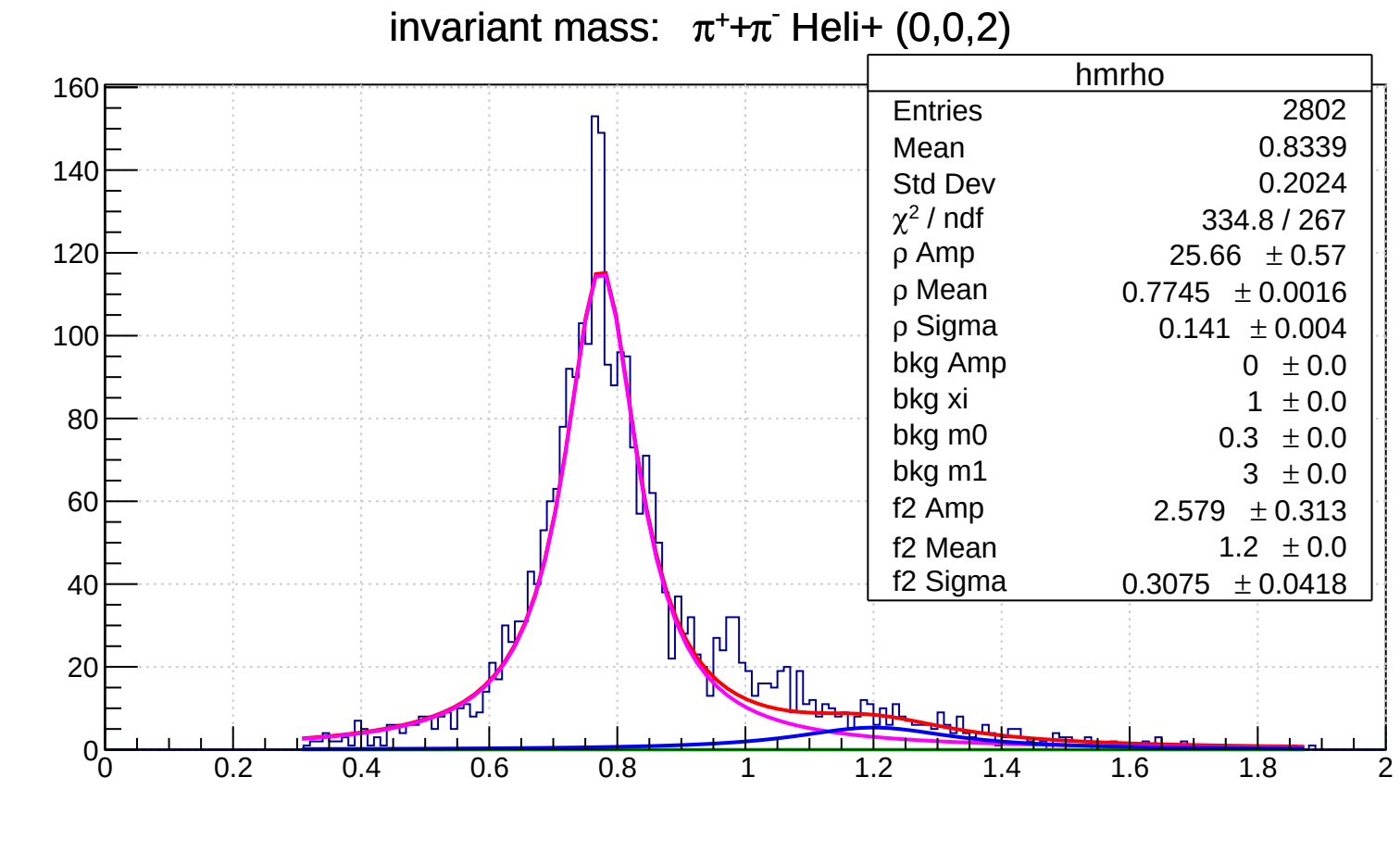
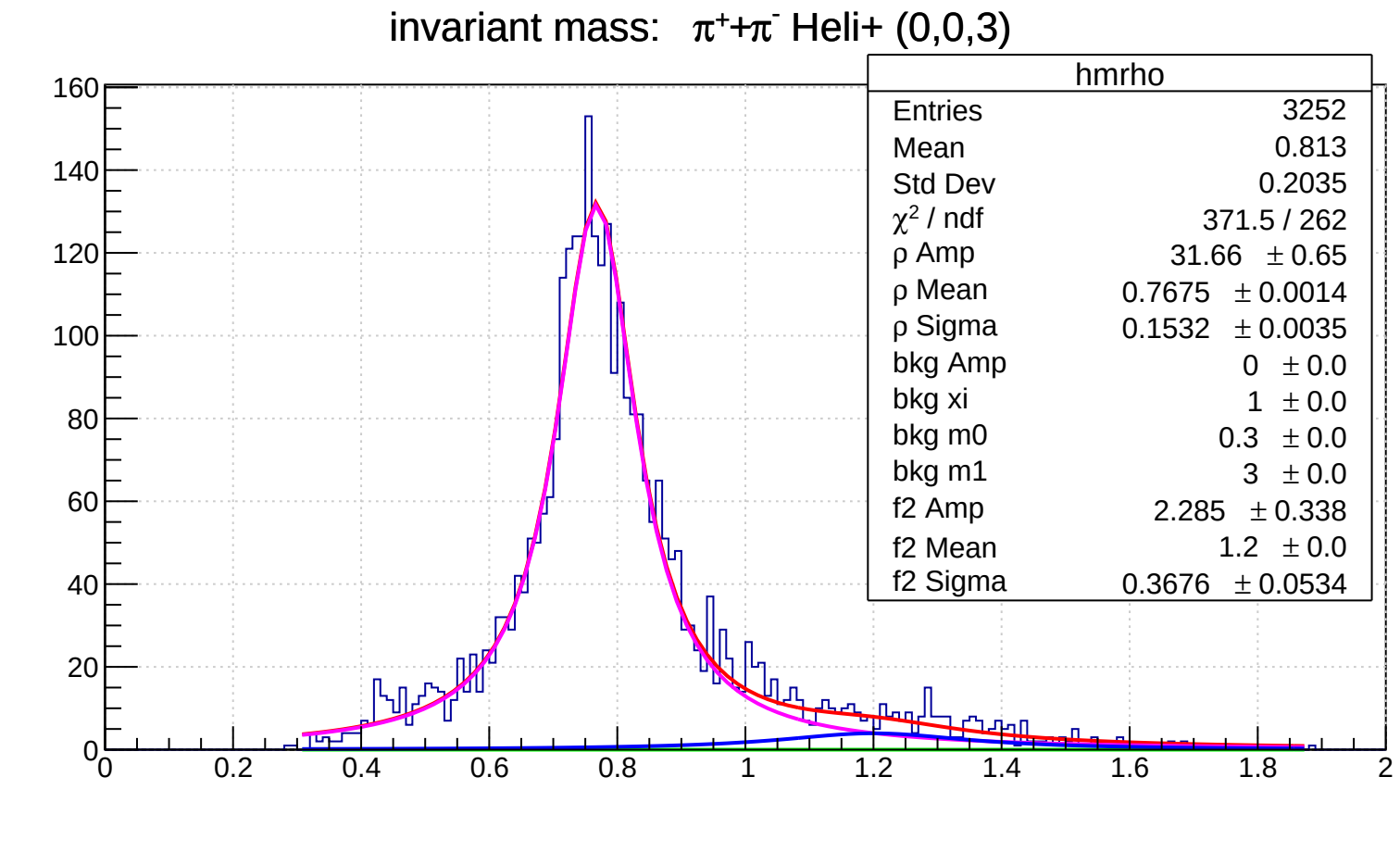
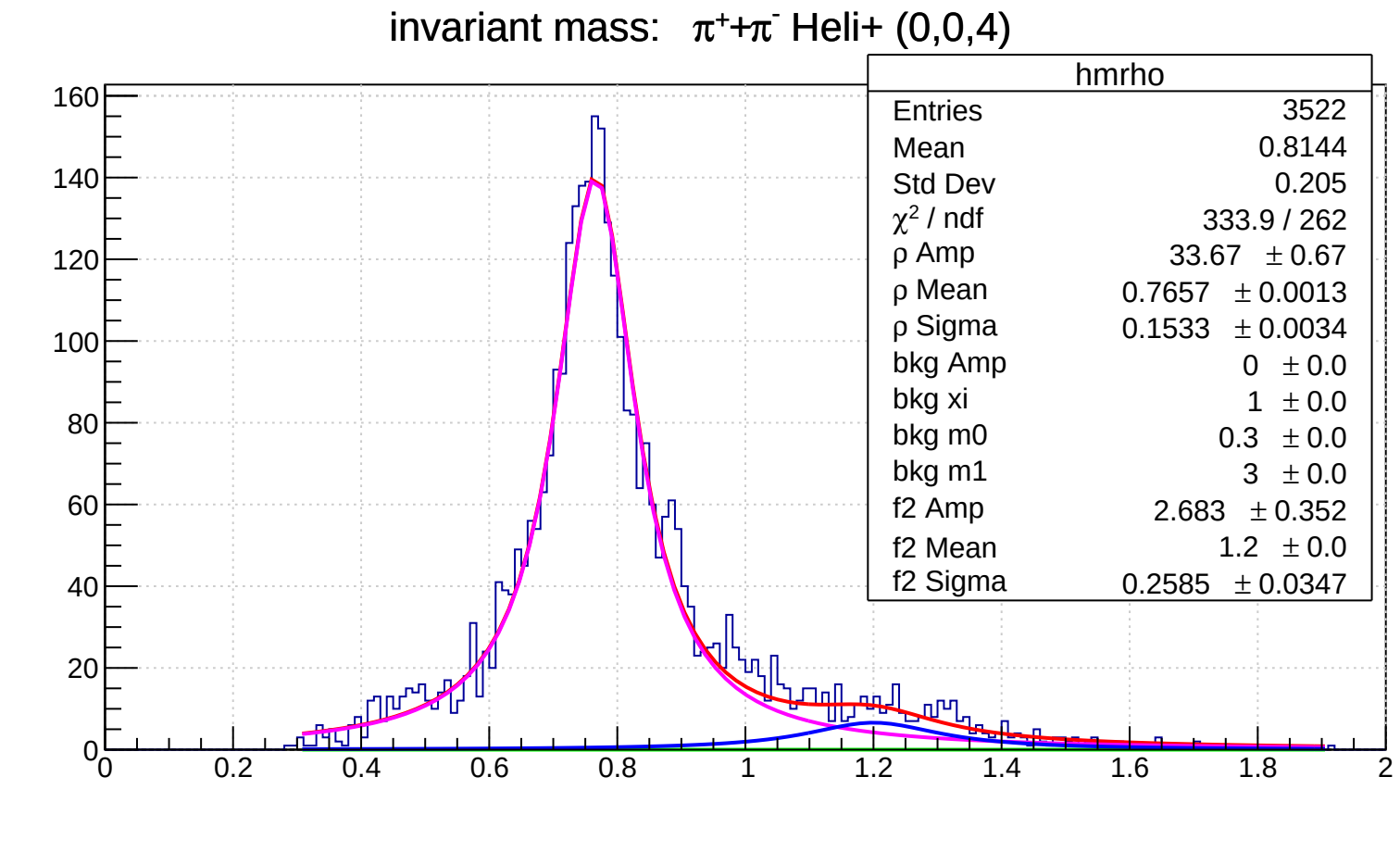
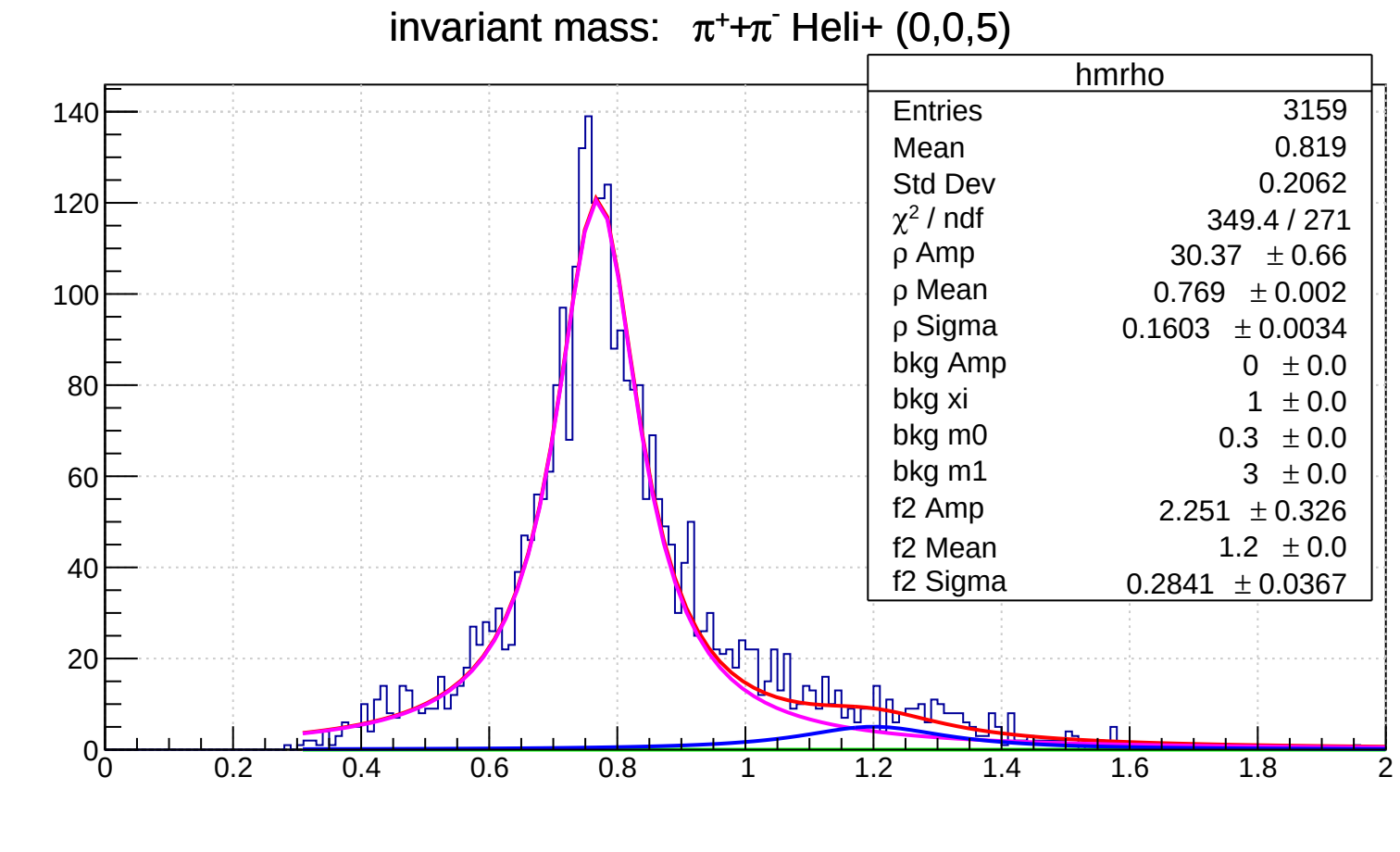

invariant mass: π⁺+π⁻ Heli+ (0,0,0)
hmrho
Entries 1307
Mean 0.8943
Std Dev 0.233
χ² / ndf 231.1 / 261
ρ Amp 10.44 ± 0.39
ρ Mean 0.7892 ± 0.0027
ρ Sigma 0.1407 ± 0.0058
bkg Amp 0 ± 0.0
bkg xi 1 ± 0.0
bkg m0 0.3 ± 0.0
bkg m1 3 ± 0.0
f2 Amp 2.823 ± 0.294
f2 Mean 1.2 ± 0.0
f2 Sigma 0.3629 ± 0.0428
0
10
20
30
40
50
60
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

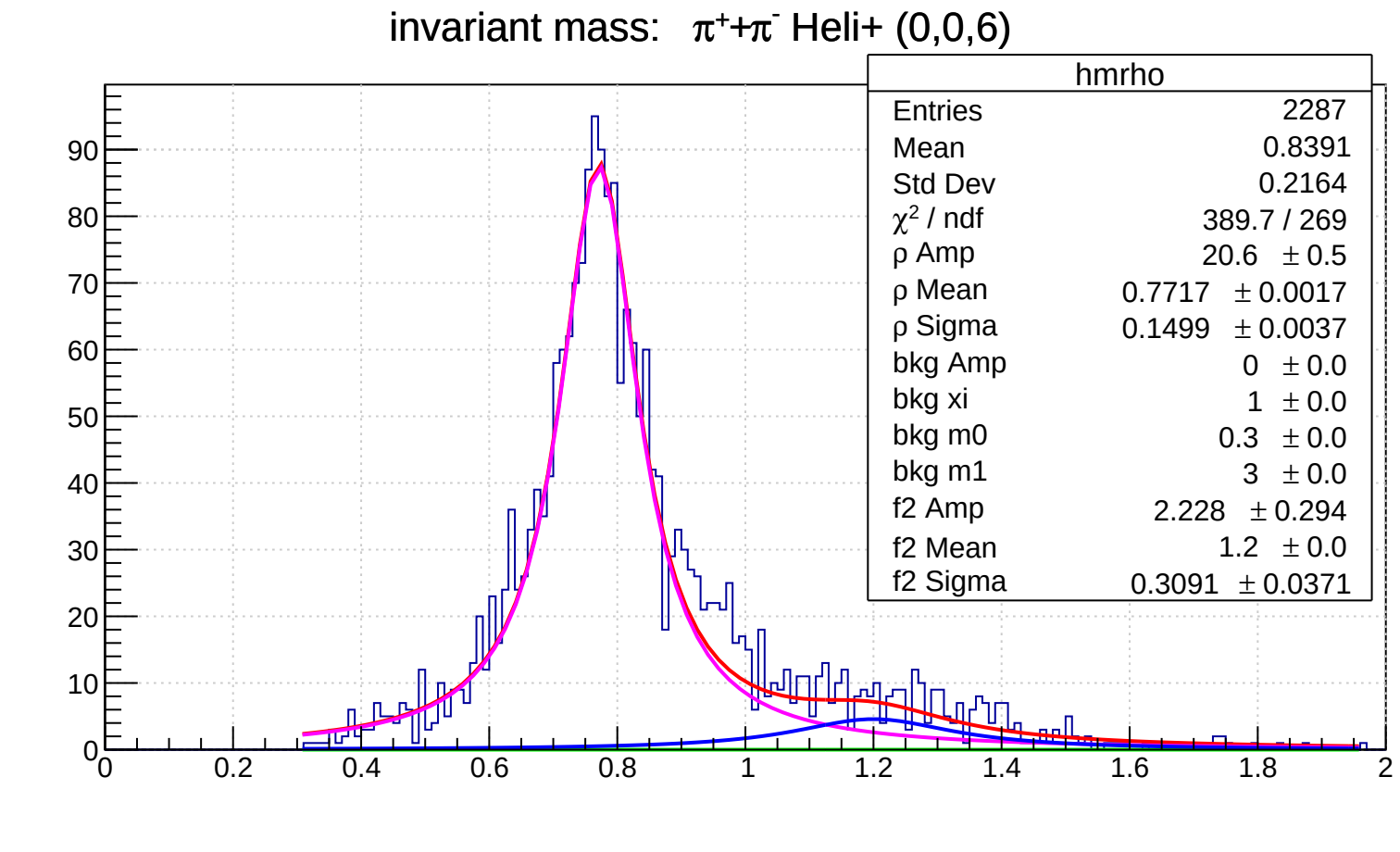

invariant mass: π⁺+π⁻ Heli+ (0,0,1)
hmrho
Entries 1934
Mean 0.8493
Std Dev 0.2023
χ² / ndf 301.7 / 251
ρ Amp 17.18 ± 0.51
ρ Mean 0.7831 ± 0.0021
ρ Sigma 0.1363 ± 0.0042
bkg Amp 0 ± 0.0
bkg xi 1 ± 0.0
bkg m0 0.3 ± 0.0
bkg m1 3 ± 0.0
f2 Amp 2.429 ± 0.337
f2 Mean 1.2 ± 0.0
f2 Sigma 0.4305 ± 0.0589
0
10
20
30
40
50
60
70
80
90
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

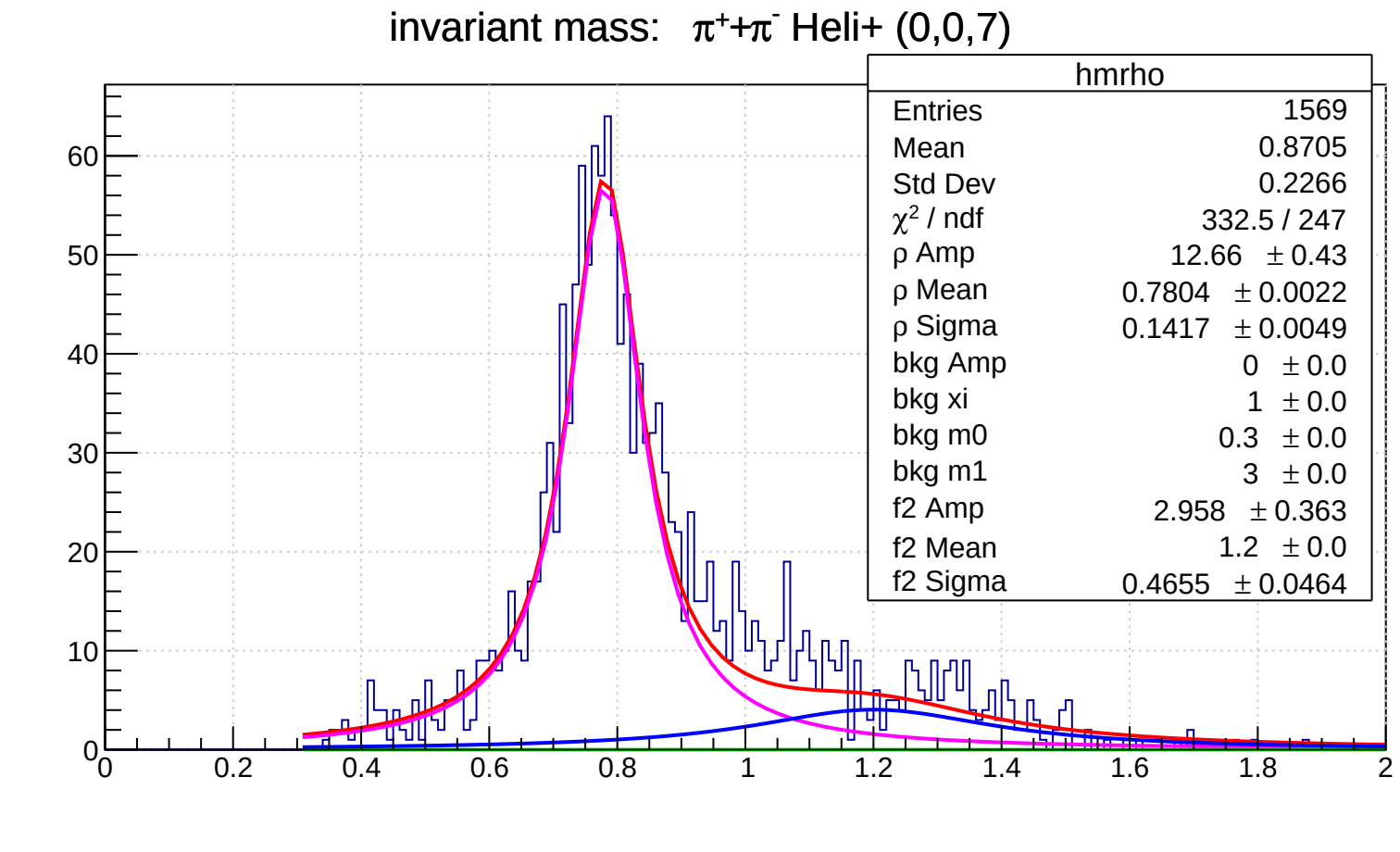

invariant mass: π⁺+π⁻ Heli+ (0,0,2)
hmrho
Entries 2802
Mean 0.8339
Std Dev 0.2024
χ² / ndf 334.8 / 267
ρ Amp 25.66 ± 0.57
ρ Mean 0.7745 ± 0.0016
ρ Sigma 0.141 ± 0.004
bkg Amp 0 ± 0.0
bkg xi 1 ± 0.0
bkg m0 0.3 ± 0.0
bkg m1 3 ± 0.0
f2 Amp 2.579 ± 0.313
f2 Mean 1.2 ± 0.0
f2 Sigma 0.3075 ± 0.0418
0
20
40
60
80
100
120
140
160
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

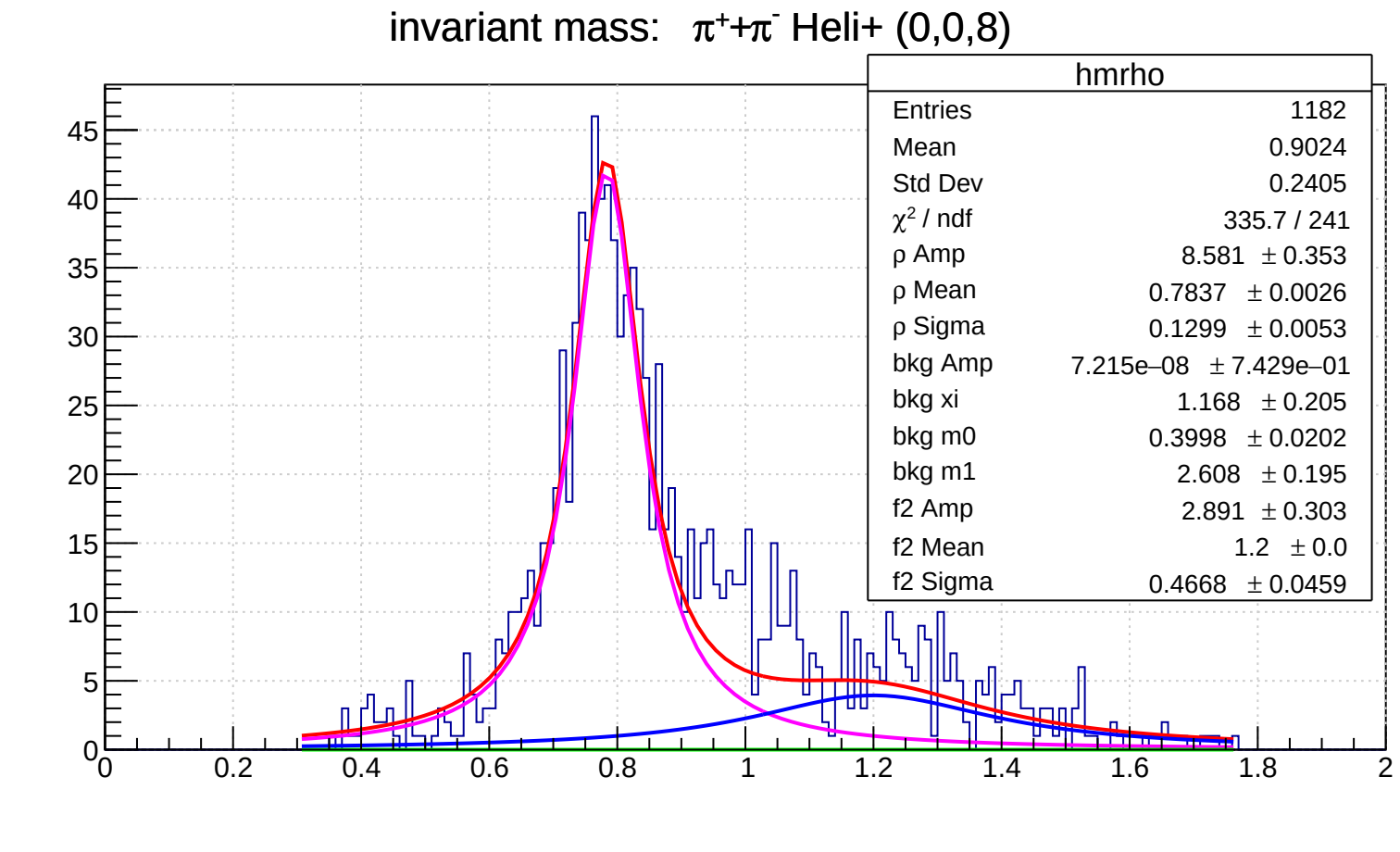

invariant mass: π⁺+π⁻ Heli+ (0,0,3)
hmrho
Entries 3252
Mean 0.813
Std Dev 0.2035
χ² / ndf 371.5 / 262
ρ Amp 31.66 ± 0.65
ρ Mean 0.7675 ± 0.0014
ρ Sigma 0.1532 ± 0.0035
bkg Amp 0 ± 0.0
bkg xi 1 ± 0.0
bkg m0 0.3 ± 0.0
bkg m1 3 ± 0.0
f2 Amp 2.285 ± 0.338
f2 Mean 1.2 ± 0.0
f2 Sigma 0.3676 ± 0.0534
0
20
40
60
80
100
120
140
160
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

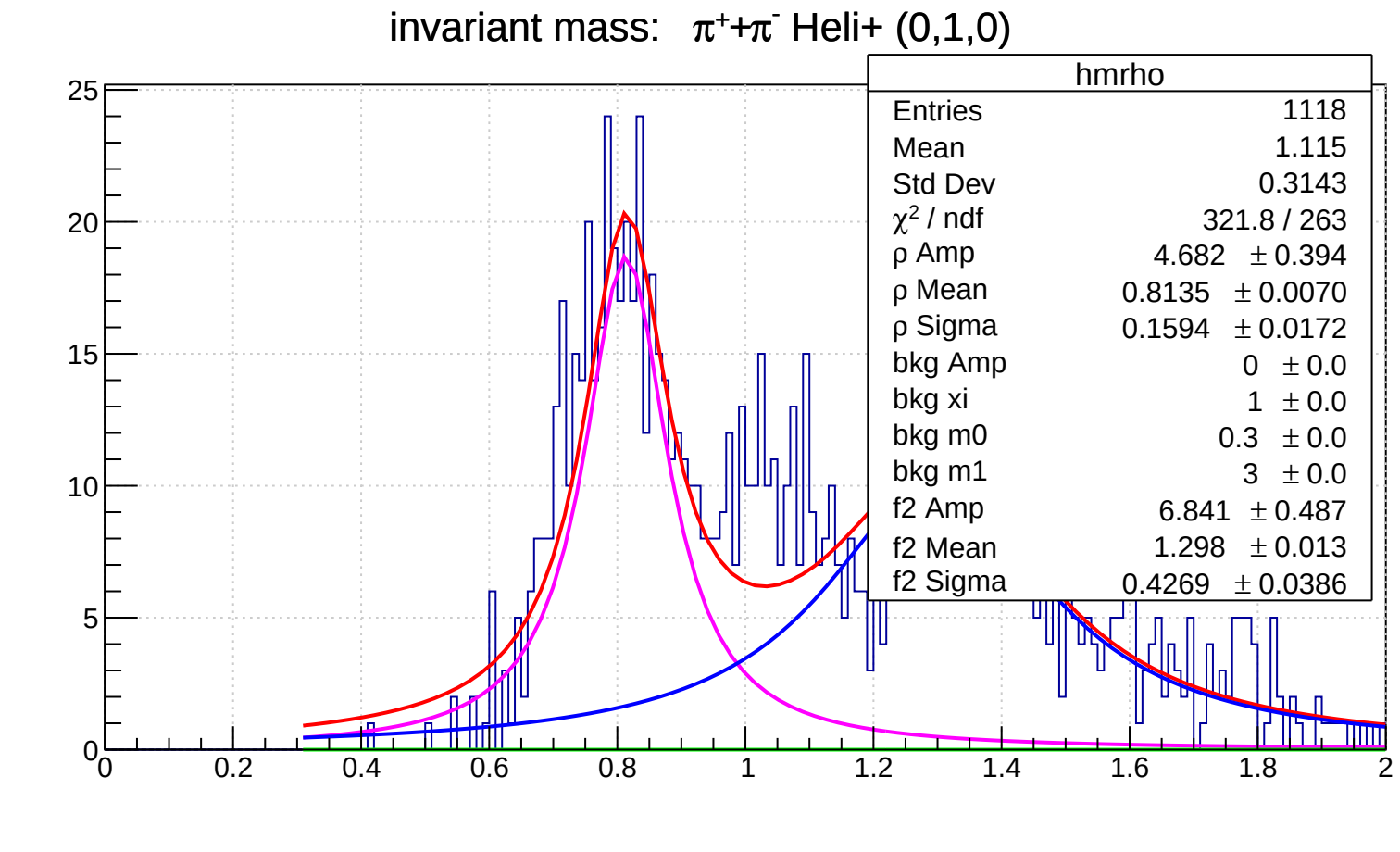

invariant mass: π⁺+π⁻ Heli+ (0,0,4)
hmrho
Entries 3522
Mean 0.8144
Std Dev 0.205
χ² / ndf 333.9 / 262
ρ Amp 33.67 ± 0.67
ρ Mean 0.7657 ± 0.0013
ρ Sigma 0.1533 ± 0.0034
bkg Amp 0 ± 0.0
bkg xi 1 ± 0.0
bkg m0 0.3 ± 0.0
bkg m1 3 ± 0.0
f2 Amp 2.683 ± 0.352
f2 Mean 1.2 ± 0.0
f2 Sigma 0.2585 ± 0.0347
0
20
40
60
80
100
120
140
160
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

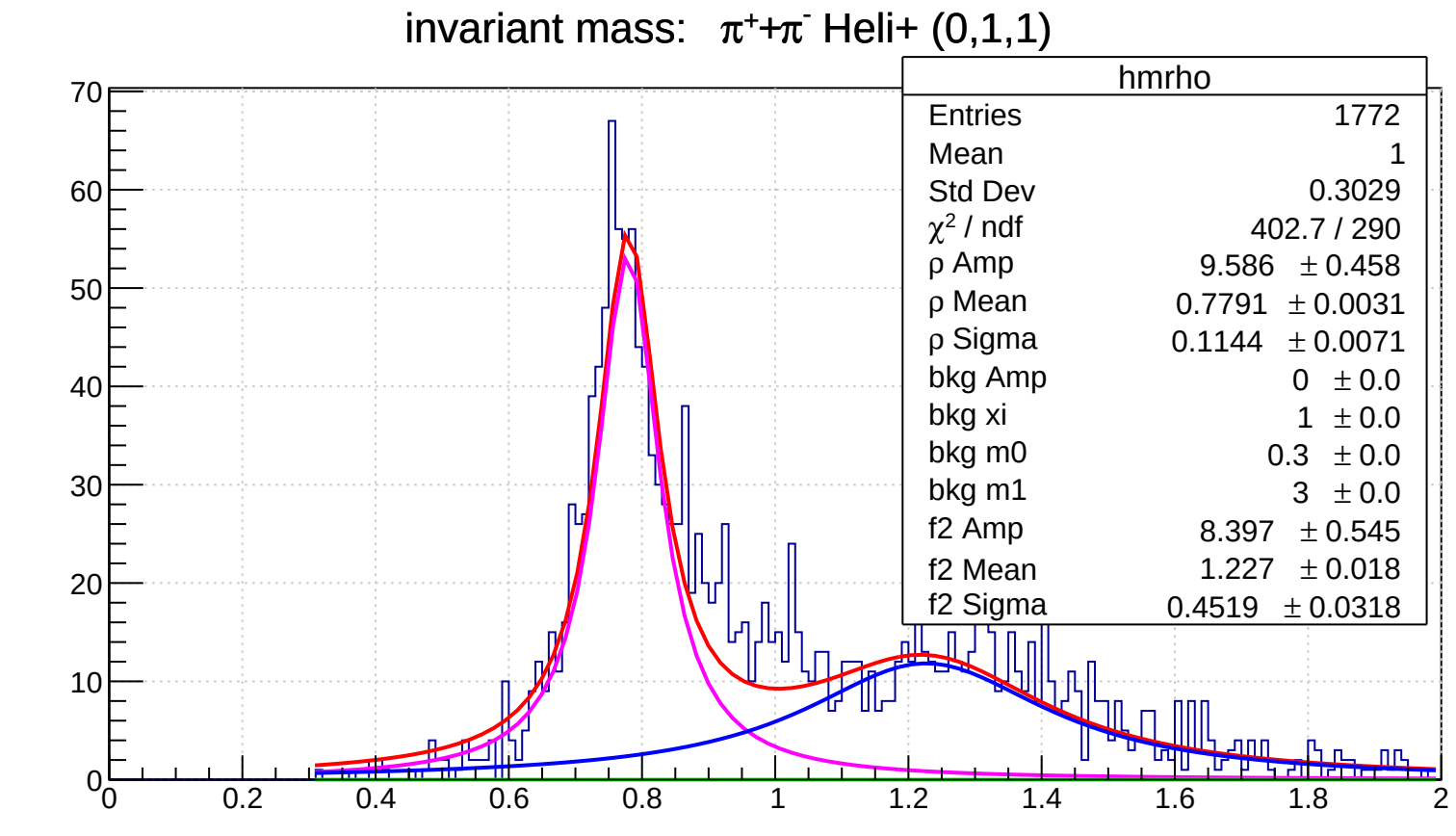

invariant mass: π⁺+π⁻ Heli+ (0,0,5)
hmrho
Entries 3159
Mean 0.819
Std Dev 0.2062
χ² / ndf 349.4 / 271
ρ Amp 30.37 ± 0.66
ρ Mean 0.769 ± 0.002
ρ Sigma 0.1603 ± 0.0034
bkg Amp 0 ± 0.0
bkg xi 1 ± 0.0
bkg m0 0.3 ± 0.0
bkg m1 3 ± 0.0
f2 Amp 2.251 ± 0.326
f2 Mean 1.2 ± 0.0
f2 Sigma 0.2841 ± 0.0367
0
20
40
60
80
100
120
140
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

