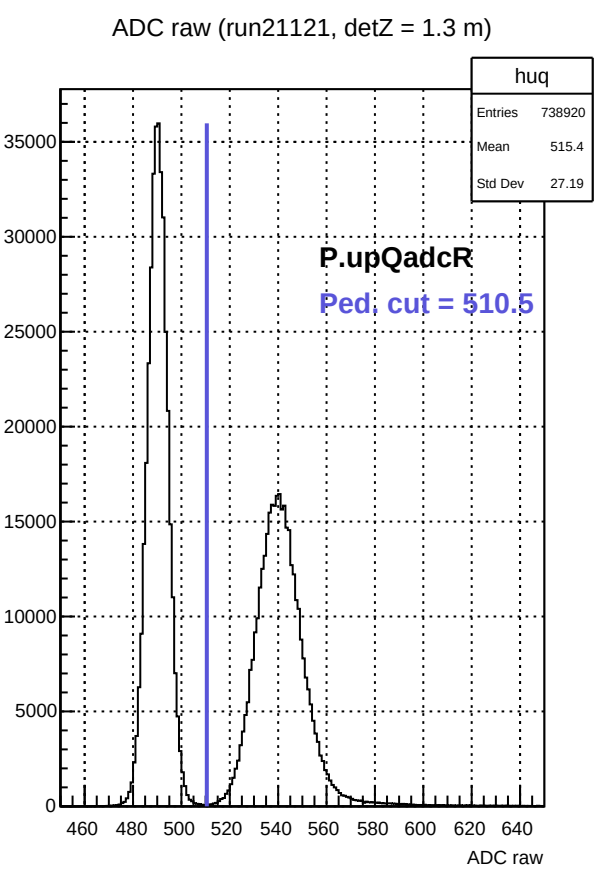
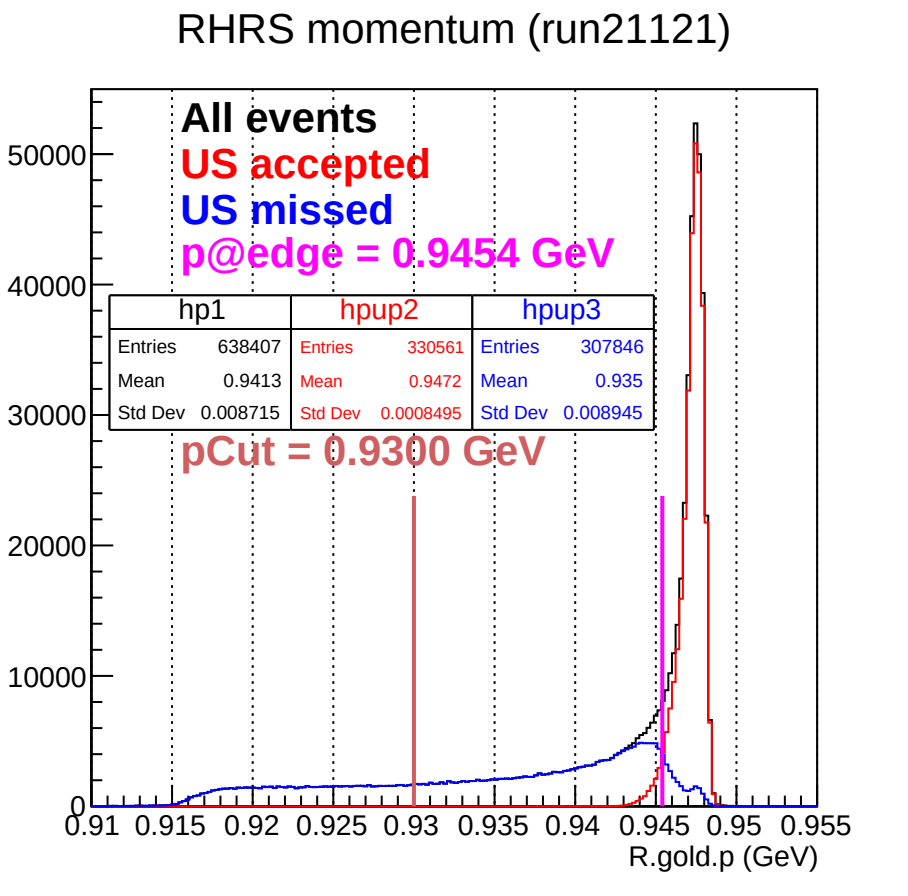
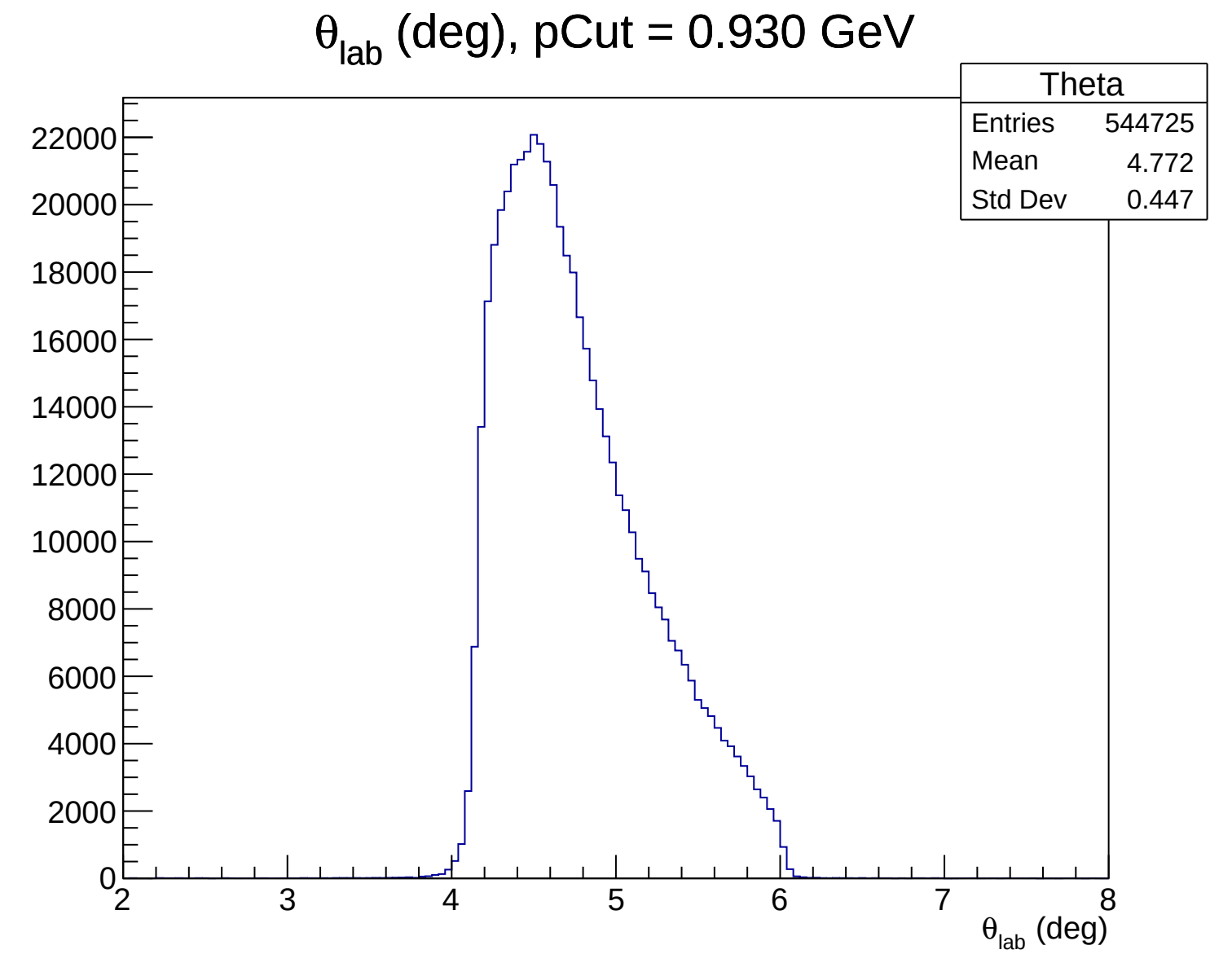
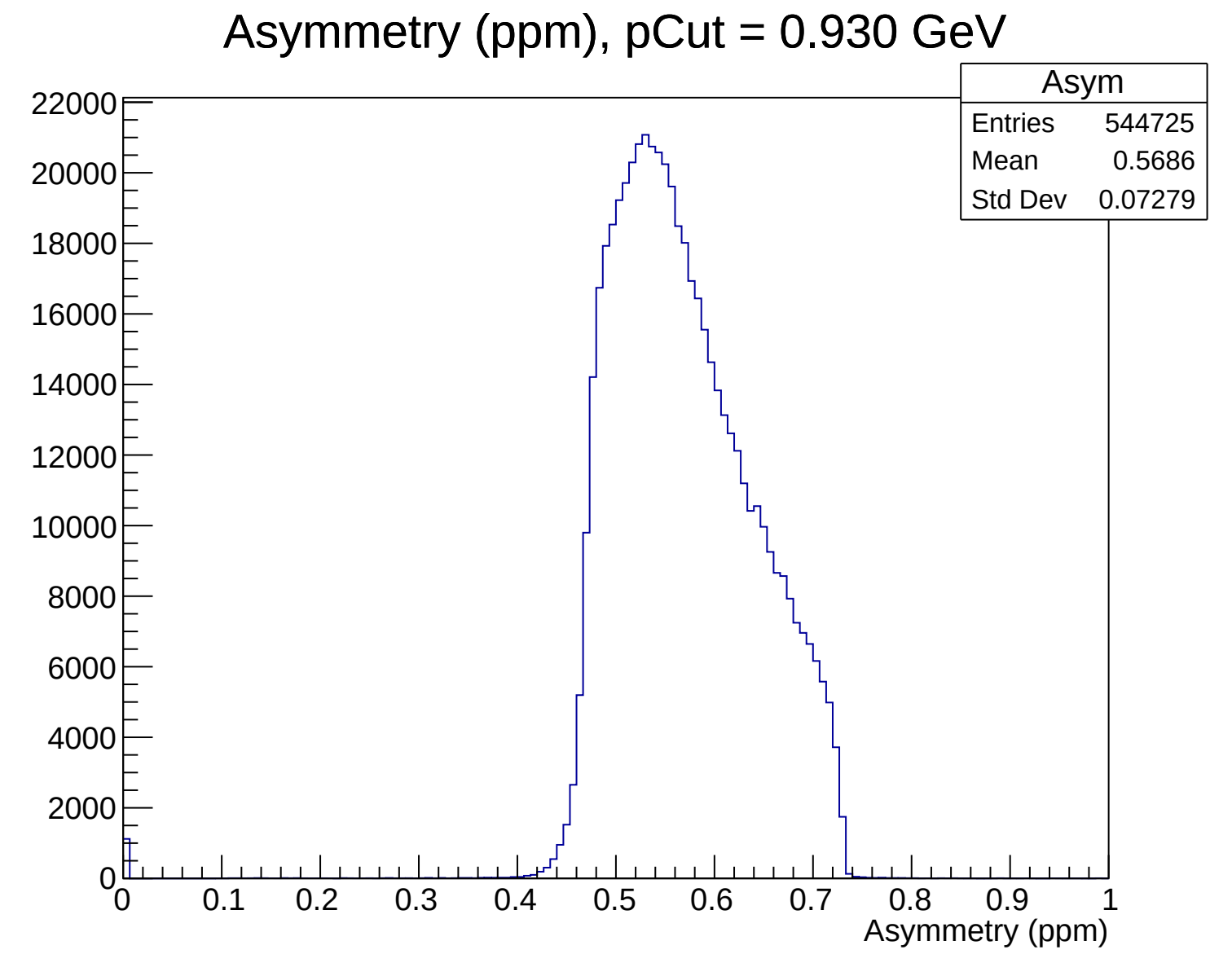
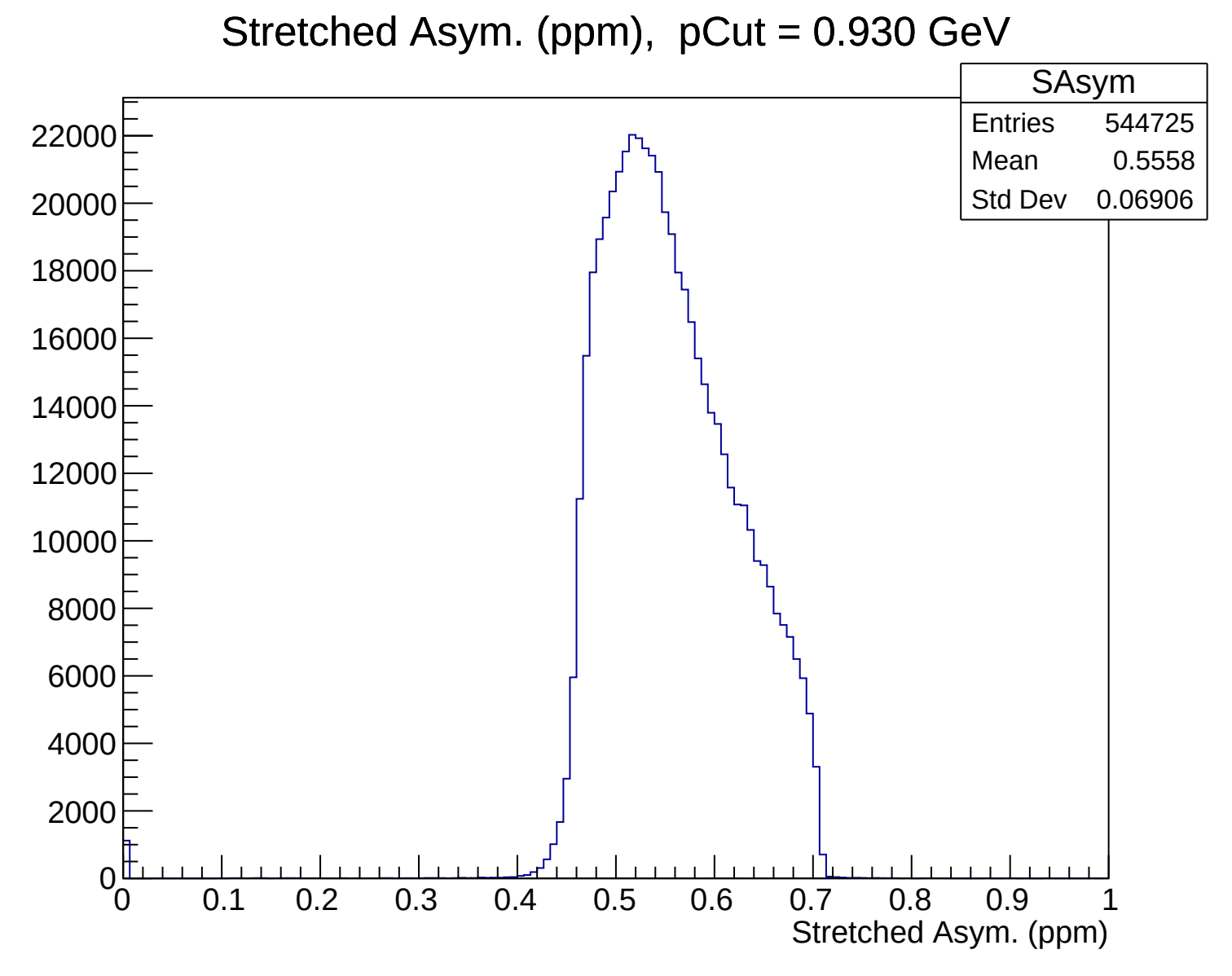
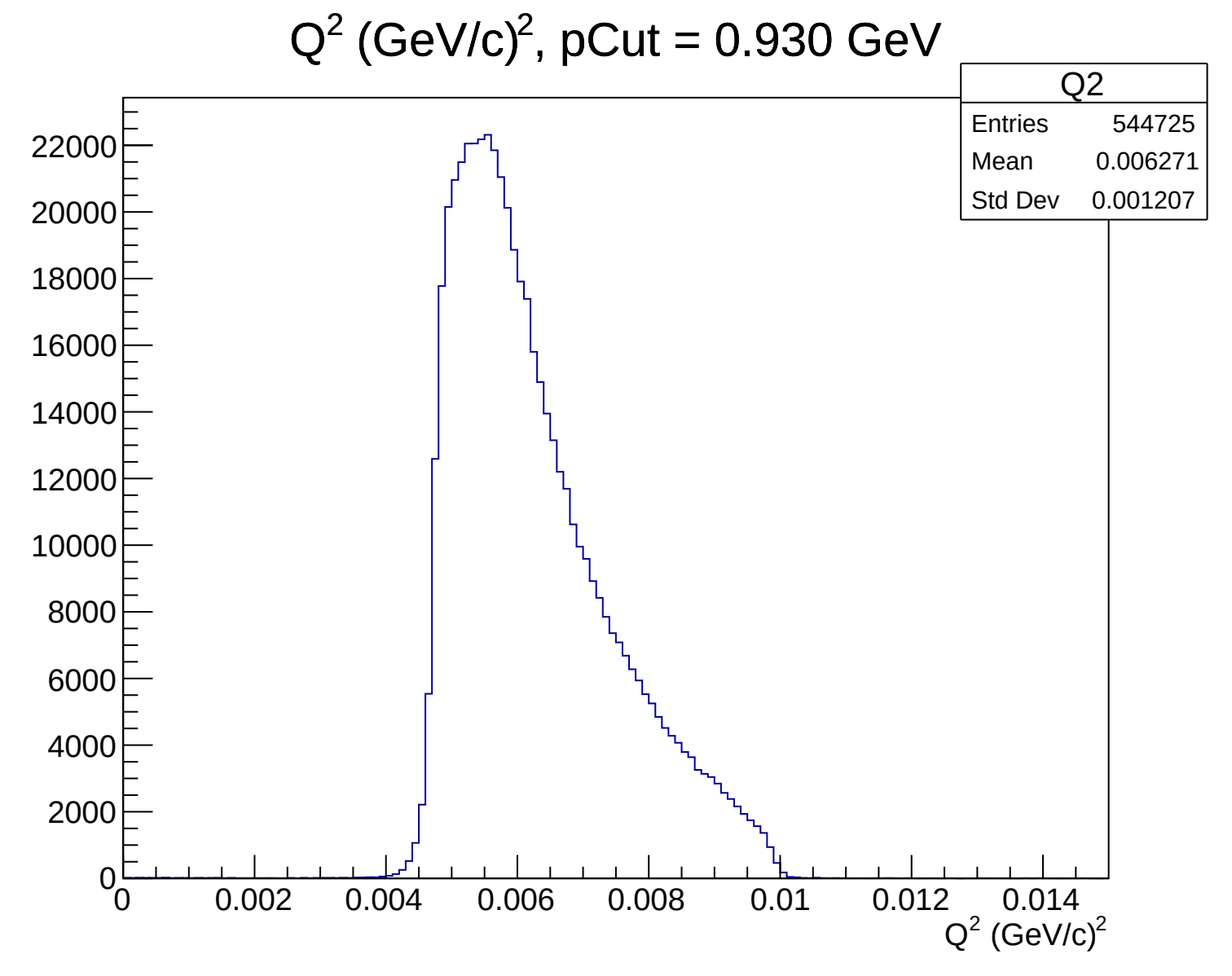

ADC raw (run21121, detZ = 1.3 m)
huq
Entries 738920
Mean 515.4
Std Dev 27.19
P.upQadcR
Ped. cut = 510.5
35000
30000
25000
20000
15000
10000
5000
0
460 480 500 520 540 560 580 600 620 640
ADC raw

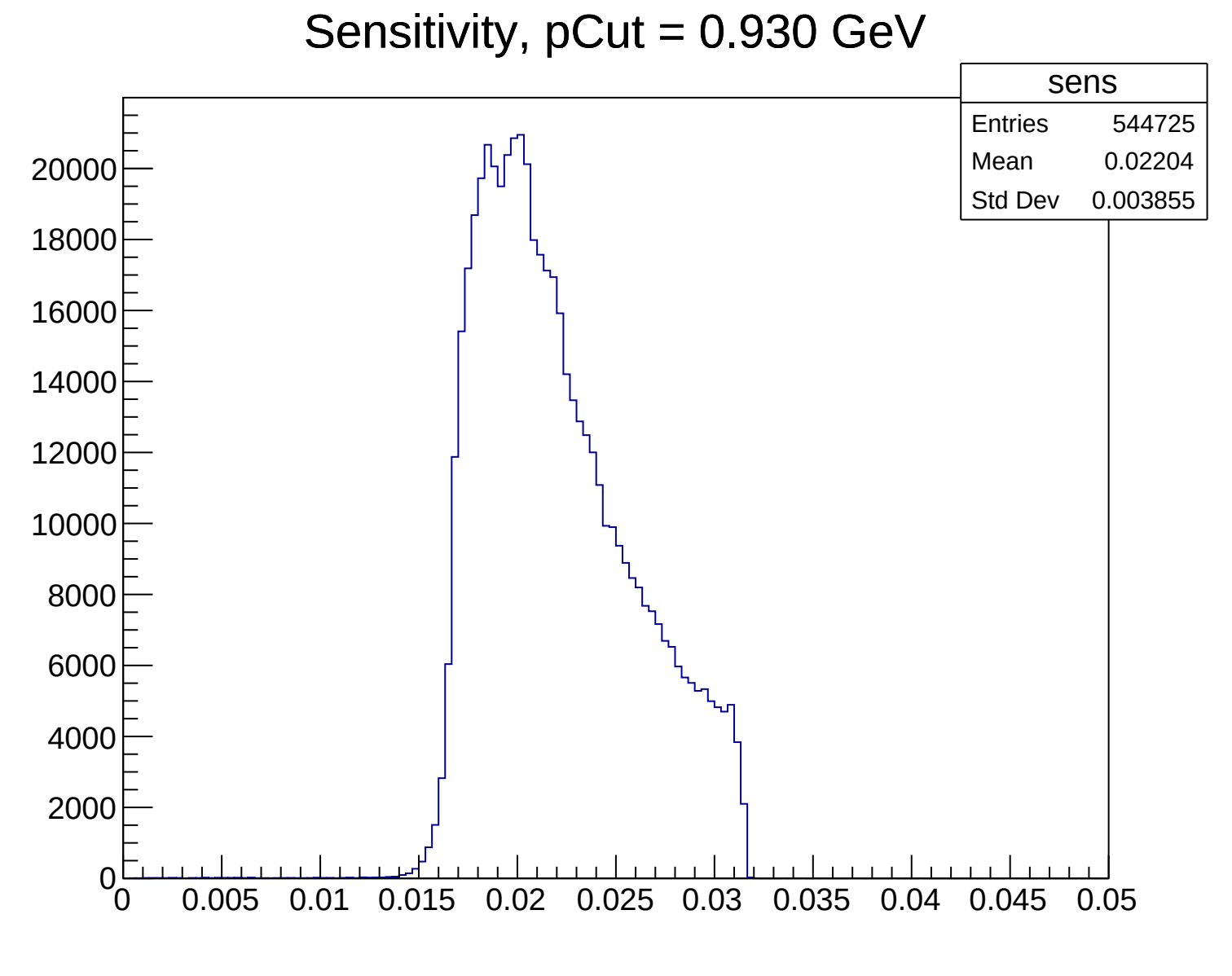

RHRS momentum (run21121)
All events
US accepted
US missed
p@edge = 0.9454 GeV
hp1
Entries 638407
Mean 0.9413
Std Dev 0.008715
hpup2
Entries 330561
Mean 0.9472
Std Dev 0.0008495
hpup3
Entries 307846
Mean 0.935
Std Dev 0.008945
pCut = 0.9300 GeV
50000
40000
30000
20000
10000
0
0.91 0.915 0.92 0.925 0.93 0.935 0.94 0.945 0.95 0.955
R.gold.p (GeV)

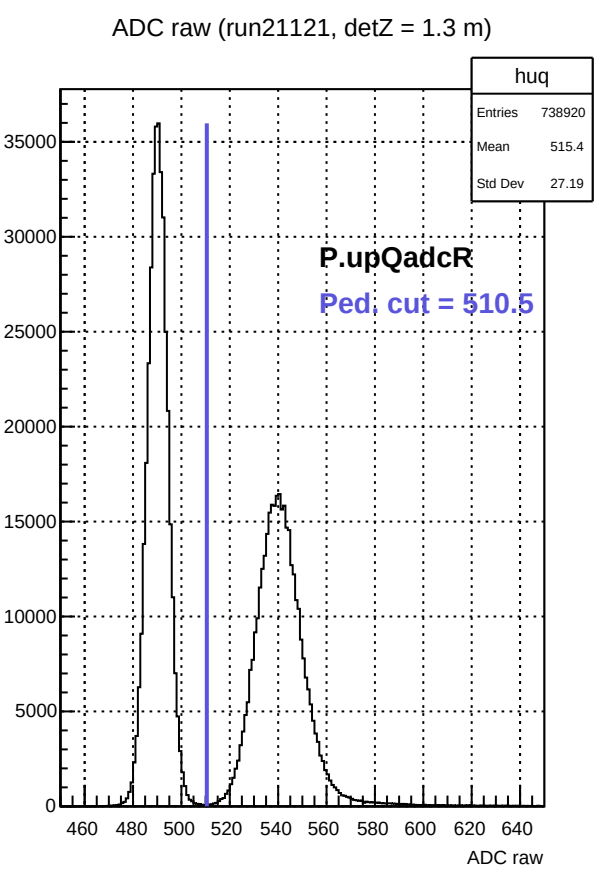

θlab (deg), pCut = 0.930 GeV
Theta
Entries 544725
Mean 4.772
Std Dev 0.447
22000
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
2
3
4
5
6
7
8
θlab (deg)

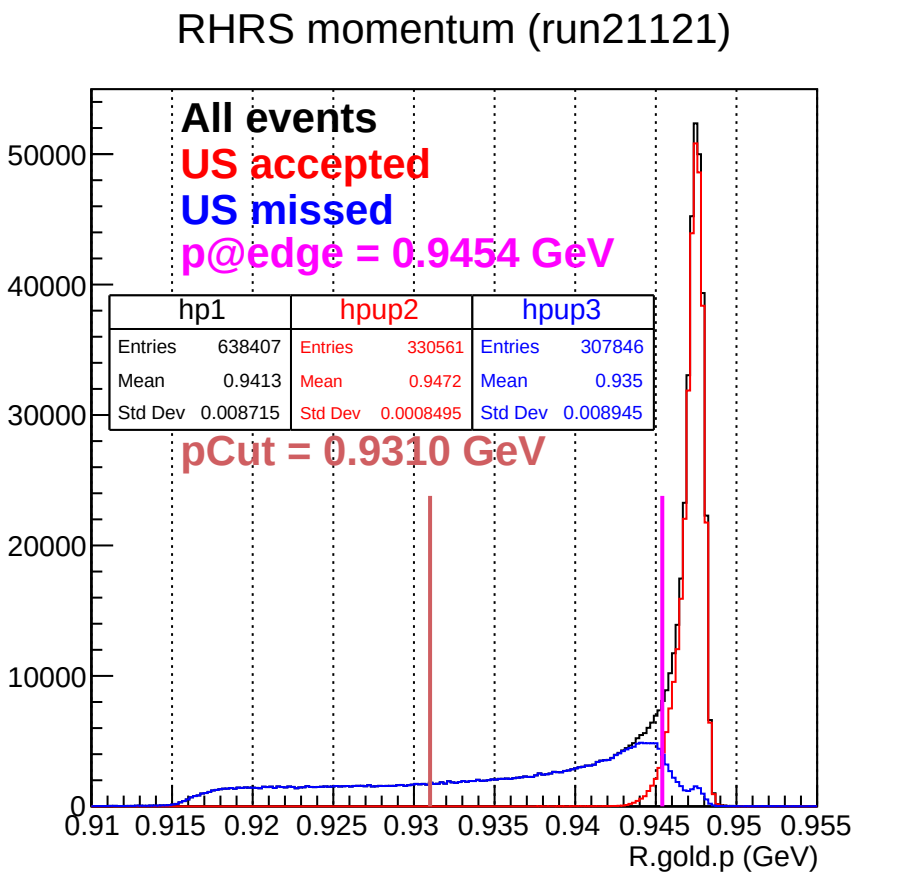

Asymmetry (ppm), pCut = 0.930 GeV
Asym
Entries 544725
Mean 0.5686
Std Dev 0.07279
22000
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1
Asymmetry (ppm)

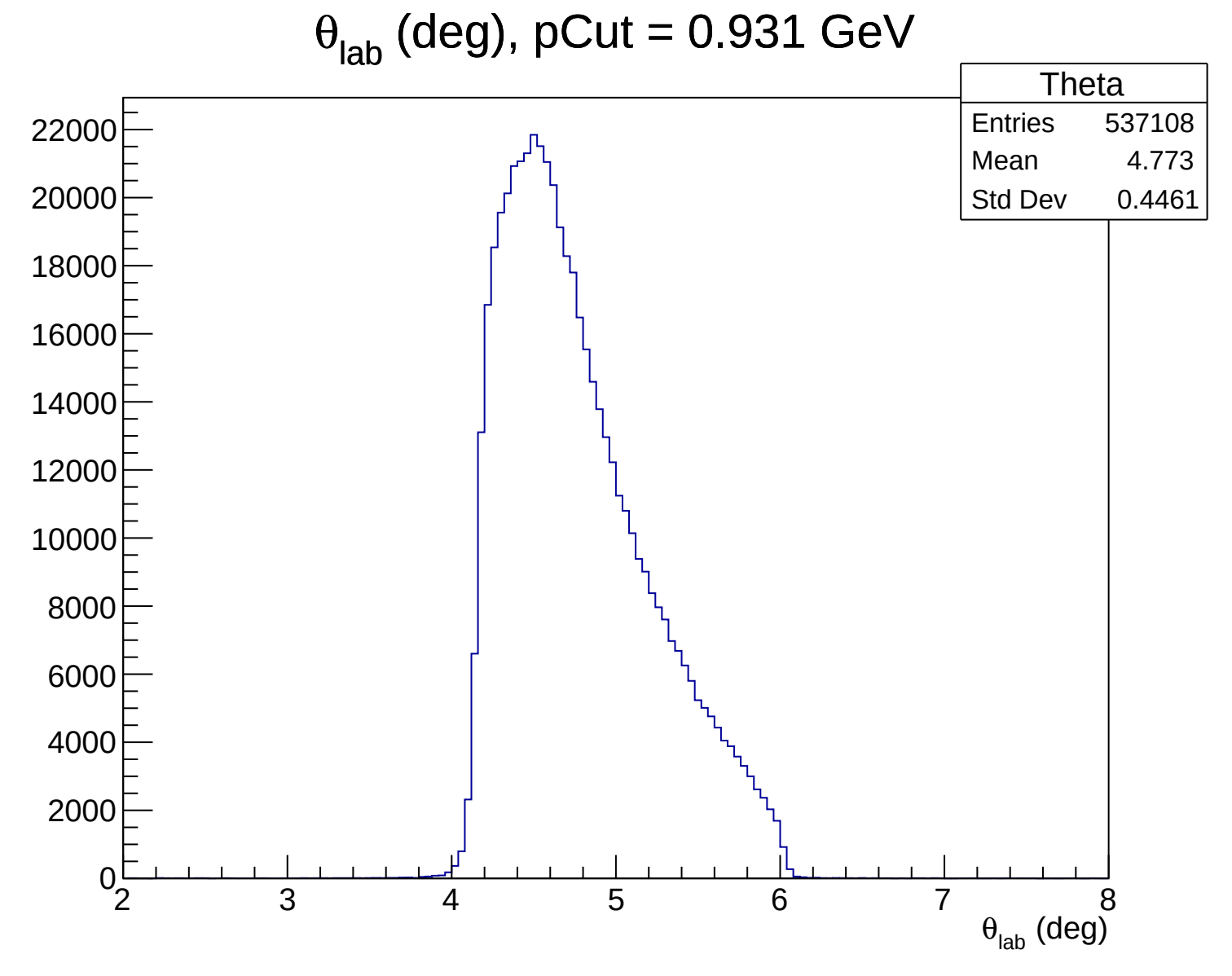

Stretched Asym. (ppm), pCut = 0.930 GeV
SAsym
Entries 544725
Mean 0.5558
Std Dev 0.06906
22000
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
Stretched Asym. (ppm)