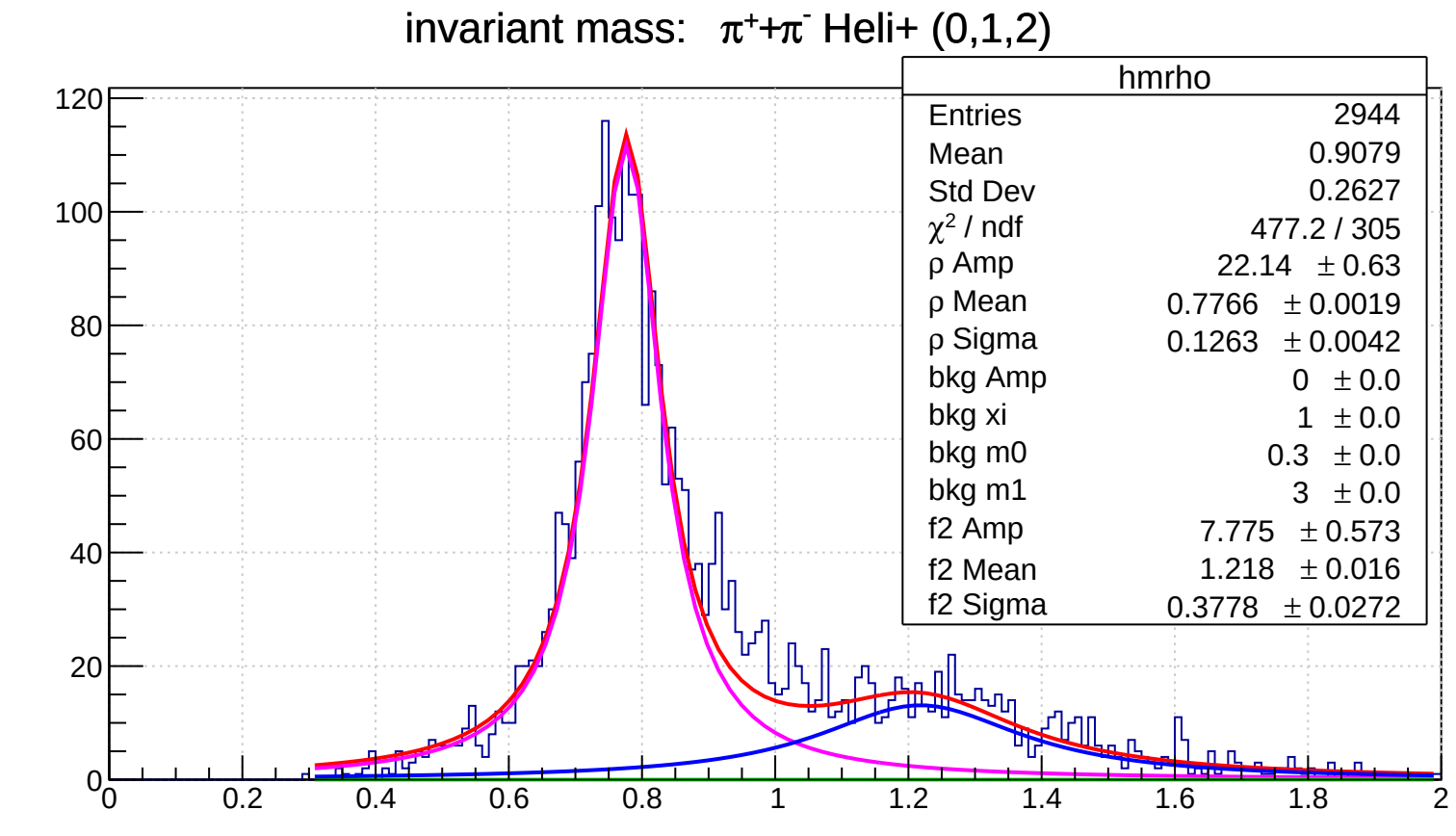

invariant mass: π⁺+π⁻ Heli+ (0,0,6)
hmrho
Entries 2287
Mean 0.8391
Std Dev 0.2164
χ² / ndf 389.7 / 269
ρ Amp 20.6 ± 0.5
ρ Mean 0.7717 ± 0.0017
ρ Sigma 0.1499 ± 0.0037
bkg Amp 0 ± 0.0
bkg xi 1 ± 0.0
bkg m0 0.3 ± 0.0
bkg m1 3 ± 0.0
f2 Amp 2.228 ± 0.294
f2 Mean 1.2 ± 0.0
f2 Sigma 0.3091 ± 0.0371
0
10
20
30
40
50
60
70
80
90
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

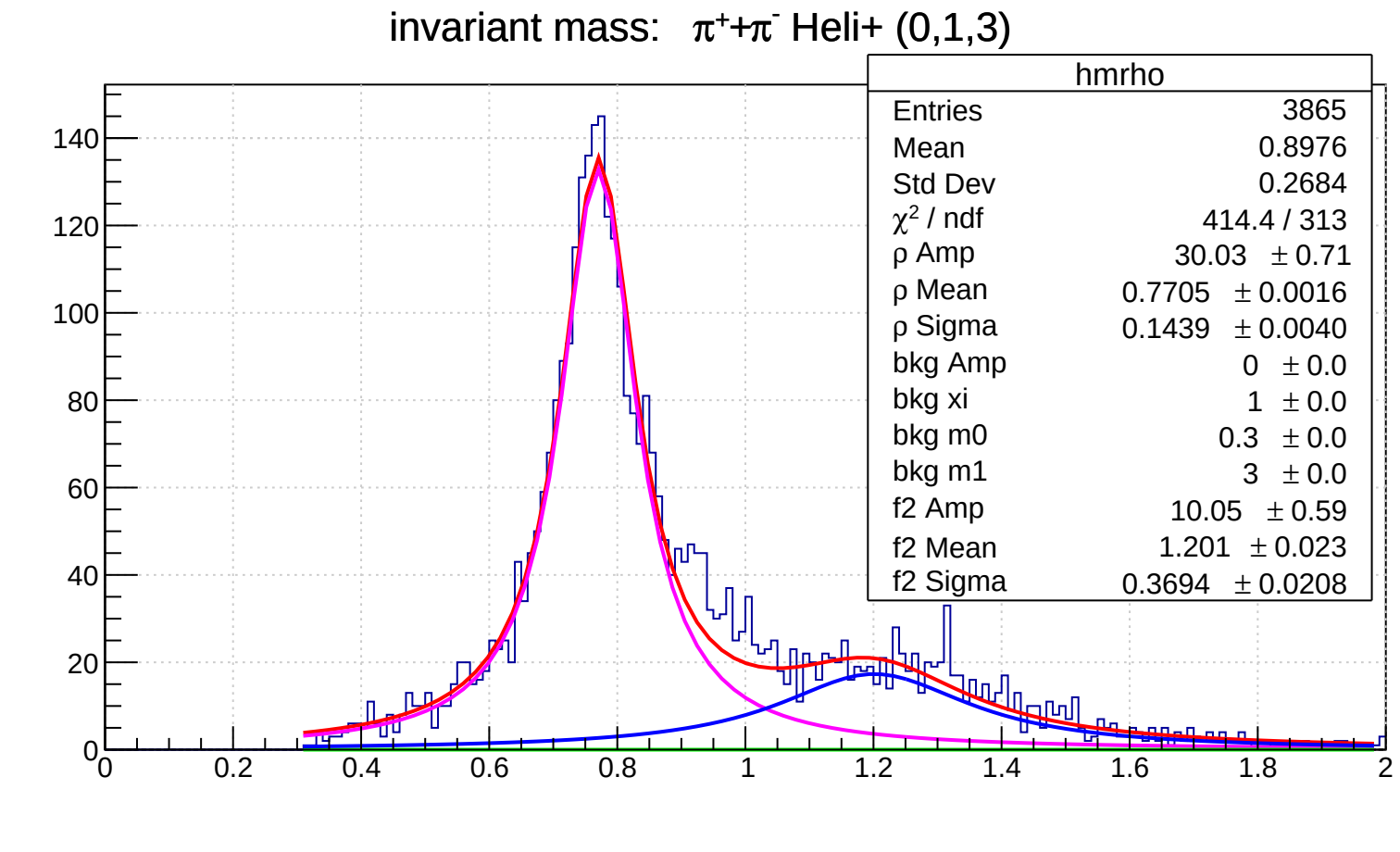

invariant mass: π⁺+π⁻ Heli+ (0,0,7)
hmrho
Entries 1569
Mean 0.8705
Std Dev 0.2266
χ² / ndf 332.5 / 247
ρ Amp 12.66 ± 0.43
ρ Mean 0.7804 ± 0.0022
ρ Sigma 0.1417 ± 0.0049
bkg Amp 0 ± 0.0
bkg xi 1 ± 0.0
bkg m0 0.3 ± 0.0
bkg m1 3 ± 0.0
f2 Amp 2.958 ± 0.363
f2 Mean 1.2 ± 0.0
f2 Sigma 0.4655 ± 0.0464
0
10
20
30
40
50
60
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

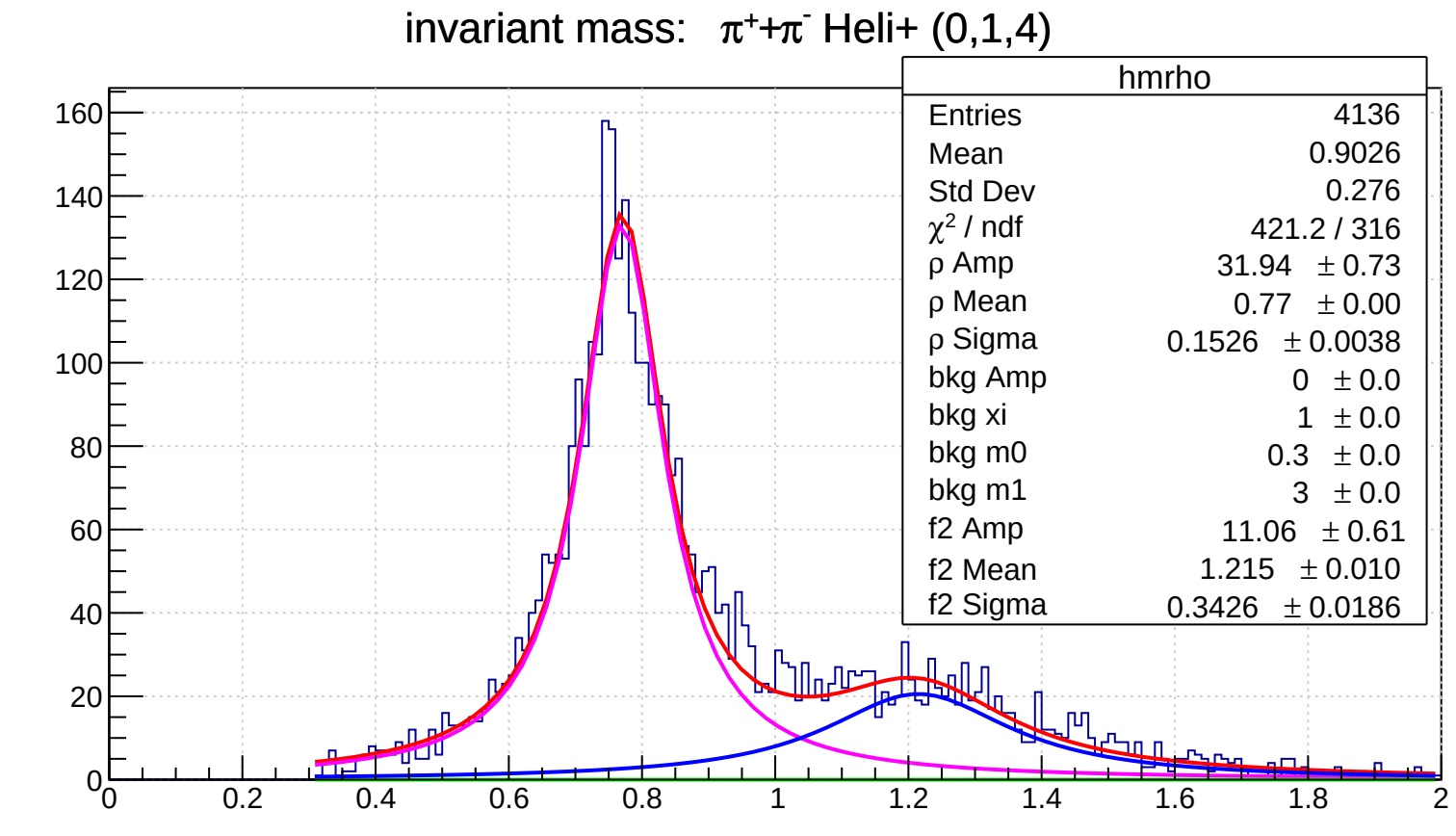

invariant mass: π⁺+π⁻ Heli+ (0,0,8)
hmrho
Entries 1182
Mean 0.9024
Std Dev 0.2405
χ² / ndf 335.7 / 241
ρ Amp 8.581 ± 0.353
ρ Mean 0.7837 ± 0.0026
ρ Sigma 0.1299 ± 0.0053
bkg Amp 7.215e–08 ± 7.429e–01
bkg xi 1.168 ± 0.205
bkg m0 0.3998 ± 0.0202
bkg m1 2.608 ± 0.195
f2 Amp 2.891 ± 0.303
f2 Mean 1.2 ± 0.0
f2 Sigma 0.4668 ± 0.0459
0
5
10
15
20
25
30
35
40
45
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

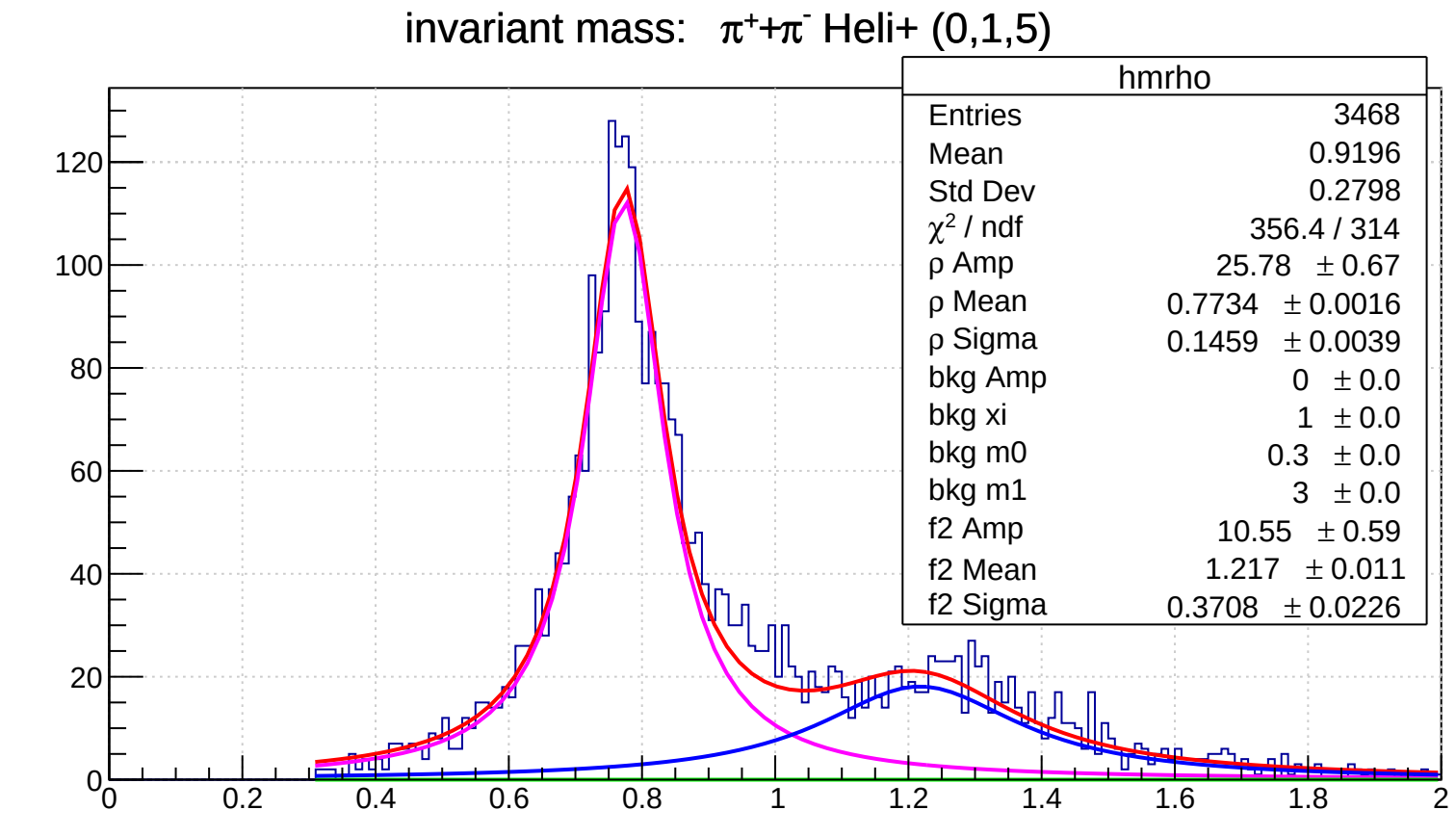

invariant mass: π⁺+π⁻ Heli+ (0,1,0)
hmrho
Entries 1118
Mean 1.115
Std Dev 0.3143
χ² / ndf 321.8 / 263
ρ Amp 4.682 ± 0.394
ρ Mean 0.8135 ± 0.0070
ρ Sigma 0.1594 ± 0.0172
bkg Amp 0 ± 0.0
bkg xi 1 ± 0.0
bkg m0 0.3 ± 0.0
bkg m1 3 ± 0.0
f2 Amp 6.841 ± 0.487
f2 Mean 1.298 ± 0.013
f2 Sigma 0.4269 ± 0.0386
0
5
10
15
20
25
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

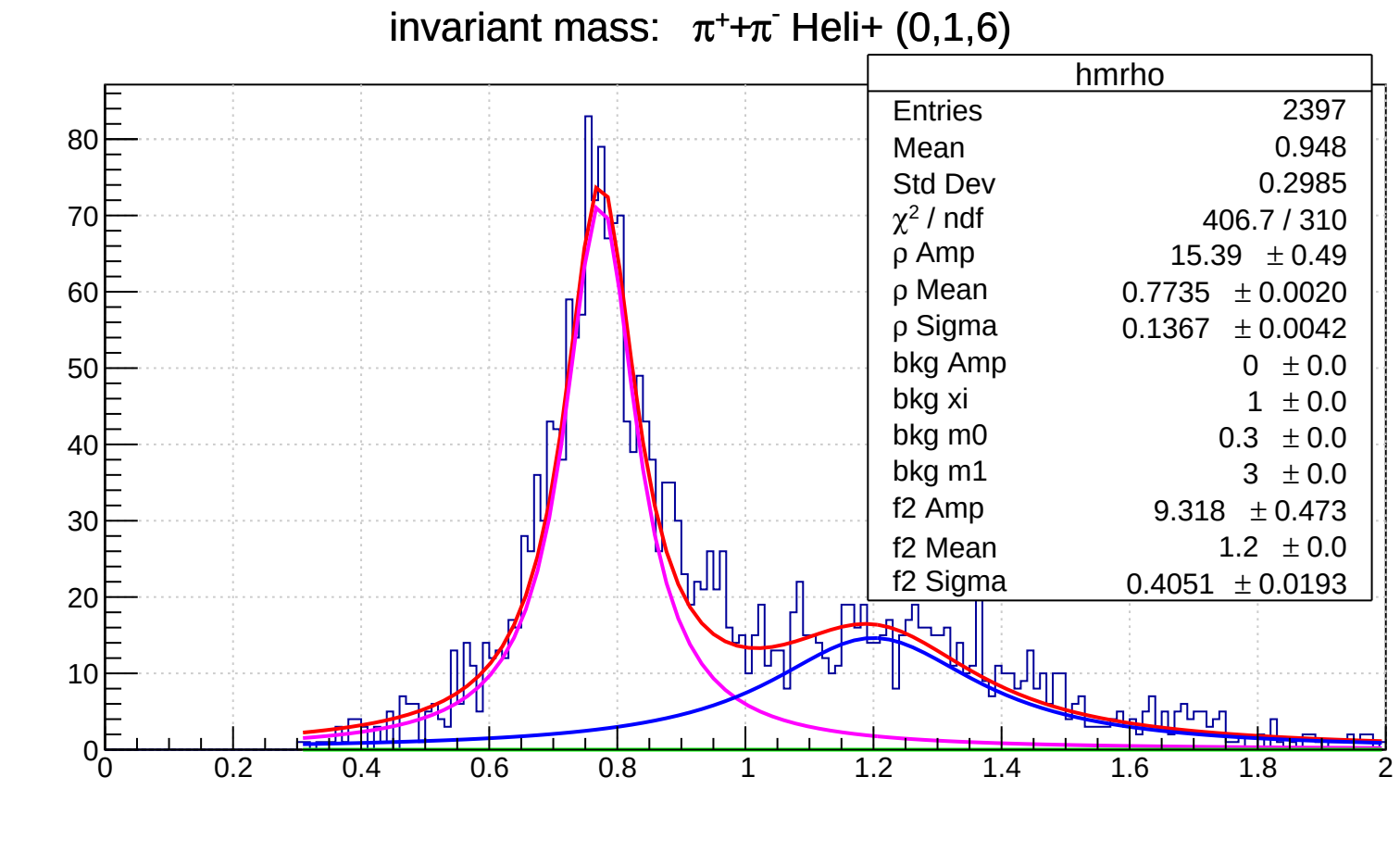

invariant mass: π⁺+π⁻ Heli+ (0,1,1)
hmrho
Entries 1772
Mean 1
Std Dev 0.3029
χ² / ndf 402.7 / 290
ρ Amp 9.586 ± 0.458
ρ Mean 0.7791 ± 0.0031
ρ Sigma 0.1144 ± 0.0071
bkg Amp 0 ± 0.0
bkg xi 1 ± 0.0
bkg m0 0.3 ± 0.0
bkg m1 3 ± 0.0
f2 Amp 8.397 ± 0.545
f2 Mean 1.227 ± 0.018
f2 Sigma 0.4519 ± 0.0318
0
10
20
30
40
50
60
70
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

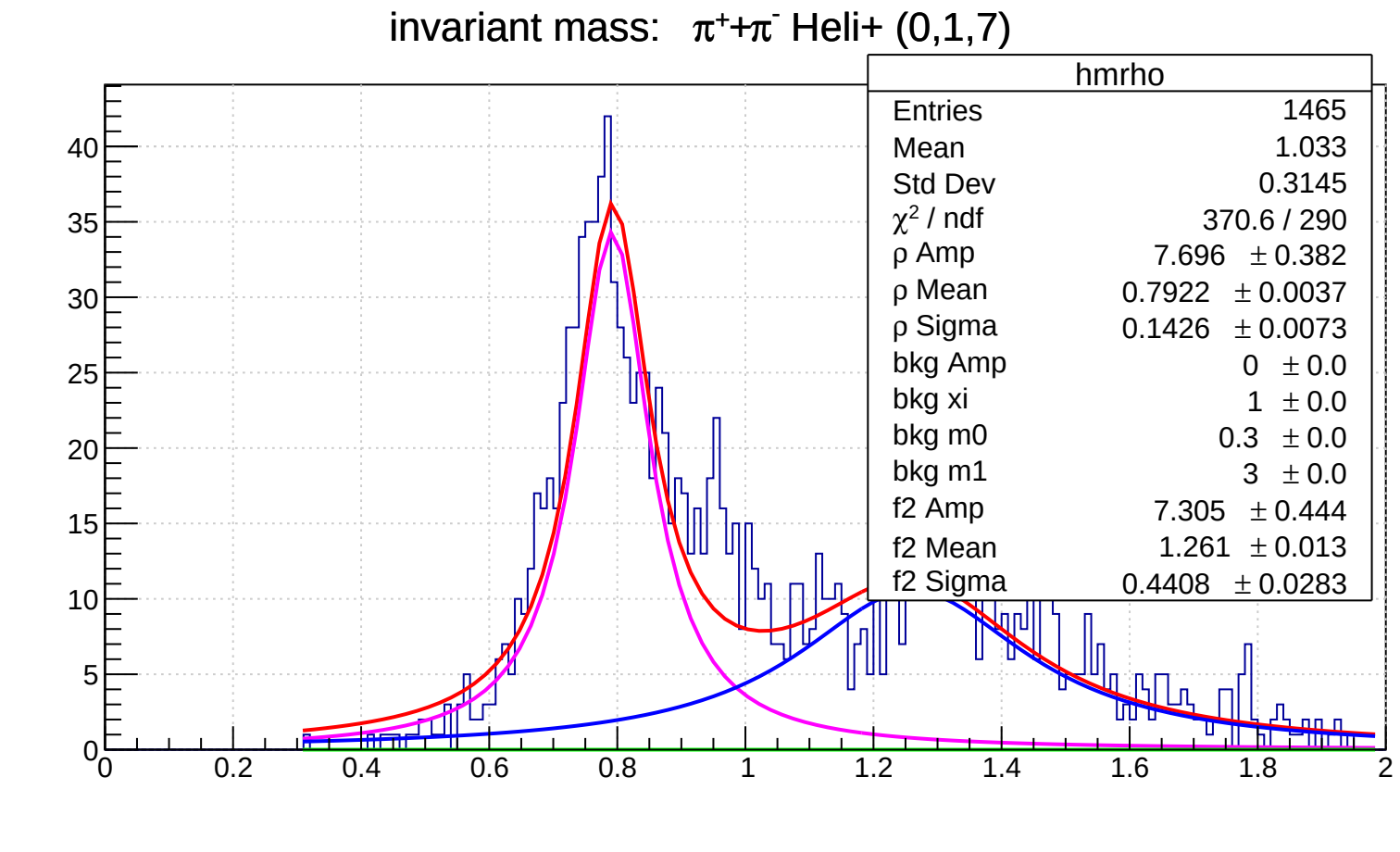

invariant mass: π+π- Heli+ (0,1,2)
hmrho
Entries 2944
Mean 0.9079
Std Dev 0.2627
χ2 / ndf 477.2 / 305
ρ Amp 22.14 ± 0.63
ρ Mean 0.7766 ± 0.0019
ρ Sigma 0.1263 ± 0.0042
bkg Amp 0 ± 0.0
bkg xi 1 ± 0.0
bkg m0 0.3 ± 0.0
bkg m1 3 ± 0.0
f2 Amp 7.775 ± 0.573
f2 Mean 1.218 ± 0.016
f2 Sigma 0.3778 ± 0.0272
0
20
40
60
80
100
120
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

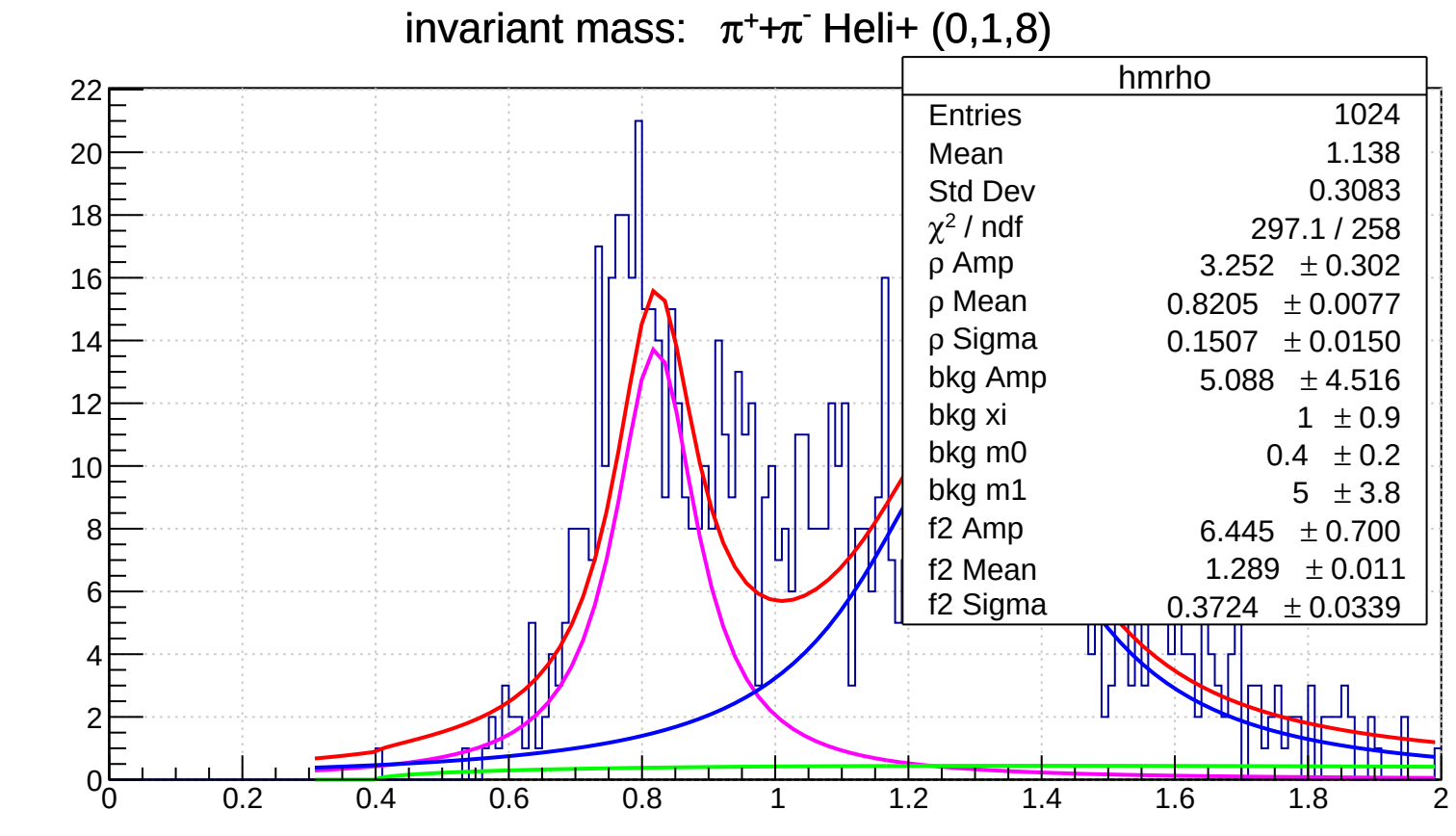

invariant mass: π⁺+π⁻ Heli+ (0,1,3)
hmrho
Entries 3865
Mean 0.8976
Std Dev 0.2684
χ² / ndf 414.4 / 313
ρ Amp 30.03 ± 0.71
ρ Mean 0.7705 ± 0.0016
ρ Sigma 0.1439 ± 0.0040
bkg Amp 0 ± 0.0
bkg xi 1 ± 0.0
bkg m0 0.3 ± 0.0
bkg m1 3 ± 0.0
f2 Amp 10.05 ± 0.59
f2 Mean 1.201 ± 0.023
f2 Sigma 0.3694 ± 0.0208
0
20
40
60
80
100
120
140
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

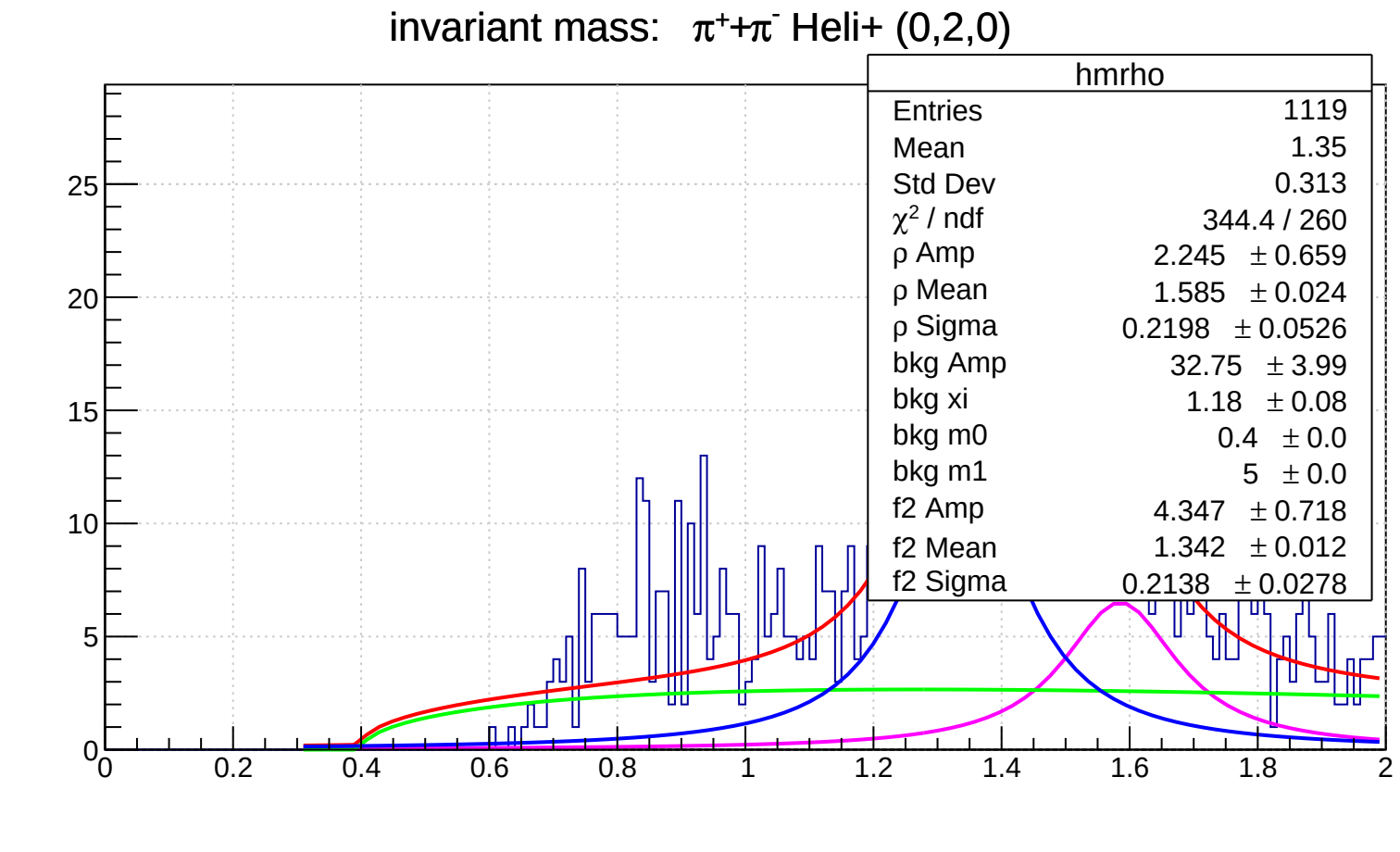

invariant mass: π⁺+π⁻ Heli+ (0,1,4)
hmrho
Entries 4136
Mean 0.9026
Std Dev 0.276
χ² / ndf 421.2 / 316
ρ Amp 31.94 ± 0.73
ρ Mean 0.77 ± 0.00
ρ Sigma 0.1526 ± 0.0038
bkg Amp 0 ± 0.0
bkg xi 1 ± 0.0
bkg m0 0.3 ± 0.0
bkg m1 3 ± 0.0
f2 Amp 11.06 ± 0.61
f2 Mean 1.215 ± 0.010
f2 Sigma 0.3426 ± 0.0186
0
20
40
60
80
100
120
140
160
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

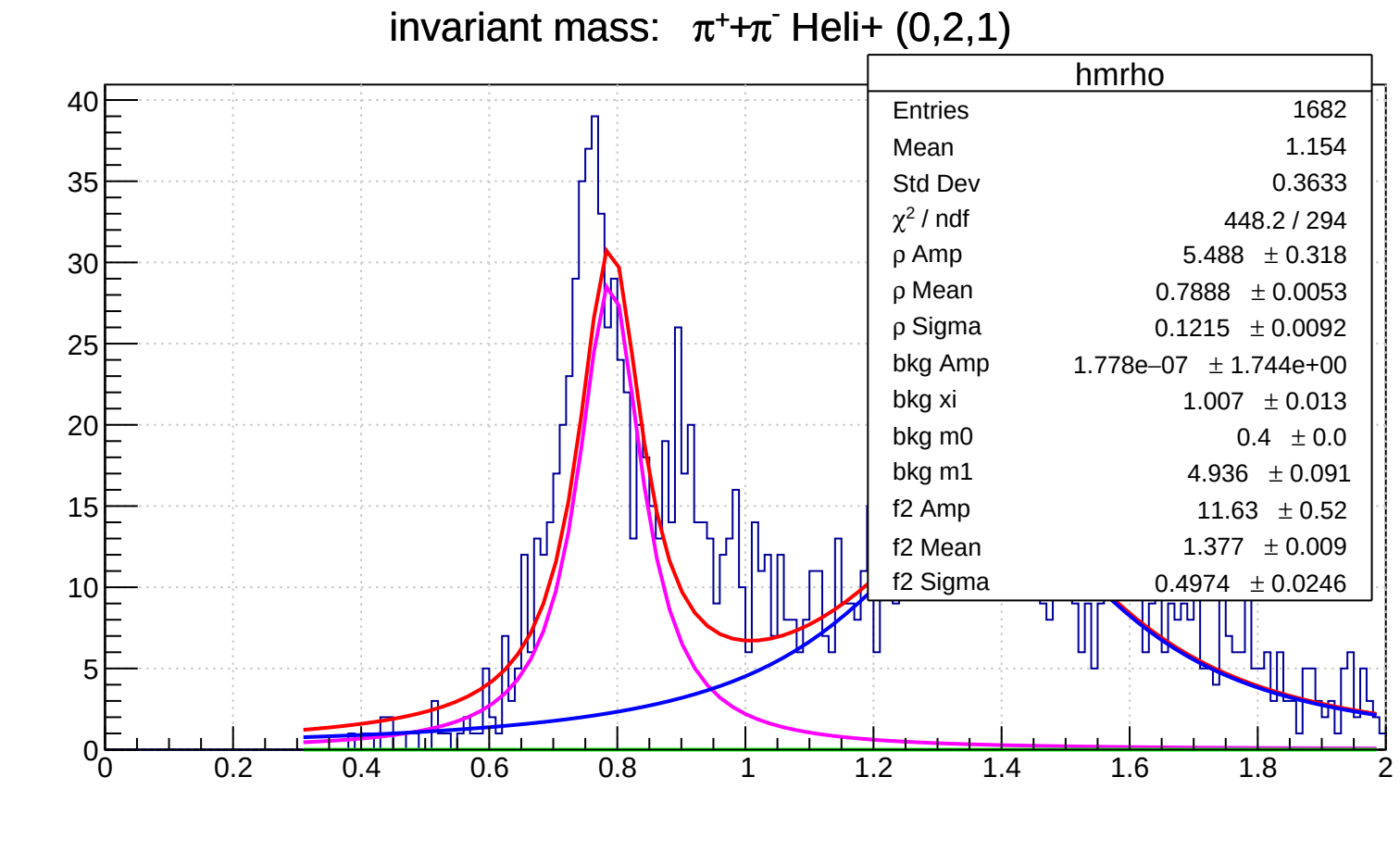

invariant mass: π+π- Heli+ (0,1,5)
hmrho
Entries 3468
Mean 0.9196
Std Dev 0.2798
χ2 / ndf 356.4 / 314
ρ Amp 25.78 ± 0.67
ρ Mean 0.7734 ± 0.0016
ρ Sigma 0.1459 ± 0.0039
bkg Amp 0 ± 0.0
bkg xi 1 ± 0.0
bkg m0 0.3 ± 0.0
bkg m1 3 ± 0.0
f2 Amp 10.55 ± 0.59
f2 Mean 1.217 ± 0.011
f2 Sigma 0.3708 ± 0.0226
0
20
40
60
80
100
120
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