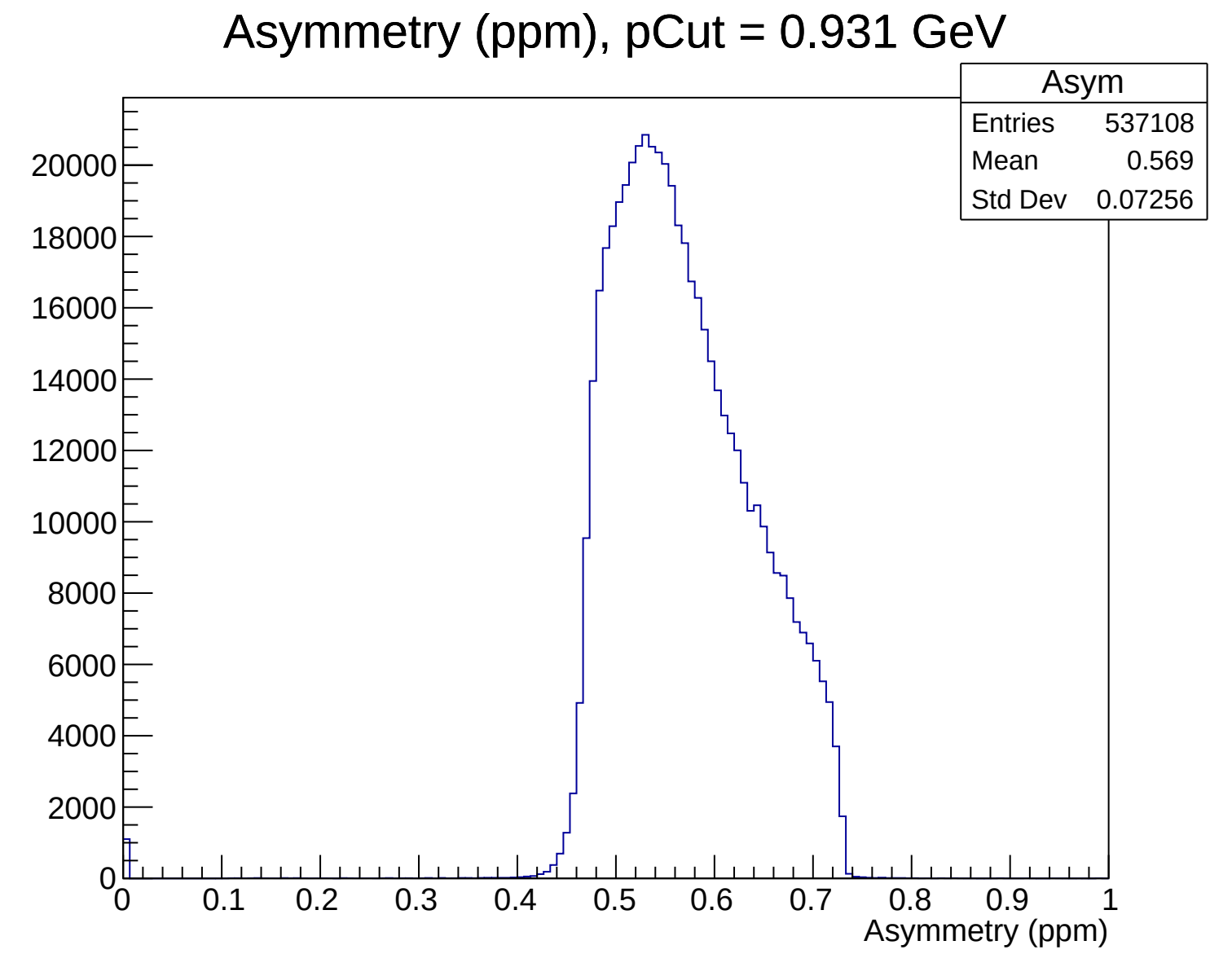

Q^2 (GeV/c)^2, pCut = 0.930 GeV
Q2
Entries 544725
Mean 0.006271
Std Dev 0.001207
22000
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0
0.002
0.004
0.006
0.008
0.01
0.012
0.014
Q^2 (GeV/c)^2

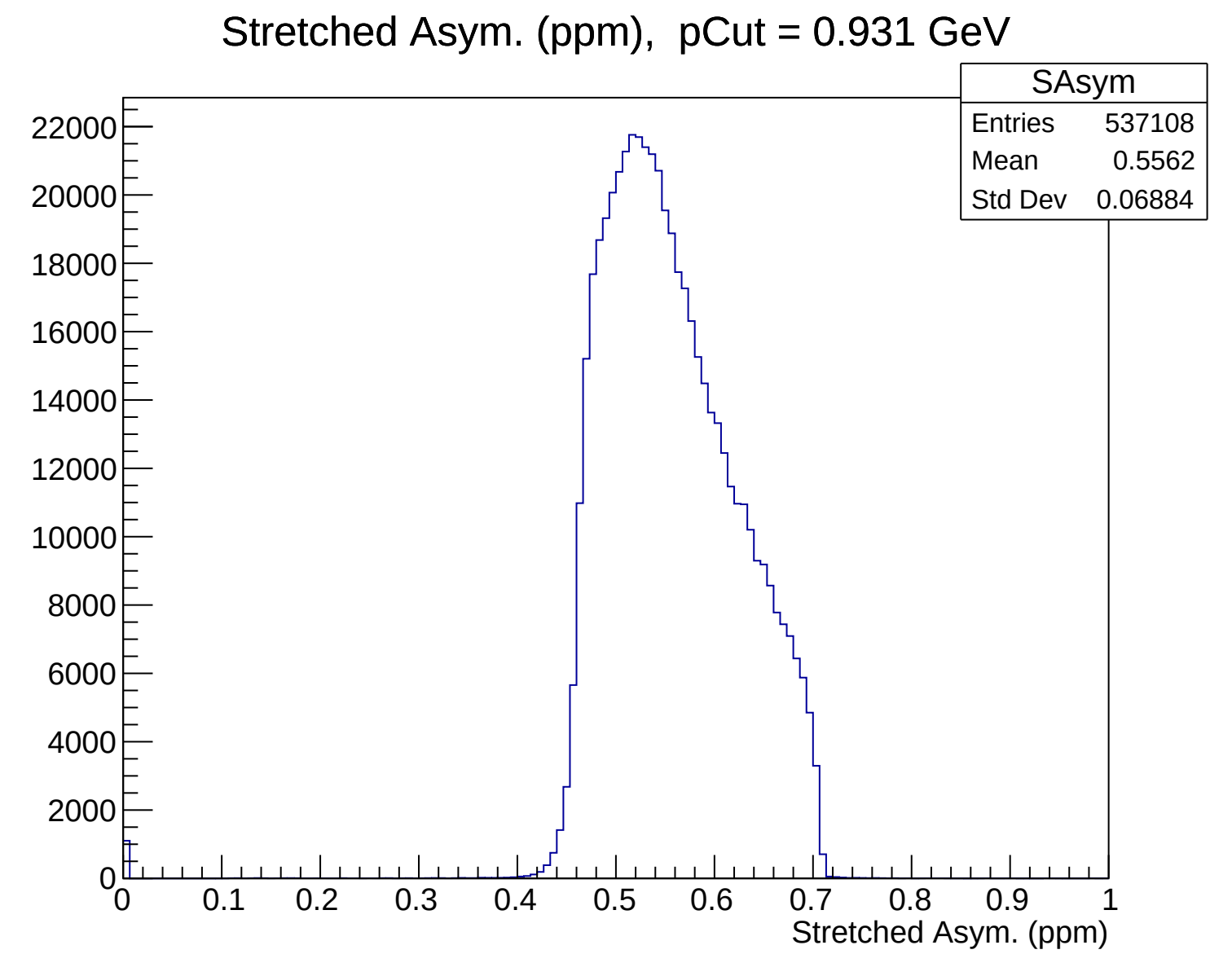

Sensitivity, pCut = 0.930 GeV
sens
Entries 544725
Mean 0.02204
Std Dev 0.003855
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0 0.005 0.01 0.015 0.02 0.025 0.03 0.035 0.04 0.045 0.05

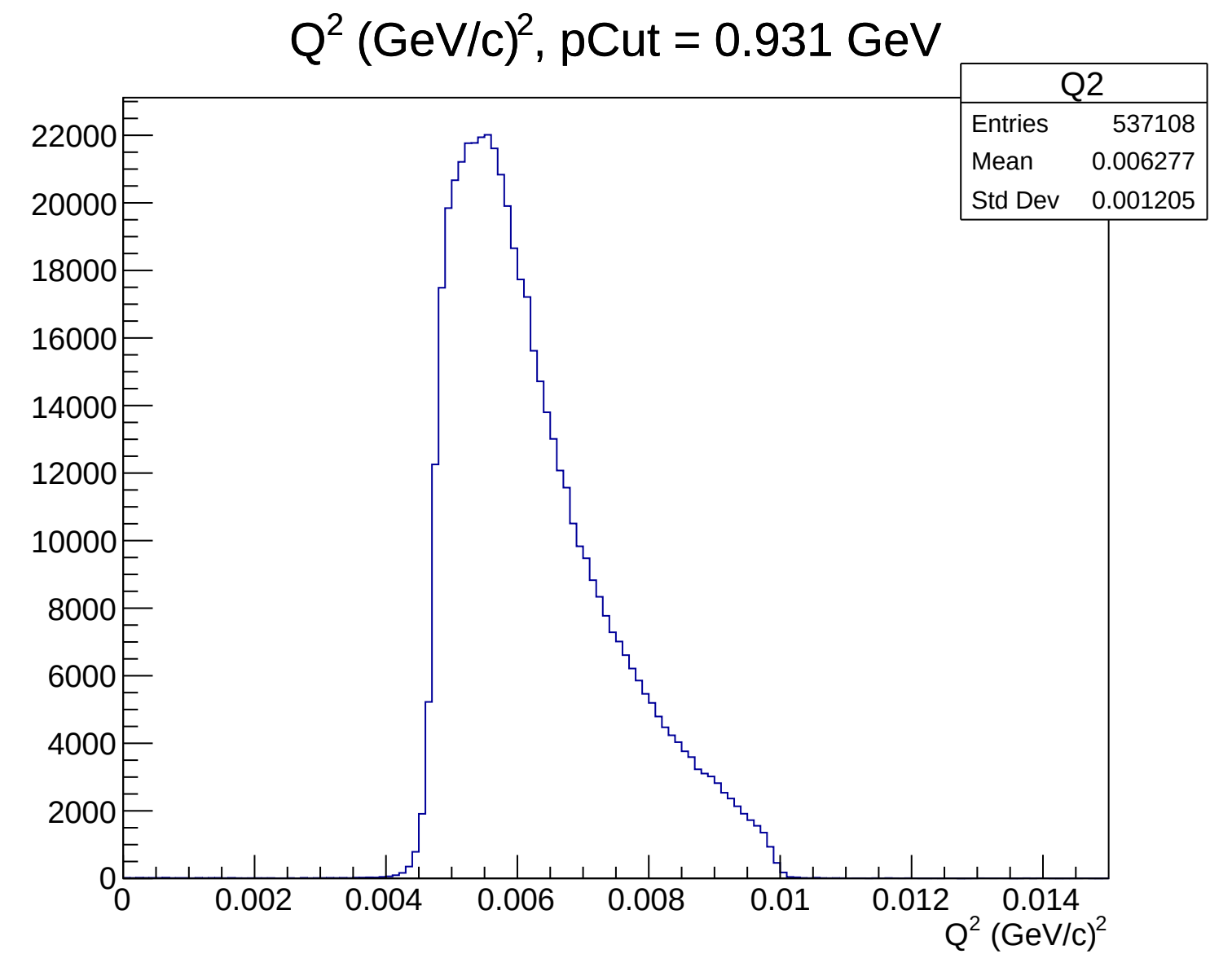

ADC raw (run21121, detZ = 1.3 m)
huq
Entries 738920
Mean 515.4
Std Dev 27.19
P.upQadcR
Ped. cut = 510.5
35000
30000
25000
20000
15000
10000
5000
0
460 480 500 520 540 560 580 600 620 640
ADC raw

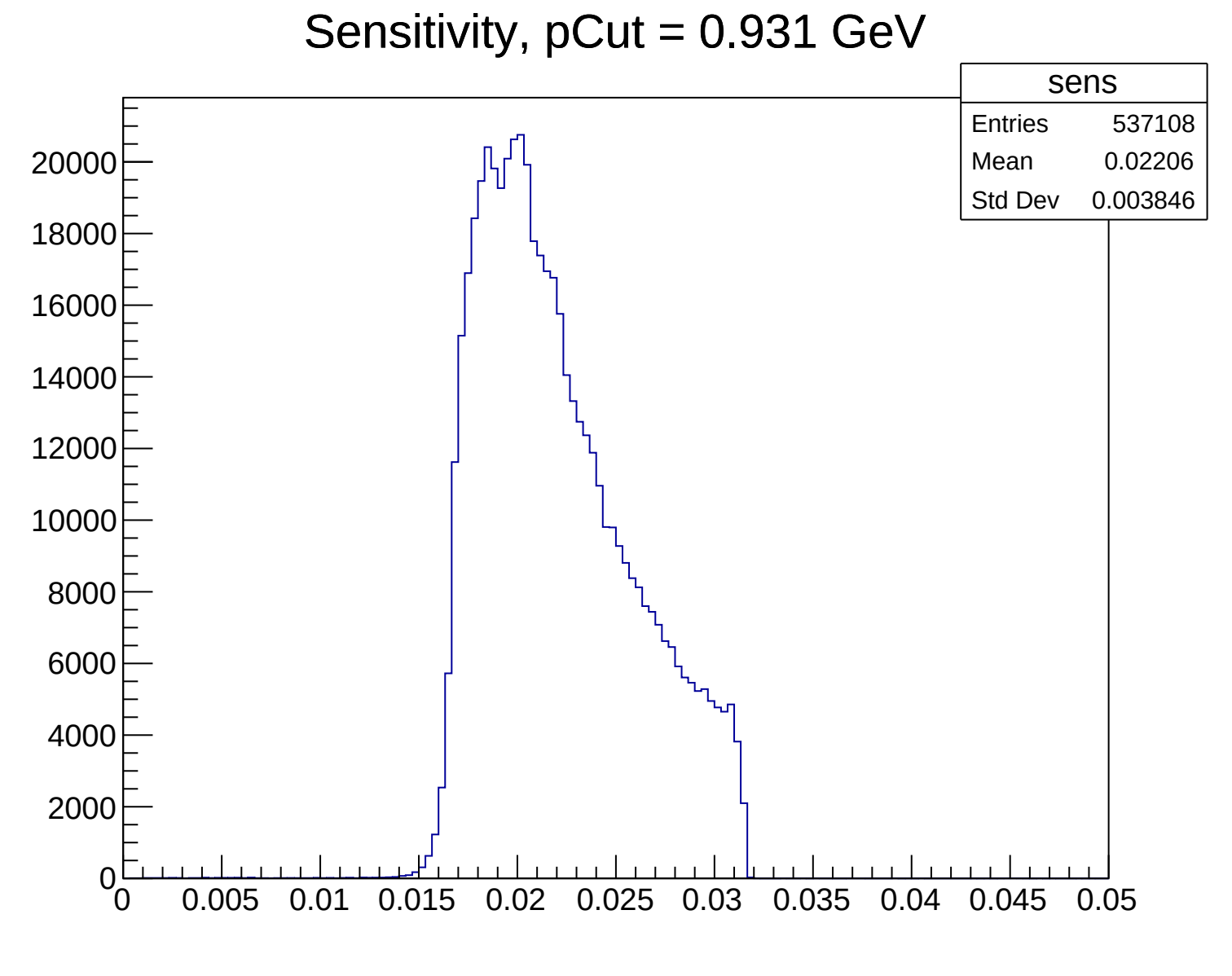

RHRS momentum (run21121)
All events
US accepted
US missed
p@edge = 0.9454 GeV
hp1
Entries 638407
Mean 0.9413
Std Dev 0.008715
hpup2
Entries 330561
Mean 0.9472
Std Dev 0.0008495
hpup3
Entries 307846
Mean 0.935
Std Dev 0.008945
pCut = 0.9310 GeV
50000
40000
30000
20000
10000
0
0.91 0.915 0.92 0.925 0.93 0.935 0.94 0.945 0.95 0.955
R.gold.p (GeV)