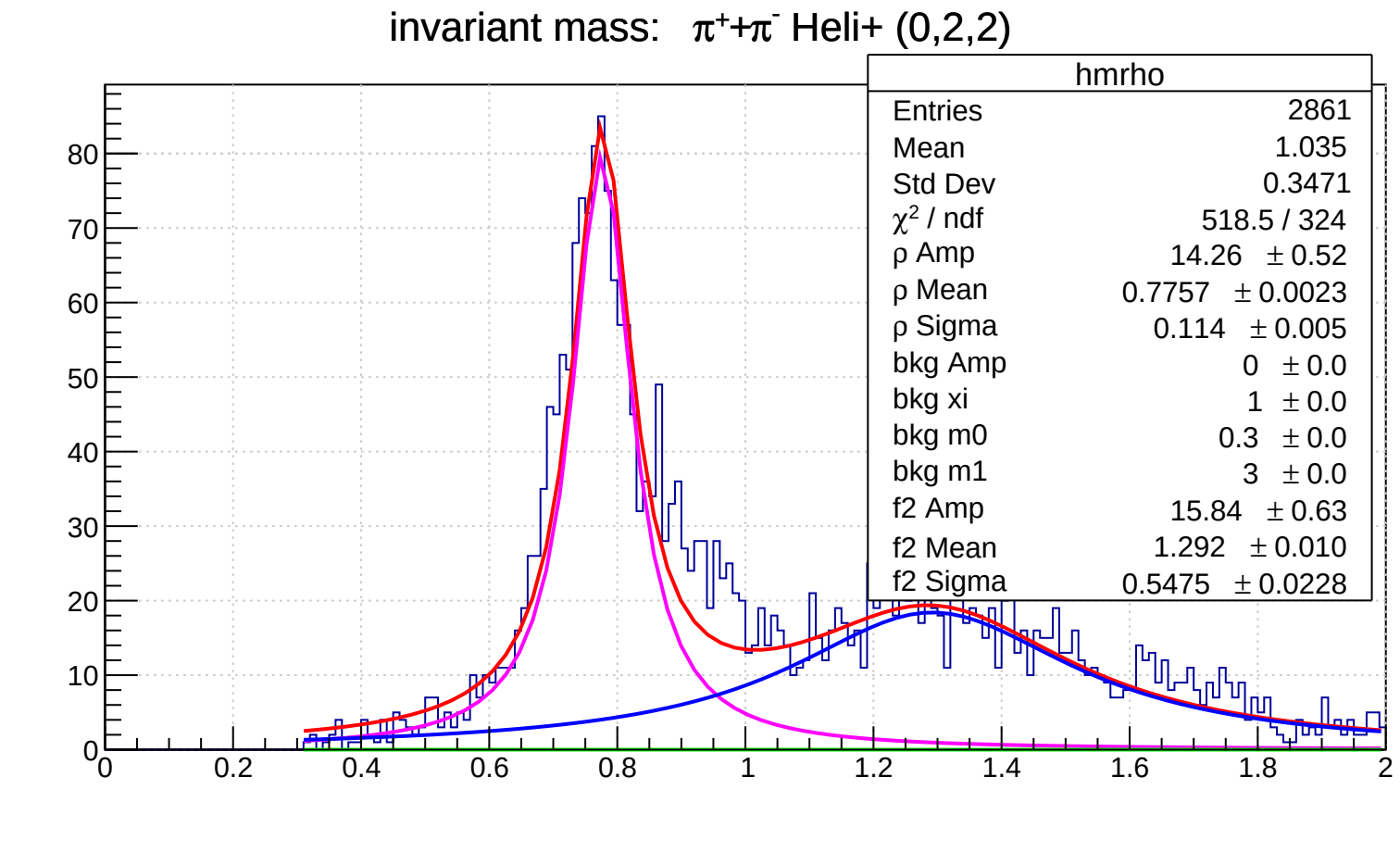

invariant mass: π⁺+π⁻ Heli+ (0,1,6)
hmrho
Entries 2397
Mean 0.948
Std Dev 0.2985
χ² / ndf 406.7 / 310
ρ Amp 15.39 ± 0.49
ρ Mean 0.7735 ± 0.0020
ρ Sigma 0.1367 ± 0.0042
bkg Amp 0 ± 0.0
bkg xi 1 ± 0.0
bkg m0 0.3 ± 0.0
bkg m1 3 ± 0.0
f2 Amp 9.318 ± 0.473
f2 Mean 1.2 ± 0.0
f2 Sigma 0.4051 ± 0.0193
0
10
20
30
40
50
60
70
80
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

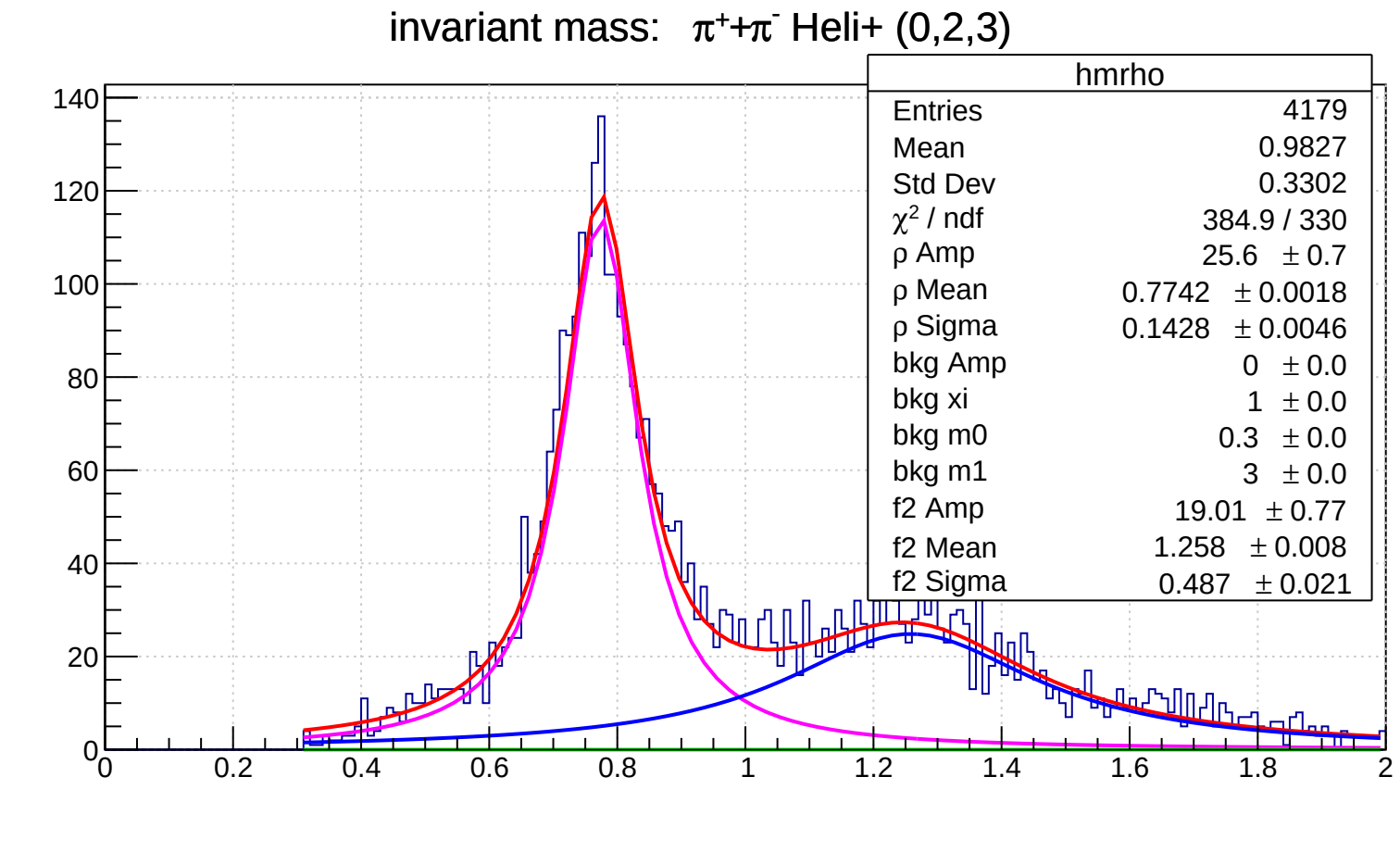

invariant mass: π⁺+π⁻ Heli+ (0,1,7)
hmrho
Entries 1465
Mean 1.033
Std Dev 0.3145
χ² / ndf 370.6 / 290
ρ Amp 7.696 ± 0.382
ρ Mean 0.7922 ± 0.0037
ρ Sigma 0.1426 ± 0.0073
bkg Amp 0 ± 0.0
bkg xi 1 ± 0.0
bkg m0 0.3 ± 0.0
bkg m1 3 ± 0.0
f2 Amp 7.305 ± 0.444
f2 Mean 1.261 ± 0.013
f2 Sigma 0.4408 ± 0.0283
0
5
10
15
20
25
30
35
40
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

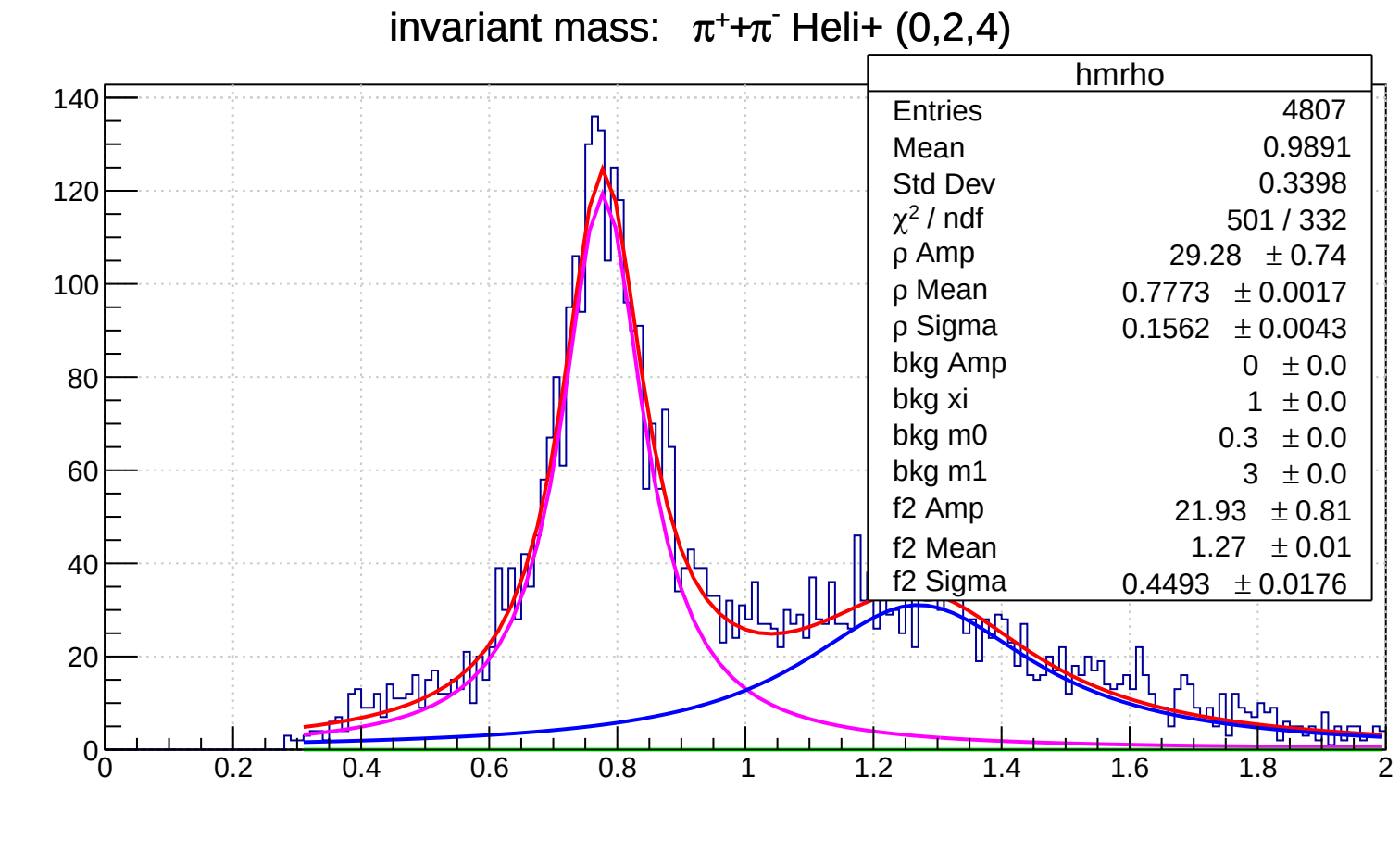

invariant mass: π⁺+π⁻ Heli+ (0,1,8)
hmrho
Entries 1024
Mean 1.138
Std Dev 0.3083
χ² / ndf 297.1 / 258
ρ Amp 3.252 ± 0.302
ρ Mean 0.8205 ± 0.0077
ρ Sigma 0.1507 ± 0.0150
bkg Amp 5.088 ± 4.516
bkg xi 1 ± 0.9
bkg m0 0.4 ± 0.2
bkg m1 5 ± 3.8
f2 Amp 6.445 ± 0.700
f2 Mean 1.289 ± 0.011
f2 Sigma 0.3724 ± 0.0339
0 2 4 6 8 10 12 14 16 18 20 22
0 0.2 0.4 0.6 0.8 1 1.2 1.4 1.6 1.8 2

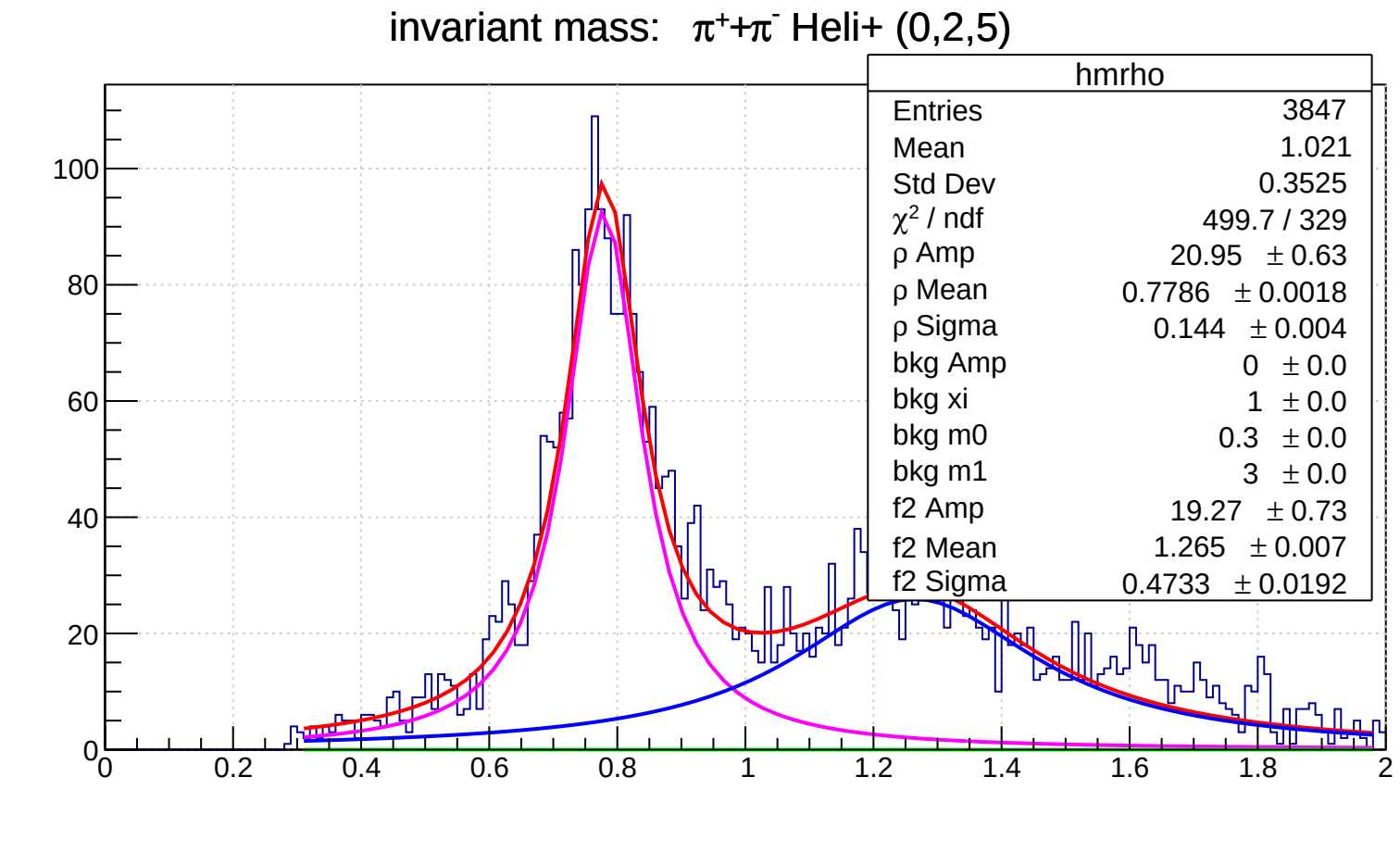

invariant mass: π⁺+π⁻ Heli+ (0,2,0)
hmrho
Entries 1119
Mean 1.35
Std Dev 0.313
χ² / ndf 344.4 / 260
ρ Amp 2.245 ± 0.659
ρ Mean 1.585 ± 0.024
ρ Sigma 0.2198 ± 0.0526
bkg Amp 32.75 ± 3.99
bkg xi 1.18 ± 0.08
bkg m0 0.4 ± 0.0
bkg m1 5 ± 0.0
f2 Amp 4.347 ± 0.718
f2 Mean 1.342 ± 0.012
f2 Sigma 0.2138 ± 0.0278
0
5
10
15
20
25
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

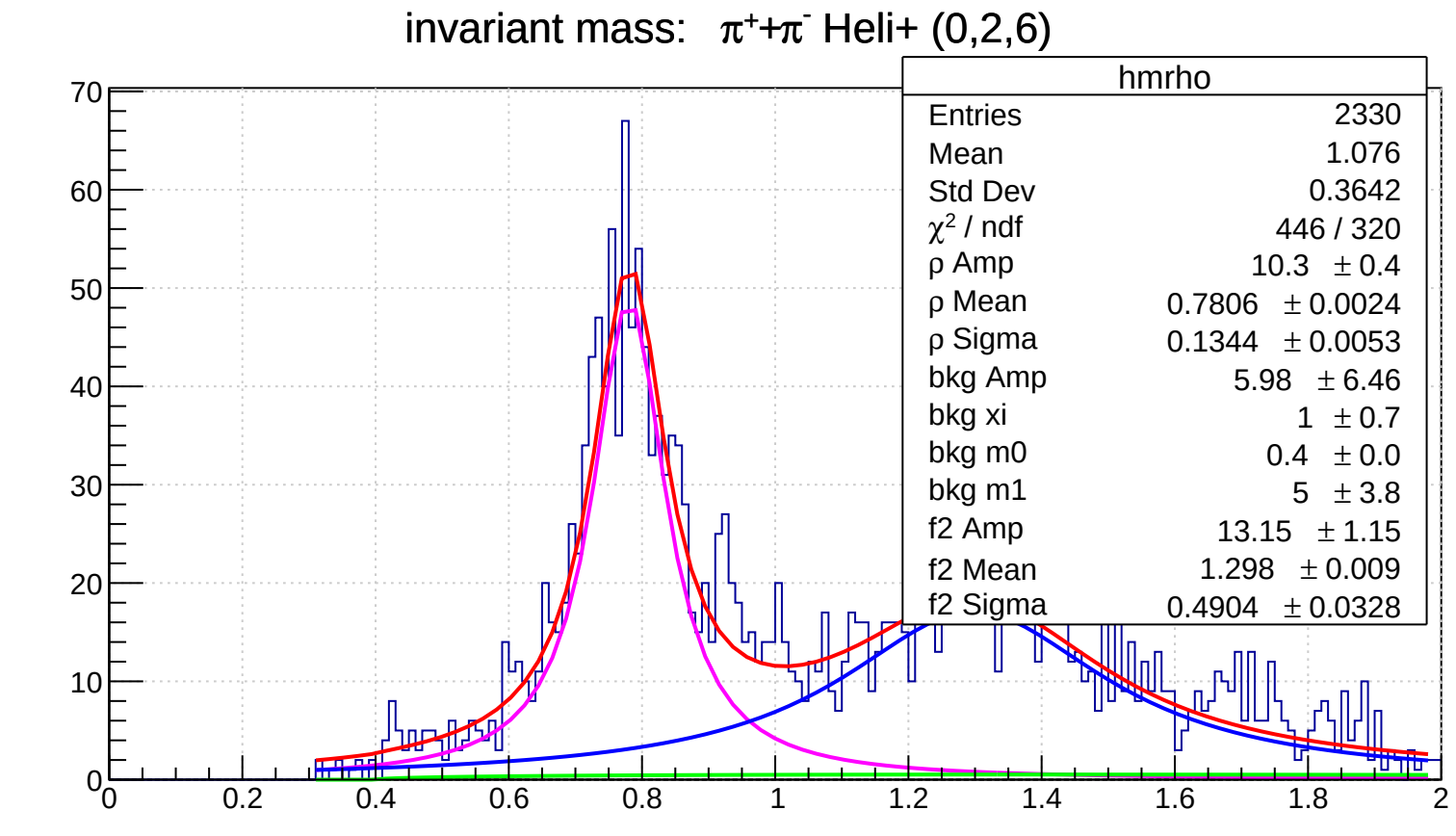

invariant mass: π⁺+π⁻ Heli+ (0,2,1)
hmrho
Entries 1682
Mean 1.154
Std Dev 0.3633
χ² / ndf 448.2 / 294
ρ Amp 5.488 ± 0.318
ρ Mean 0.7888 ± 0.0053
ρ Sigma 0.1215 ± 0.0092
bkg Amp 1.778e−07 ± 1.744e+00
bkg xi 1.007 ± 0.013
bkg m0 0.4 ± 0.0
bkg m1 4.936 ± 0.091
f2 Amp 11.63 ± 0.52
f2 Mean 1.377 ± 0.009
f2 Sigma 0.4974 ± 0.0246
0 5 10 15 20 25 30 35 40
0 0.2 0.4 0.6 0.8 1 1.2 1.4 1.6 1.8 2

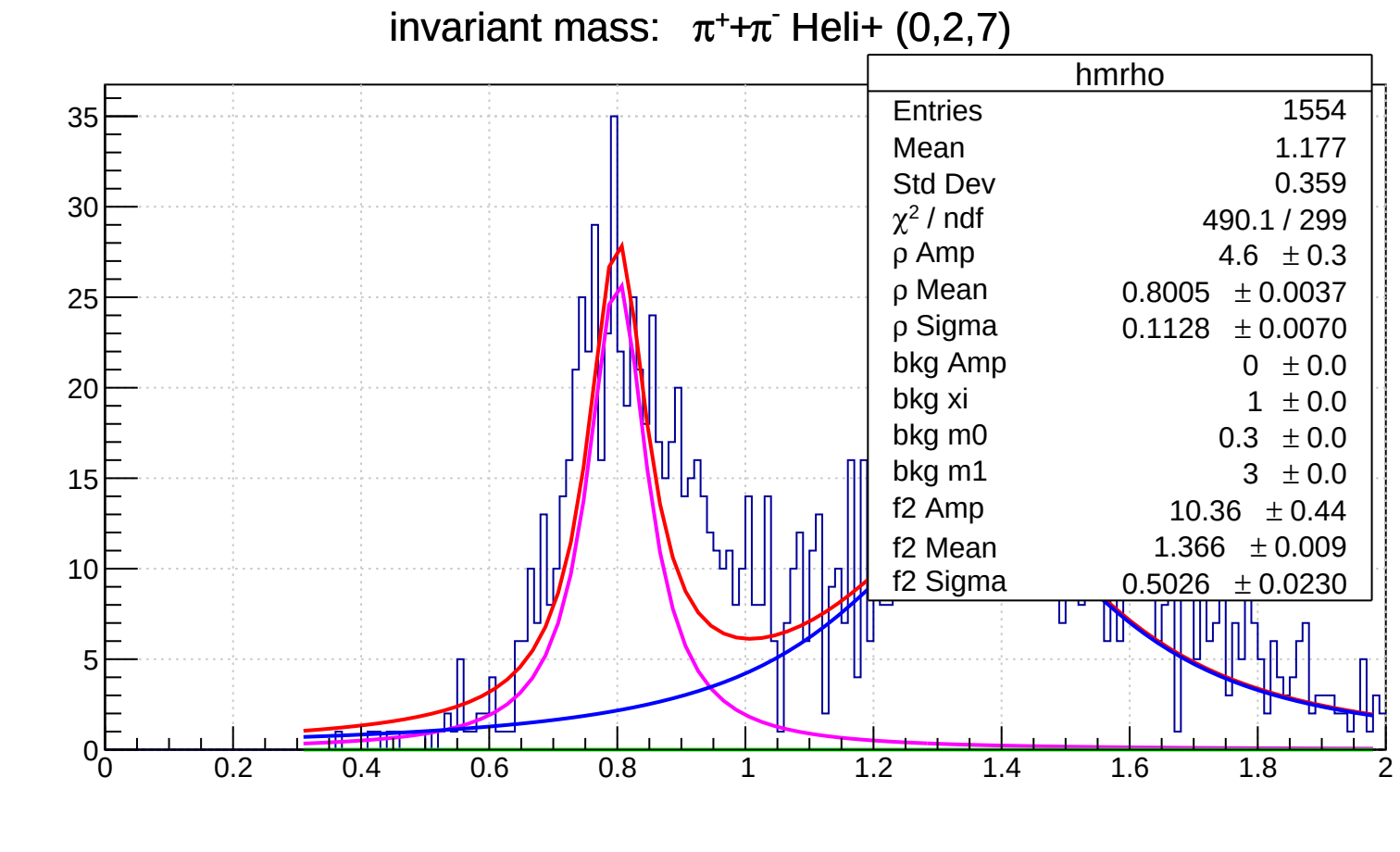

invariant mass: π⁺+π⁻ Heli+ (0,2,2)
hmrho
Entries 2861
Mean 1.035
Std Dev 0.3471
χ² / ndf 518.5 / 324
ρ Amp 14.26 ± 0.52
ρ Mean 0.7757 ± 0.0023
ρ Sigma 0.114 ± 0.005
bkg Amp 0 ± 0.0
bkg xi 1 ± 0.0
bkg m0 0.3 ± 0.0
bkg m1 3 ± 0.0
f2 Amp 15.84 ± 0.63
f2 Mean 1.292 ± 0.010
f2 Sigma 0.5475 ± 0.0228
0
10
20
30
40
50
60
70
80
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

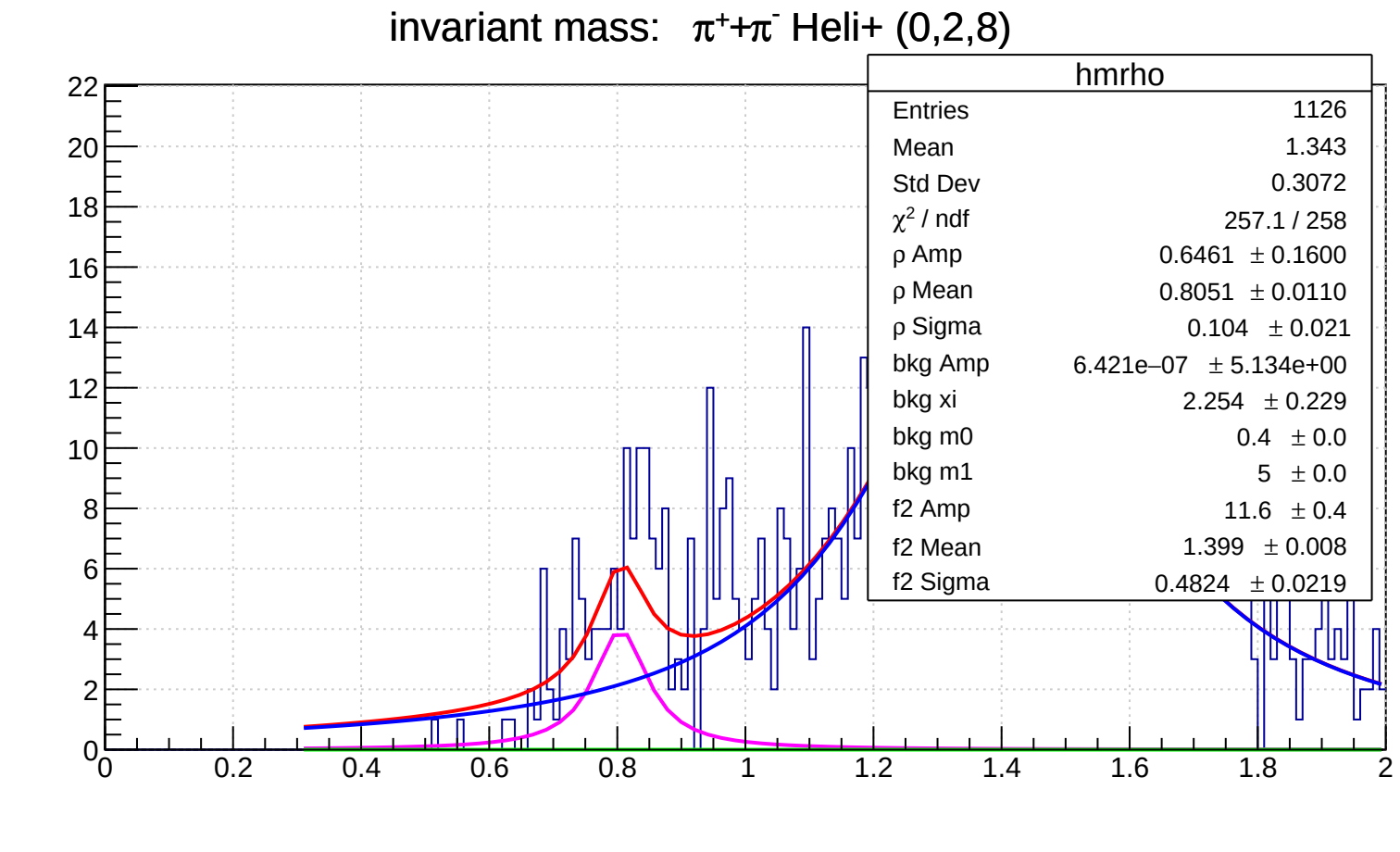

invariant mass: π⁺+π⁻ Heli+ (0,2,3)
hmrho
Entries 4179
Mean 0.9827
Std Dev 0.3302
χ² / ndf 384.9 / 330
ρ Amp 25.6 ± 0.7
ρ Mean 0.7742 ± 0.0018
ρ Sigma 0.1428 ± 0.0046
bkg Amp 0 ± 0.0
bkg xi 1 ± 0.0
bkg m0 0.3 ± 0.0
bkg m1 3 ± 0.0
f2 Amp 19.01 ± 0.77
f2 Mean 1.258 ± 0.008
f2 Sigma 0.487 ± 0.021
0
20
40
60
80
100
120
140
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

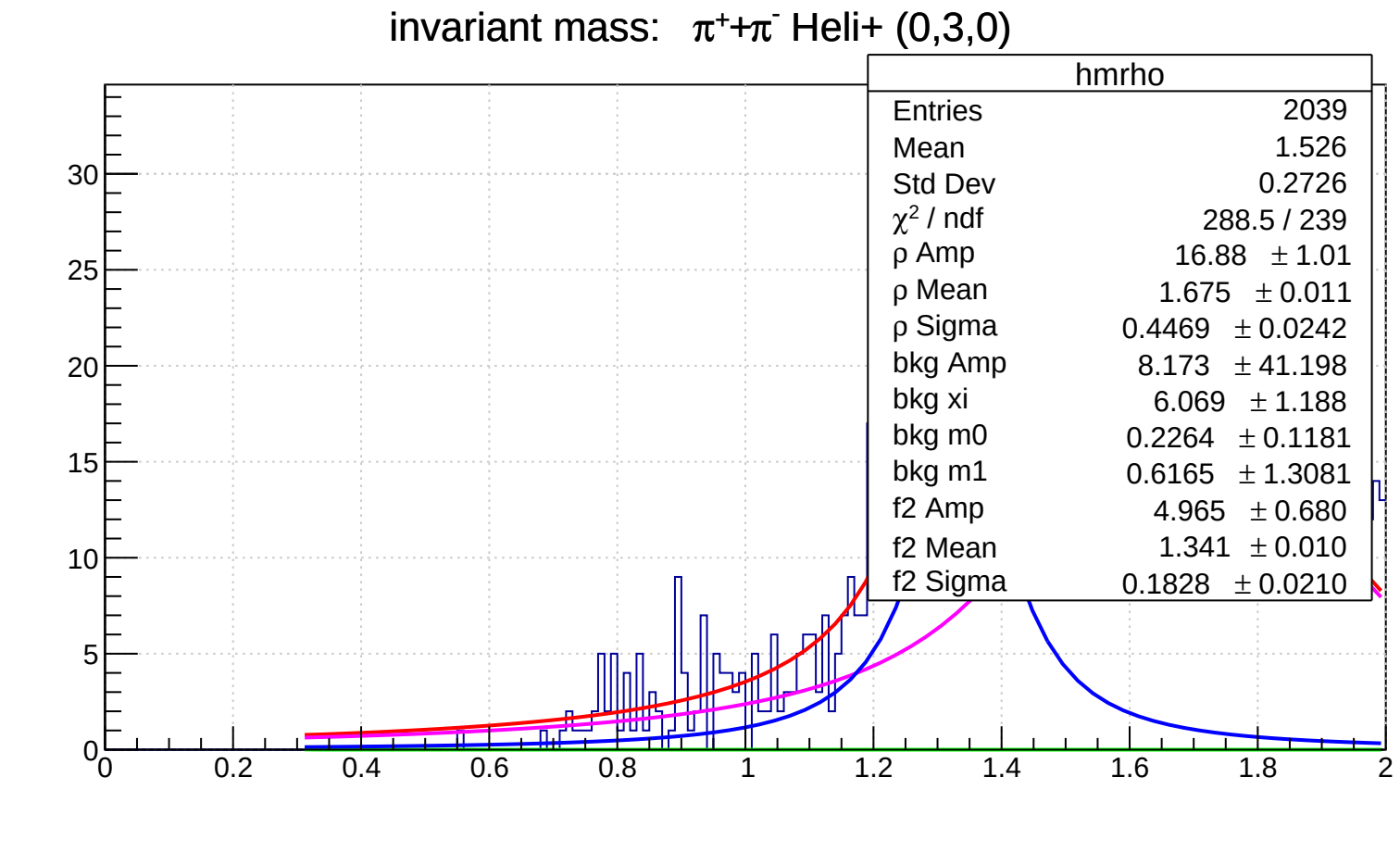

invariant mass: π⁺+π⁻ Heli+ (0,2,4)
hmrho
Entries 4807
Mean 0.9891
Std Dev 0.3398
χ² / ndf 501 / 332
ρ Amp 29.28 ± 0.74
ρ Mean 0.7773 ± 0.0017
ρ Sigma 0.1562 ± 0.0043
bkg Amp 0 ± 0.0
bkg xi 1 ± 0.0
bkg m0 0.3 ± 0.0
bkg m1 3 ± 0.0
f2 Amp 21.93 ± 0.81
f2 Mean 1.27 ± 0.01
f2 Sigma 0.4493 ± 0.0176
0
20
40
60
80
100
120
140
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

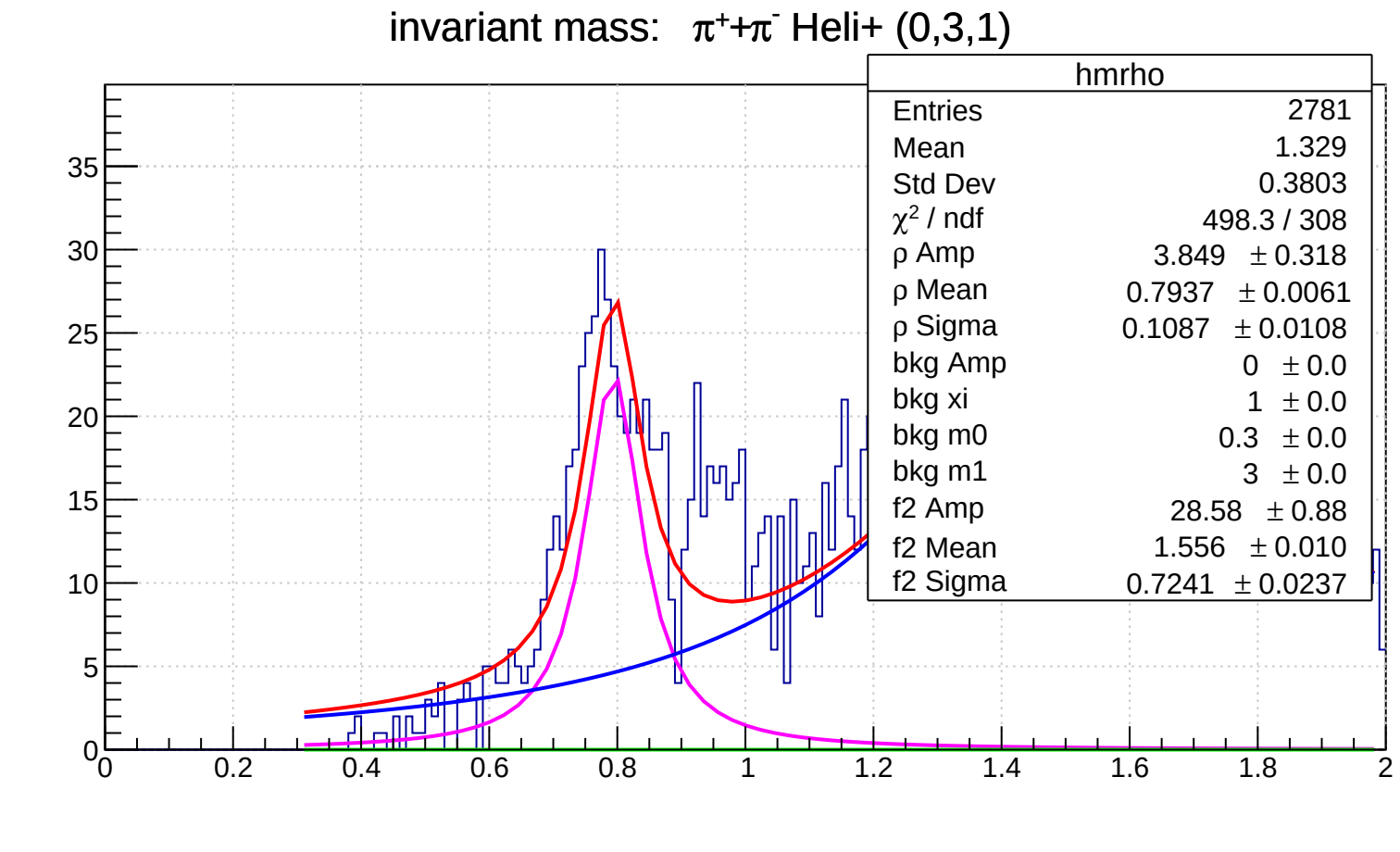

invariant mass: π⁺+π⁻ Heli+ (0,2,5)
hmrho
Entries 3847
Mean 1.021
Std Dev 0.3525
χ² / ndf 499.7 / 329
ρ Amp 20.95 ± 0.63
ρ Mean 0.7786 ± 0.0018
ρ Sigma 0.144 ± 0.004
bkg Amp 0 ± 0.0
bkg xi 1 ± 0.0
bkg m0 0.3 ± 0.0
bkg m1 3 ± 0.0
f2 Amp 19.27 ± 0.73
f2 Mean 1.265 ± 0.007
f2 Sigma 0.4733 ± 0.0192
0
20
40
60
80
100
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