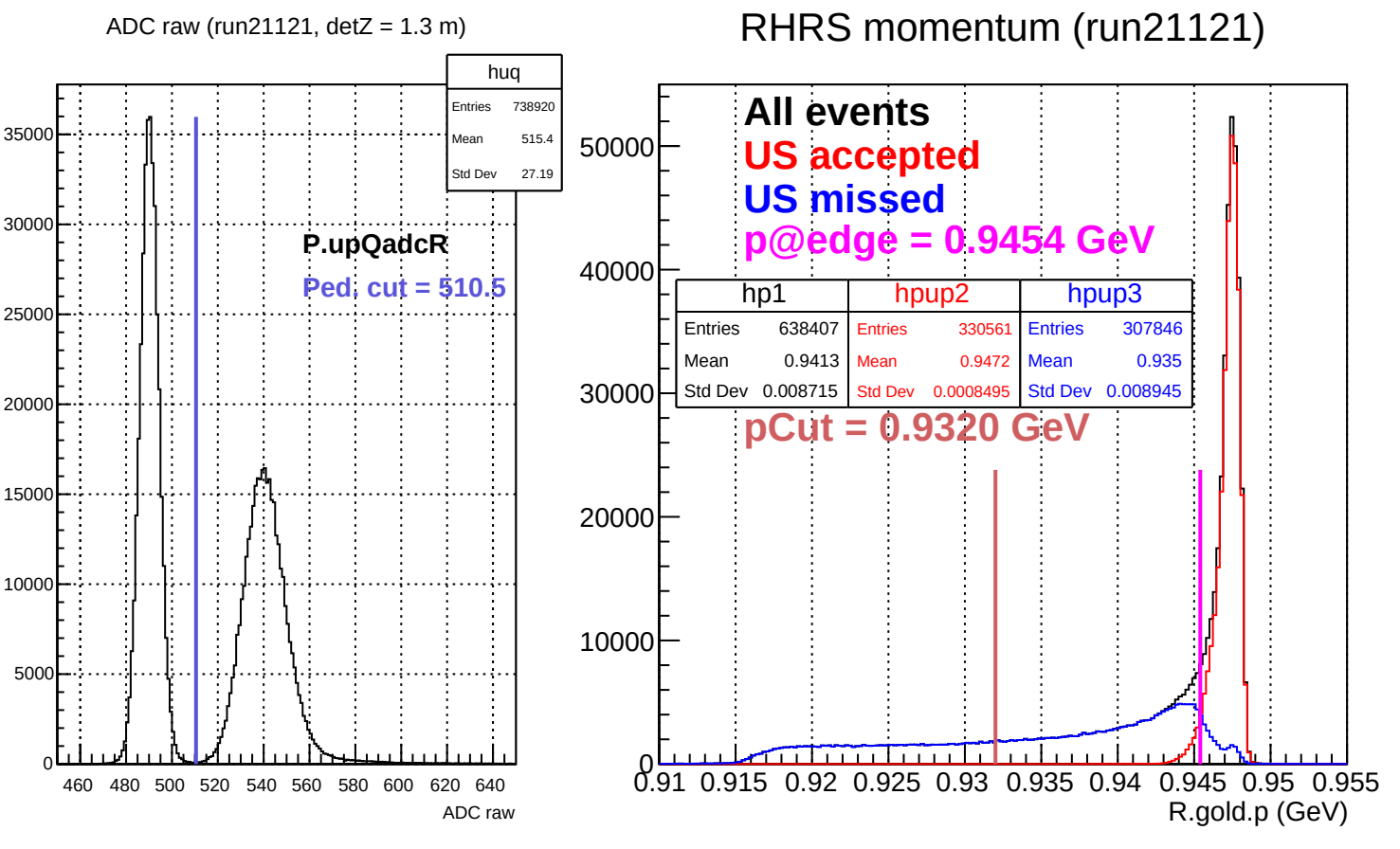

θlab (deg), pCut = 0.931 GeV
Theta
Entries 537108
Mean 4.773
Std Dev 0.4461
22000
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
2
3
4
5
6
7
8
θlab (deg)

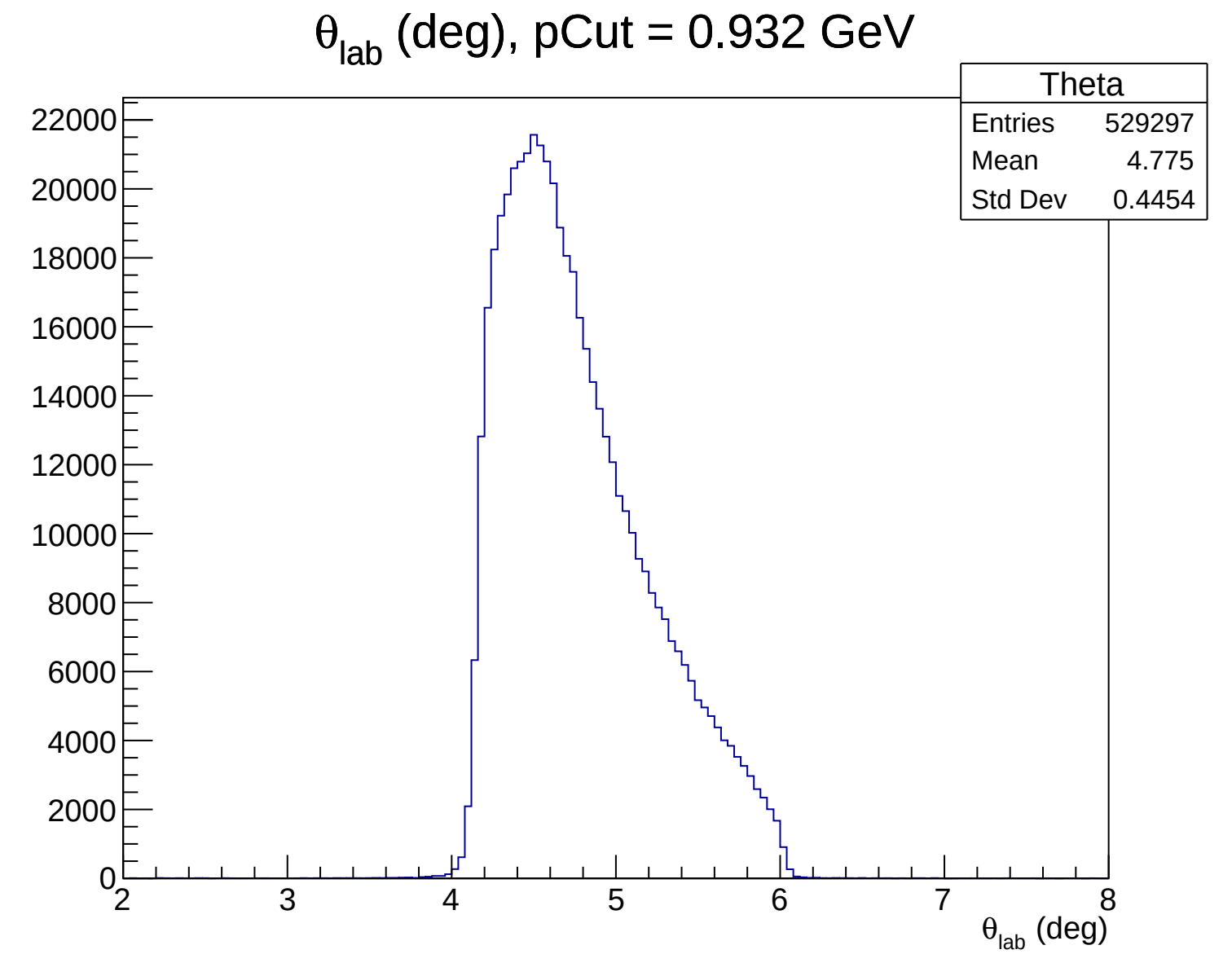

Asymmetry (ppm), pCut = 0.931 GeV
Asym
Entries 537108
Mean 0.569
Std Dev 0.07256
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1
Asymmetry (ppm)

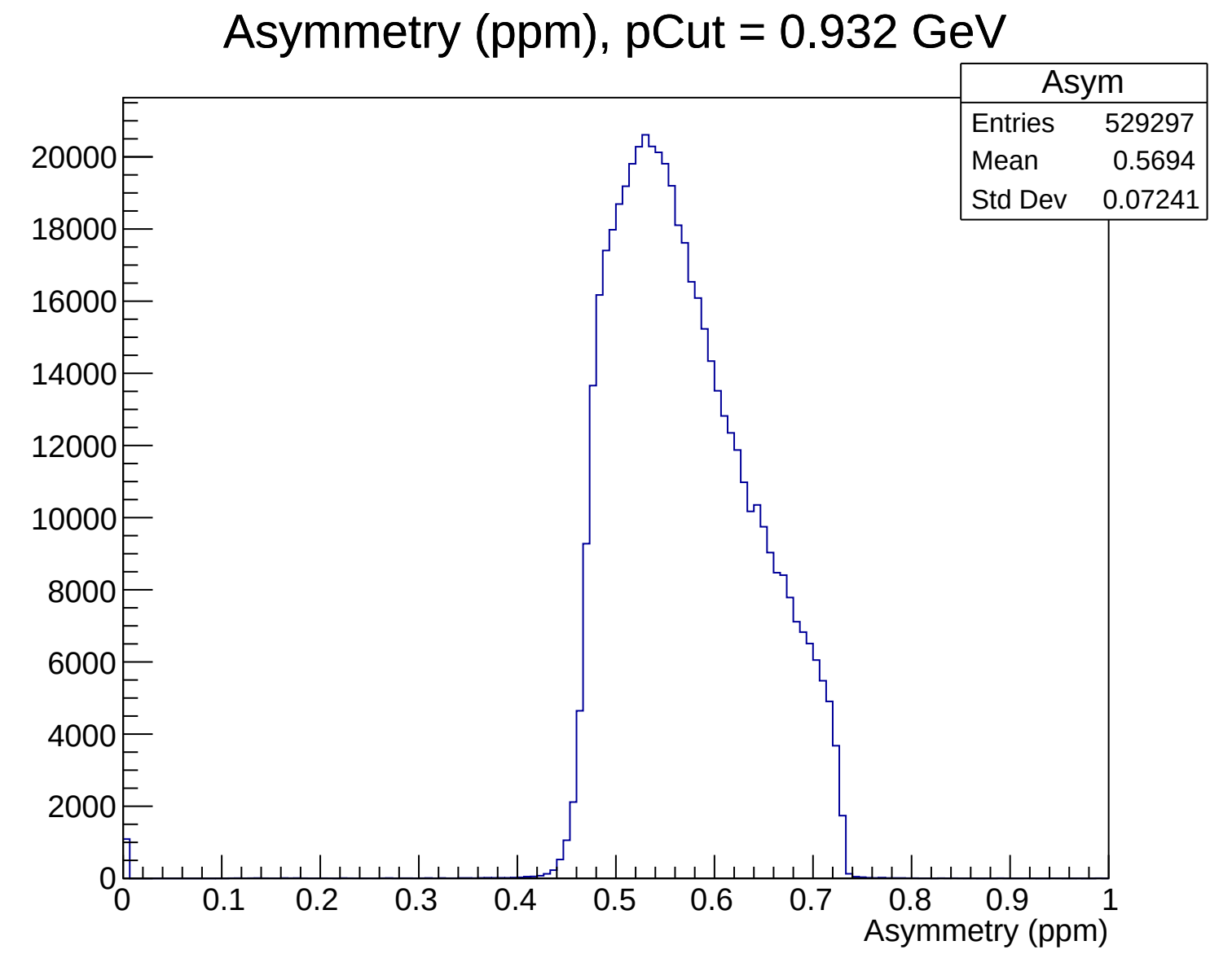

Stretched Asym. (ppm), pCut = 0.931 GeV
SAsym
Entries 537108
Mean 0.5562
Std Dev 0.06884
22000
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
Stretched Asym. (ppm)

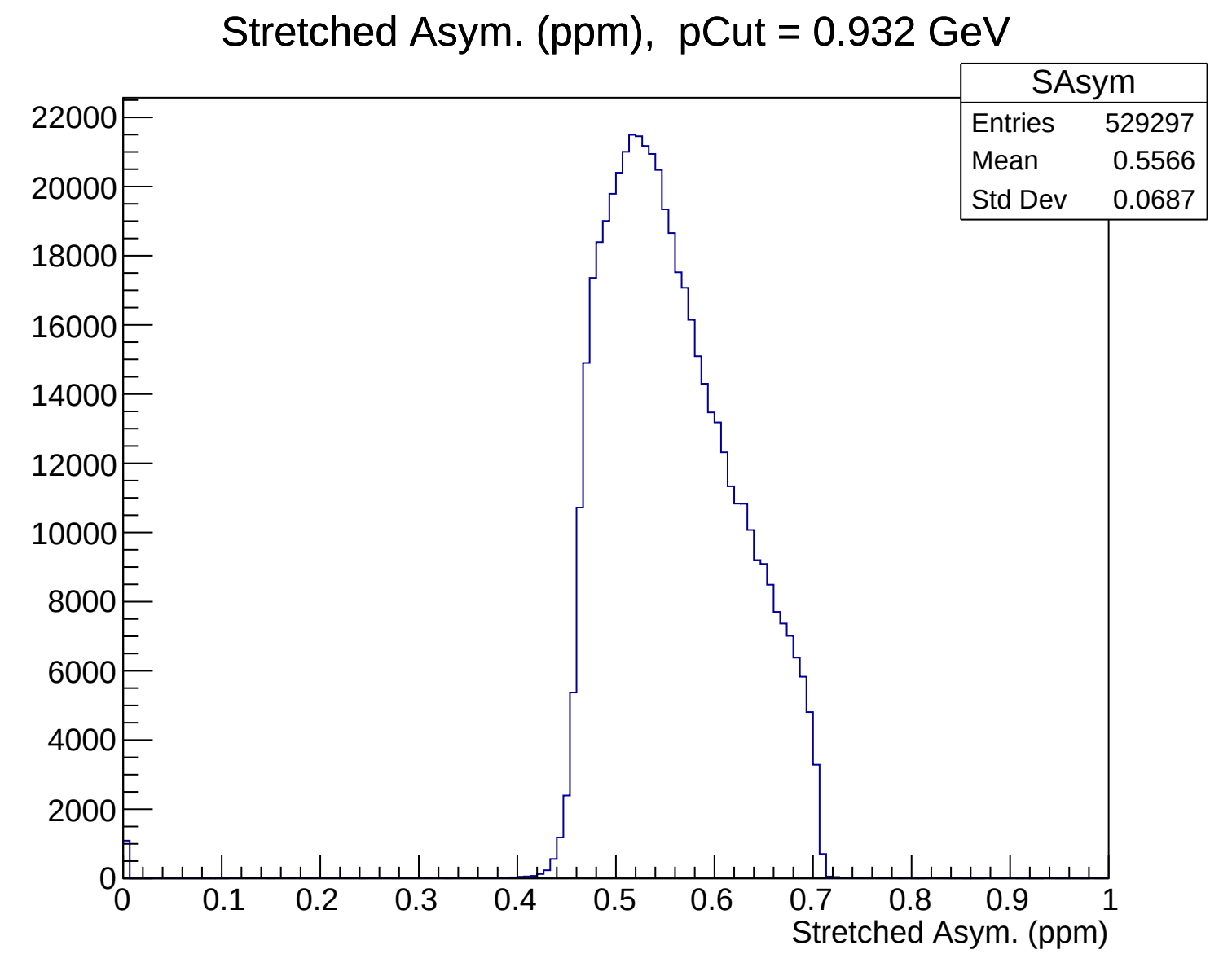

Q^2 (GeV/c)^2, pCut = 0.931 GeV
Q2
Entries 537108
Mean 0.006277
Std Dev 0.001205
22000
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0
0.002
0.004
0.006
0.008
0.01
0.012
0.014
Q^2 (GeV/c)^2

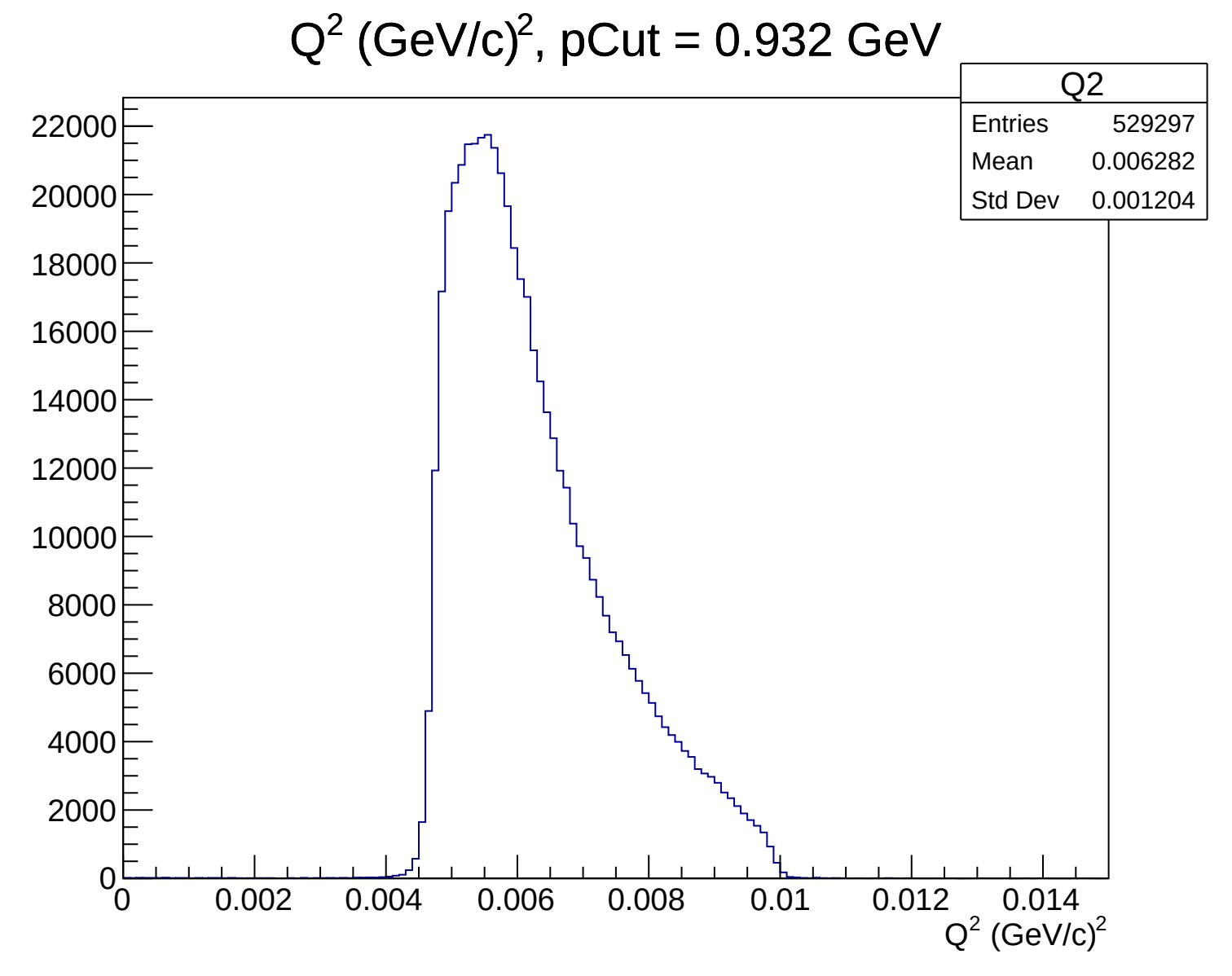

Sensitivity, pCut = 0.931 GeV
sens
Entries 537108
Mean 0.02206
Std Dev 0.003846
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0 0.005 0.01 0.015 0.02 0.025 0.03 0.035 0.04 0.045 0.05

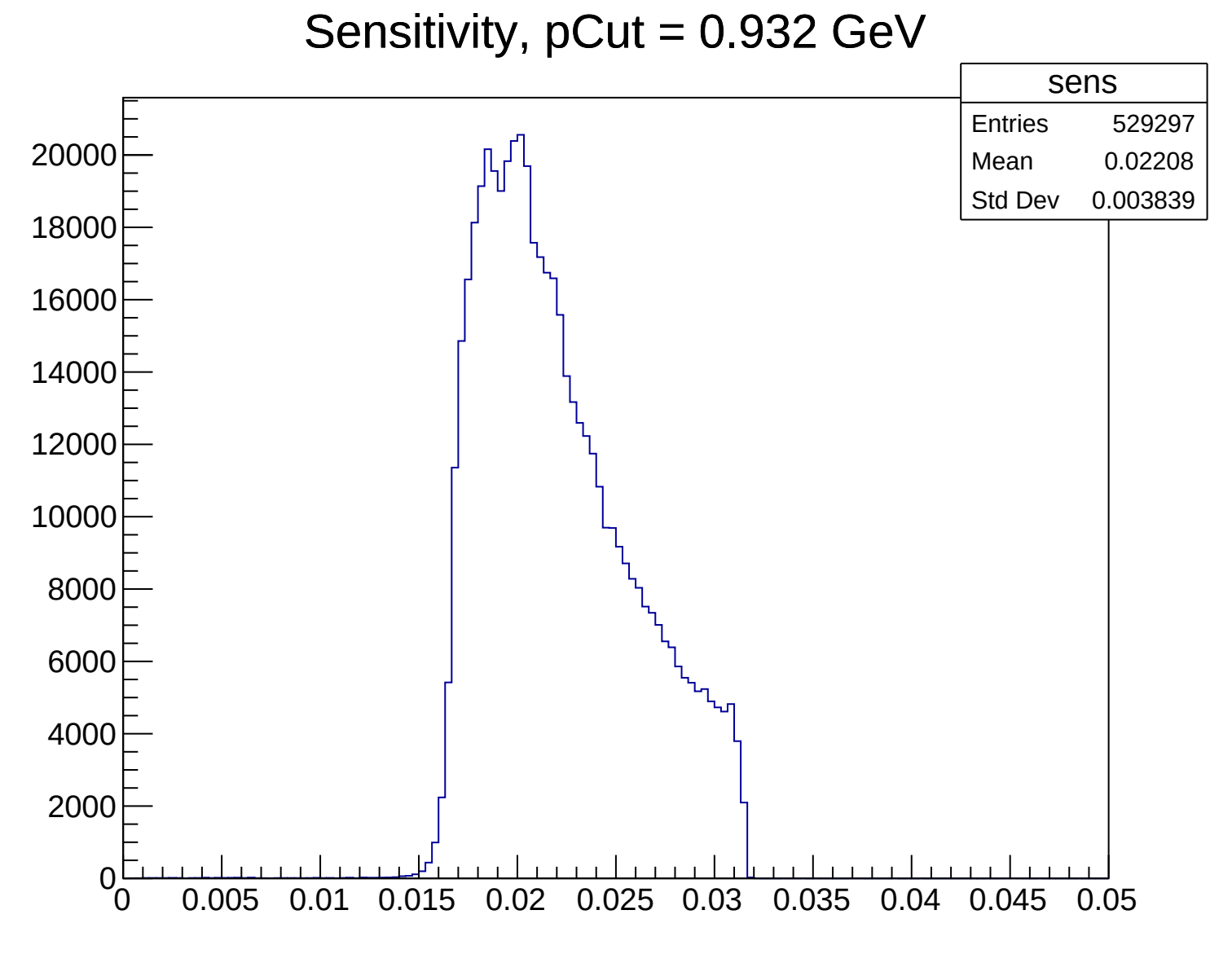

ADC raw (run21121, detZ = 1.3 m)
huq
Entries 738920
Mean 515.4
Std Dev 27.19
P.upQadcR
Ped. cut = 510.5
ADC raw
RHRS momentum (run21121)
All events
US accepted
US missed
p@edge = 0.9454 GeV
hp1
Entries 638407
Mean 0.9413
Std Dev 0.008715
hpup2
Entries 330561
Mean 0.9472
Std Dev 0.0008495
hpup3
Entries 307846
Mean 0.935
Std Dev 0.008945
pCut = 0.9320 GeV
R.gold.p (GeV)

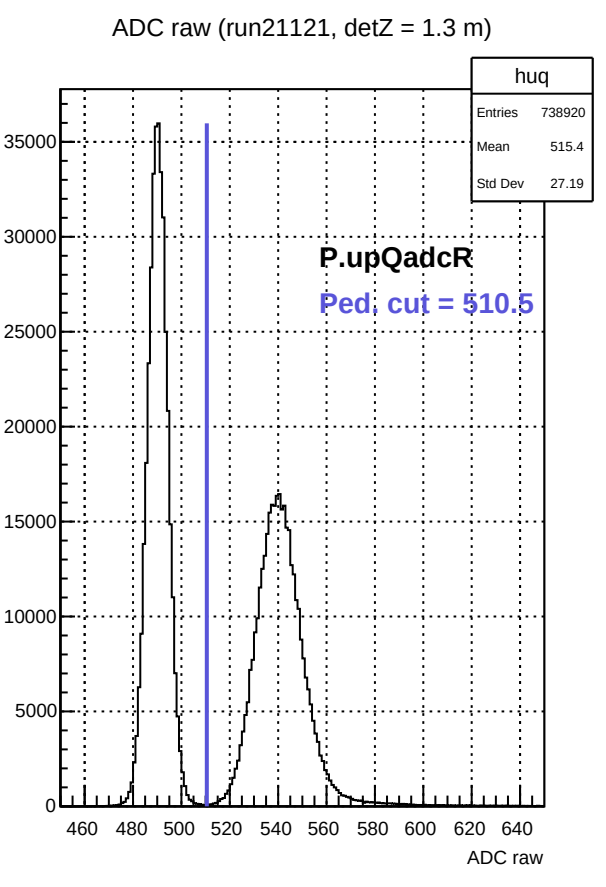

θlab (deg), pCut = 0.932 GeV
Theta
Entries 529297
Mean 4.775
Std Dev 0.4454
22000
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
2
3
4
5
6
7
8
θlab (deg)

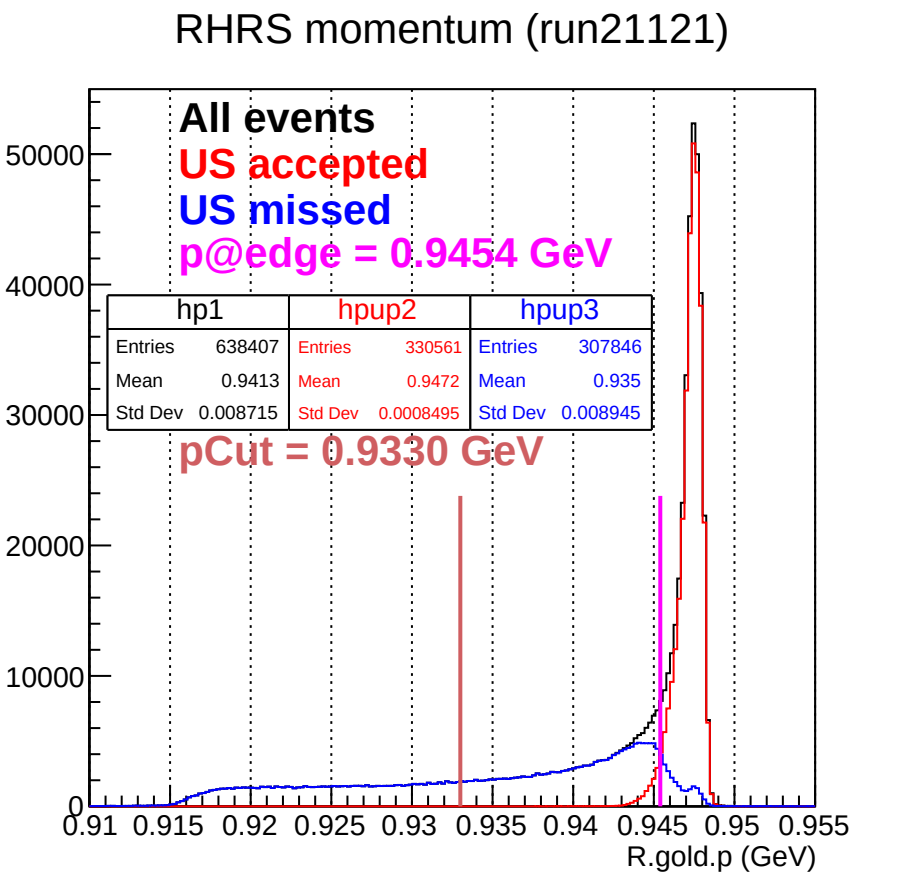

Asymmetry (ppm), pCut = 0.932 GeV
Asym
Entries 529297
Mean 0.5694
Std Dev 0.07241
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1
Asymmetry (ppm)