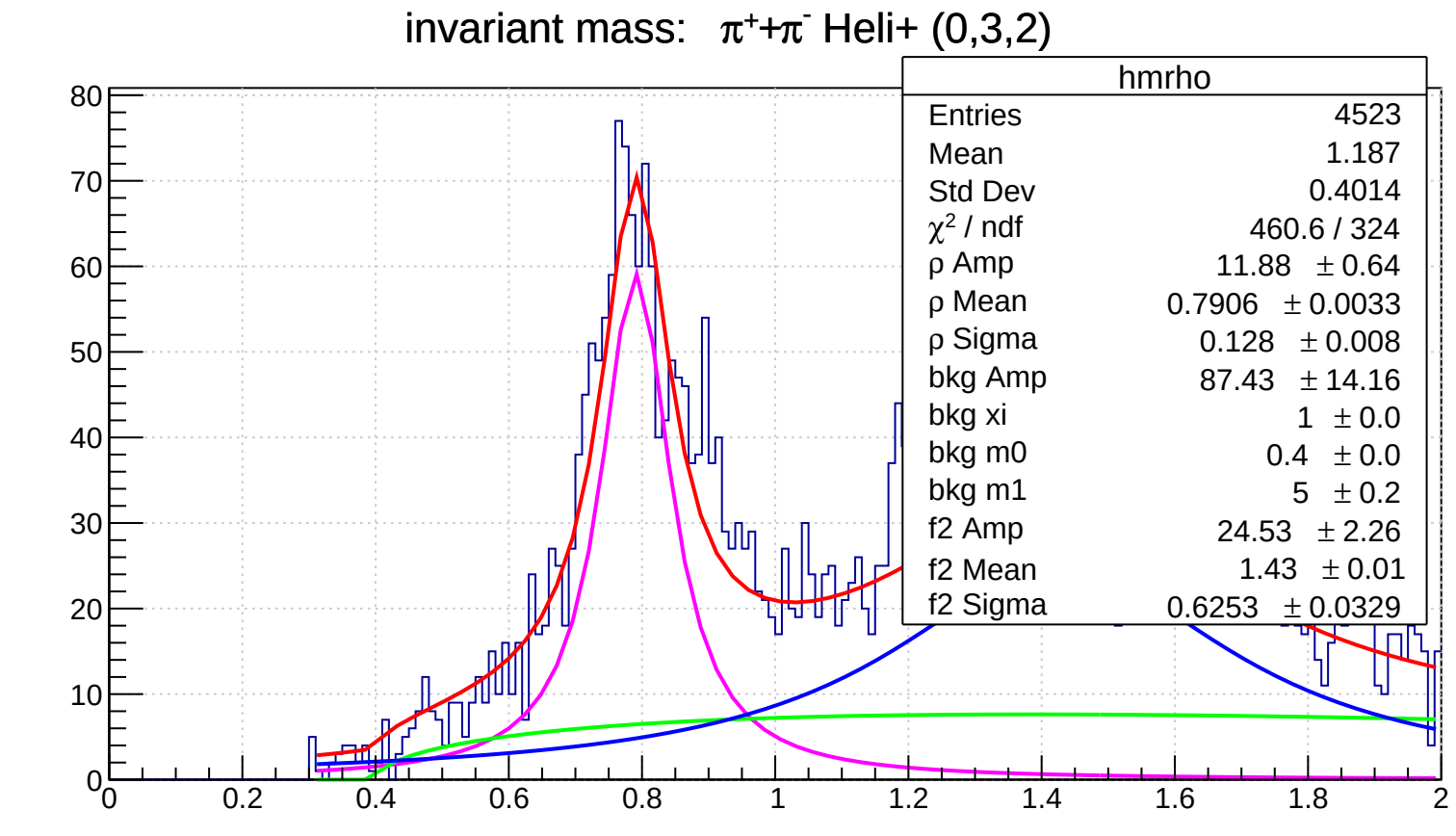

invariant mass: π⁺+π⁻ Heli+ (0,2,6)
hmrho
Entries 2330
Mean 1.076
Std Dev 0.3642
χ² / ndf 446 / 320
ρ Amp 10.3 ± 0.4
ρ Mean 0.7806 ± 0.0024
ρ Sigma 0.1344 ± 0.0053
bkg Amp 5.98 ± 6.46
bkg xi 1 ± 0.7
bkg m0 0.4 ± 0.0
bkg m1 5 ± 3.8
f2 Amp 13.15 ± 1.15
f2 Mean 1.298 ± 0.009
f2 Sigma 0.4904 ± 0.0328
0
10
20
30
40
50
60
70
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

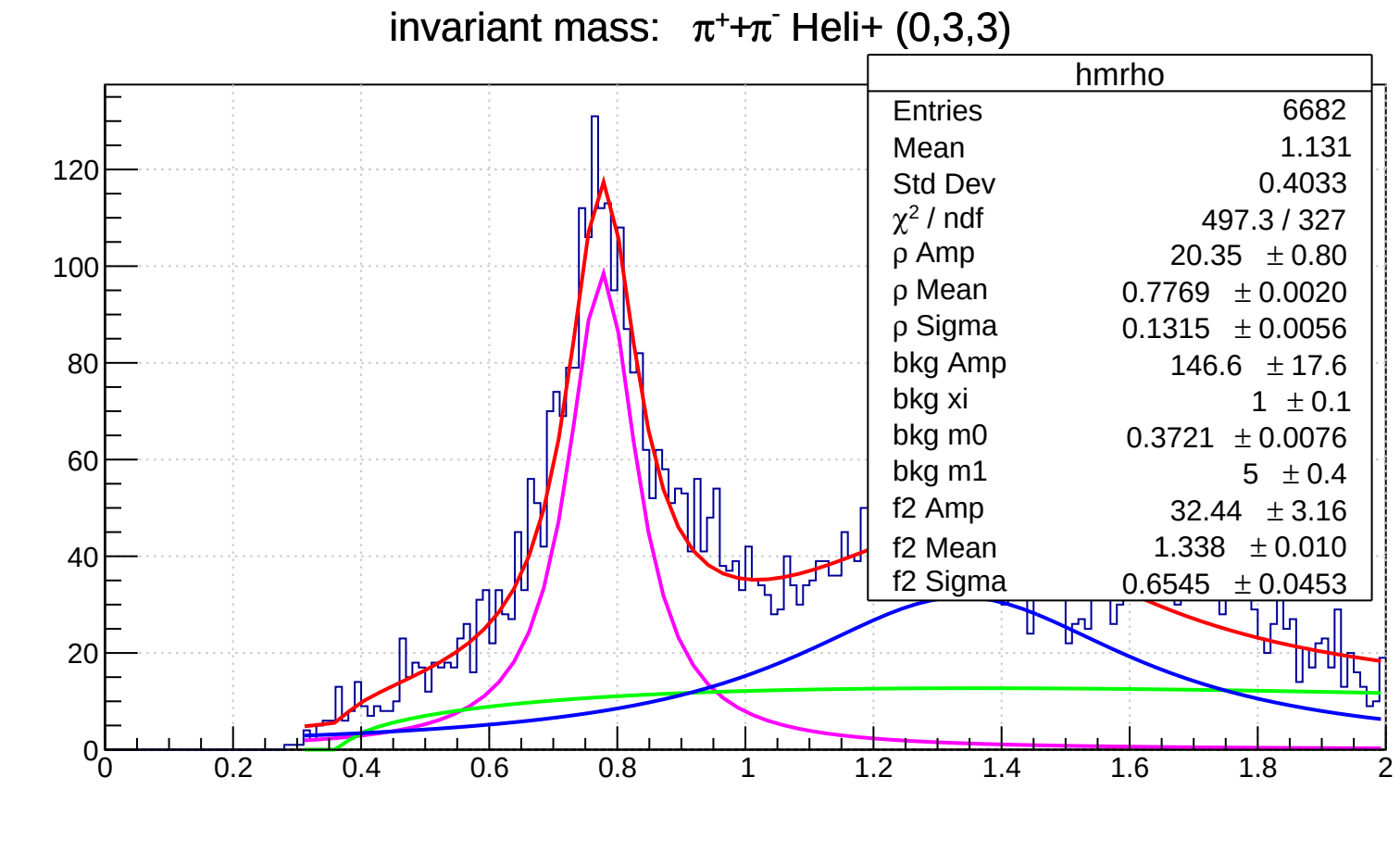

invariant mass: π⁺+π⁻ Heli+ (0,2,7)
hmrho
Entries 1554
Mean 1.177
Std Dev 0.359
χ² / ndf 490.1 / 299
ρ Amp 4.6 ± 0.3
ρ Mean 0.8005 ± 0.0037
ρ Sigma 0.1128 ± 0.0070
bkg Amp 0 ± 0.0
bkg xi 1 ± 0.0
bkg m0 0.3 ± 0.0
bkg m1 3 ± 0.0
f2 Amp 10.36 ± 0.44
f2 Mean 1.366 ± 0.009
f2 Sigma 0.5026 ± 0.0230
0
5
10
15
20
25
30
35
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

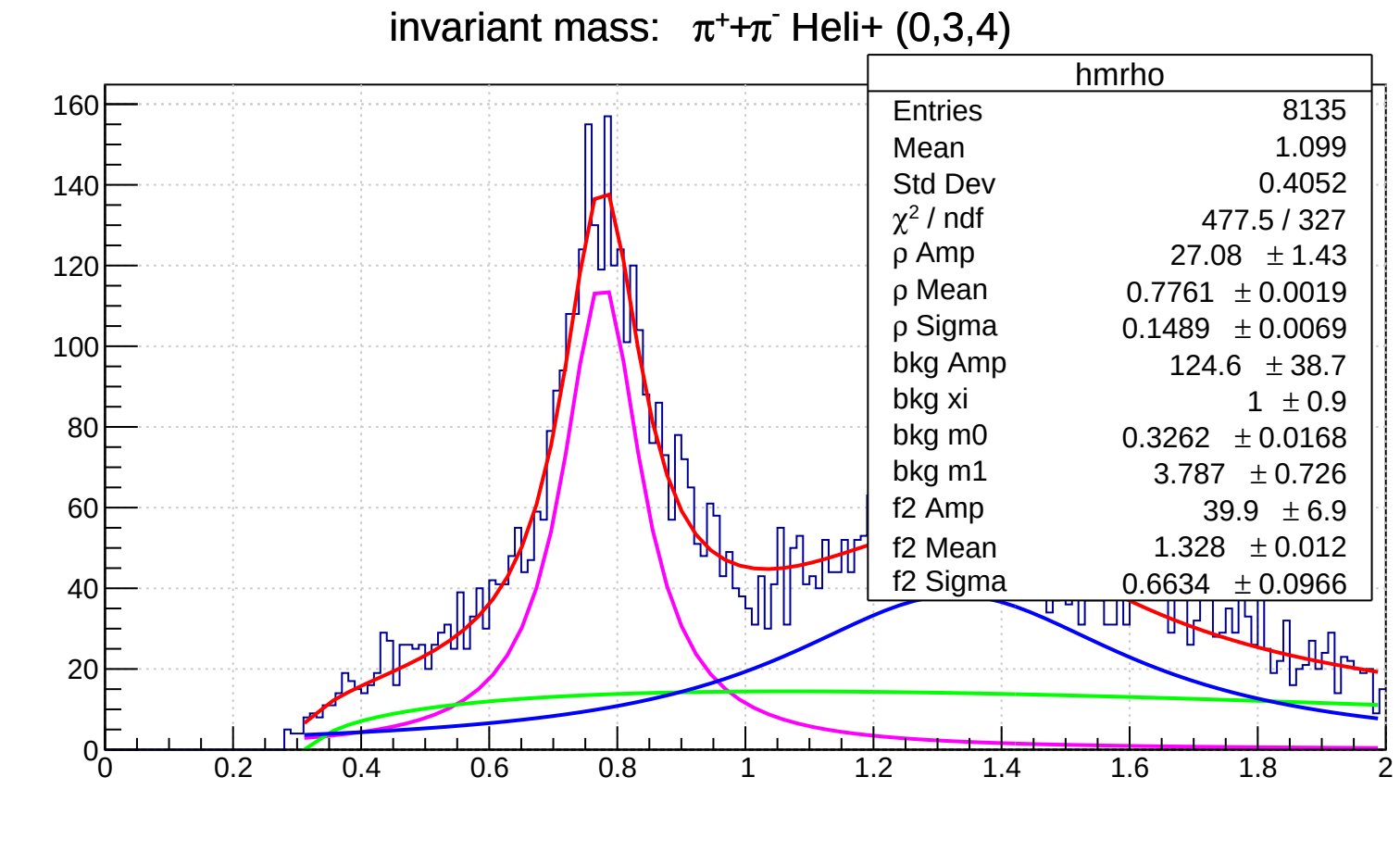

invariant mass: π+π- Heli+ (0,2,8)
hmrho
Entries 1126
Mean 1.343
Std Dev 0.3072
χ2 / ndf 257.1 / 258
ρ Amp 0.6461 ± 0.1600
ρ Mean 0.8051 ± 0.0110
ρ Sigma 0.104 ± 0.021
bkg Amp 6.421e−07 ± 5.134e+00
bkg xi 2.254 ± 0.229
bkg m0 0.4 ± 0.0
bkg m1 5 ± 0.0
f2 Amp 11.6 ± 0.4
f2 Mean 1.399 ± 0.008
f2 Sigma 0.4824 ± 0.0219
0 2 4 6 8 10 12 14 16 18 20 22
0 0.2 0.4 0.6 0.8 1 1.2 1.4 1.6 1.8 2

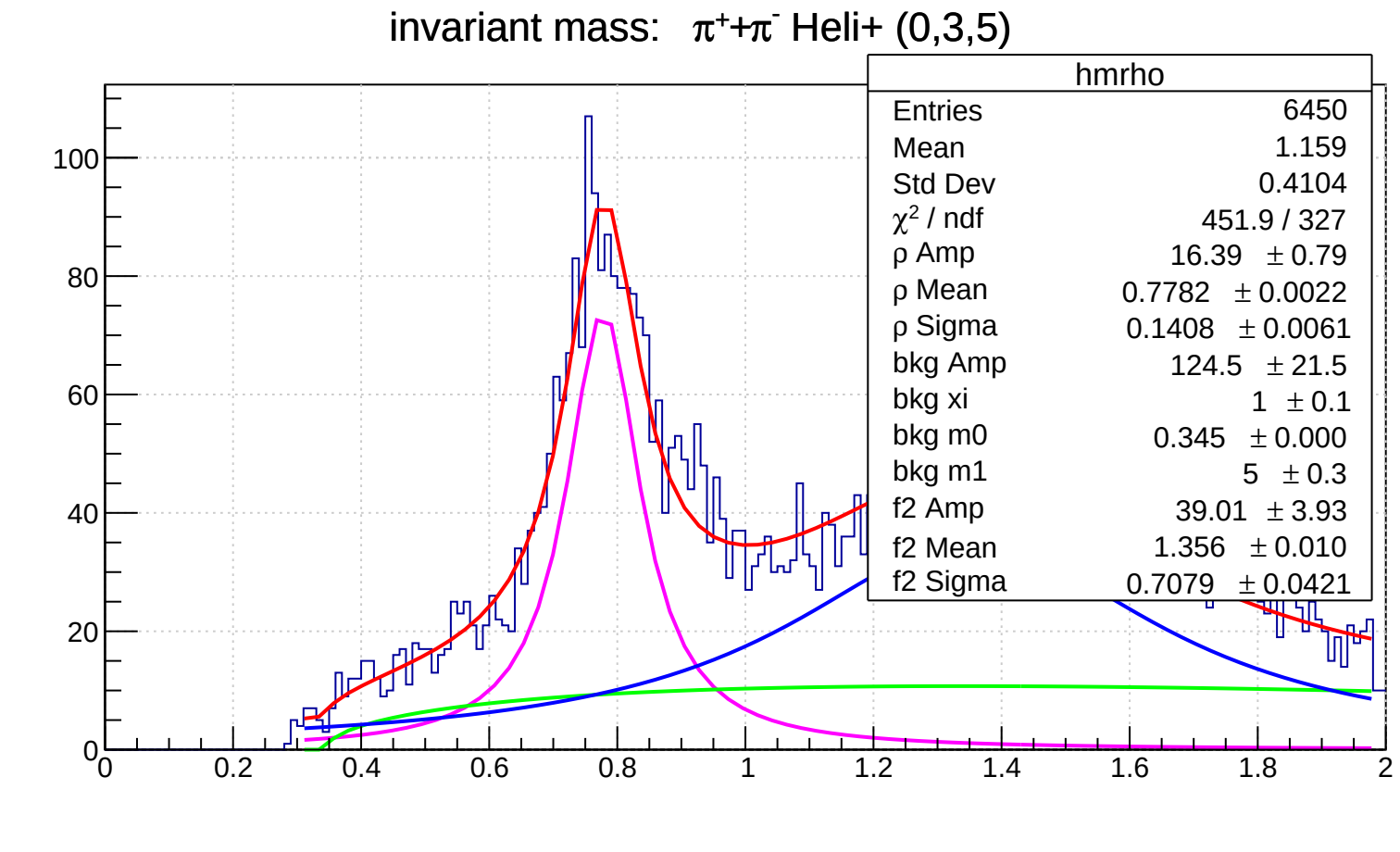

invariant mass: π⁺+π⁻ Heli+ (0,3,0)
hmrho
Entries 2039
Mean 1.526
Std Dev 0.2726
χ² / ndf 288.5 / 239
ρ Amp 16.88 ± 1.01
ρ Mean 1.675 ± 0.011
ρ Sigma 0.4469 ± 0.0242
bkg Amp 8.173 ± 41.198
bkg xi 6.069 ± 1.188
bkg m0 0.2264 ± 0.1181
bkg m1 0.6165 ± 1.3081
f2 Amp 4.965 ± 0.680
f2 Mean 1.341 ± 0.010
f2 Sigma 0.1828 ± 0.0210
0
5
10
15
20
25
30
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

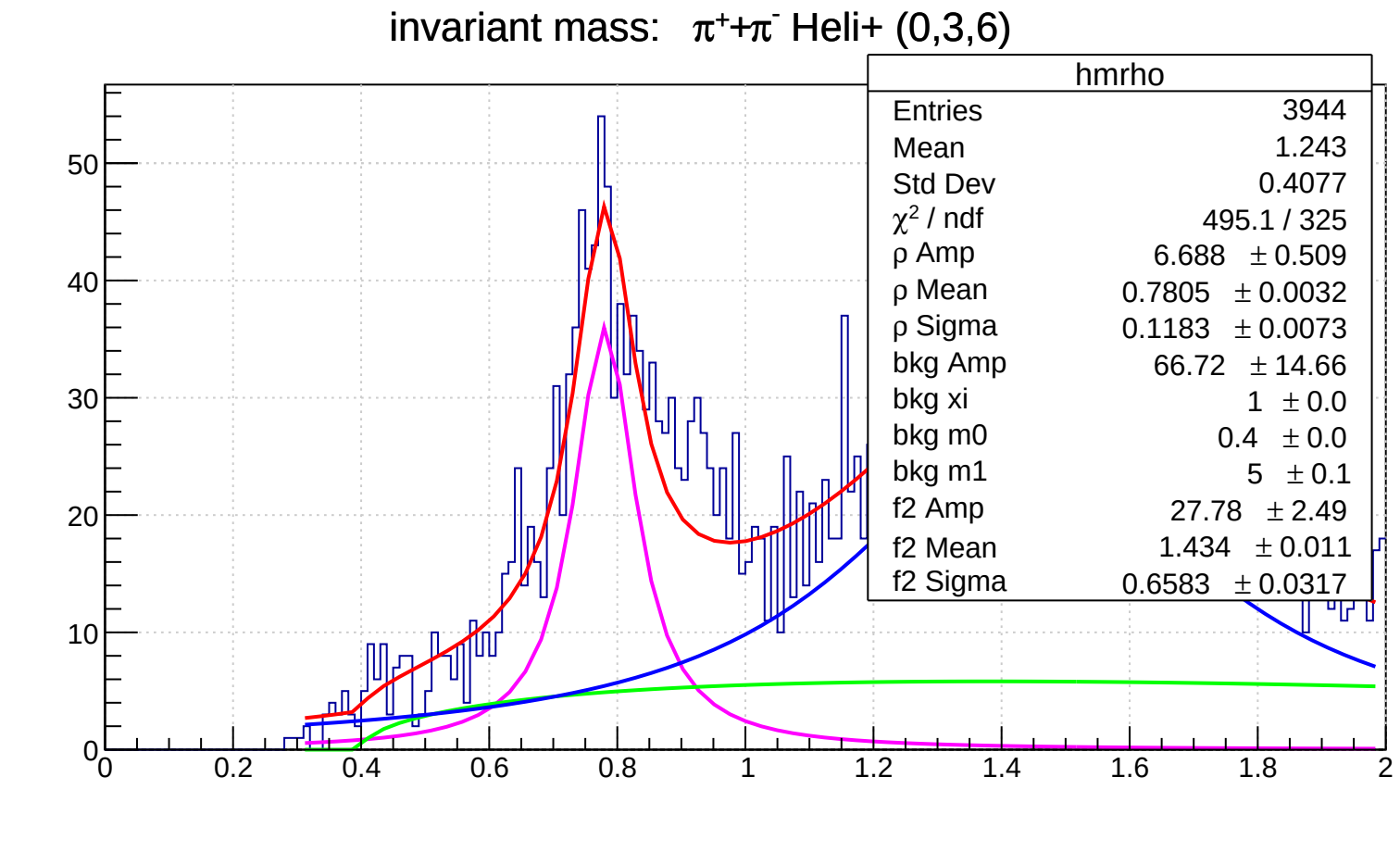

invariant mass: π+π- Heli+ (0,3,1)
hmrho
Entries 2781
Mean 1.329
Std Dev 0.3803
χ2 / ndf 498.3 / 308
ρ Amp 3.849 ± 0.318
ρ Mean 0.7937 ± 0.0061
ρ Sigma 0.1087 ± 0.0108
bkg Amp 0 ± 0.0
bkg xi 1 ± 0.0
bkg m0 0.3 ± 0.0
bkg m1 3 ± 0.0
f2 Amp 28.58 ± 0.88
f2 Mean 1.556 ± 0.010
f2 Sigma 0.7241 ± 0.0237
0
5
10
15
20
25
30
35
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

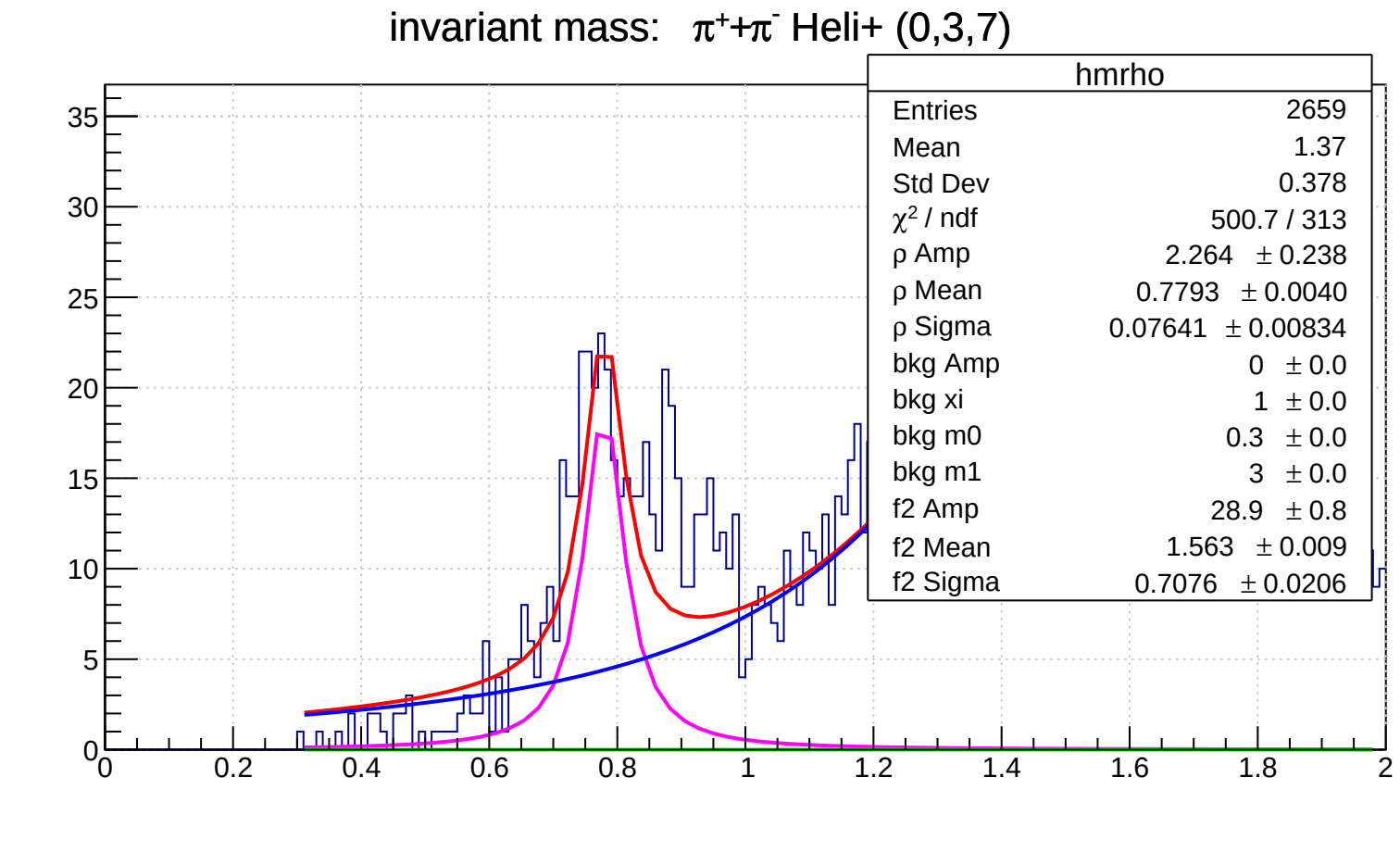

invariant mass: π⁺+π⁻ Heli+ (0,3,2)
hmrho
Entries 4523
Mean 1.187
Std Dev 0.4014
χ² / ndf 460.6 / 324
ρ Amp 11.88 ± 0.64
ρ Mean 0.7906 ± 0.0033
ρ Sigma 0.128 ± 0.008
bkg Amp 87.43 ± 14.16
bkg xi 1 ± 0.0
bkg m0 0.4 ± 0.0
bkg m1 5 ± 0.2
f2 Amp 24.53 ± 2.26
f2 Mean 1.43 ± 0.01
f2 Sigma 0.6253 ± 0.0329
0 10 20 30 40 50 60 70 80
0 0.2 0.4 0.6 0.8 1 1.2 1.4 1.6 1.8 2

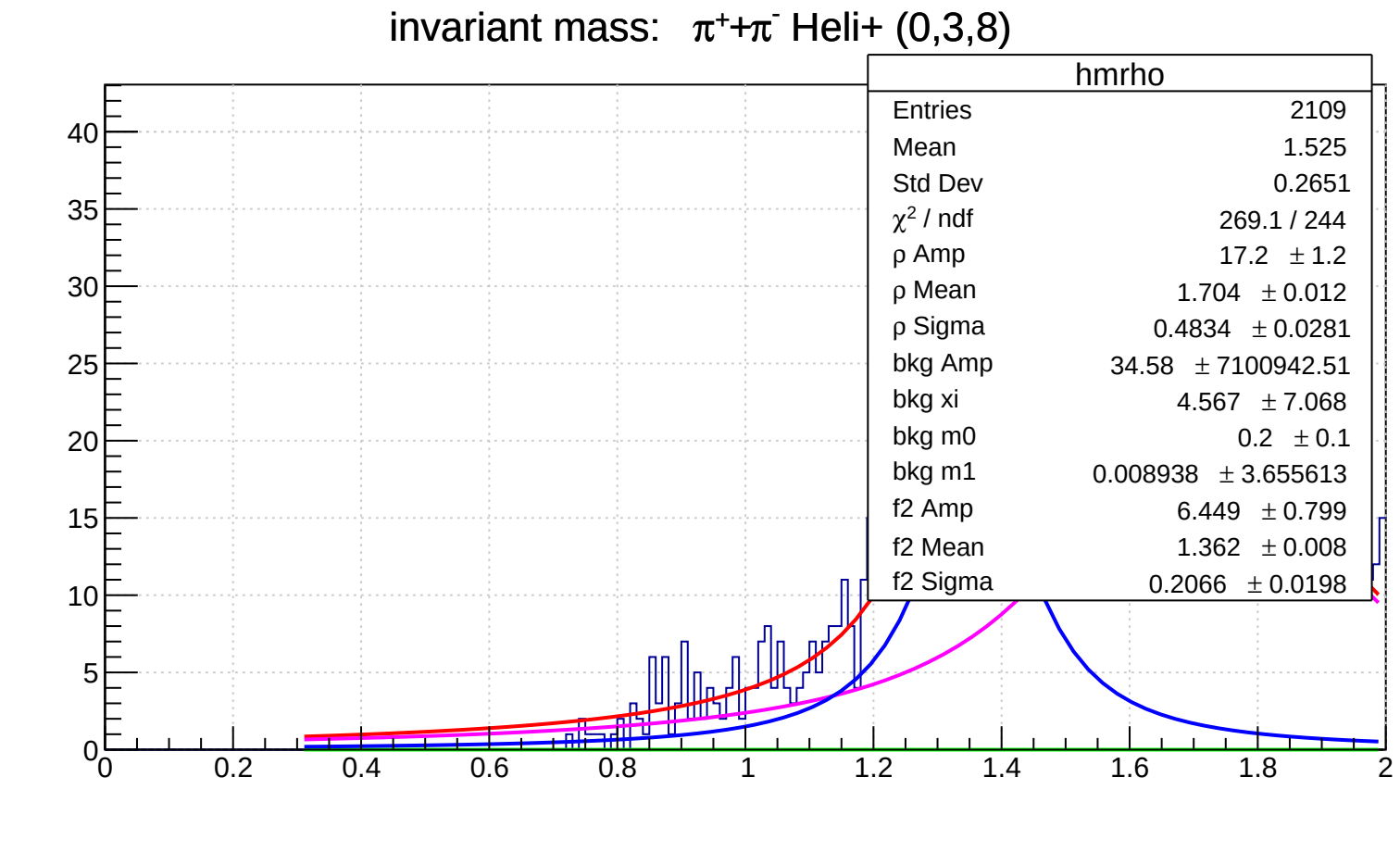

invariant mass: π⁺+π⁻ Heli+ (0,3,3)
hmrho
Entries 6682
Mean 1.131
Std Dev 0.4033
χ² / ndf 497.3 / 327
ρ Amp 20.35 ± 0.80
ρ Mean 0.7769 ± 0.0020
ρ Sigma 0.1315 ± 0.0056
bkg Amp 146.6 ± 17.6
bkg xi 1 ± 0.1
bkg m0 0.3721 ± 0.0076
bkg m1 5 ± 0.4
f2 Amp 32.44 ± 3.16
f2 Mean 1.338 ± 0.010
f2 Sigma 0.6545 ± 0.0453
0
20
40
60
80
100
120
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

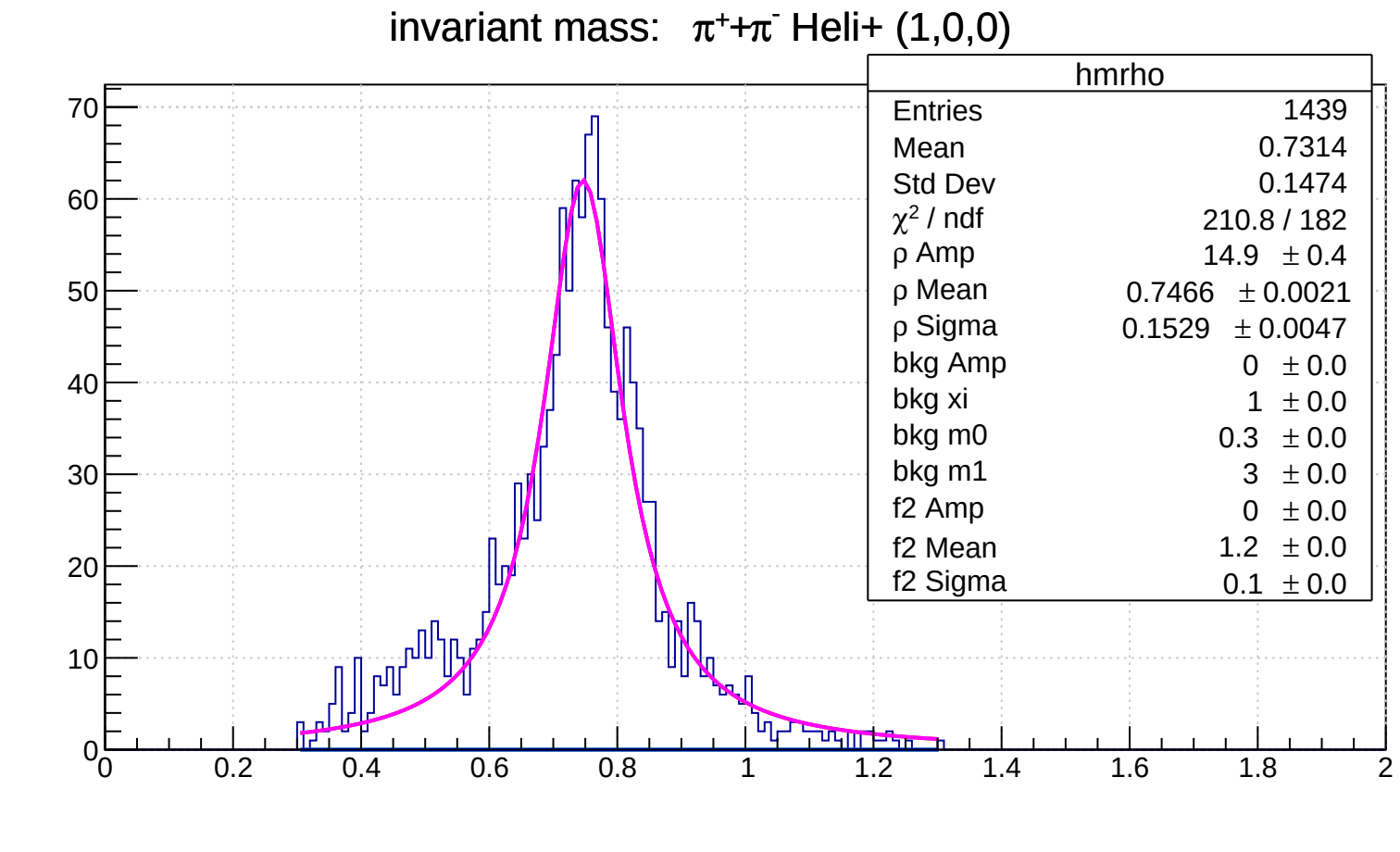

invariant mass: π+π- Heli+ (0,3,4)
hmrho
Entries 8135
Mean 1.099
Std Dev 0.4052
χ2 / ndf 477.5 / 327
ρ Amp 27.08 ± 1.43
ρ Mean 0.7761 ± 0.0019
ρ Sigma 0.1489 ± 0.0069
bkg Amp 124.6 ± 38.7
bkg xi 1 ± 0.9
bkg m0 0.3262 ± 0.0168
bkg m1 3.787 ± 0.726
f2 Amp 39.9 ± 6.9
f2 Mean 1.328 ± 0.012
f2 Sigma 0.6634 ± 0.0966
0
20
40
60
80
100
120
140
160
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

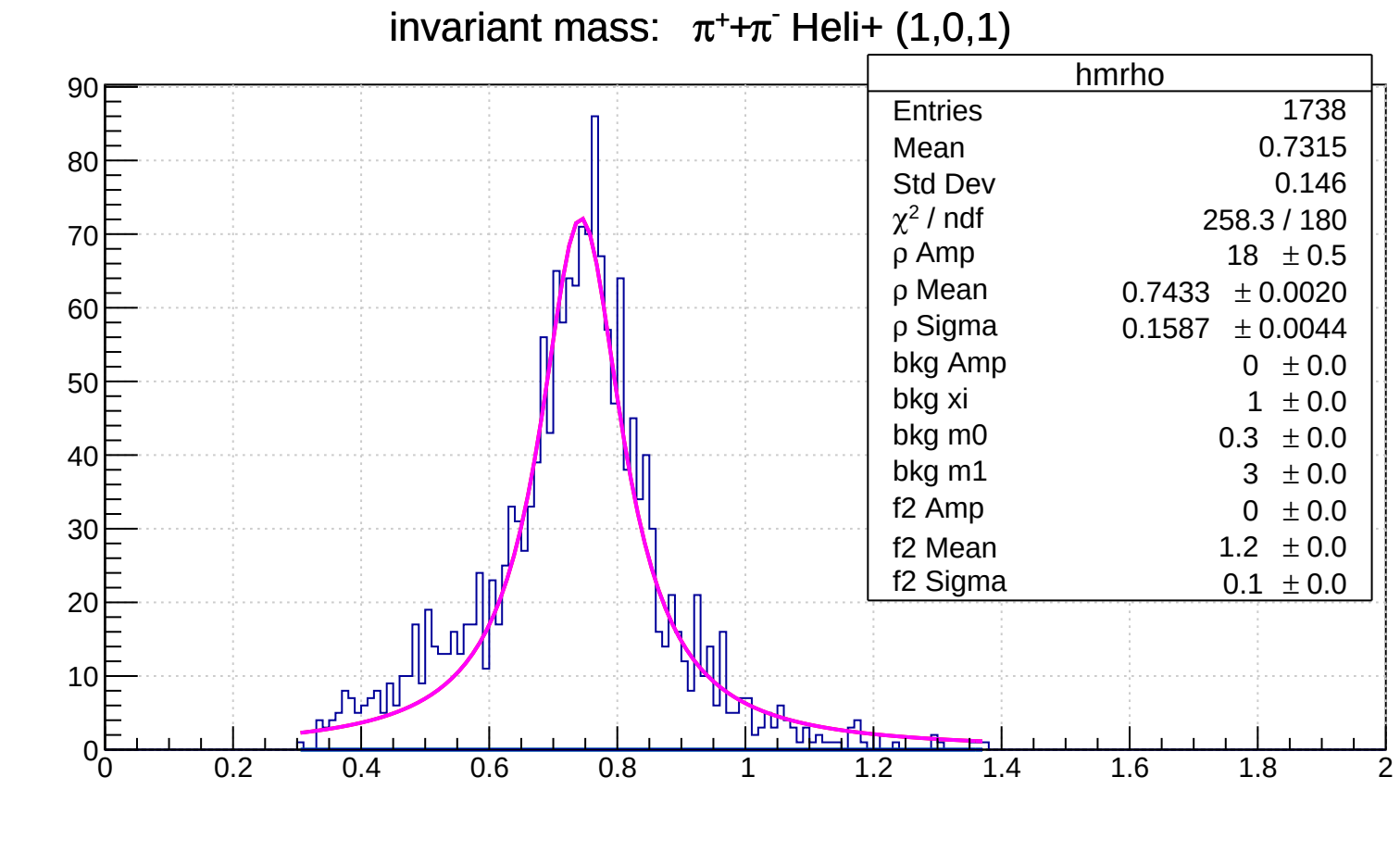

invariant mass: π⁺+π⁻ Heli+ (0,3,5)
hmrho
Entries 6450
Mean 1.159
Std Dev 0.4104
χ² / ndf 451.9 / 327
ρ Amp 16.39 ± 0.79
ρ Mean 0.7782 ± 0.0022
ρ Sigma 0.1408 ± 0.0061
bkg Amp 124.5 ± 21.5
bkg xi 1 ± 0.1
bkg m0 0.345 ± 0.000
bkg m1 5 ± 0.3
f2 Amp 39.01 ± 3.93
f2 Mean 1.356 ± 0.010
f2 Sigma 0.7079 ± 0.0421
0
20
40
60
80
100
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