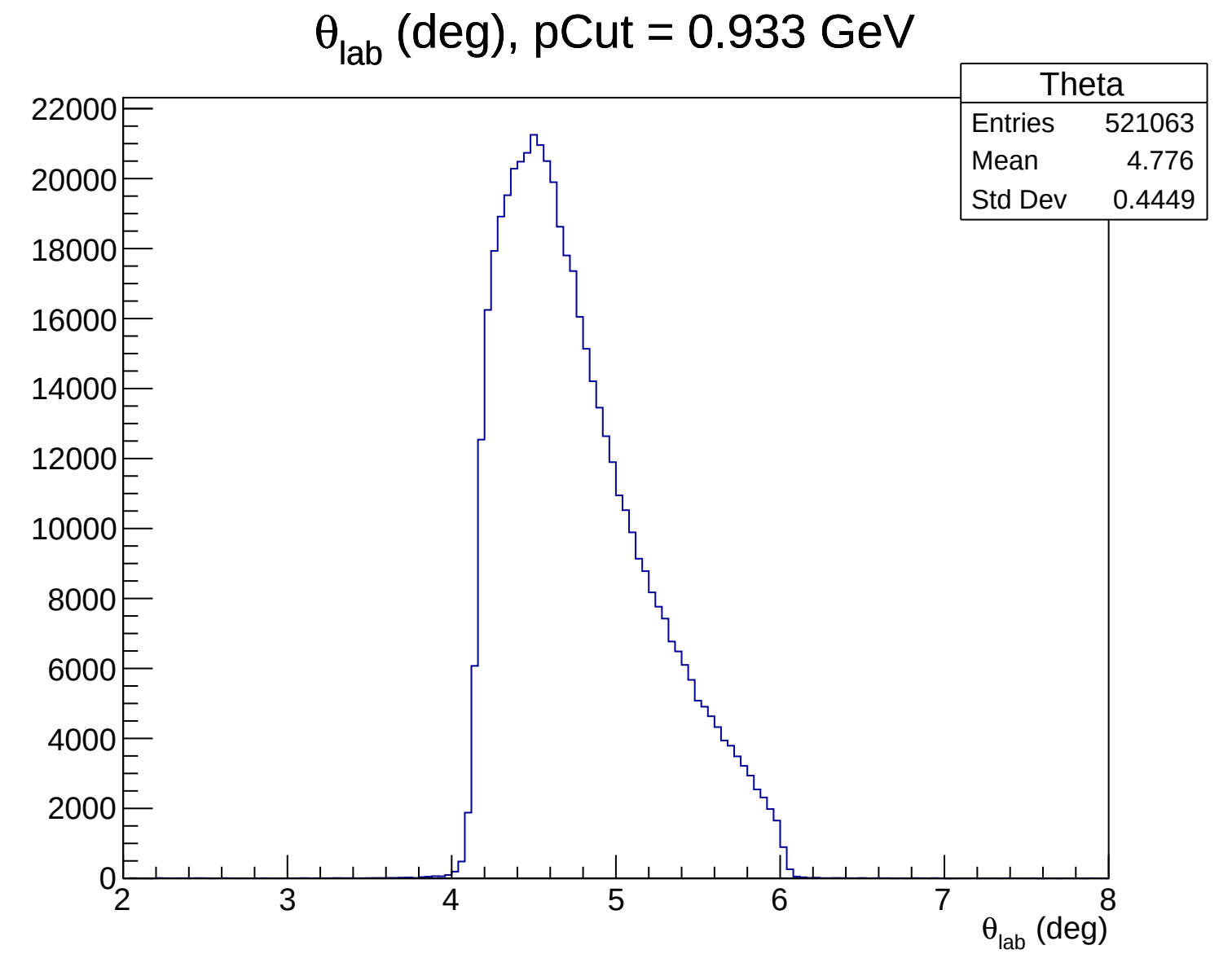

Stretched Asym. (ppm), pCut = 0.932 GeV
SAsym
Entries 529297
Mean 0.5566
Std Dev 0.0687
22000
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
Stretched Asym. (ppm)

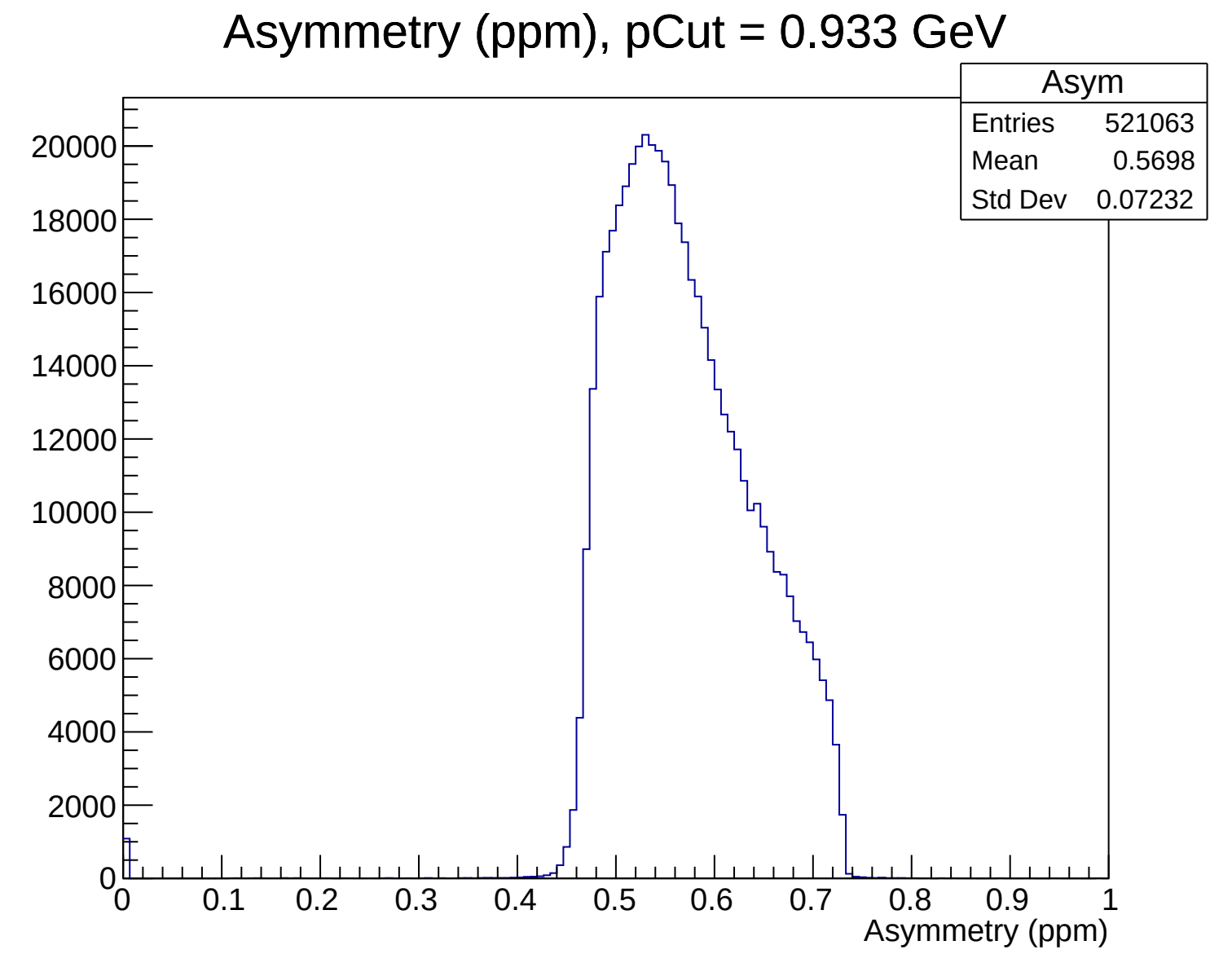

Q^2 (GeV/c)^2, pCut = 0.932 GeV
Q2
Entries 529297
Mean 0.006282
Std Dev 0.001204
22000
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0
0.002
0.004
0.006
0.008
0.01
0.012
0.014
Q^2 (GeV/c)^2

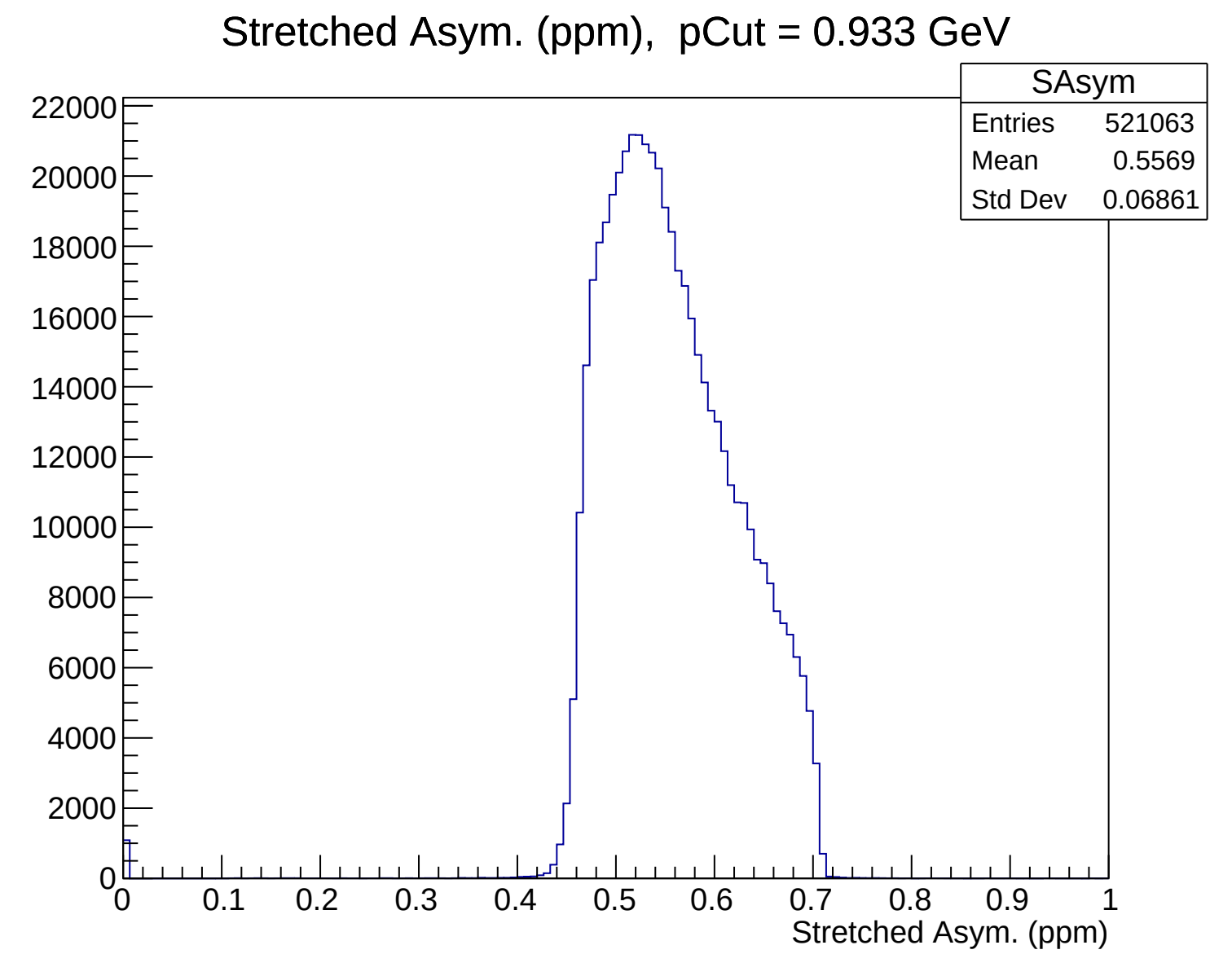

Sensitivity, pCut = 0.932 GeV
sens
Entries 529297
Mean 0.02208
Std Dev 0.003839
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0 0.005 0.01 0.015 0.02 0.025 0.03 0.035 0.04 0.045 0.05

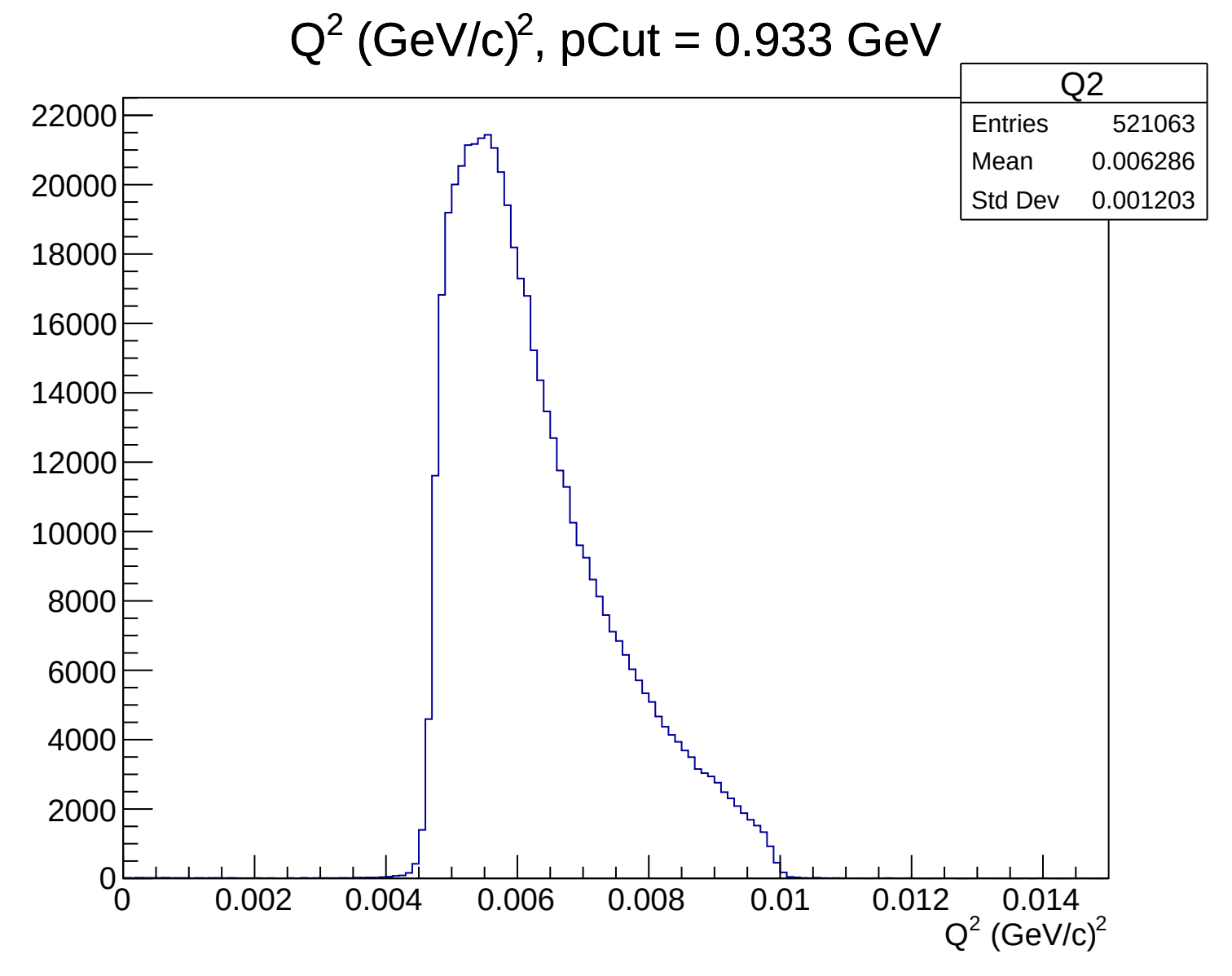

ADC raw (run21121, detZ = 1.3 m)
huq
Entries 738920
Mean 515.4
Std Dev 27.19
P.upQadcR
Ped. cut = 510.5
35000
30000
25000
20000
15000
10000
5000
0
460 480 500 520 540 560 580 600 620 640
ADC raw