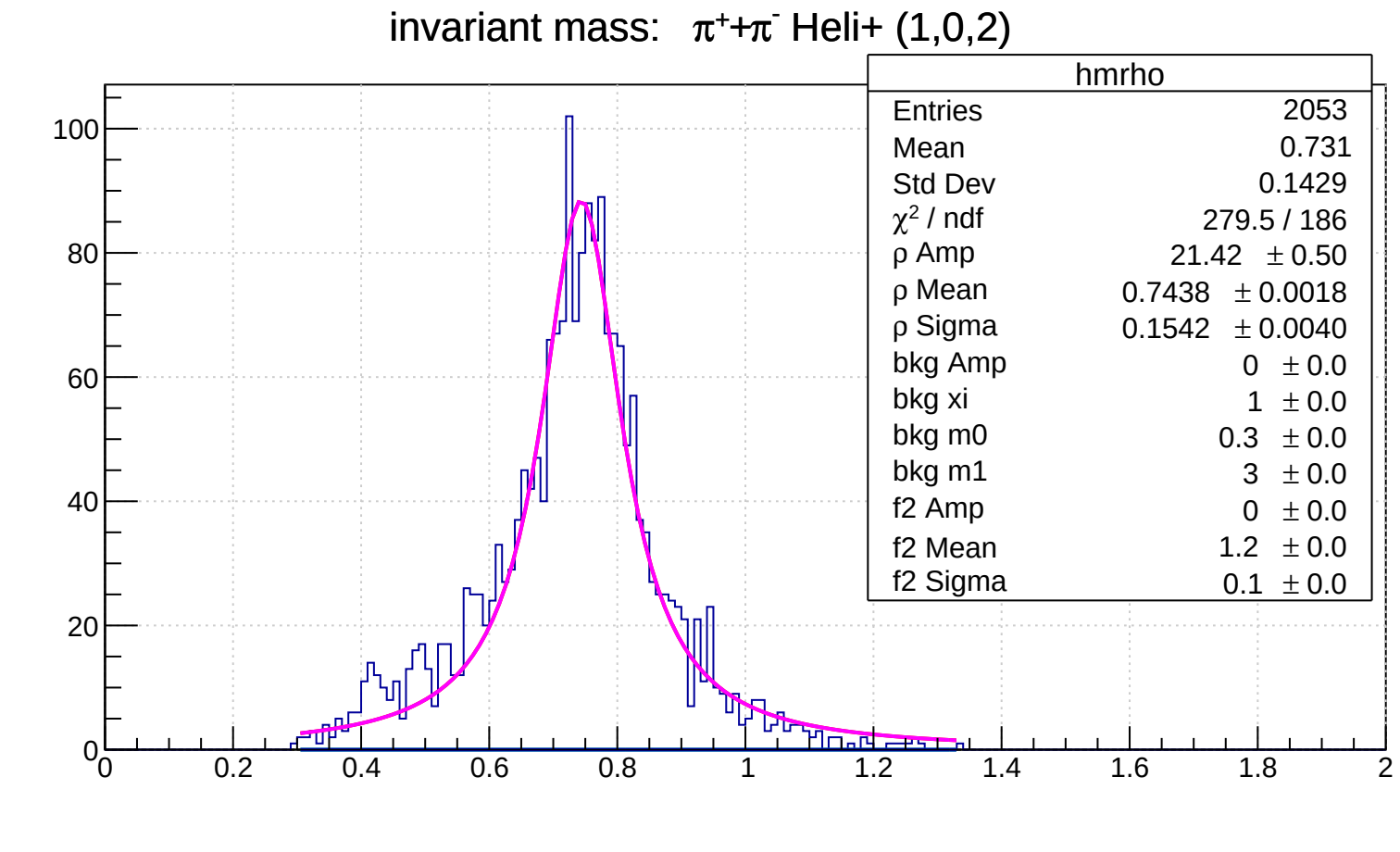

invariant mass: π⁺+π⁻ Heli+ (0,3,6)
hmrho
Entries 3944
Mean 1.243
Std Dev 0.4077
χ² / ndf 495.1 / 325
ρ Amp 6.688 ± 0.509
ρ Mean 0.7805 ± 0.0032
ρ Sigma 0.1183 ± 0.0073
bkg Amp 66.72 ± 14.66
bkg xi 1 ± 0.0
bkg m0 0.4 ± 0.0
bkg m1 5 ± 0.1
f2 Amp 27.78 ± 2.49
f2 Mean 1.434 ± 0.011
f2 Sigma 0.6583 ± 0.0317
0
10
20
30
40
50
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

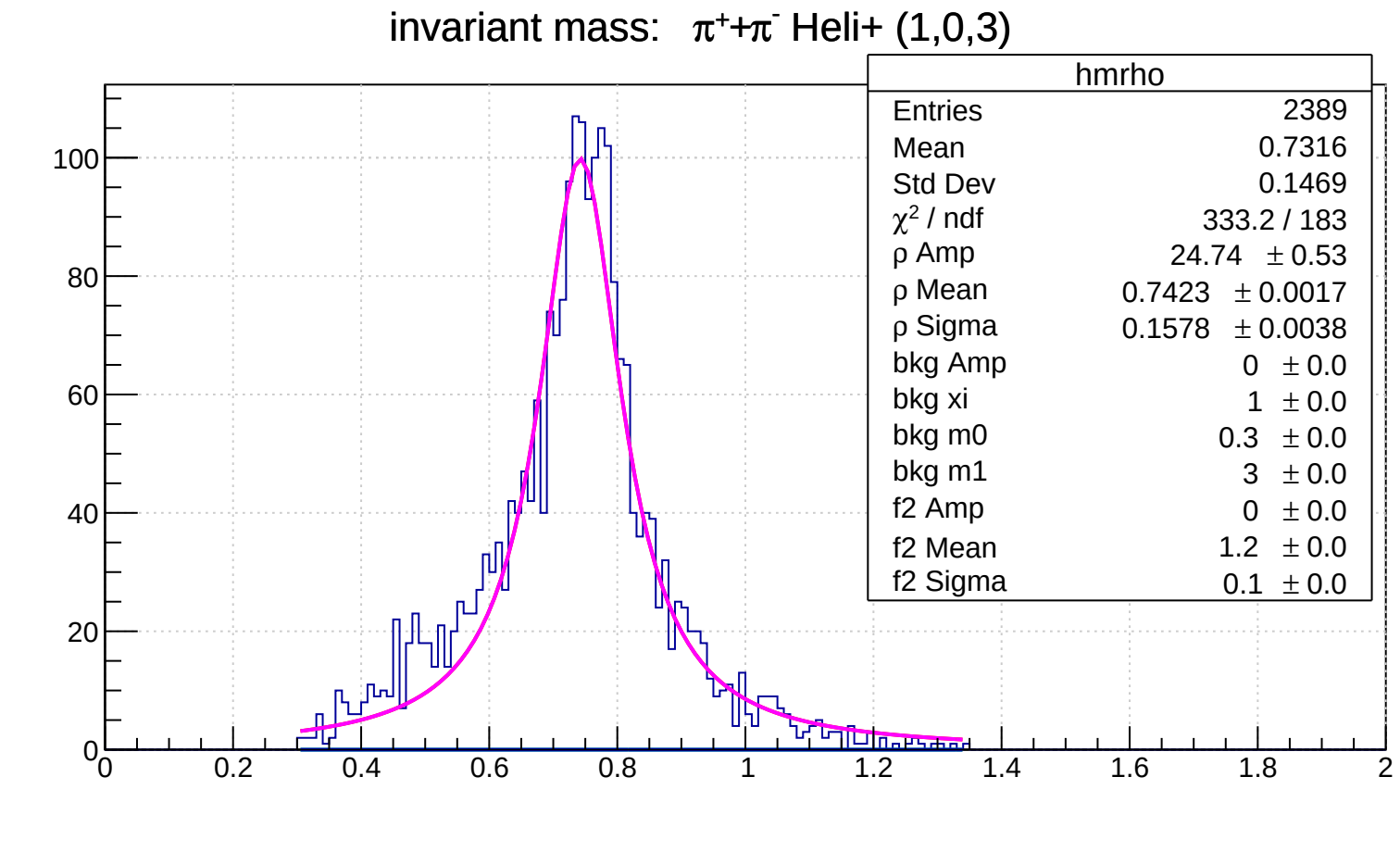

invariant mass: π⁺+π⁻ Heli+ (0,3,7)
hmrho
Entries 2659
Mean 1.37
Std Dev 0.378
χ² / ndf 500.7 / 313
ρ Amp 2.264 ± 0.238
ρ Mean 0.7793 ± 0.0040
ρ Sigma 0.07641 ± 0.00834
bkg Amp 0 ± 0.0
bkg xi 1 ± 0.0
bkg m0 0.3 ± 0.0
bkg m1 3 ± 0.0
f2 Amp 28.9 ± 0.8
f2 Mean 1.563 ± 0.009
f2 Sigma 0.7076 ± 0.0206
0
5
10
15
20
25
30
35
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

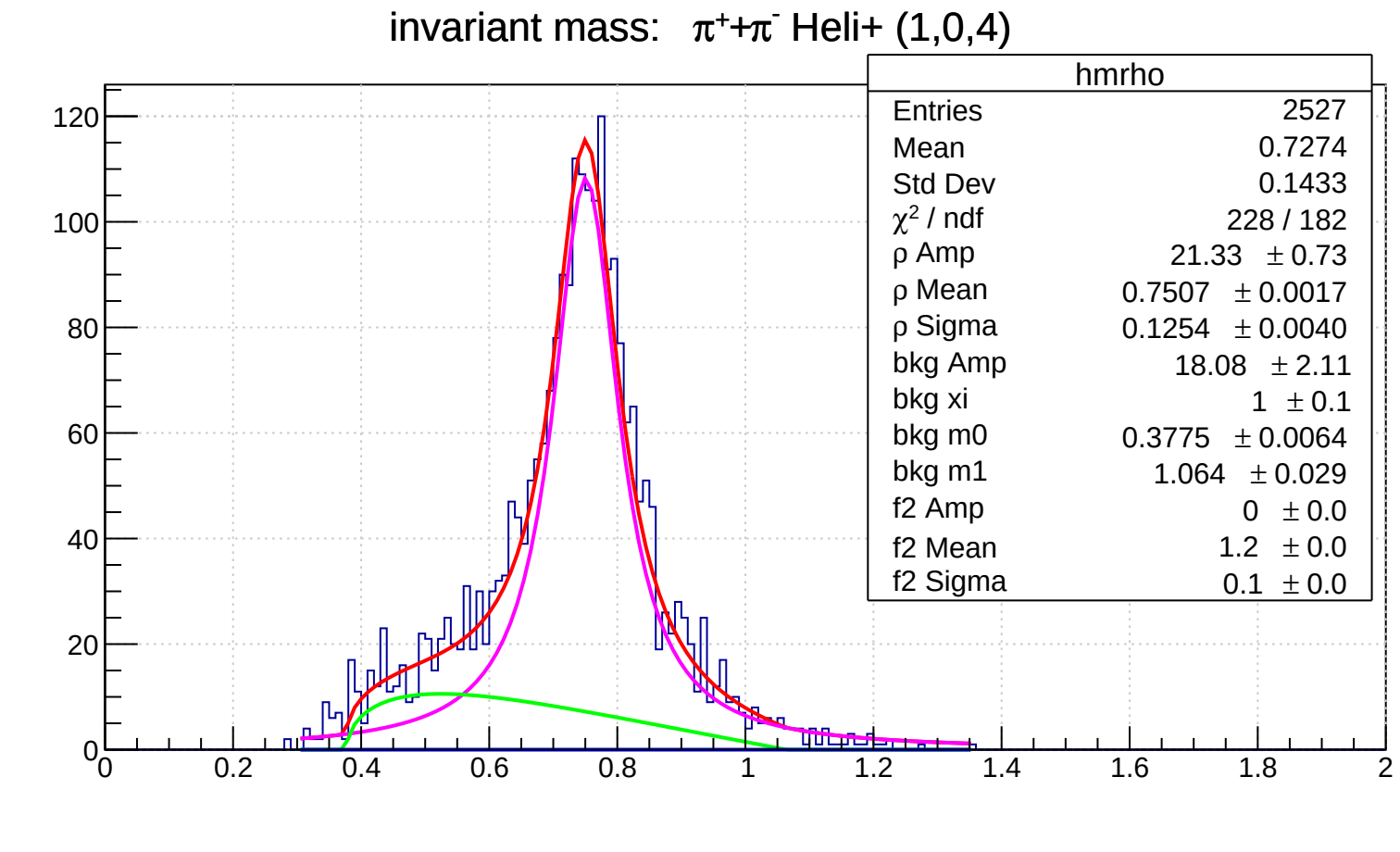

invariant mass: π⁺+π⁻ Heli+ (0,3,8)
hmrho
Entries 2109
Mean 1.525
Std Dev 0.2651
χ² / ndf 269.1 / 244
ρ Amp 17.2 ± 1.2
ρ Mean 1.704 ± 0.012
ρ Sigma 0.4834 ± 0.0281
bkg Amp 34.58 ± 7100942.51
bkg xi 4.567 ± 7.068
bkg m0 0.2 ± 0.1
bkg m1 0.008938 ± 3.655613
f2 Amp 6.449 ± 0.799
f2 Mean 1.362 ± 0.008
f2 Sigma 0.2066 ± 0.0198
0
5
10
15
20
25
30
35
40
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

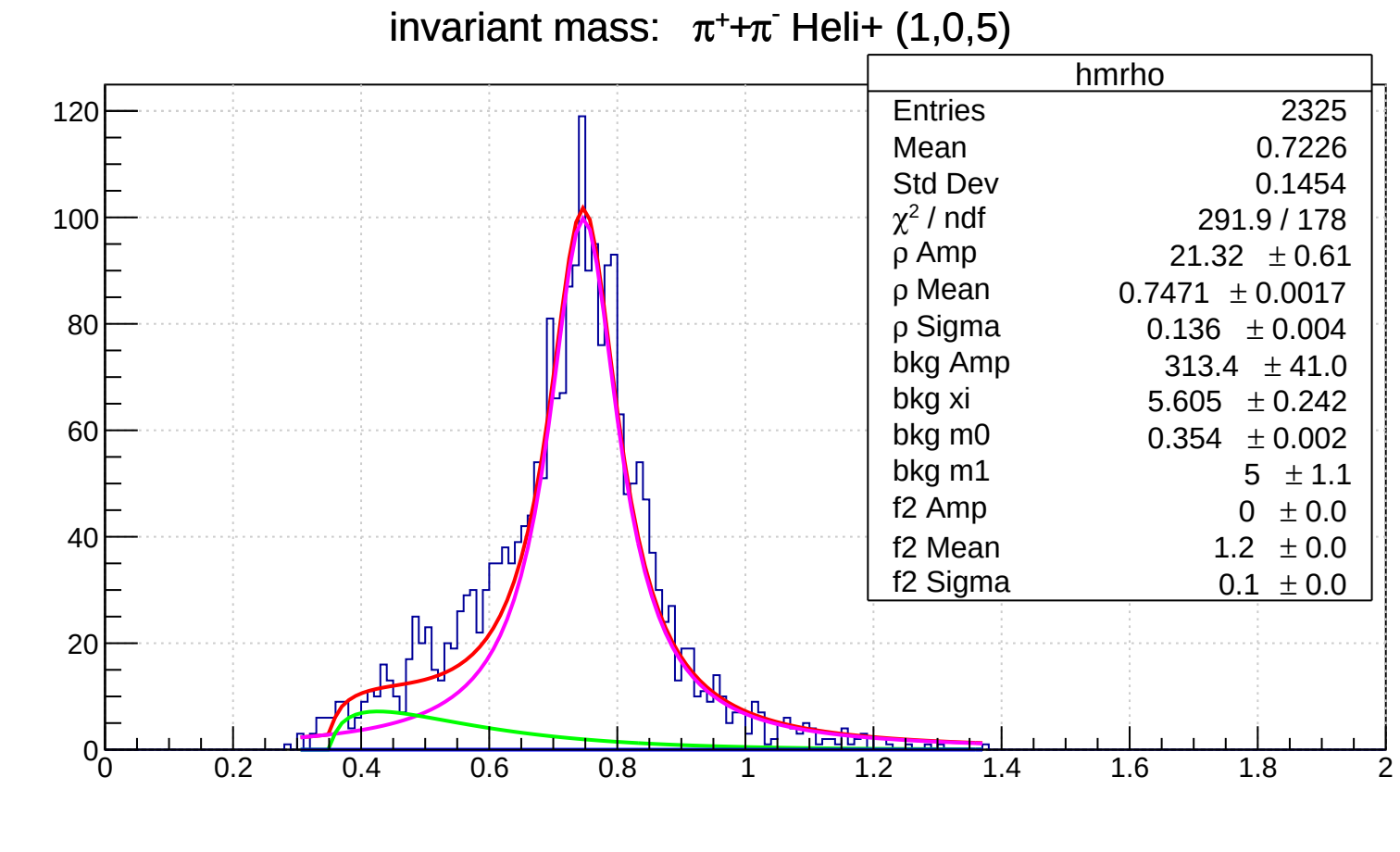

invariant mass: π⁺+π⁻ Heli+ (1,0,0)
hmrho
Entries 1439
Mean 0.7314
Std Dev 0.1474
χ² / ndf 210.8 / 182
ρ Amp 14.9 ± 0.4
ρ Mean 0.7466 ± 0.0021
ρ Sigma 0.1529 ± 0.0047
bkg Amp 0 ± 0.0
bkg xi 1 ± 0.0
bkg m0 0.3 ± 0.0
bkg m1 3 ± 0.0
f2 Amp 0 ± 0.0
f2 Mean 1.2 ± 0.0
f2 Sigma 0.1 ± 0.0
0
10
20
30
40
50
60
70
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

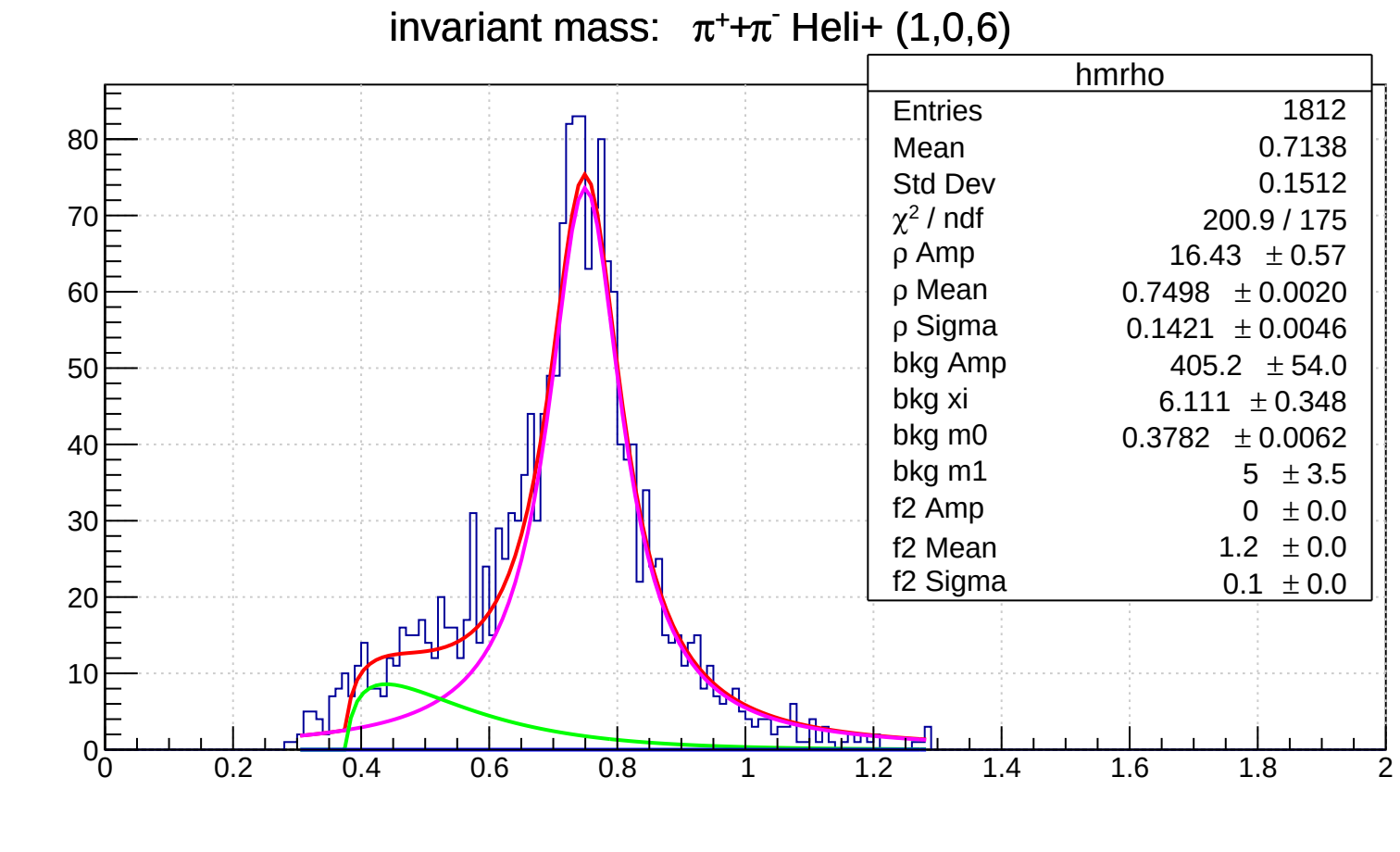

invariant mass: π⁺+π⁻ Heli+ (1,0,1)
hmrho
Entries 1738
Mean 0.7315
Std Dev 0.146
χ² / ndf 258.3 / 180
ρ Amp 18 ± 0.5
ρ Mean 0.7433 ± 0.0020
ρ Sigma 0.1587 ± 0.0044
bkg Amp 0 ± 0.0
bkg xi 1 ± 0.0
bkg m0 0.3 ± 0.0
bkg m1 3 ± 0.0
f2 Amp 0 ± 0.0
f2 Mean 1.2 ± 0.0
f2 Sigma 0.1 ± 0.0
0 10 20 30 40 50 60 70 80 90
0 0.2 0.4 0.6 0.8 1 1.2 1.4 1.6 1.8 2

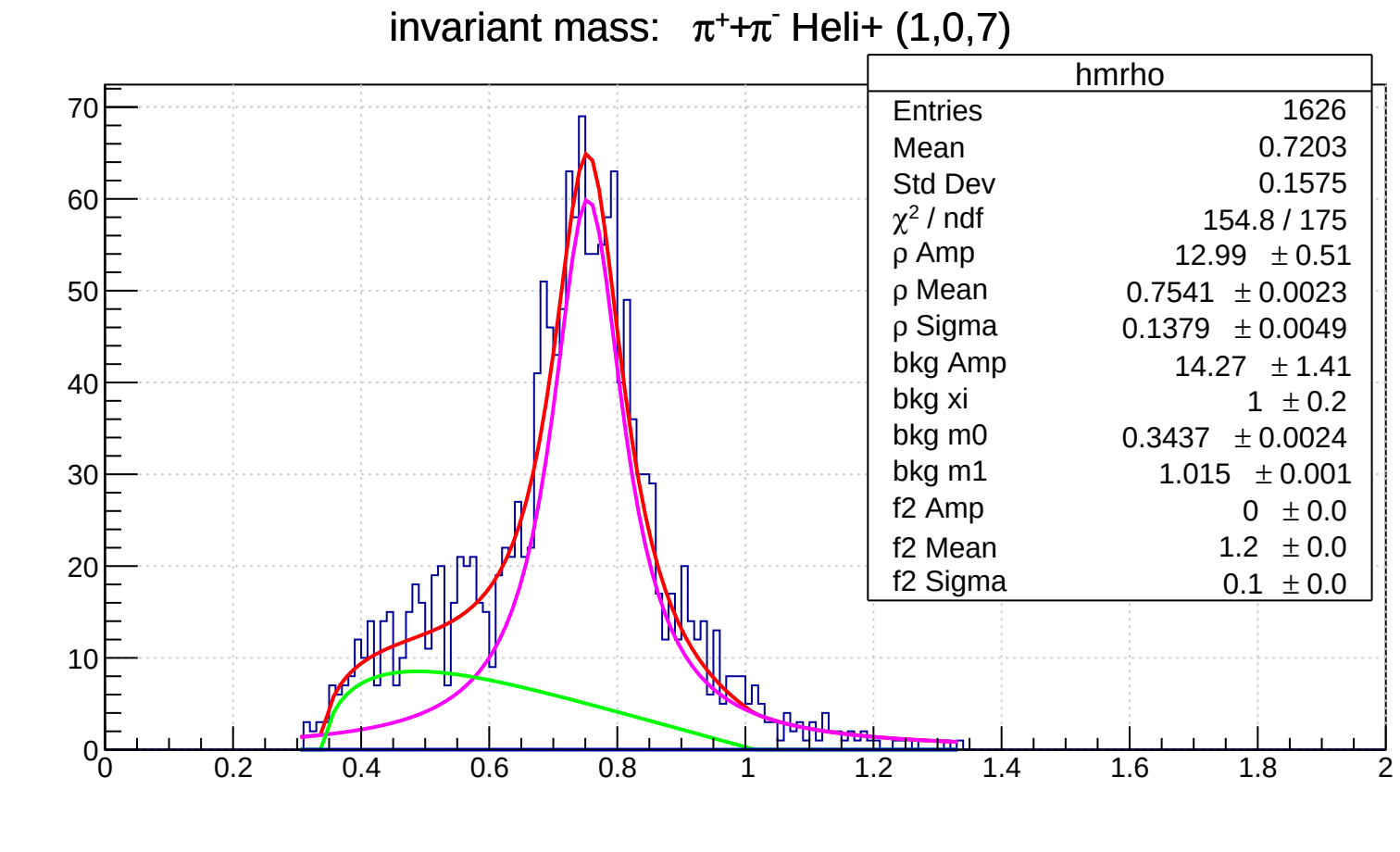

invariant mass: π+π- Heli+ (1,0,2)
hmrho
Entries 2053
Mean 0.731
Std Dev 0.1429
χ2 / ndf 279.5 / 186
ρ Amp 21.42 ± 0.50
ρ Mean 0.7438 ± 0.0018
ρ Sigma 0.1542 ± 0.0040
bkg Amp 0 ± 0.0
bkg xi 1 ± 0.0
bkg m0 0.3 ± 0.0
bkg m1 3 ± 0.0
f2 Amp 0 ± 0.0
f2 Mean 1.2 ± 0.0
f2 Sigma 0.1 ± 0.0
0
20
40
60
80
100
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

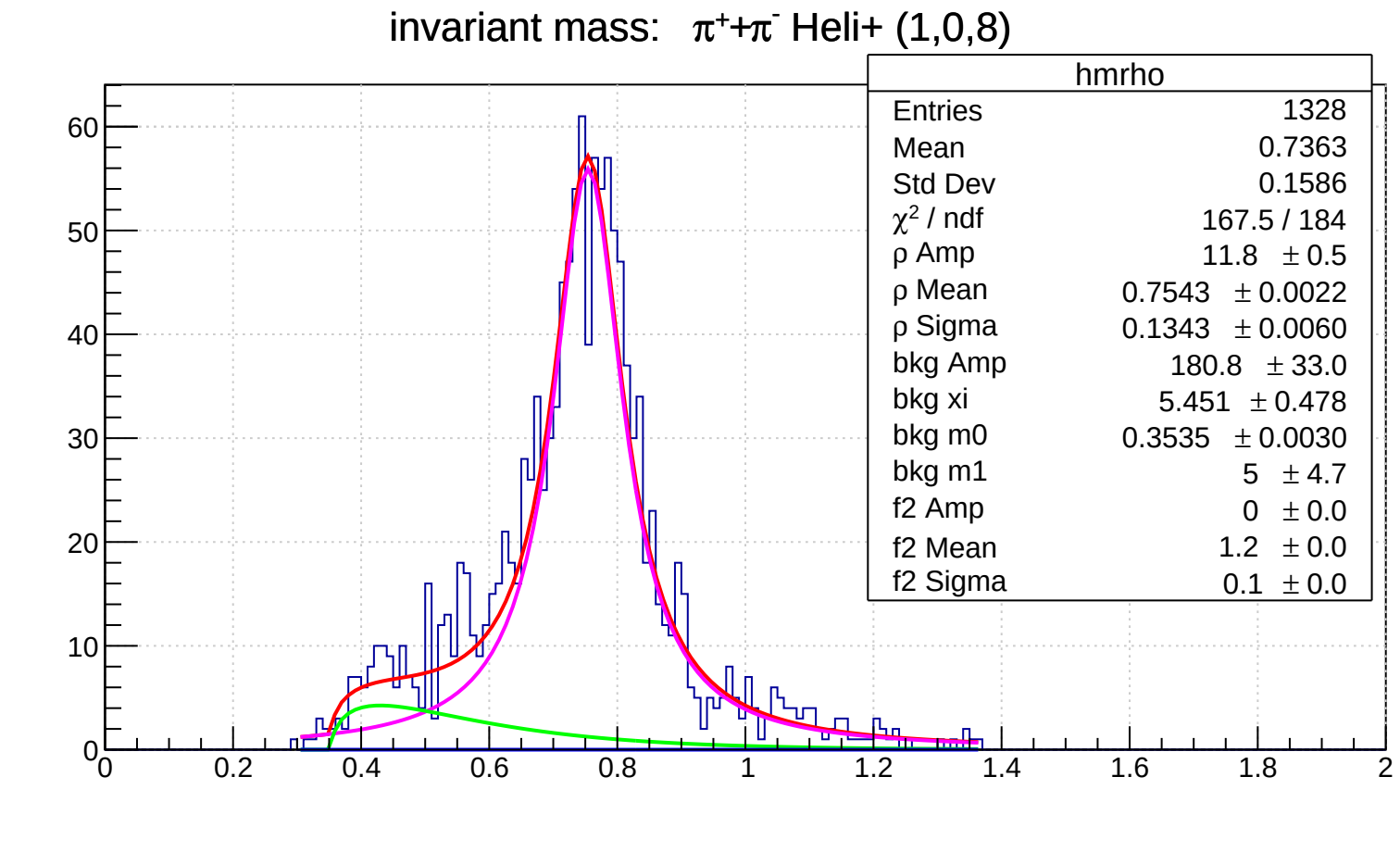

invariant mass: π⁺+π⁻ Heli+ (1,0,3)
hmrho
Entries 2389
Mean 0.7316
Std Dev 0.1469
χ² / ndf 333.2 / 183
ρ Amp 24.74 ± 0.53
ρ Mean 0.7423 ± 0.0017
ρ Sigma 0.1578 ± 0.0038
bkg Amp 0 ± 0.0
bkg xi 1 ± 0.0
bkg m0 0.3 ± 0.0
bkg m1 3 ± 0.0
f2 Amp 0 ± 0.0
f2 Mean 1.2 ± 0.0
f2 Sigma 0.1 ± 0.0
0
20
40
60
80
100
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

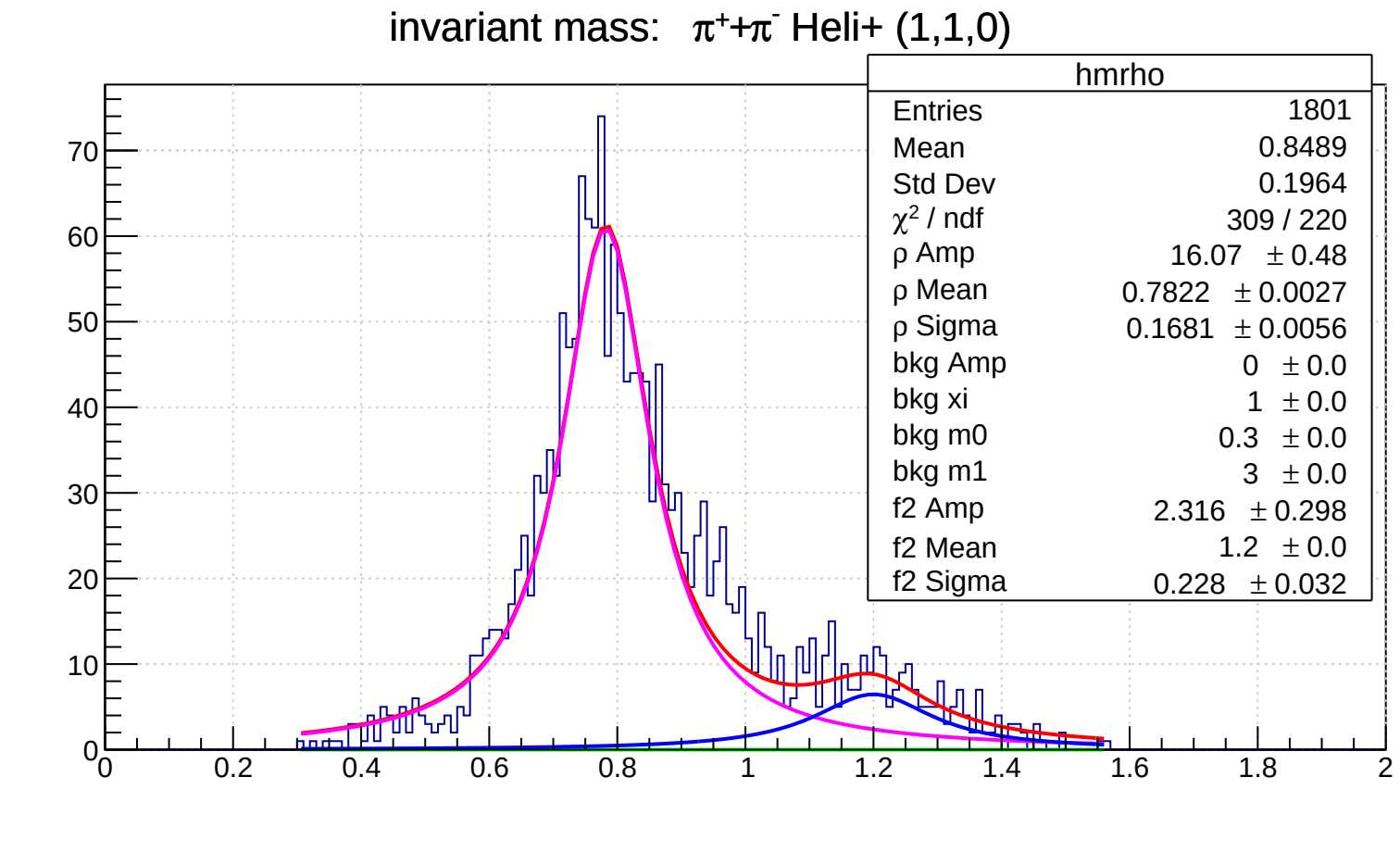

invariant mass: π⁺+π⁻ Heli+ (1,0,4)
hmrho
Entries 2527
Mean 0.7274
Std Dev 0.1433
χ² / ndf 228 / 182
ρ Amp 21.33 ± 0.73
ρ Mean 0.7507 ± 0.0017
ρ Sigma 0.1254 ± 0.0040
bkg Amp 18.08 ± 2.11
bkg xi 1 ± 0.1
bkg m0 0.3775 ± 0.0064
bkg m1 1.064 ± 0.029
f2 Amp 0 ± 0.0
f2 Mean 1.2 ± 0.0
f2 Sigma 0.1 ± 0.0
0
20
40
60
80
100
120
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

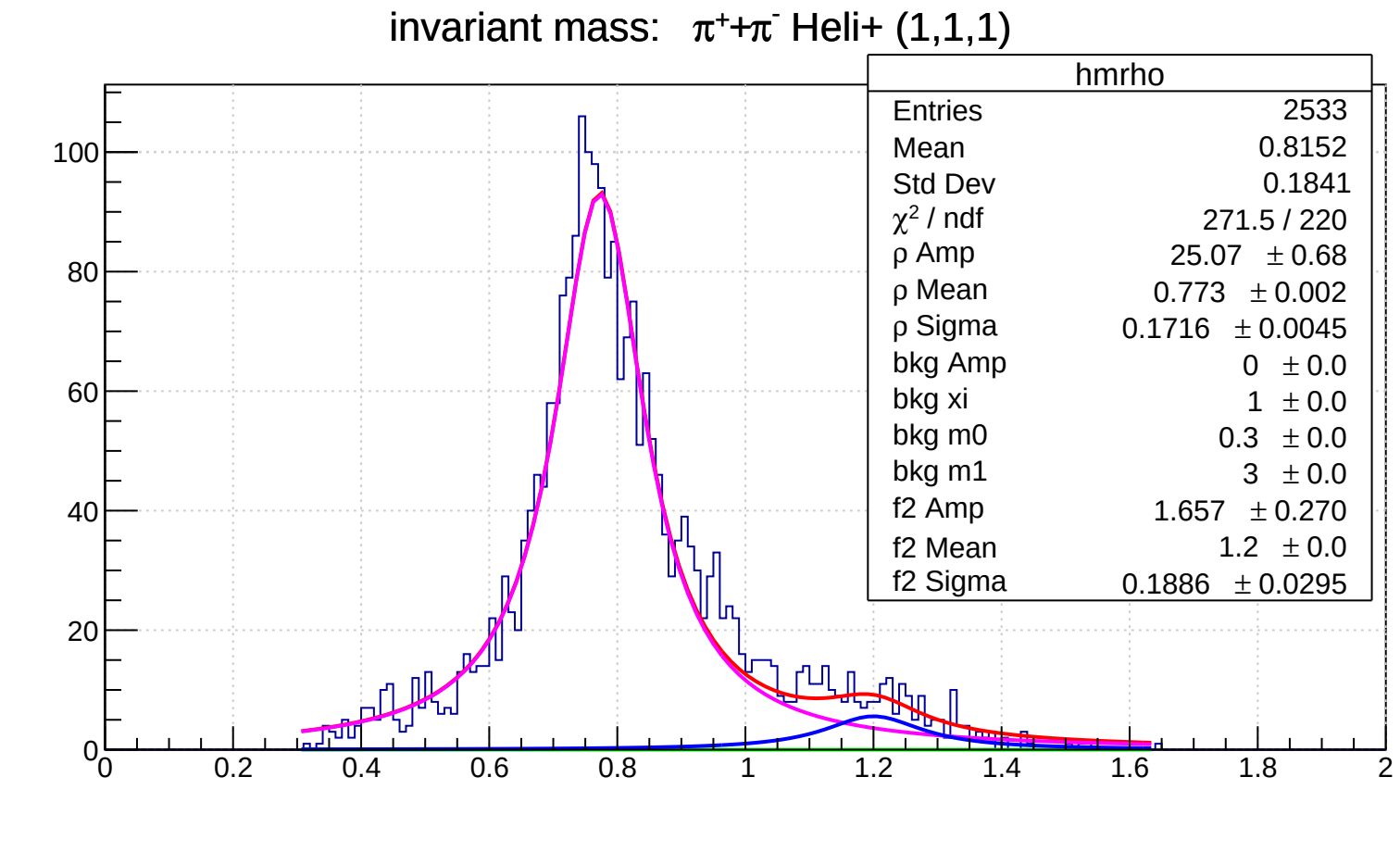

invariant mass: π⁺+π⁻ Heli+ (1,0,5)
hmrho
Entries 2325
Mean 0.7226
Std Dev 0.1454
χ² / ndf 291.9 / 178
ρ Amp 21.32 ± 0.61
ρ Mean 0.7471 ± 0.0017
ρ Sigma 0.136 ± 0.004
bkg Amp 313.4 ± 41.0
bkg xi 5.605 ± 0.242
bkg m0 0.354 ± 0.002
bkg m1 5 ± 1.1
f2 Amp 0 ± 0.0
f2 Mean 1.2 ± 0.0
f2 Sigma 0.1 ± 0.0
0
20
40
60
80
100
120
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

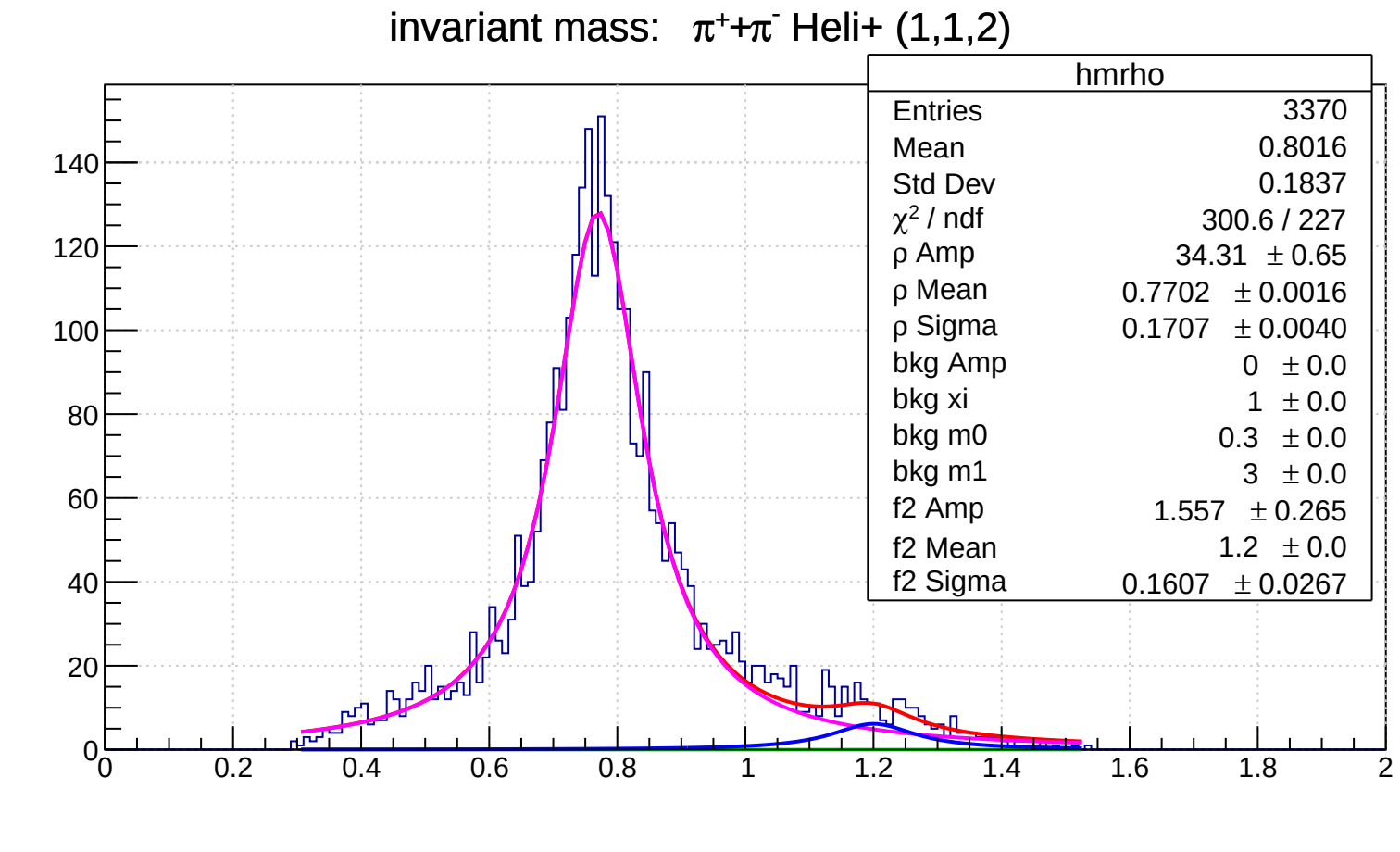

invariant mass: π⁺+π⁻ Heli+ (1,0,6)
hmrho
Entries 1812
Mean 0.7138
Std Dev 0.1512
χ² / ndf 200.9 / 175
ρ Amp 16.43 ± 0.57
ρ Mean 0.7498 ± 0.0020
ρ Sigma 0.1421 ± 0.0046
bkg Amp 405.2 ± 54.0
bkg xi 6.111 ± 0.348
bkg m0 0.3782 ± 0.0062
bkg m1 5 ± 3.5
f2 Amp 0 ± 0.0
f2 Mean 1.2 ± 0.0
f2 Sigma 0.1 ± 0.0
0
10
20
30
40
50
60
70
80
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

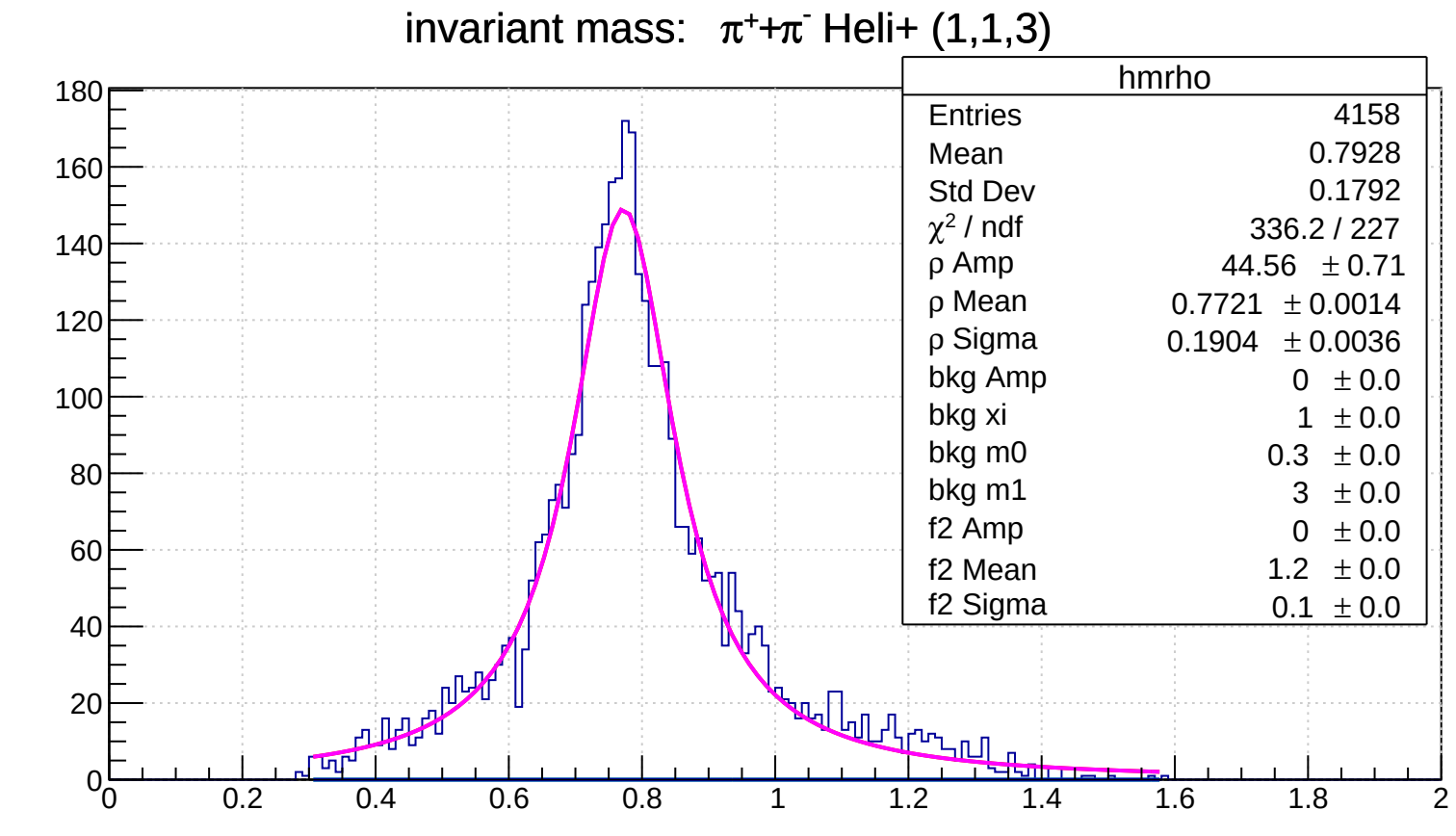

invariant mass: π⁺+π⁻ Heli+ (1,0,7)
hmrho
Entries 1626
Mean 0.7203
Std Dev 0.1575
χ² / ndf 154.8 / 175
ρ Amp 12.99 ± 0.51
ρ Mean 0.7541 ± 0.0023
ρ Sigma 0.1379 ± 0.0049
bkg Amp 14.27 ± 1.41
bkg xi 1 ± 0.2
bkg m0 0.3437 ± 0.0024
bkg m1 1.015 ± 0.001
f2 Amp 0 ± 0.0
f2 Mean 1.2 ± 0.0
f2 Sigma 0.1 ± 0.0
0
10
20
30
40
50
60
70
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

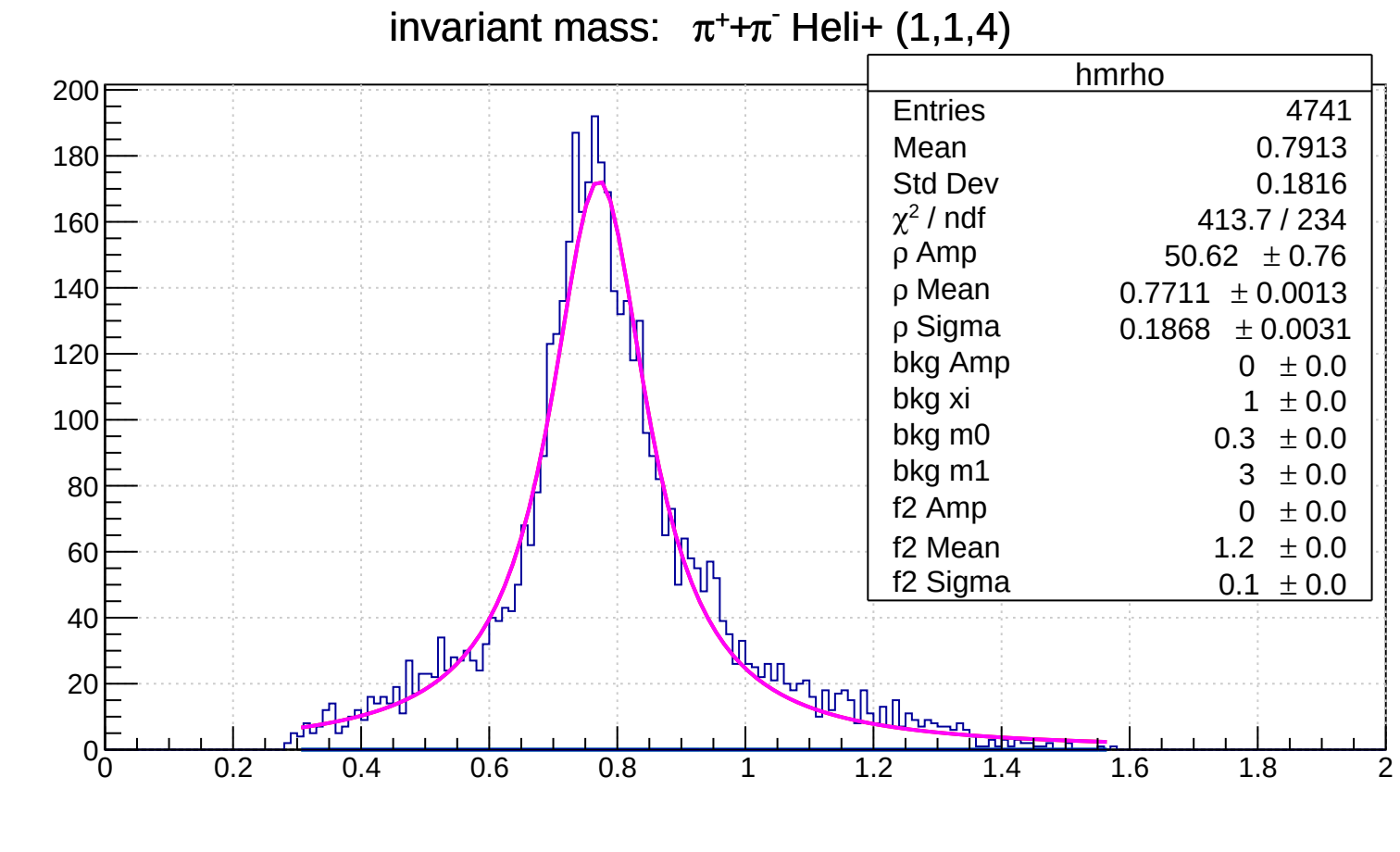

invariant mass: π⁺+π⁻ Heli+ (1,0,8)
hmrho
Entries 1328
Mean 0.7363
Std Dev 0.1586
χ² / ndf 167.5 / 184
ρ Amp 11.8 ± 0.5
ρ Mean 0.7543 ± 0.0022
ρ Sigma 0.1343 ± 0.0060
bkg Amp 180.8 ± 33.0
bkg xi 5.451 ± 0.478
bkg m0 0.3535 ± 0.0030
bkg m1 5 ± 4.7
f2 Amp 0 ± 0.0
f2 Mean 1.2 ± 0.0
f2 Sigma 0.1 ± 0.0
0
10
20
30
40
50
60
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

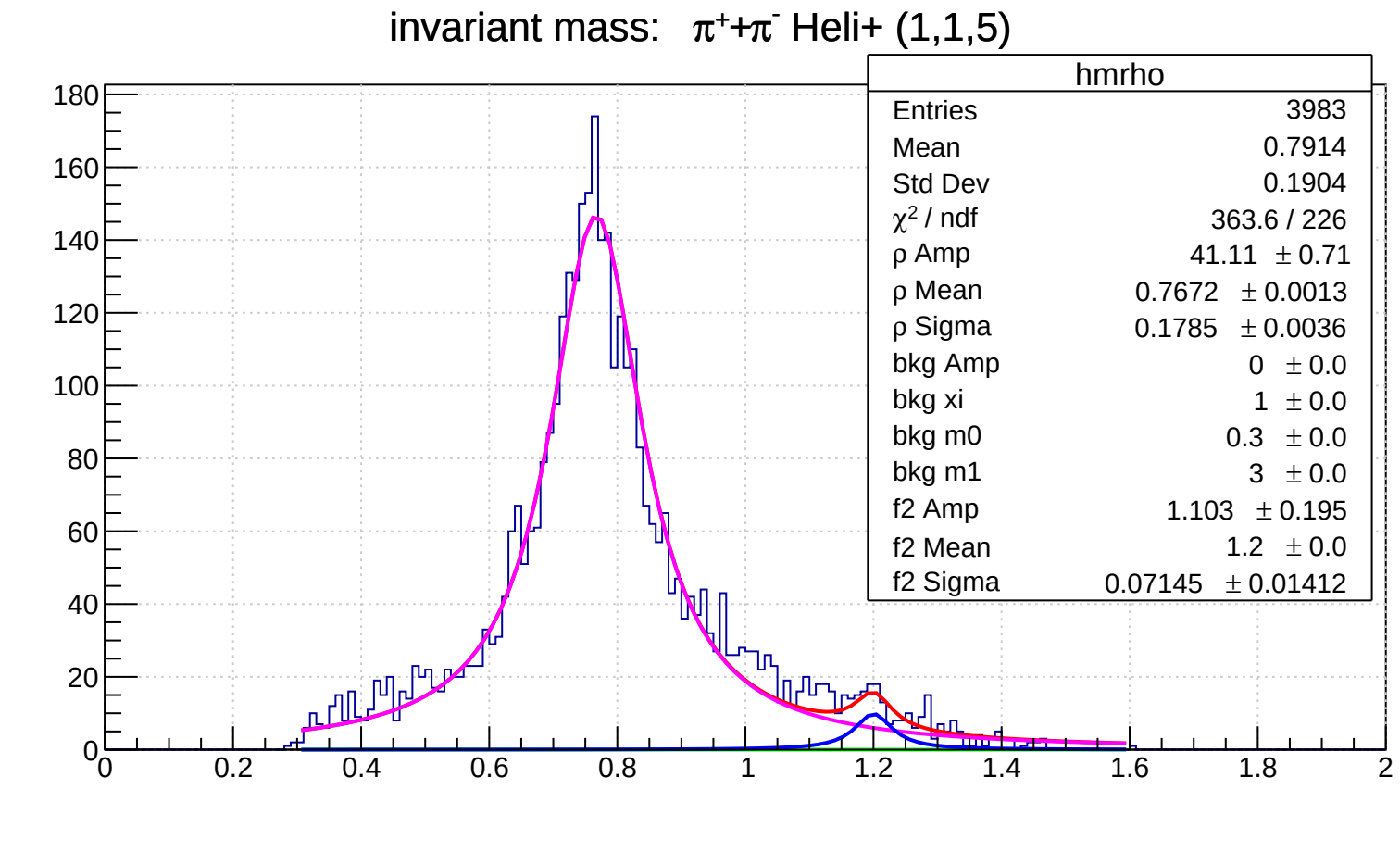

invariant mass: π⁺+π⁻ Heli+ (1,1,0)
hmrho
Entries 1801
Mean 0.8489
Std Dev 0.1964
χ² / ndf 309 / 220
ρ Amp 16.07 ± 0.48
ρ Mean 0.7822 ± 0.0027
ρ Sigma 0.1681 ± 0.0056
bkg Amp 0 ± 0.0
bkg xi 1 ± 0.0
bkg m0 0.3 ± 0.0
bkg m1 3 ± 0.0
f2 Amp 2.316 ± 0.298
f2 Mean 1.2 ± 0.0
f2 Sigma 0.228 ± 0.032
0
10
20
30
40
50
60
70
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

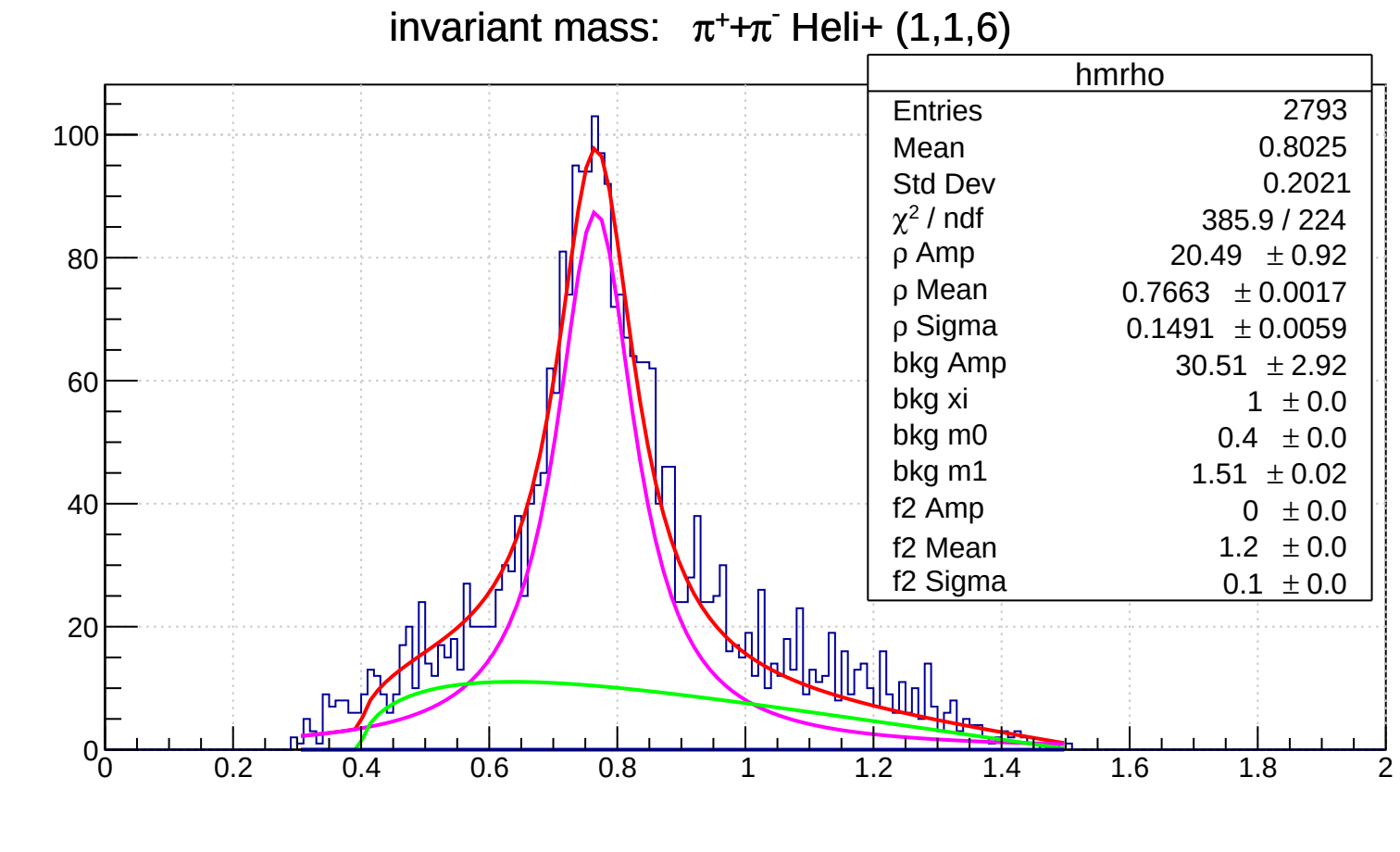

invariant mass: π⁺+π⁻ Heli+ (1,1,1)
hmrho
Entries 2533
Mean 0.8152
Std Dev 0.1841
χ² / ndf 271.5 / 220
ρ Amp 25.07 ± 0.68
ρ Mean 0.773 ± 0.002
ρ Sigma 0.1716 ± 0.0045
bkg Amp 0 ± 0.0
bkg xi 1 ± 0.0
bkg m0 0.3 ± 0.0
bkg m1 3 ± 0.0
f2 Amp 1.657 ± 0.270
f2 Mean 1.2 ± 0.0
f2 Sigma 0.1886 ± 0.0295
0
20
40
60
80
100
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

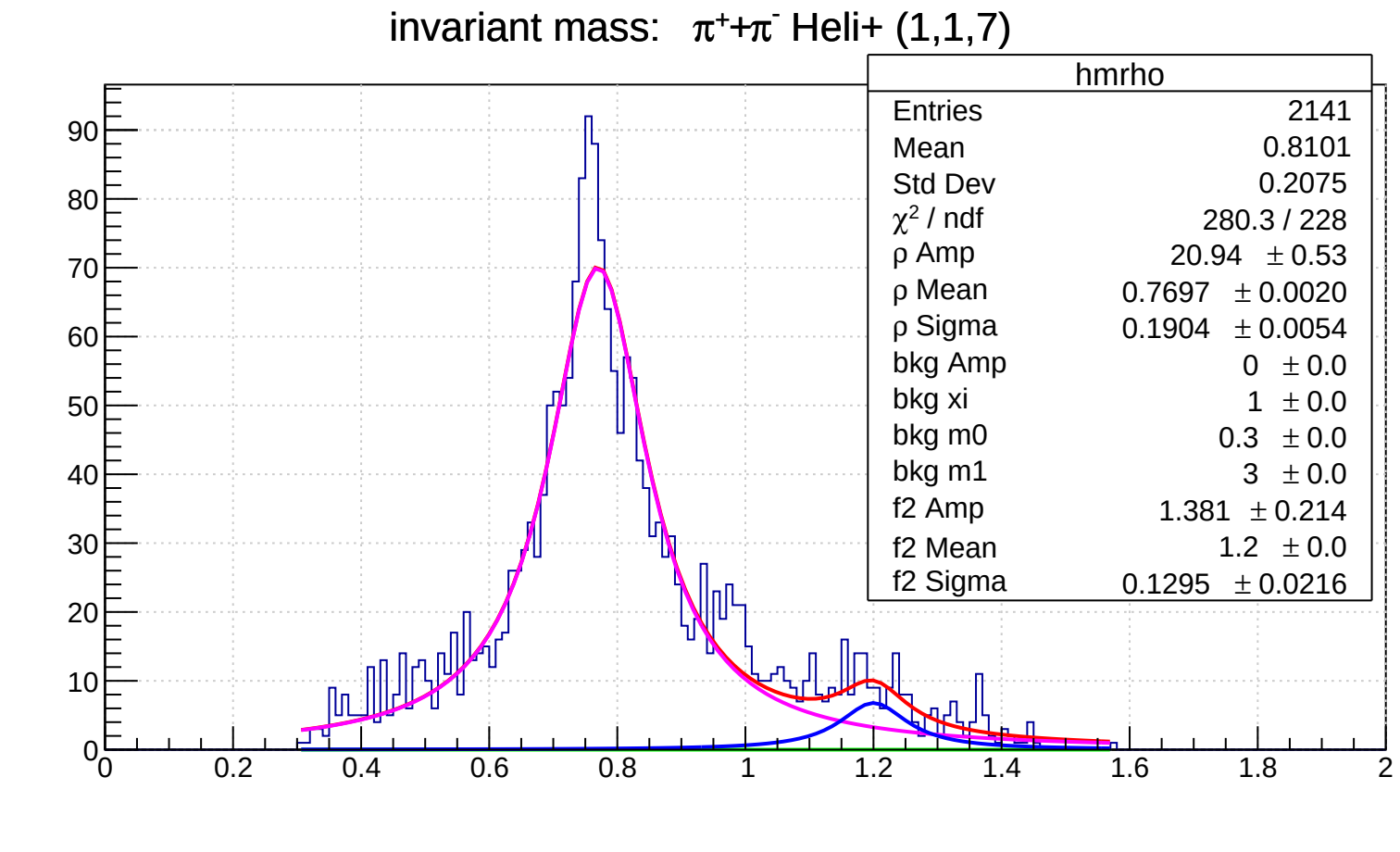

invariant mass: π⁺+π⁻ Heli+ (1,1,2)
hmrho
Entries 3370
Mean 0.8016
Std Dev 0.1837
χ² / ndf 300.6 / 227
ρ Amp 34.31 ± 0.65
ρ Mean 0.7702 ± 0.0016
ρ Sigma 0.1707 ± 0.0040
bkg Amp 0 ± 0.0
bkg xi 1 ± 0.0
bkg m0 0.3 ± 0.0
bkg m1 3 ± 0.0
f2 Amp 1.557 ± 0.265
f2 Mean 1.2 ± 0.0
f2 Sigma 0.1607 ± 0.0267
0
20
40
60
80
100
120
140
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

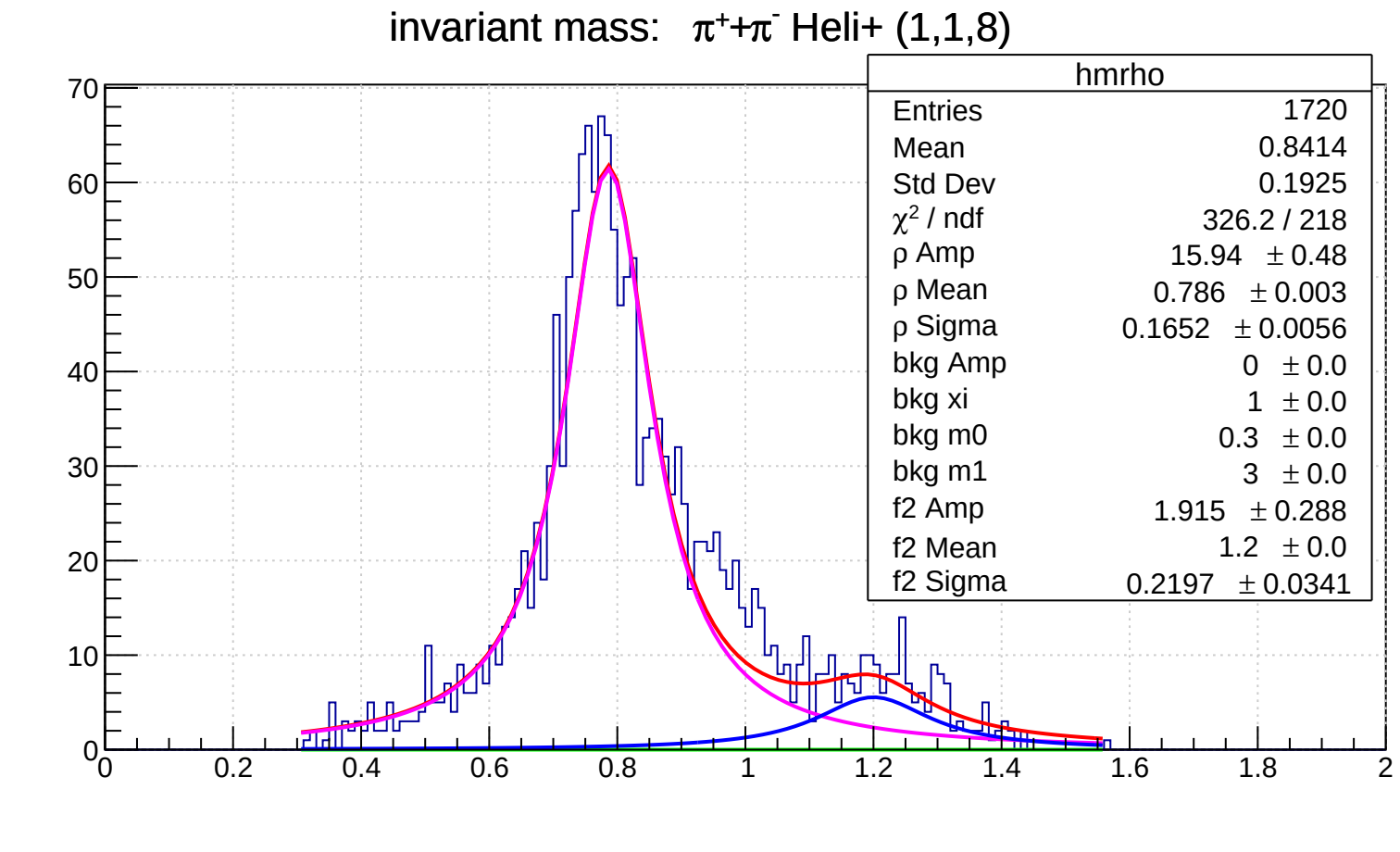

invariant mass: π+π- Heli+ (1,1,3)
hmrho
Entries 4158
Mean 0.7928
Std Dev 0.1792
χ2 / ndf 336.2 / 227
ρ Amp 44.56 ± 0.71
ρ Mean 0.7721 ± 0.0014
ρ Sigma 0.1904 ± 0.0036
bkg Amp 0 ± 0.0
bkg xi 1 ± 0.0
bkg m0 0.3 ± 0.0
bkg m1 3 ± 0.0
f2 Amp 0 ± 0.0
f2 Mean 1.2 ± 0.0
f2 Sigma 0.1 ± 0.0
0
20
40
60
80
100
120
140
160
180
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

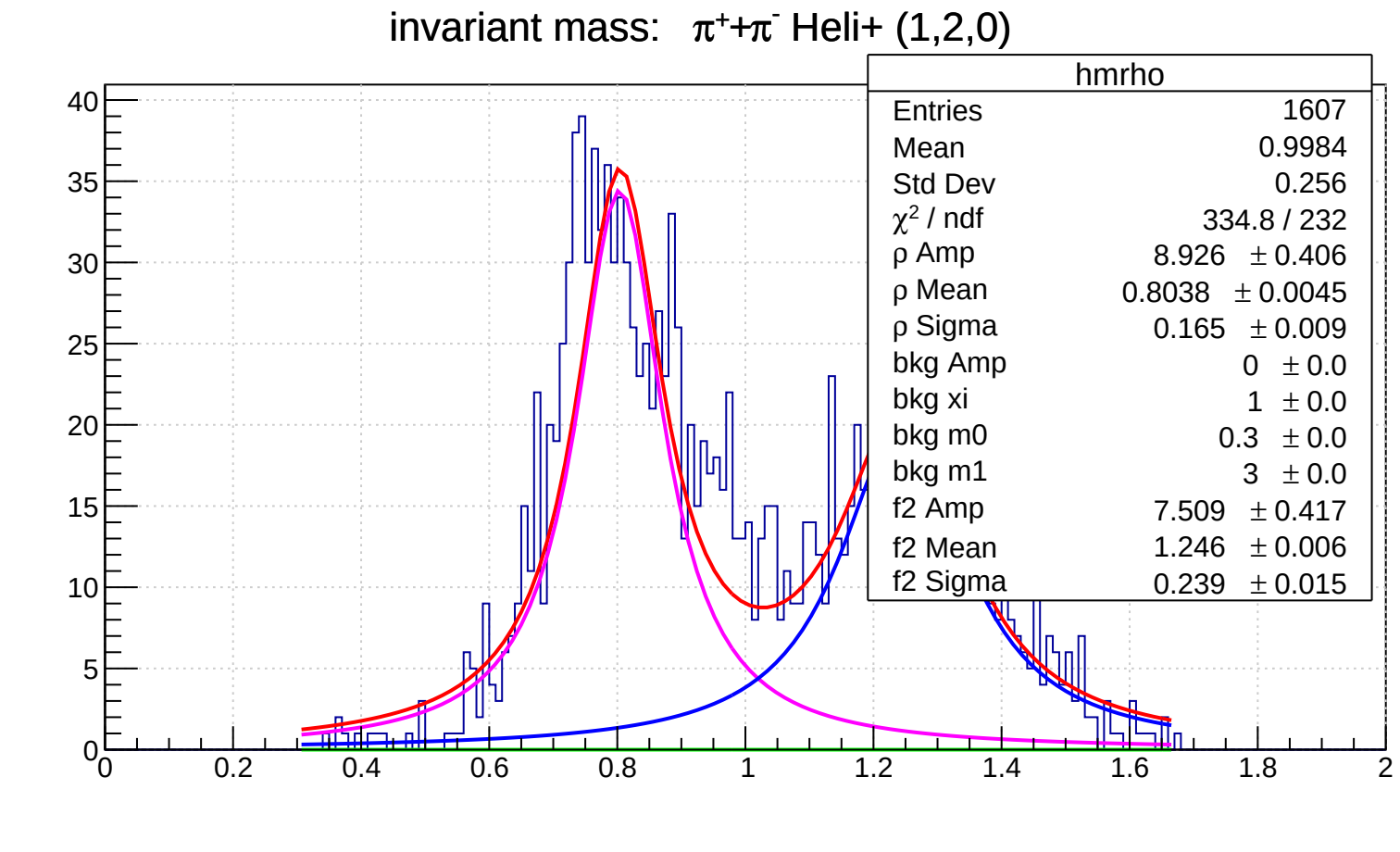

invariant mass: π⁺+π⁻ Heli+ (1,1,4)
hmrho
Entries 4741
Mean 0.7913
Std Dev 0.1816
χ² / ndf 413.7 / 234
ρ Amp 50.62 ± 0.76
ρ Mean 0.7711 ± 0.0013
ρ Sigma 0.1868 ± 0.0031
bkg Amp 0 ± 0.0
bkg xi 1 ± 0.0
bkg m0 0.3 ± 0.0
bkg m1 3 ± 0.0
f2 Amp 0 ± 0.0
f2 Mean 1.2 ± 0.0
f2 Sigma 0.1 ± 0.0
0
20
40
60
80
100
120
140
160
180
200
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