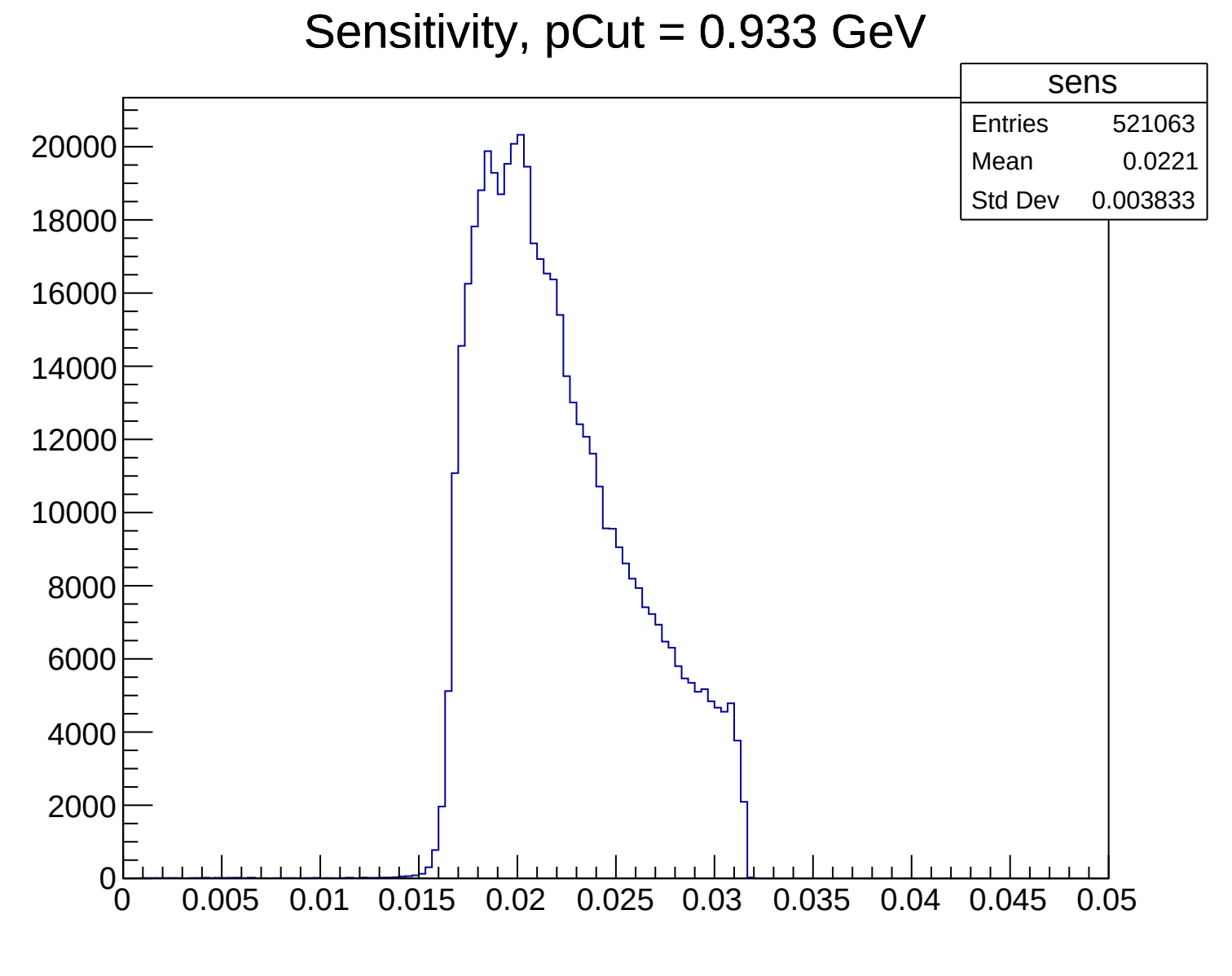

RHRS momentum (run21121)
All events
US accepted
US missed
p@edge = 0.9454 GeV
hp1
Entries 638407
Mean 0.9413
Std Dev 0.008715
hpup2
Entries 330561
Mean 0.9472
Std Dev 0.0008495
hpup3
Entries 307846
Mean 0.935
Std Dev 0.008945
pCut = 0.9330 GeV
50000
40000
30000
20000
10000
0
0.91 0.915 0.92 0.925 0.93 0.935 0.94 0.945 0.95 0.955
R.gold.p (GeV)

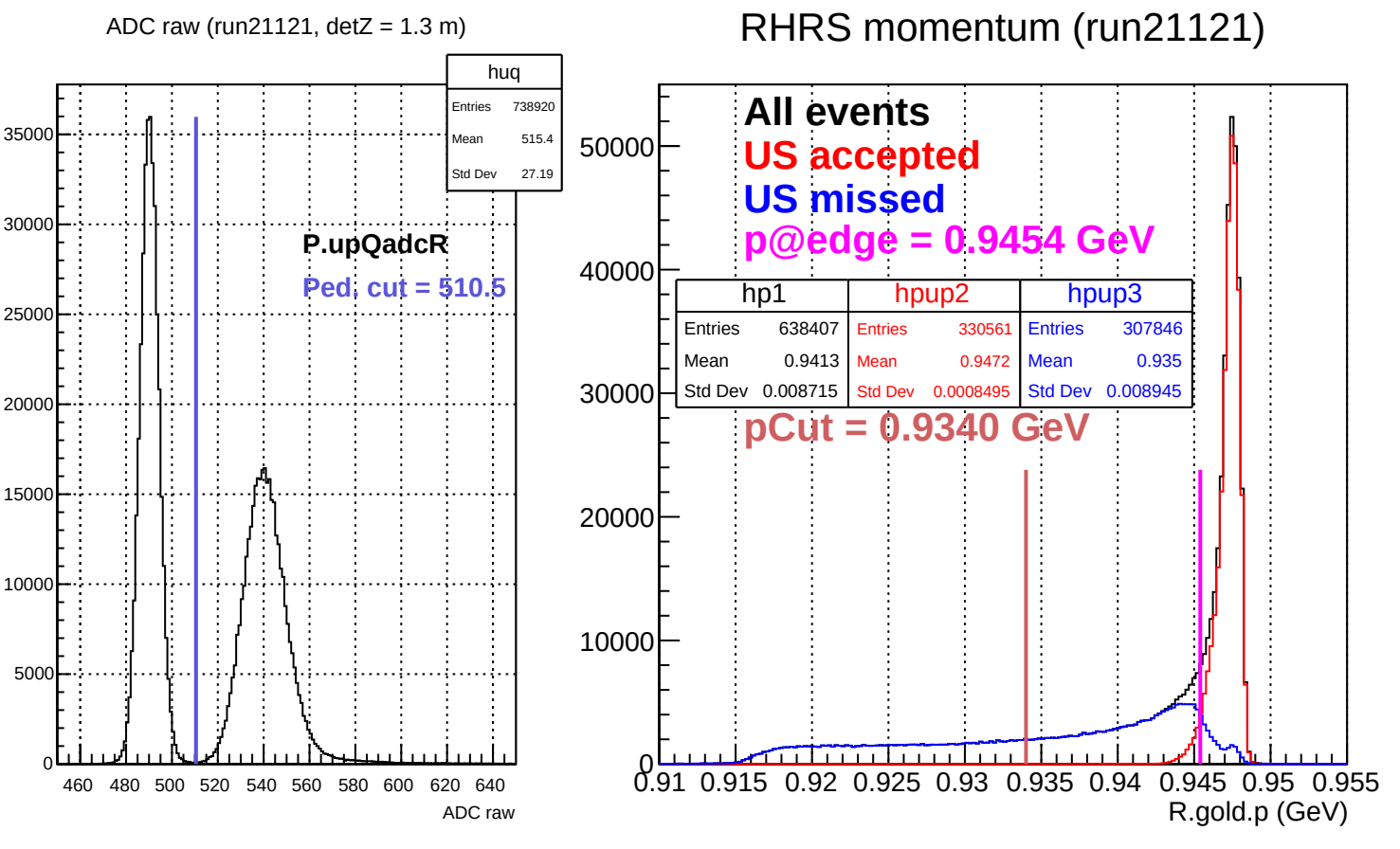

θlab (deg), pCut = 0.933 GeV
Theta
Entries 521063
Mean 4.776
Std Dev 0.4449
22000
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
2
3
4
5
6
7
8
θlab (deg)

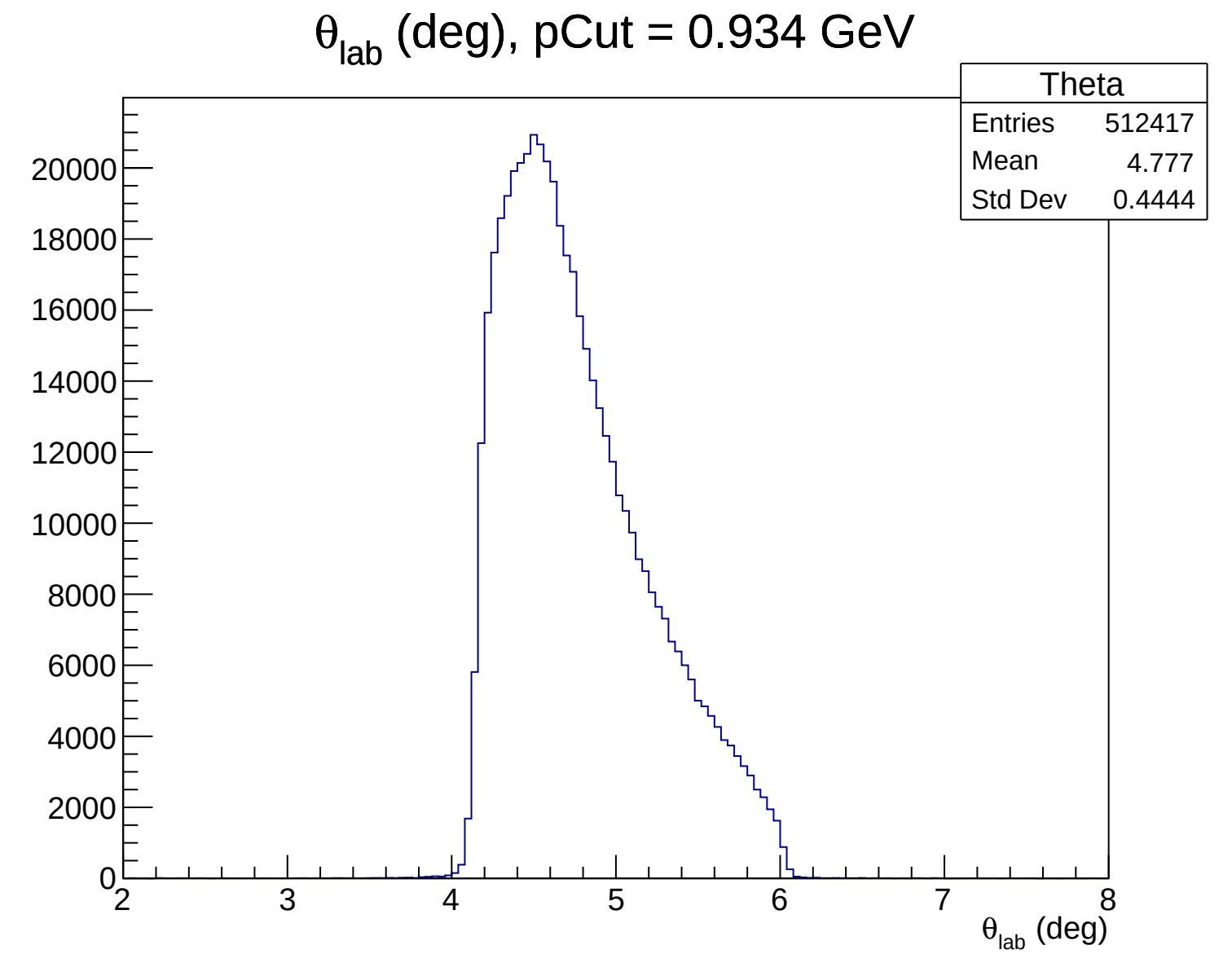

Asymmetry (ppm), pCut = 0.933 GeV
Asym
Entries 521063
Mean 0.5698
Std Dev 0.07232
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1
Asymmetry (ppm)

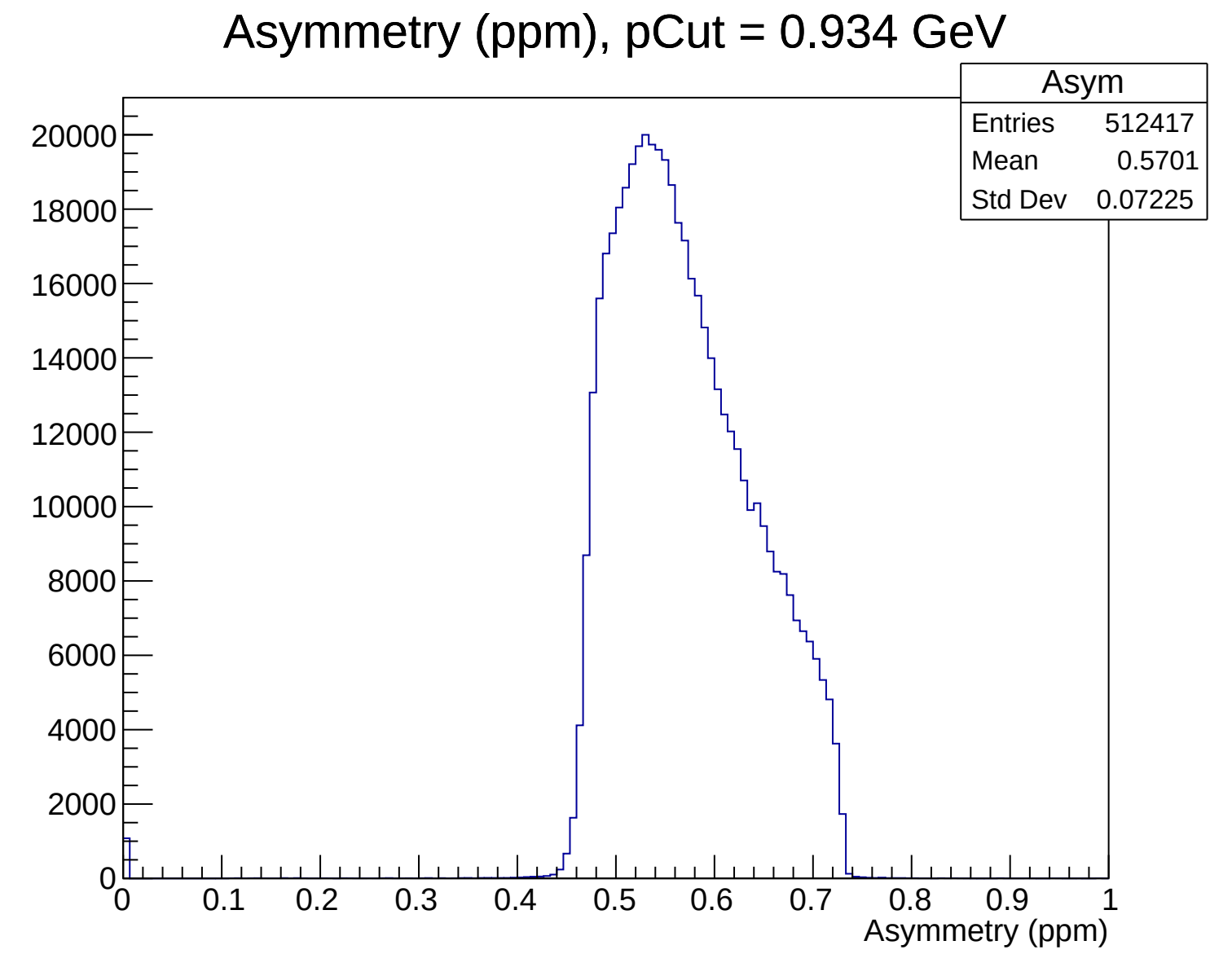

Stretched Asym. (ppm), pCut = 0.933 GeV
SAsym
Entries 521063
Mean 0.5569
Std Dev 0.06861
22000
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
Stretched Asym. (ppm)