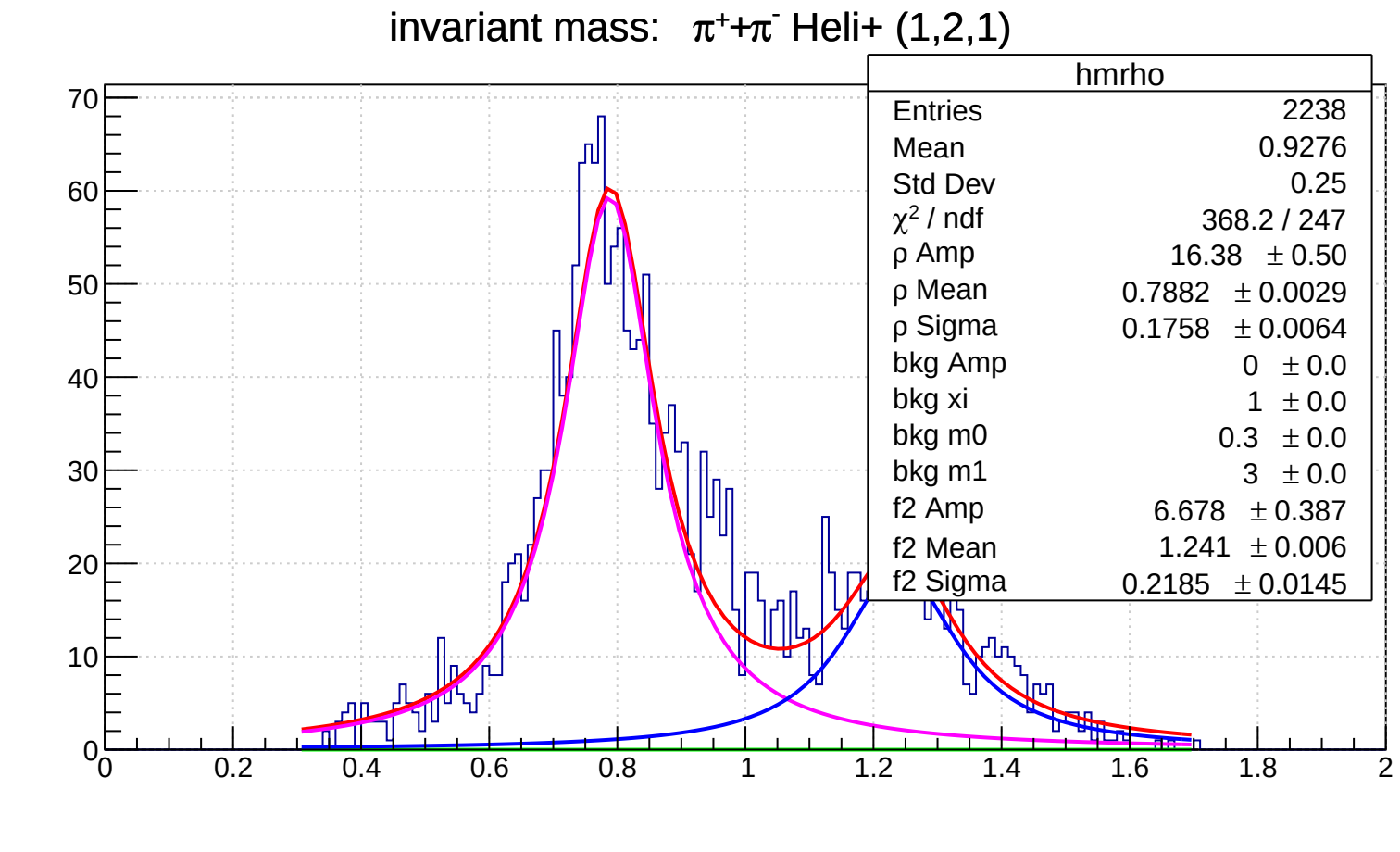

invariant mass: π+π- Heli+ (1,1,5)
hmrho
Entries 3983
Mean 0.7914
Std Dev 0.1904
χ2 / ndf 363.6 / 226
ρ Amp 41.11 ± 0.71
ρ Mean 0.7672 ± 0.0013
ρ Sigma 0.1785 ± 0.0036
bkg Amp 0 ± 0.0
bkg xi 1 ± 0.0
bkg m0 0.3 ± 0.0
bkg m1 3 ± 0.0
f2 Amp 1.103 ± 0.195
f2 Mean 1.2 ± 0.0
f2 Sigma 0.07145 ± 0.01412
0 20 40 60 80 100 120 140 160 180
0 0.2 0.4 0.6 0.8 1 1.2 1.4 1.6 1.8 2

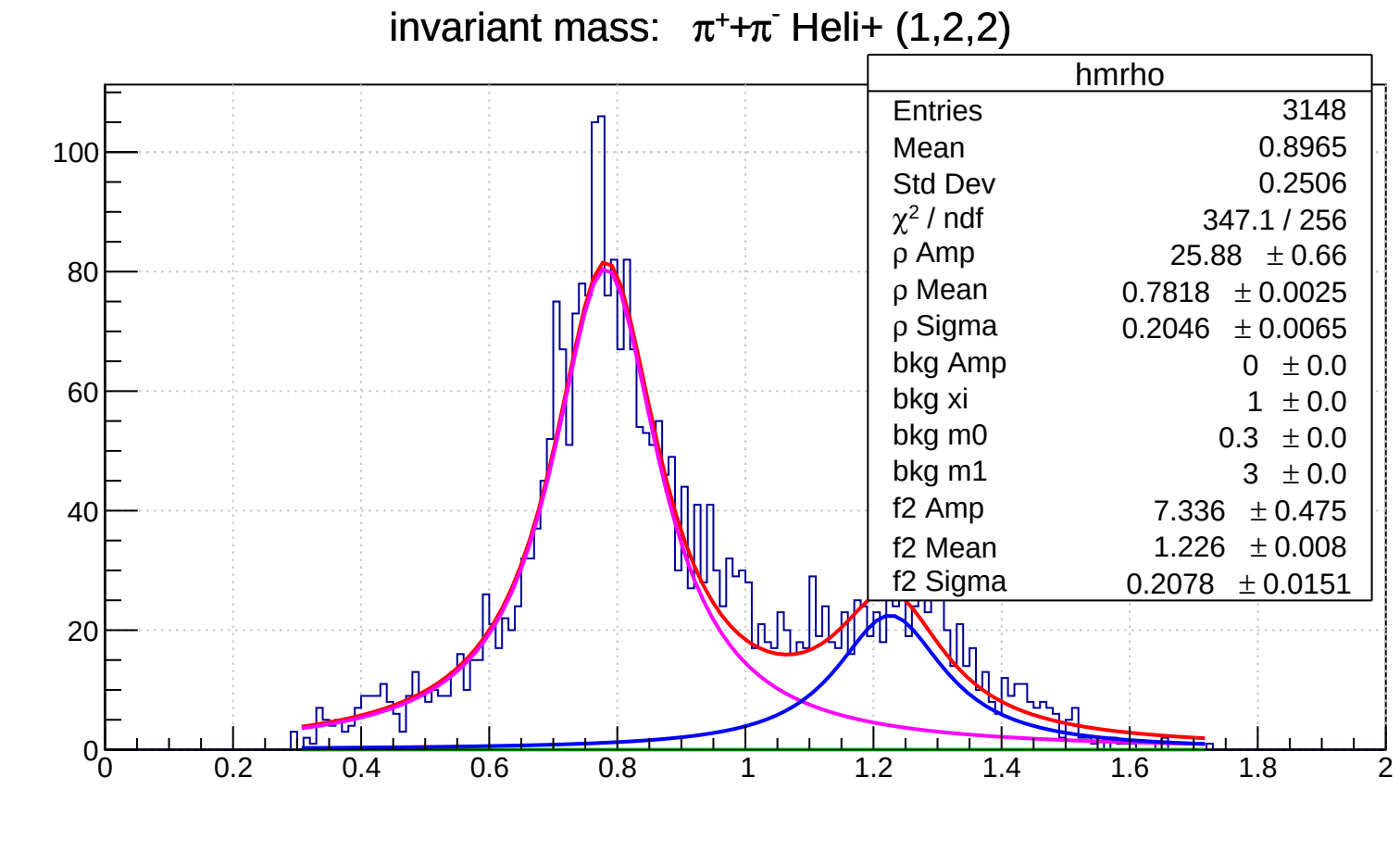

invariant mass: π⁺+π⁻ Heli+ (1,1,6)
hmrho
Entries 2793
Mean 0.8025
Std Dev 0.2021
χ² / ndf 385.9 / 224
ρ Amp 20.49 ± 0.92
ρ Mean 0.7663 ± 0.0017
ρ Sigma 0.1491 ± 0.0059
bkg Amp 30.51 ± 2.92
bkg xi 1 ± 0.0
bkg m0 0.4 ± 0.0
bkg m1 1.51 ± 0.02
f2 Amp 0 ± 0.0
f2 Mean 1.2 ± 0.0
f2 Sigma 0.1 ± 0.0
0
20
40
60
80
100
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

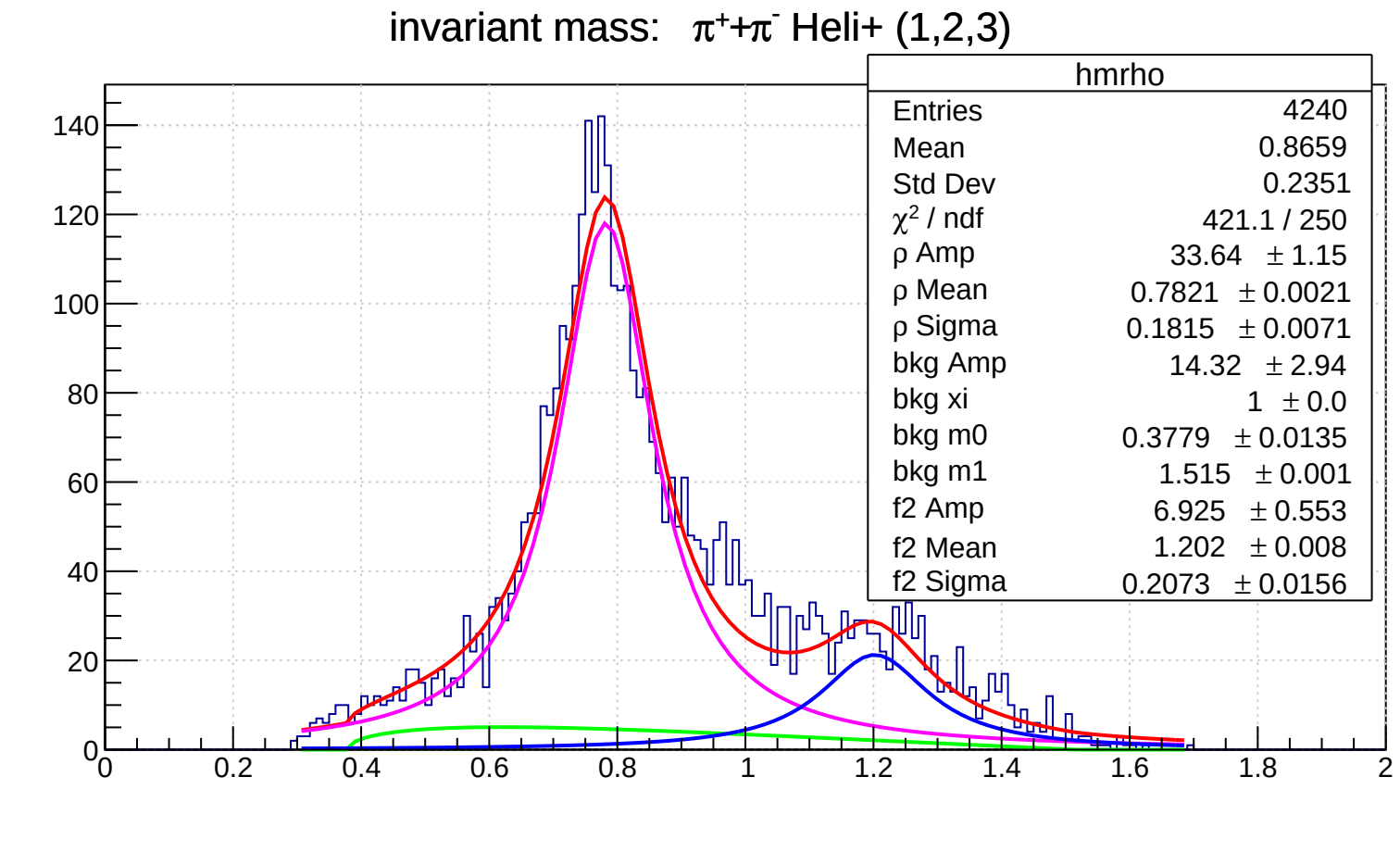

invariant mass: π⁺+π⁻ Heli+ (1,1,7)
hmrho
Entries 2141
Mean 0.8101
Std Dev 0.2075
χ² / ndf 280.3 / 228
ρ Amp 20.94 ± 0.53
ρ Mean 0.7697 ± 0.0020
ρ Sigma 0.1904 ± 0.0054
bkg Amp 0 ± 0.0
bkg xi 1 ± 0.0
bkg m0 0.3 ± 0.0
bkg m1 3 ± 0.0
f2 Amp 1.381 ± 0.214
f2 Mean 1.2 ± 0.0
f2 Sigma 0.1295 ± 0.0216
0
10
20
30
40
50
60
70
80
90
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

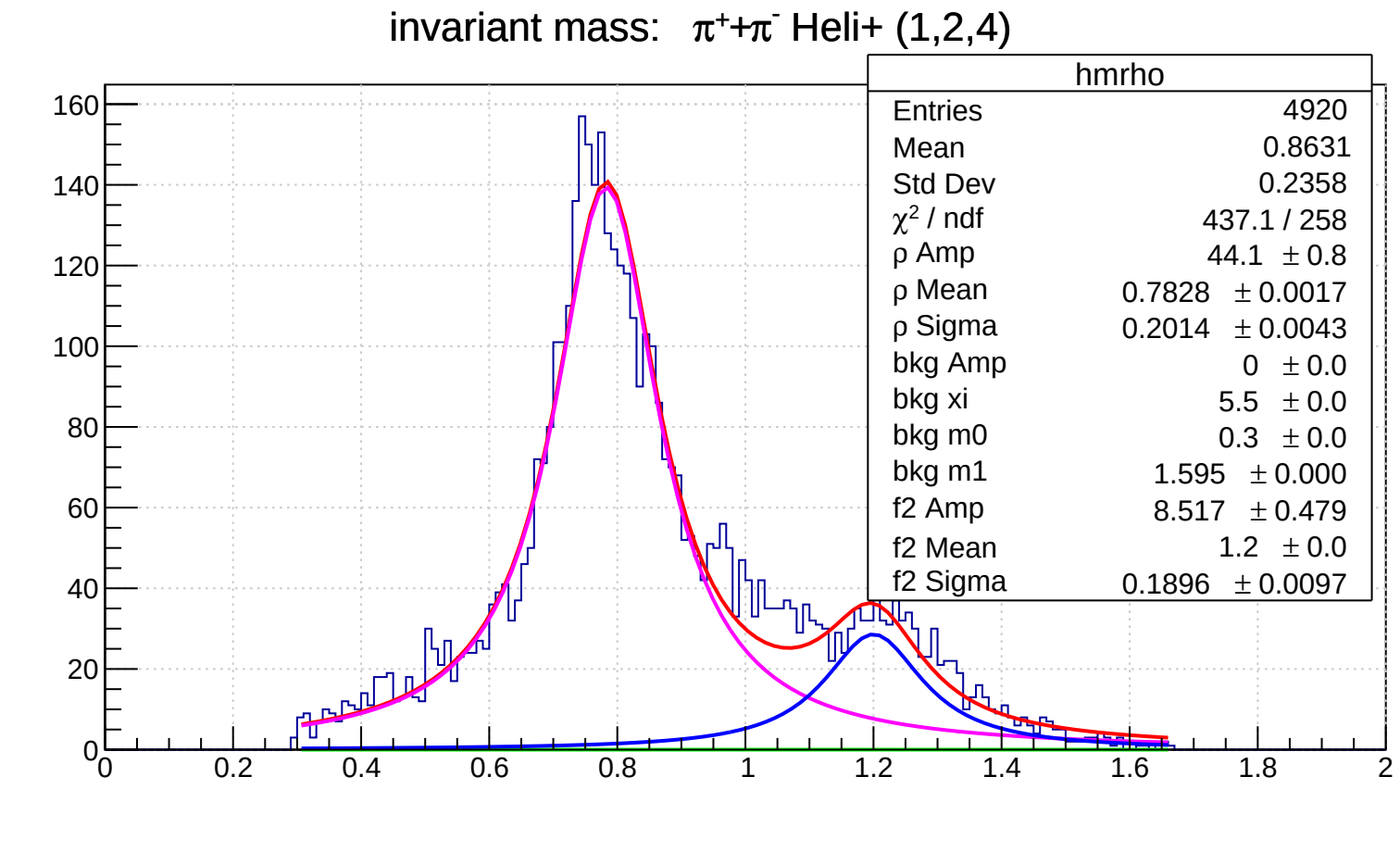

invariant mass: π⁺+π⁻ Heli+ (1,1,8)
hmrho
Entries 1720
Mean 0.8414
Std Dev 0.1925
χ² / ndf 326.2 / 218
ρ Amp 15.94 ± 0.48
ρ Mean 0.786 ± 0.003
ρ Sigma 0.1652 ± 0.0056
bkg Amp 0 ± 0.0
bkg xi 1 ± 0.0
bkg m0 0.3 ± 0.0
bkg m1 3 ± 0.0
f2 Amp 1.915 ± 0.288
f2 Mean 1.2 ± 0.0
f2 Sigma 0.2197 ± 0.0341
0
10
20
30
40
50
60
70
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

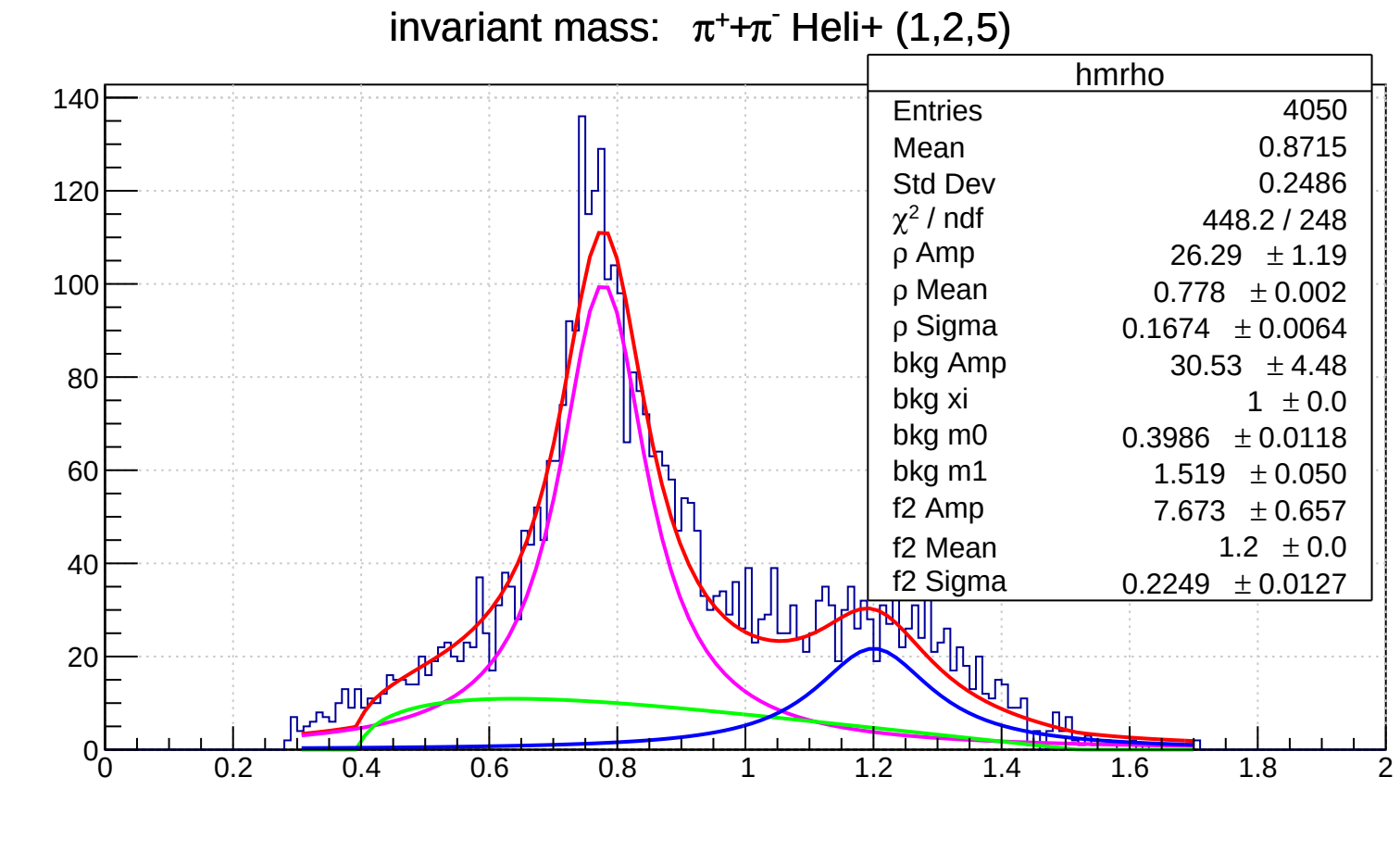

invariant mass: π⁺+π⁻ Heli+ (1,2,0)
hmrho
Entries 1607
Mean 0.9984
Std Dev 0.256
χ² / ndf 334.8 / 232
ρ Amp 8.926 ± 0.406
ρ Mean 0.8038 ± 0.0045
ρ Sigma 0.165 ± 0.009
bkg Amp 0 ± 0.0
bkg xi 1 ± 0.0
bkg m0 0.3 ± 0.0
bkg m1 3 ± 0.0
f2 Amp 7.509 ± 0.417
f2 Mean 1.246 ± 0.006
f2 Sigma 0.239 ± 0.015
0 5 10 15 20 25 30 35 40
0 0.2 0.4 0.6 0.8 1 1.2 1.4 1.6 1.8 2

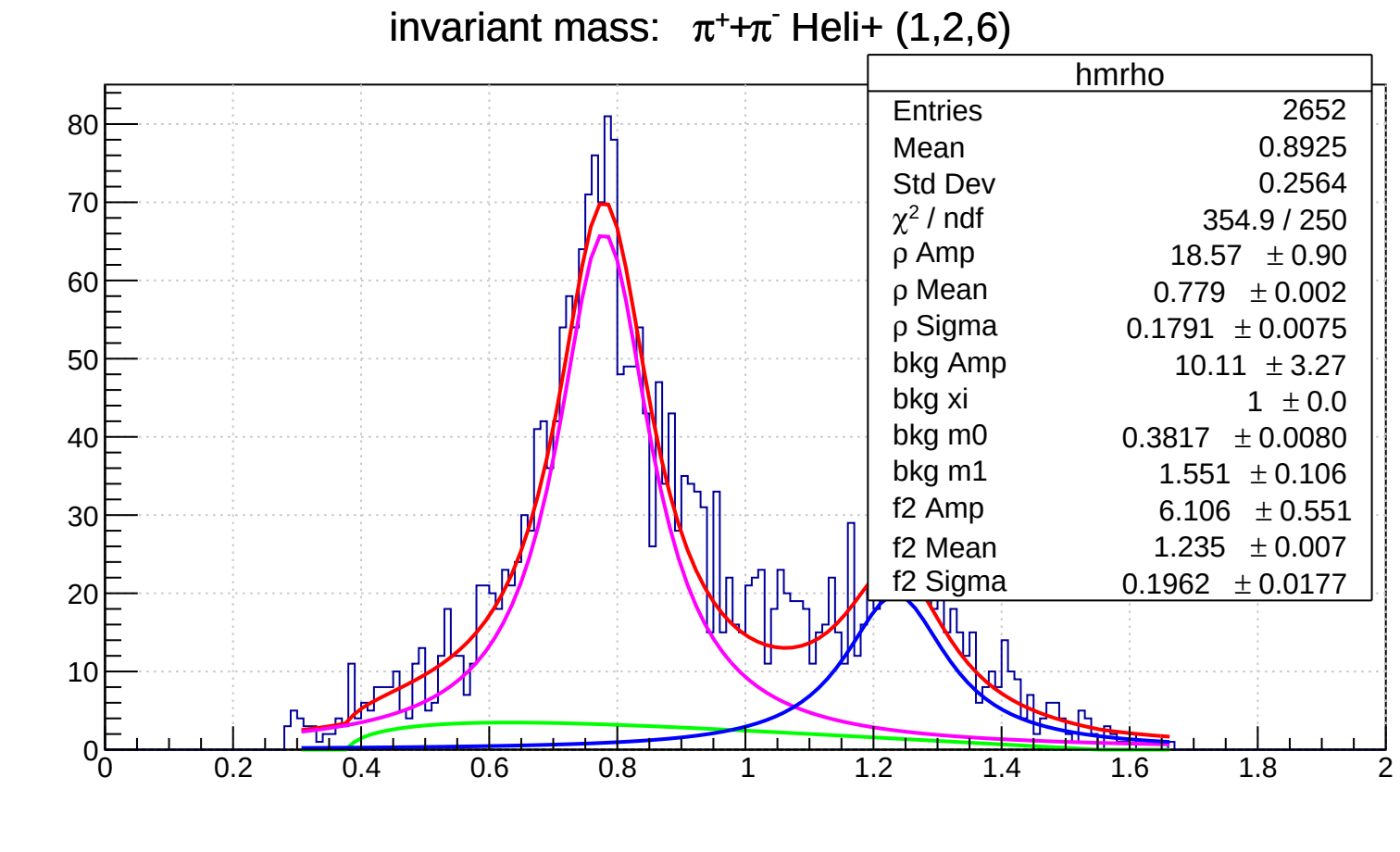

invariant mass: π⁺+π⁻ Heli+ (1,2,1)
hmrho
Entries 2238
Mean 0.9276
Std Dev 0.25
χ² / ndf 368.2 / 247
ρ Amp 16.38 ± 0.50
ρ Mean 0.7882 ± 0.0029
ρ Sigma 0.1758 ± 0.0064
bkg Amp 0 ± 0.0
bkg xi 1 ± 0.0
bkg m0 0.3 ± 0.0
bkg m1 3 ± 0.0
f2 Amp 6.678 ± 0.387
f2 Mean 1.241 ± 0.006
f2 Sigma 0.2185 ± 0.0145
0
10
20
30
40
50
60
70
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

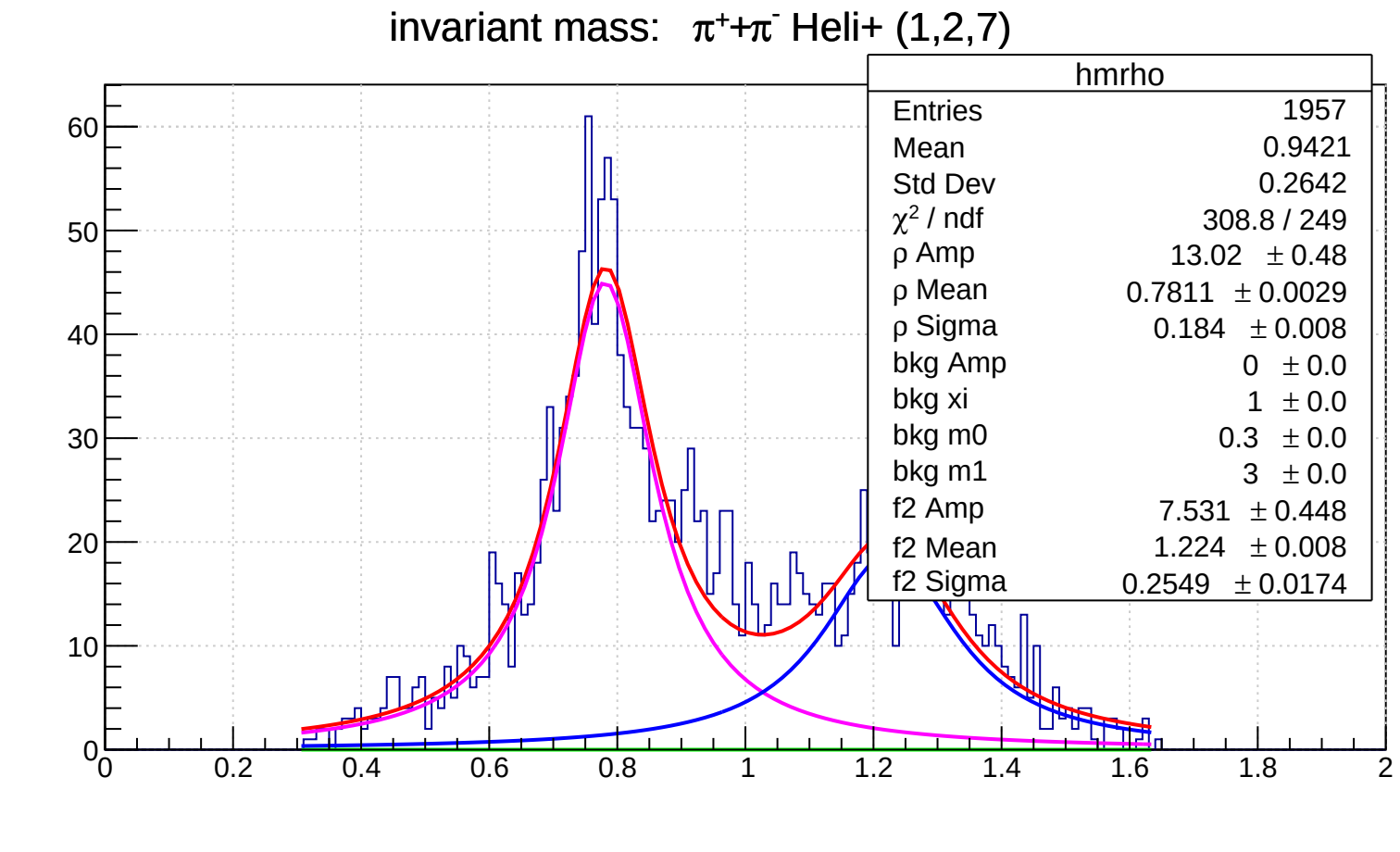

invariant mass: π⁺+π⁻ Heli+ (1,2,2)
hmrho
Entries 3148
Mean 0.8965
Std Dev 0.2506
χ² / ndf 347.1 / 256
ρ Amp 25.88 ± 0.66
ρ Mean 0.7818 ± 0.0025
ρ Sigma 0.2046 ± 0.0065
bkg Amp 0 ± 0.0
bkg xi 1 ± 0.0
bkg m0 0.3 ± 0.0
bkg m1 3 ± 0.0
f2 Amp 7.336 ± 0.475
f2 Mean 1.226 ± 0.008
f2 Sigma 0.2078 ± 0.0151
0
20
40
60
80
100
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

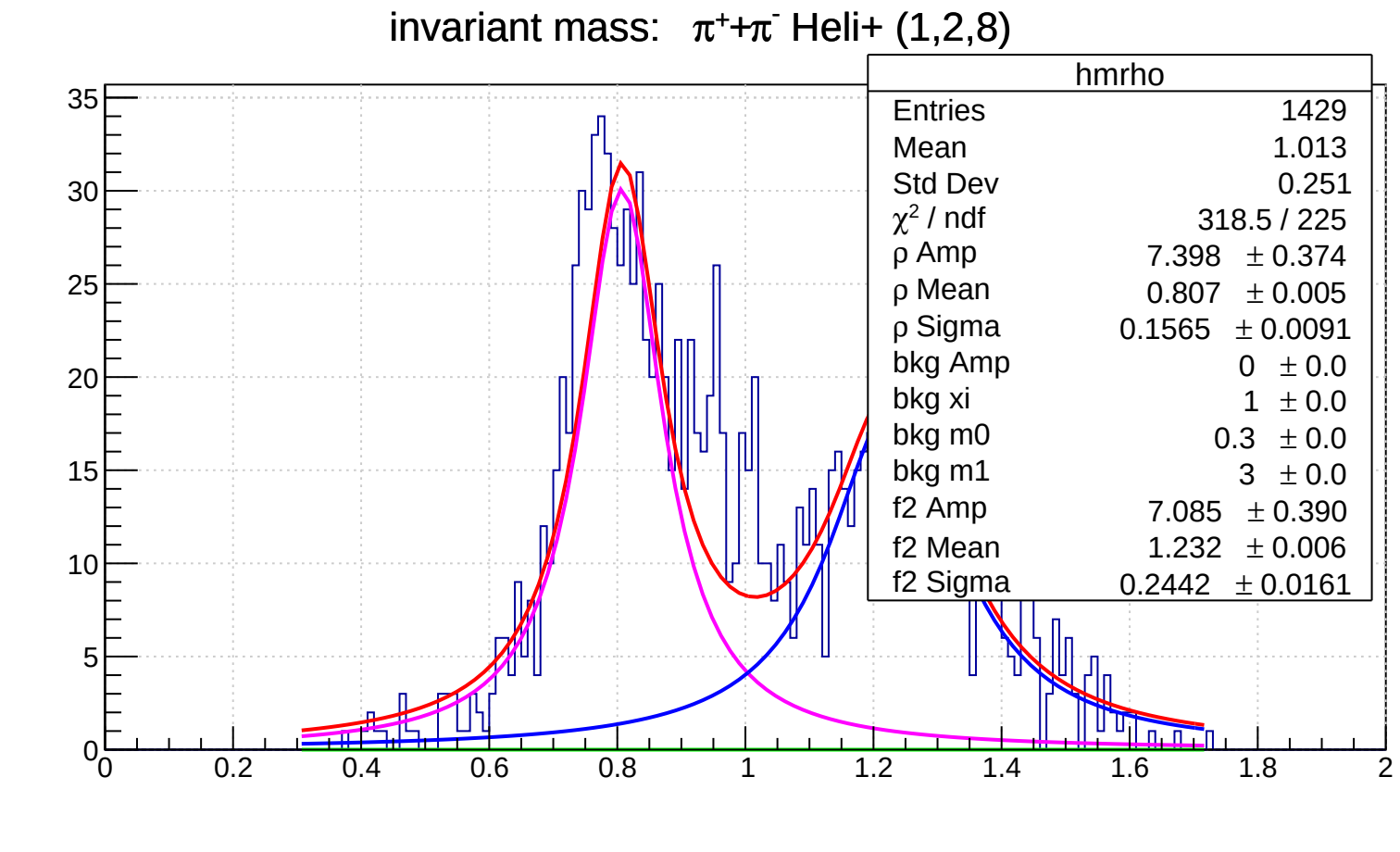

invariant mass: π⁺+π⁻ Heli+ (1,2,3)
hmrho
Entries 4240
Mean 0.8659
Std Dev 0.2351
χ² / ndf 421.1 / 250
ρ Amp 33.64 ± 1.15
ρ Mean 0.7821 ± 0.0021
ρ Sigma 0.1815 ± 0.0071
bkg Amp 14.32 ± 2.94
bkg xi 1 ± 0.0
bkg m0 0.3779 ± 0.0135
bkg m1 1.515 ± 0.001
f2 Amp 6.925 ± 0.553
f2 Mean 1.202 ± 0.008
f2 Sigma 0.2073 ± 0.0156
0
20
40
60
80
100
120
140
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

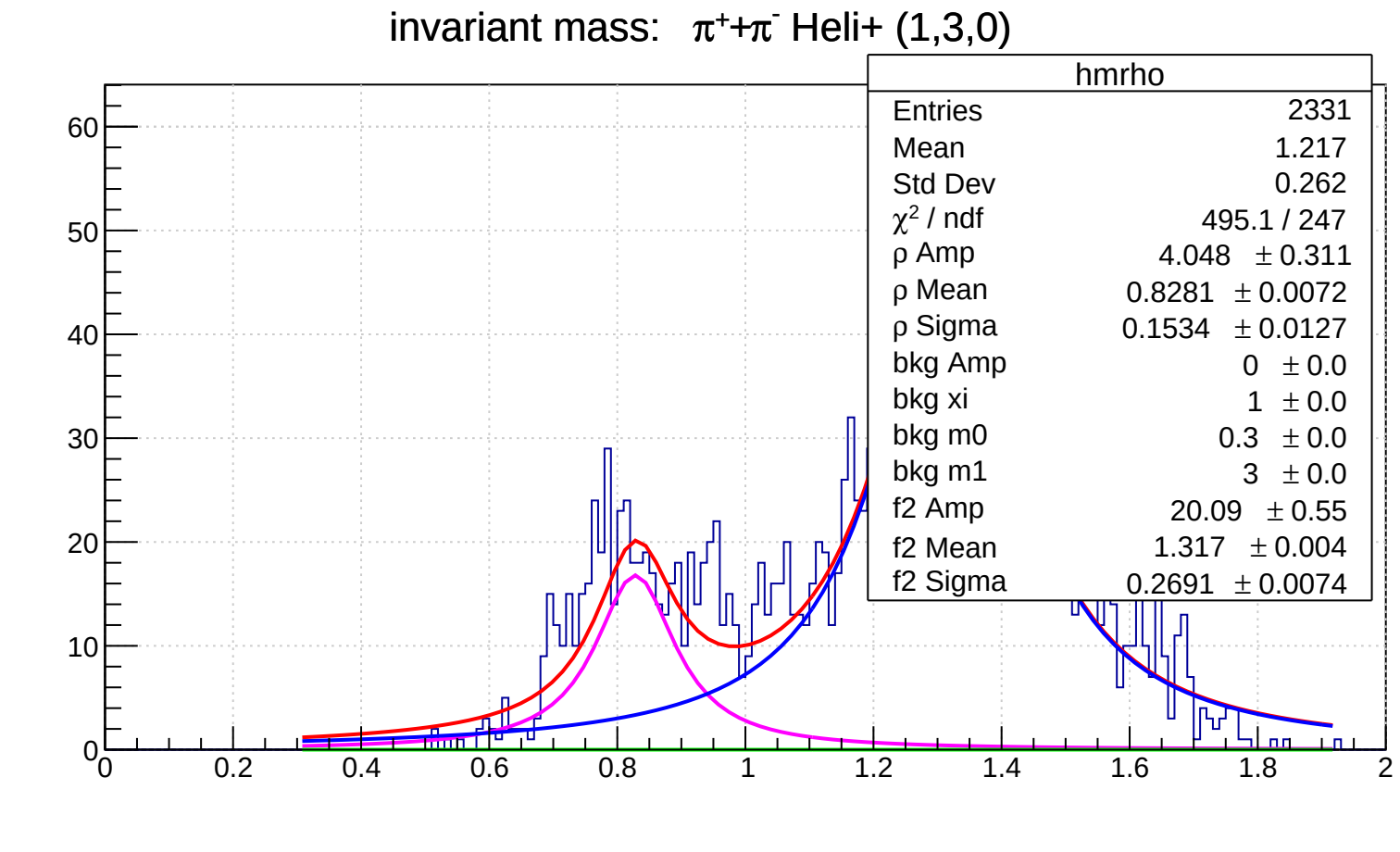

invariant mass: π⁺+π⁻ Heli+ (1,2,4)
hmrho
Entries 4920
Mean 0.8631
Std Dev 0.2358
χ² / ndf 437.1 / 258
ρ Amp 44.1 ± 0.8
ρ Mean 0.7828 ± 0.0017
ρ Sigma 0.2014 ± 0.0043
bkg Amp 0 ± 0.0
bkg xi 5.5 ± 0.0
bkg m0 0.3 ± 0.0
bkg m1 1.595 ± 0.000
f2 Amp 8.517 ± 0.479
f2 Mean 1.2 ± 0.0
f2 Sigma 0.1896 ± 0.0097
0
20
40
60
80
100
120
140
160
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

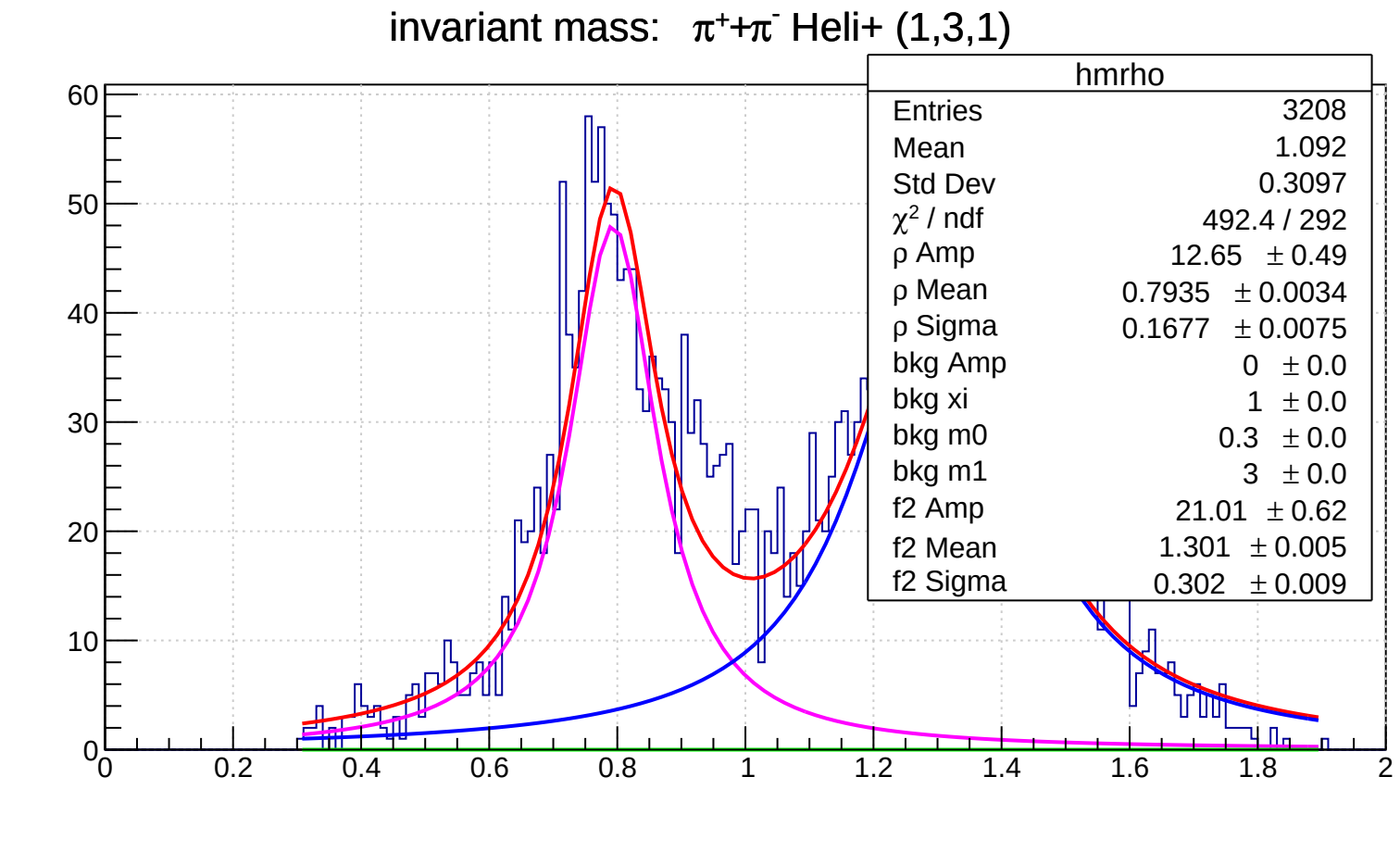

invariant mass: π⁺+π⁻ Heli+ (1,2,5)
hmrho
Entries 4050
Mean 0.8715
Std Dev 0.2486
χ² / ndf 448.2 / 248
ρ Amp 26.29 ± 1.19
ρ Mean 0.778 ± 0.002
ρ Sigma 0.1674 ± 0.0064
bkg Amp 30.53 ± 4.48
bkg xi 1 ± 0.0
bkg m0 0.3986 ± 0.0118
bkg m1 1.519 ± 0.050
f2 Amp 7.673 ± 0.657
f2 Mean 1.2 ± 0.0
f2 Sigma 0.2249 ± 0.0127
0
20
40
60
80
100
120
140
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

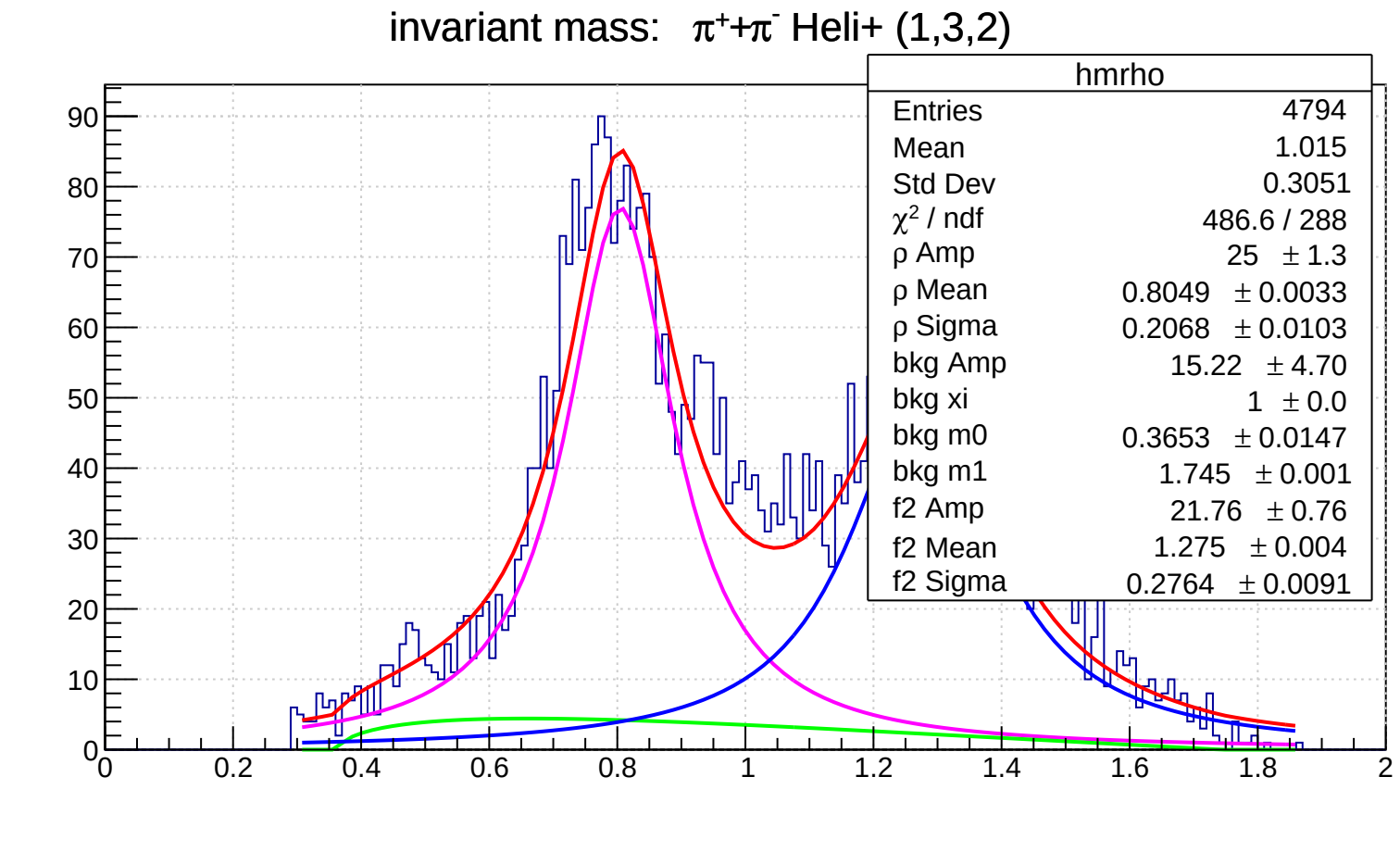

invariant mass: π⁺+π⁻ Heli+ (1,2,6)
hmrho
Entries 2652
Mean 0.8925
Std Dev 0.2564
χ² / ndf 354.9 / 250
ρ Amp 18.57 ± 0.90
ρ Mean 0.779 ± 0.002
ρ Sigma 0.1791 ± 0.0075
bkg Amp 10.11 ± 3.27
bkg xi 1 ± 0.0
bkg m0 0.3817 ± 0.0080
bkg m1 1.551 ± 0.106
f2 Amp 6.106 ± 0.551
f2 Mean 1.235 ± 0.007
f2 Sigma 0.1962 ± 0.0177
0 10 20 30 40 50 60 70 80
0 0.2 0.4 0.6 0.8 1 1.2 1.4 1.6 1.8 2

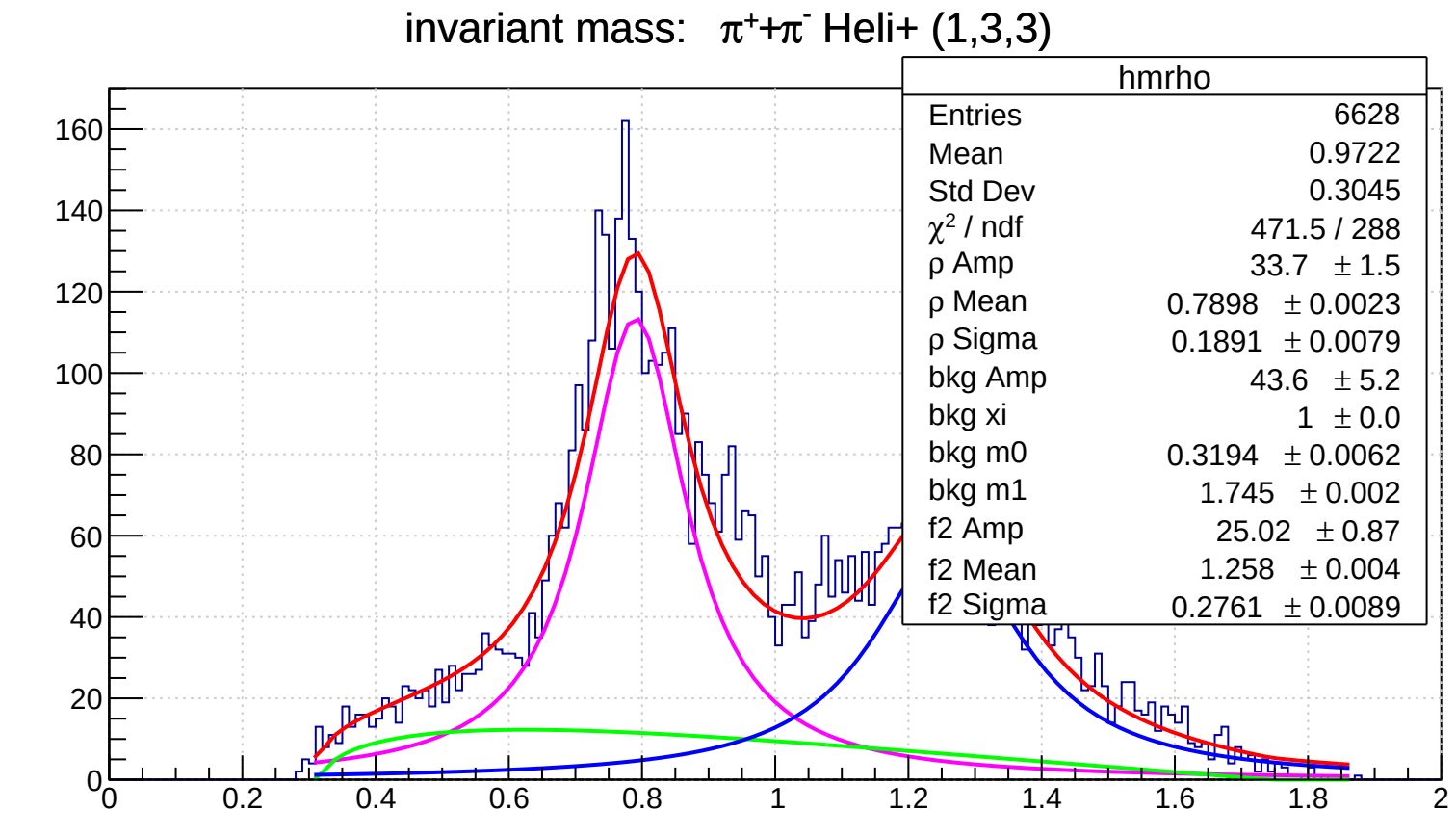

invariant mass: π⁺+π⁻ Heli+ (1,2,7)
hmrho
Entries 1957
Mean 0.9421
Std Dev 0.2642
χ² / ndf 308.8 / 249
ρ Amp 13.02 ± 0.48
ρ Mean 0.7811 ± 0.0029
ρ Sigma 0.184 ± 0.008
bkg Amp 0 ± 0.0
bkg xi 1 ± 0.0
bkg m0 0.3 ± 0.0
bkg m1 3 ± 0.0
f2 Amp 7.531 ± 0.448
f2 Mean 1.224 ± 0.008
f2 Sigma 0.2549 ± 0.0174
0
10
20
30
40
50
60
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

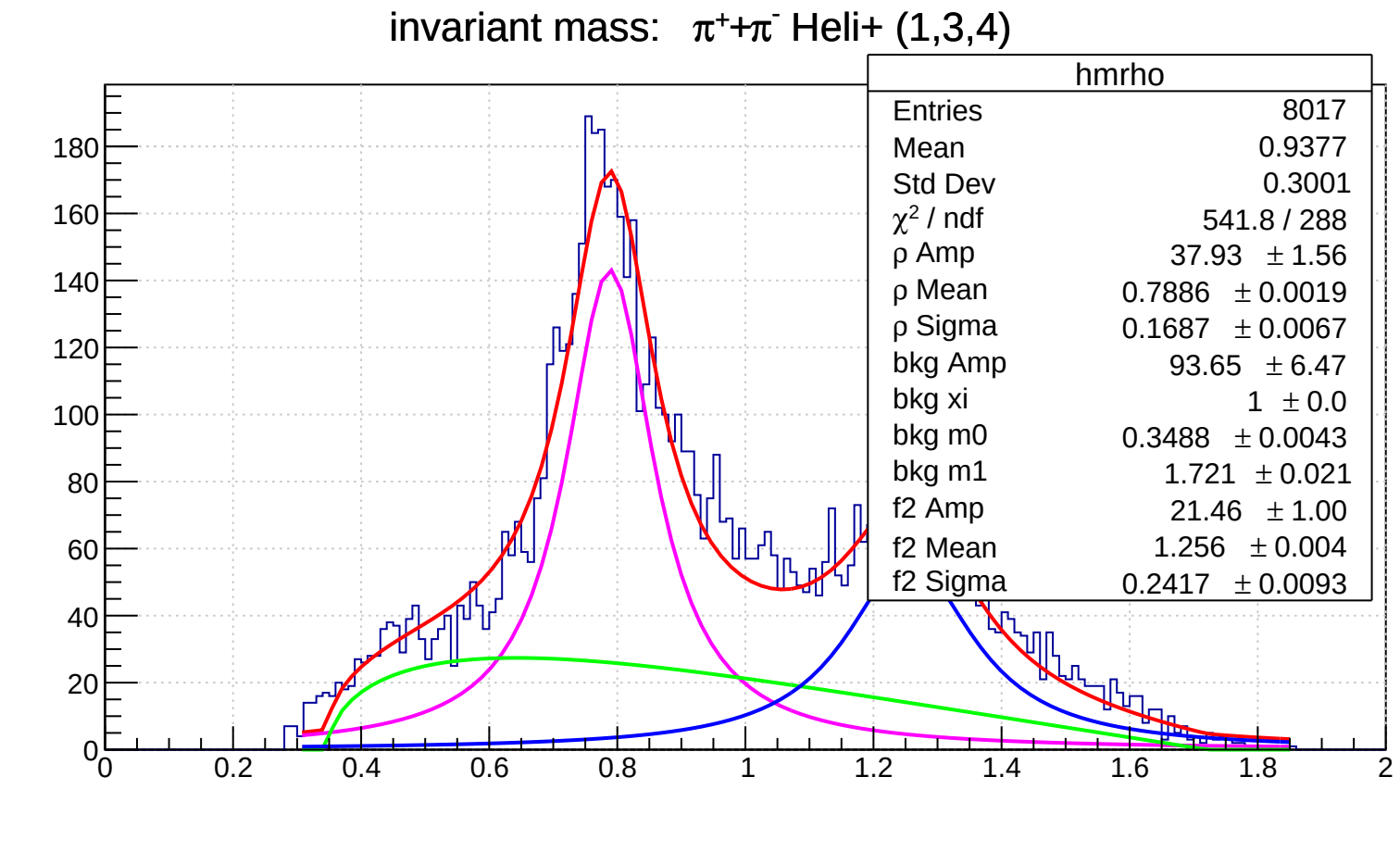

invariant mass: π⁺+π⁻ Heli+ (1,2,8)
hmrho
Entries 1429
Mean 1.013
Std Dev 0.251
χ² / ndf 318.5 / 225
ρ Amp 7.398 ± 0.374
ρ Mean 0.807 ± 0.005
ρ Sigma 0.1565 ± 0.0091
bkg Amp 0 ± 0.0
bkg xi 1 ± 0.0
bkg m0 0.3 ± 0.0
bkg m1 3 ± 0.0
f2 Amp 7.085 ± 0.390
f2 Mean 1.232 ± 0.006
f2 Sigma 0.2442 ± 0.0161
0
5
10
15
20
25
30
35
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

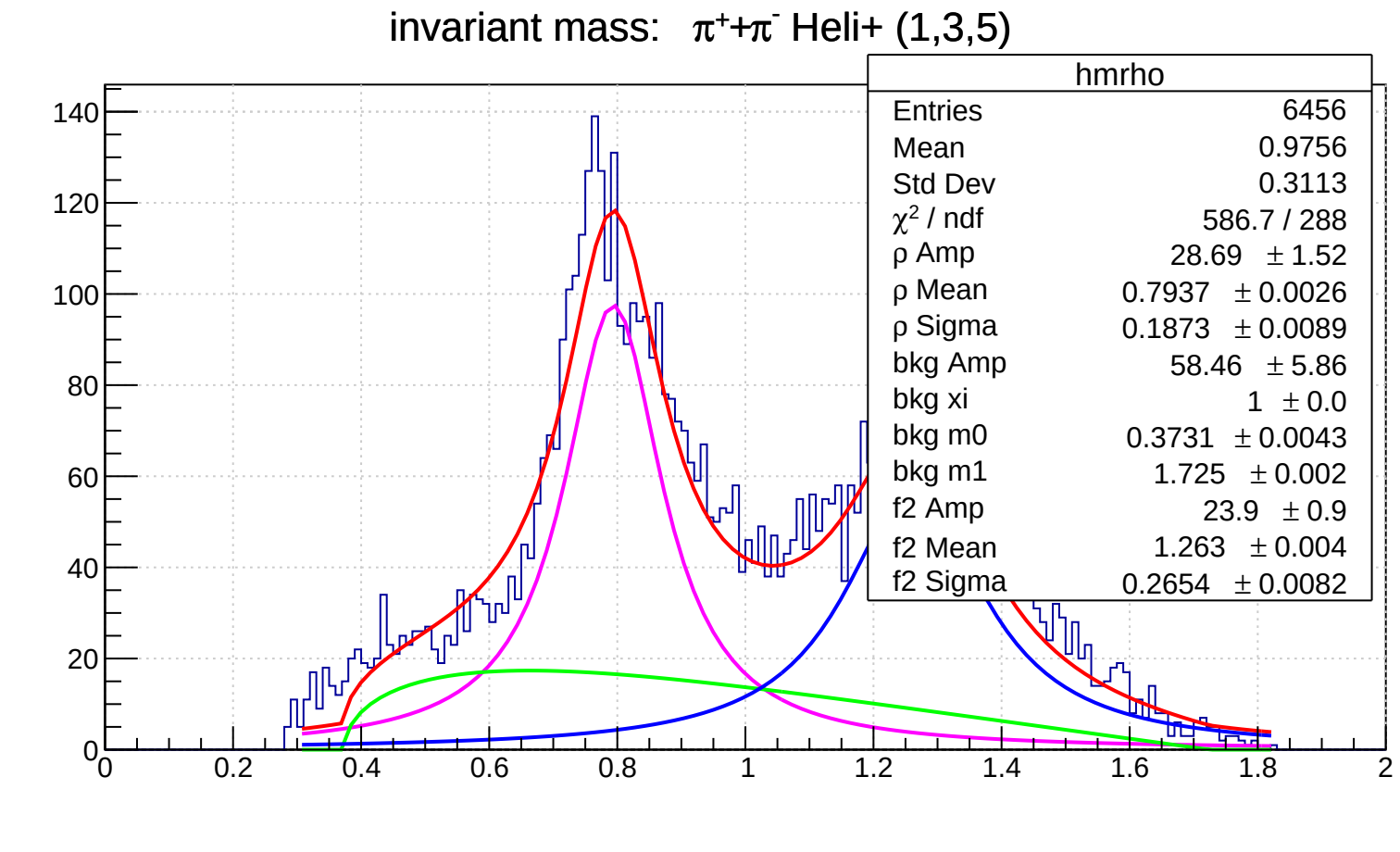

invariant mass: π⁺+π⁻ Heli+ (1,3,0)
hmrho
Entries 2331
Mean 1.217
Std Dev 0.262
χ² / ndf 495.1 / 247
ρ Amp 4.048 ± 0.311
ρ Mean 0.8281 ± 0.0072
ρ Sigma 0.1534 ± 0.0127
bkg Amp 0 ± 0.0
bkg xi 1 ± 0.0
bkg m0 0.3 ± 0.0
bkg m1 3 ± 0.0
f2 Amp 20.09 ± 0.55
f2 Mean 1.317 ± 0.004
f2 Sigma 0.2691 ± 0.0074
0
10
20
30
40
50
60
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

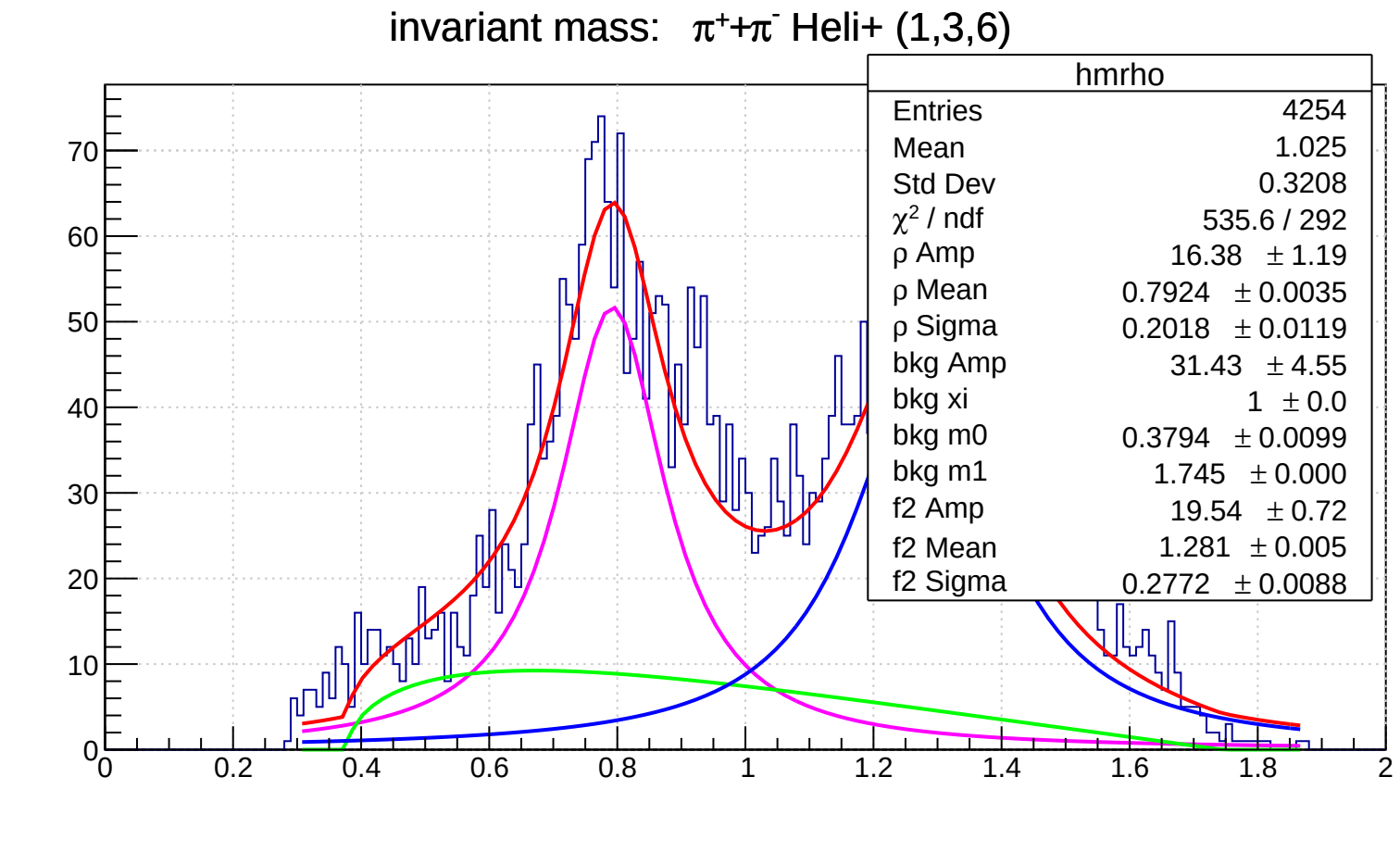

invariant mass: π+π- Heli+ (1,3,1)
hmrho
Entries 3208
Mean 1.092
Std Dev 0.3097
χ2 / ndf 492.4 / 292
ρ Amp 12.65 ± 0.49
ρ Mean 0.7935 ± 0.0034
ρ Sigma 0.1677 ± 0.0075
bkg Amp 0 ± 0.0
bkg xi 1 ± 0.0
bkg m0 0.3 ± 0.0
bkg m1 3 ± 0.0
f2 Amp 21.01 ± 0.62
f2 Mean 1.301 ± 0.005
f2 Sigma 0.302 ± 0.009
0 10 20 30 40 50 60
0 0.2 0.4 0.6 0.8 1 1.2 1.4 1.6 1.8 2

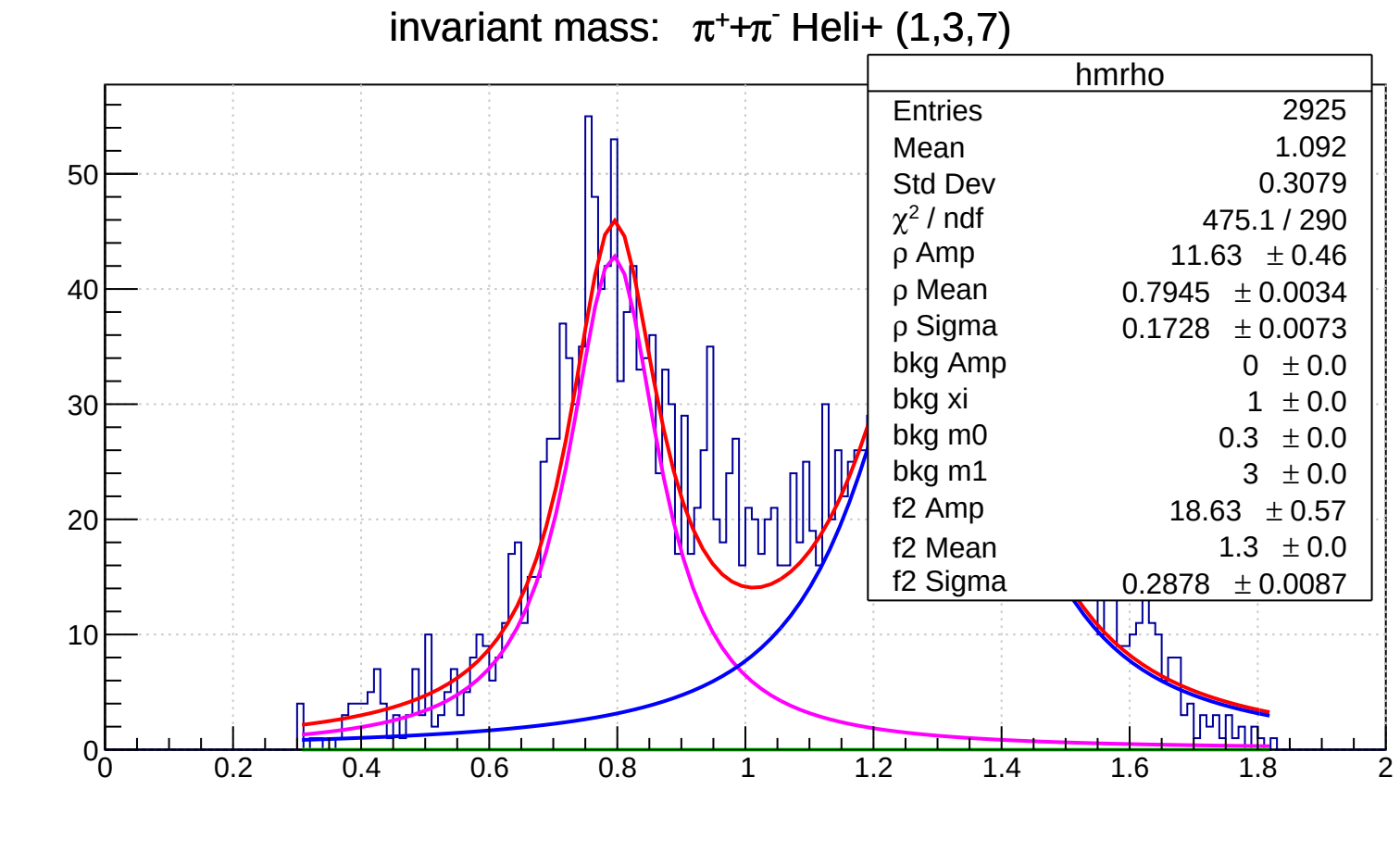

invariant mass: π⁺+π⁻ Heli+ (1,3,2)
hmrho
Entries 4794
Mean 1.015
Std Dev 0.3051
χ² / ndf 486.6 / 288
ρ Amp 25 ± 1.3
ρ Mean 0.8049 ± 0.0033
ρ Sigma 0.2068 ± 0.0103
bkg Amp 15.22 ± 4.70
bkg xi 1 ± 0.0
bkg m0 0.3653 ± 0.0147
bkg m1 1.745 ± 0.001
f2 Amp 21.76 ± 0.76
f2 Mean 1.275 ± 0.004
f2 Sigma 0.2764 ± 0.0091
0
10
20
30
40
50
60
70
80
90
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

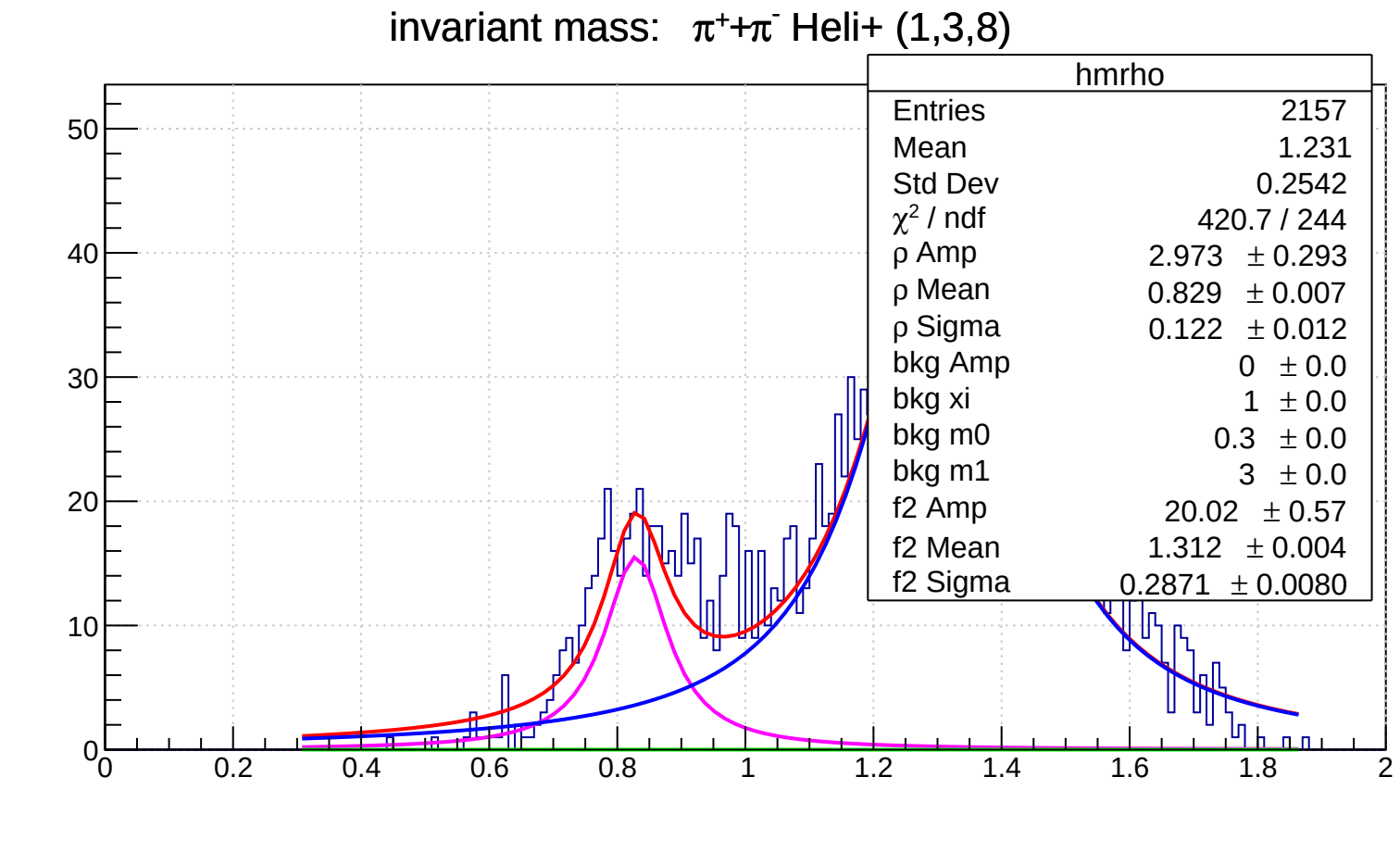

invariant mass: π⁺+π⁻ Heli+ (1,3,3)
hmrho
Entries 6628
Mean 0.9722
Std Dev 0.3045
χ² / ndf 471.5 / 288
ρ Amp 33.7 ± 1.5
ρ Mean 0.7898 ± 0.0023
ρ Sigma 0.1891 ± 0.0079
bkg Amp 43.6 ± 5.2
bkg xi 1 ± 0.0
bkg m0 0.3194 ± 0.0062
bkg m1 1.745 ± 0.002
f2 Amp 25.02 ± 0.87
f2 Mean 1.258 ± 0.004
f2 Sigma 0.2761 ± 0.0089
0
20
40
60
80
100
120
140
160
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2


invariant mass: π+π- Heli+ (1,3,4)
hmrho
Entries 8017
Mean 0.9377
Std Dev 0.3001
χ2 / ndf 541.8 / 288
ρ Amp 37.93 ± 1.56
ρ Mean 0.7886 ± 0.0019
ρ Sigma 0.1687 ± 0.0067
bkg Amp 93.65 ± 6.47
bkg xi 1 ± 0.0
bkg m0 0.3488 ± 0.0043
bkg m1 1.721 ± 0.021
f2 Amp 21.46 ± 1.00
f2 Mean 1.256 ± 0.004
f2 Sigma 0.2417 ± 0.0093
0
20
40
60
80
100
120
140
160
180
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2


invariant mass: π⁺+π⁻ Heli+ (1,3,5)
hmrho
Entries 6456
Mean 0.9756
Std Dev 0.3113
χ² / ndf 586.7 / 288
ρ Amp 28.69 ± 1.52
ρ Mean 0.7937 ± 0.0026
ρ Sigma 0.1873 ± 0.0089
bkg Amp 58.46 ± 5.86
bkg xi 1 ± 0.0
bkg m0 0.3731 ± 0.0043
bkg m1 1.725 ± 0.002
f2 Amp 23.9 ± 0.9
f2 Mean 1.263 ± 0.004
f2 Sigma 0.2654 ± 0.0082
0
20
40
60
80
100
120
140
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2


invariant mass: π⁺+π⁻ Heli+ (1,3,6)
hmrho
Entries 4254
Mean 1.025
Std Dev 0.3208
χ² / ndf 535.6 / 292
ρ Amp 16.38 ± 1.19
ρ Mean 0.7924 ± 0.0035
ρ Sigma 0.2018 ± 0.0119
bkg Amp 31.43 ± 4.55
bkg xi 1 ± 0.0
bkg m0 0.3794 ± 0.0099
bkg m1 1.745 ± 0.000
f2 Amp 19.54 ± 0.72
f2 Mean 1.281 ± 0.005
f2 Sigma 0.2772 ± 0.0088
0
10
20
30
40
50
60
70
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2


invariant mass: π⁺+π⁻ Heli+ (1,3,7)
hmrho
Entries 2925
Mean 1.092
Std Dev 0.3079
χ² / ndf 475.1 / 290
ρ Amp 11.63 ± 0.46
ρ Mean 0.7945 ± 0.0034
ρ Sigma 0.1728 ± 0.0073
bkg Amp 0 ± 0.0
bkg xi 1 ± 0.0
bkg m0 0.3 ± 0.0
bkg m1 3 ± 0.0
f2 Amp 18.63 ± 0.57
f2 Mean 1.3 ± 0.0
f2 Sigma 0.2878 ± 0.0087
0
10
20
30
40
50
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2


invariant mass: π⁺+π⁻ Heli+ (1,3,8)
hmrho
Entries 2157
Mean 1.231
Std Dev 0.2542
χ² / ndf 420.7 / 244
ρ Amp 2.973 ± 0.293
ρ Mean 0.829 ± 0.007
ρ Sigma 0.122 ± 0.012
bkg Amp 0 ± 0.0
bkg xi 1 ± 0.0
bkg m0 0.3 ± 0.0
bkg m1 3 ± 0.0
f2 Amp 20.02 ± 0.57
f2 Mean 1.312 ± 0.004
f2 Sigma 0.2871 ± 0.0080
0
10
20
30
40
50
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2