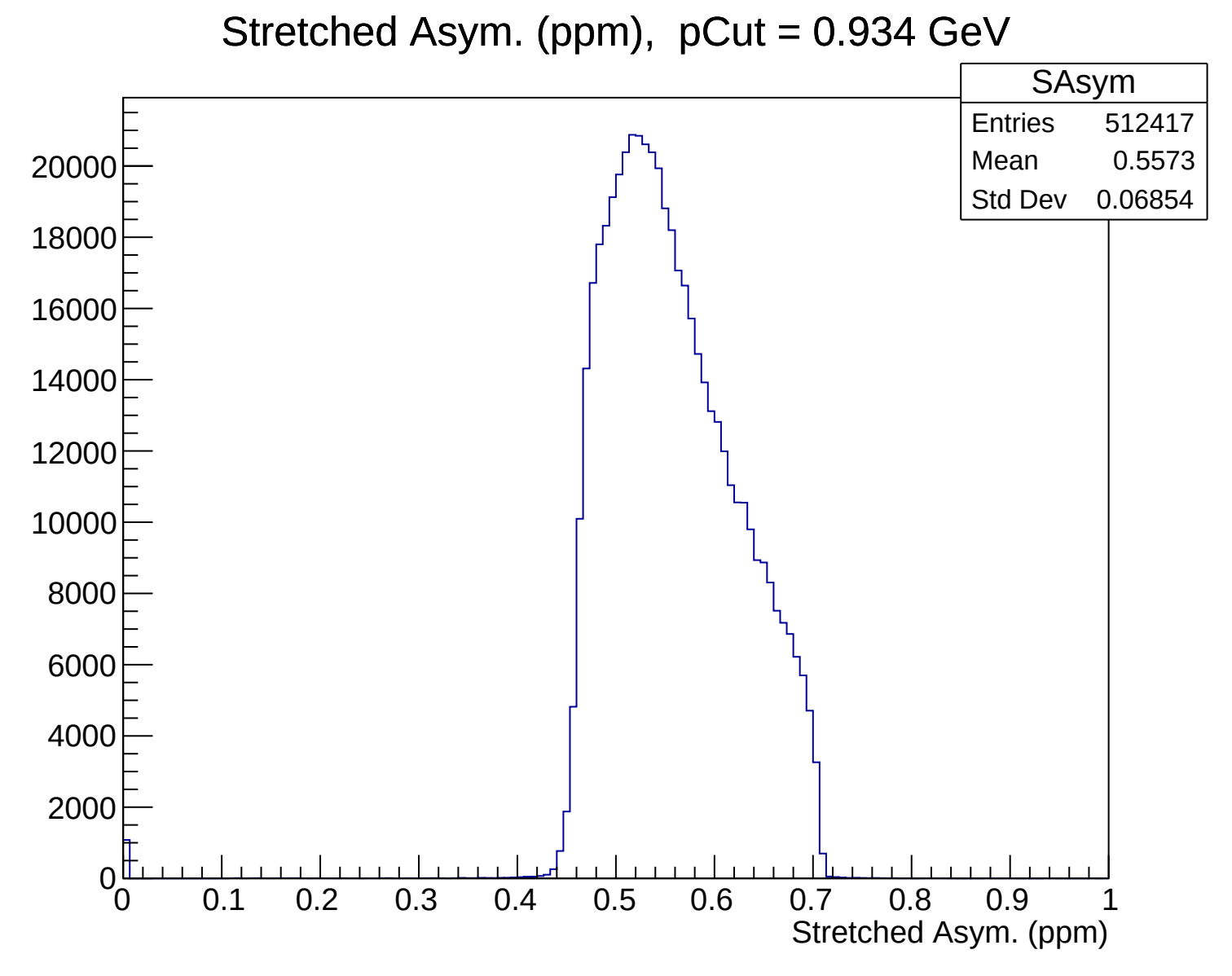

Q^2 (GeV/c)^2, pCut = 0.933 GeV
Q2
Entries 521063
Mean 0.006286
Std Dev 0.001203
22000
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0
0.002
0.004
0.006
0.008
0.01
0.012
0.014
Q^2 (GeV/c)^2

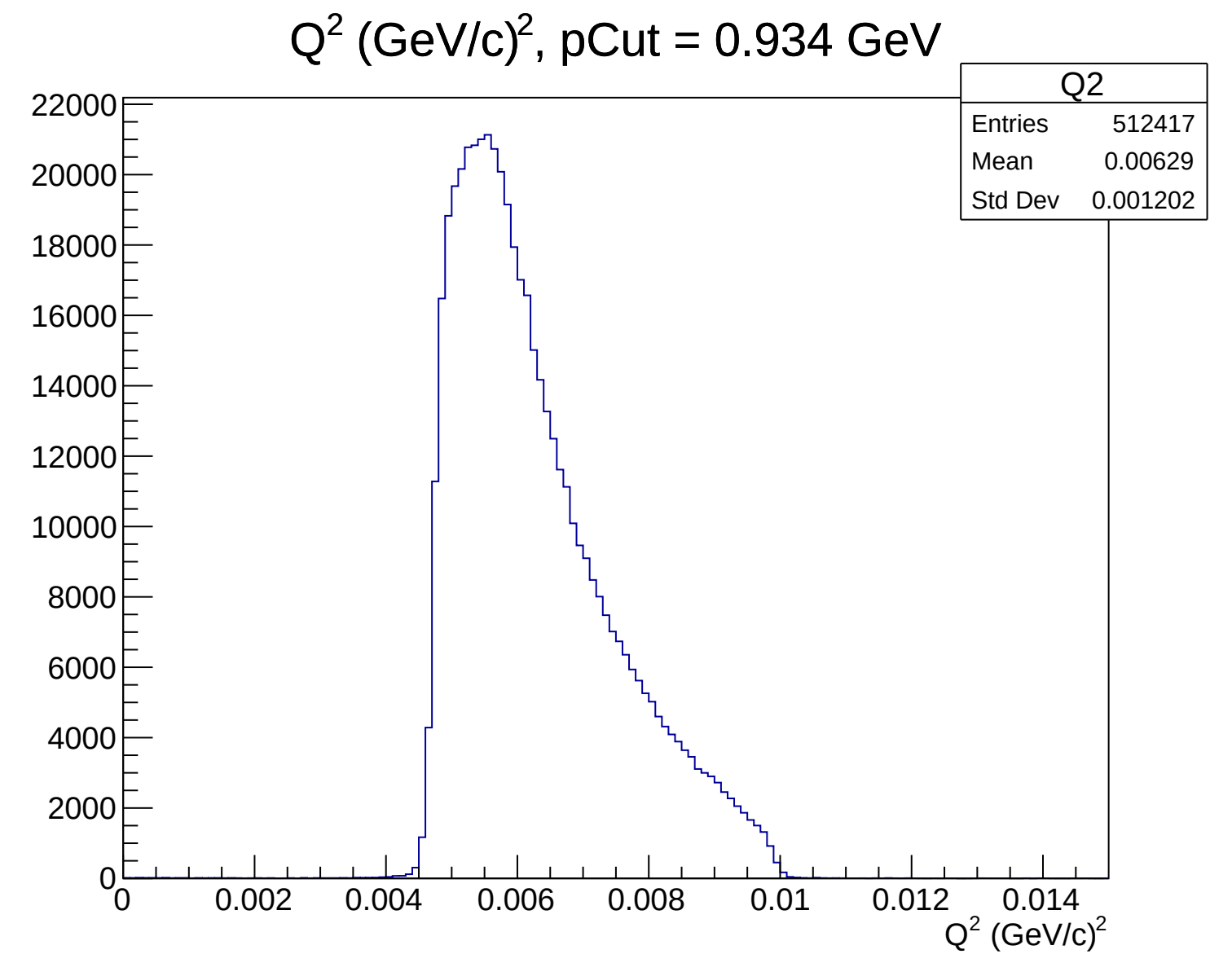

Sensitivity, pCut = 0.933 GeV
sens
Entries 521063
Mean 0.0221
Std Dev 0.003833
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0
0.005
0.01
0.015
0.02
0.025
0.03
0.035
0.04
0.045
0.05

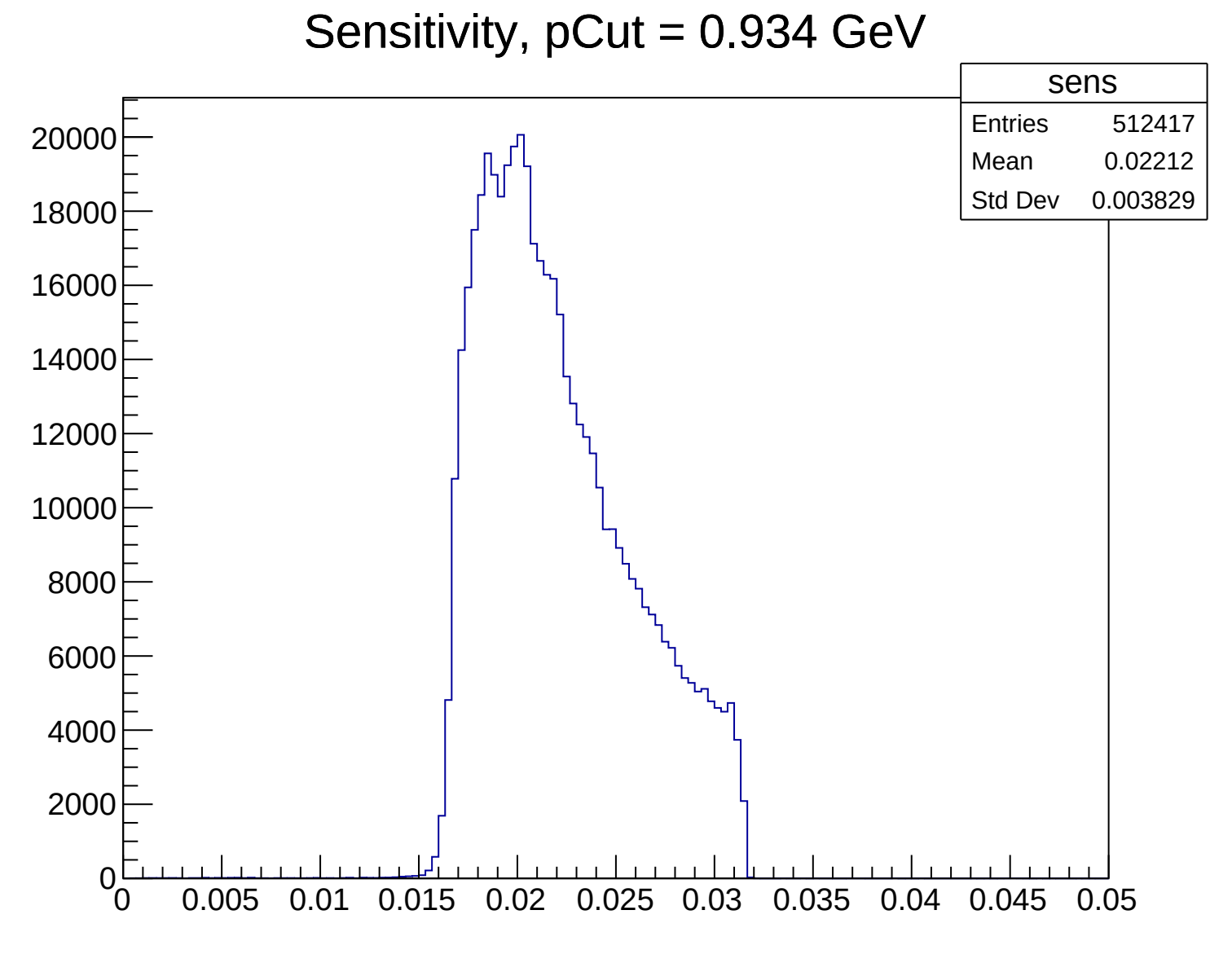

ADC raw (run21121, detZ = 1.3 m)
huq
Entries 738920
Mean 515.4
Std Dev 27.19
P.upQadcR
Ped. cut = 510.5
ADC raw
RHRS momentum (run21121)
All events
US accepted
US missed
p@edge = 0.9454 GeV
hp1
Entries 638407
Mean 0.9413
Std Dev 0.008715
hpup2
Entries 330561
Mean 0.9472
Std Dev 0.0008495
hpup3
Entries 307846
Mean 0.935
Std Dev 0.008945
pCut = 0.9340 GeV
R.gold.p (GeV)

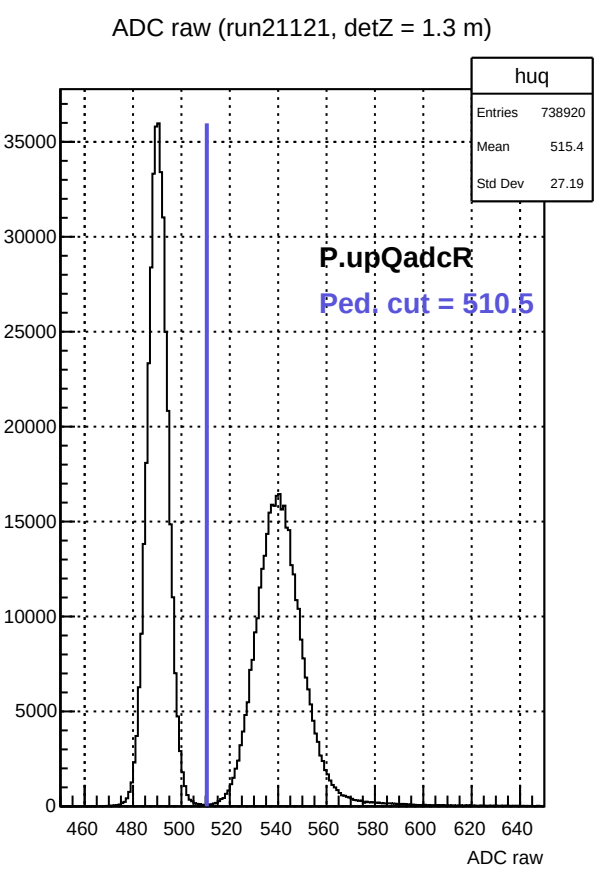

θlab (deg), pCut = 0.934 GeV
Theta
Entries 512417
Mean 4.777
Std Dev 0.4444
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
2
3
4
5
6
7
8
θlab (deg)

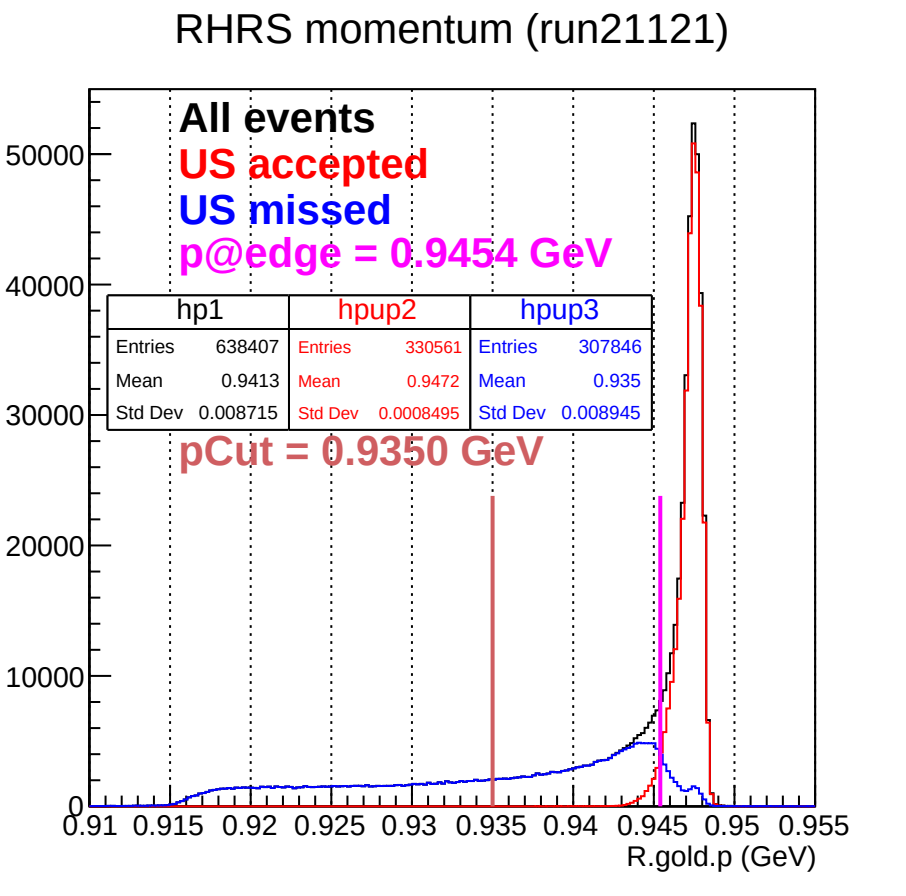

Asymmetry (ppm), pCut = 0.934 GeV
Asym
Entries 512417
Mean 0.5701
Std Dev 0.07225
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1
Asymmetry (ppm)

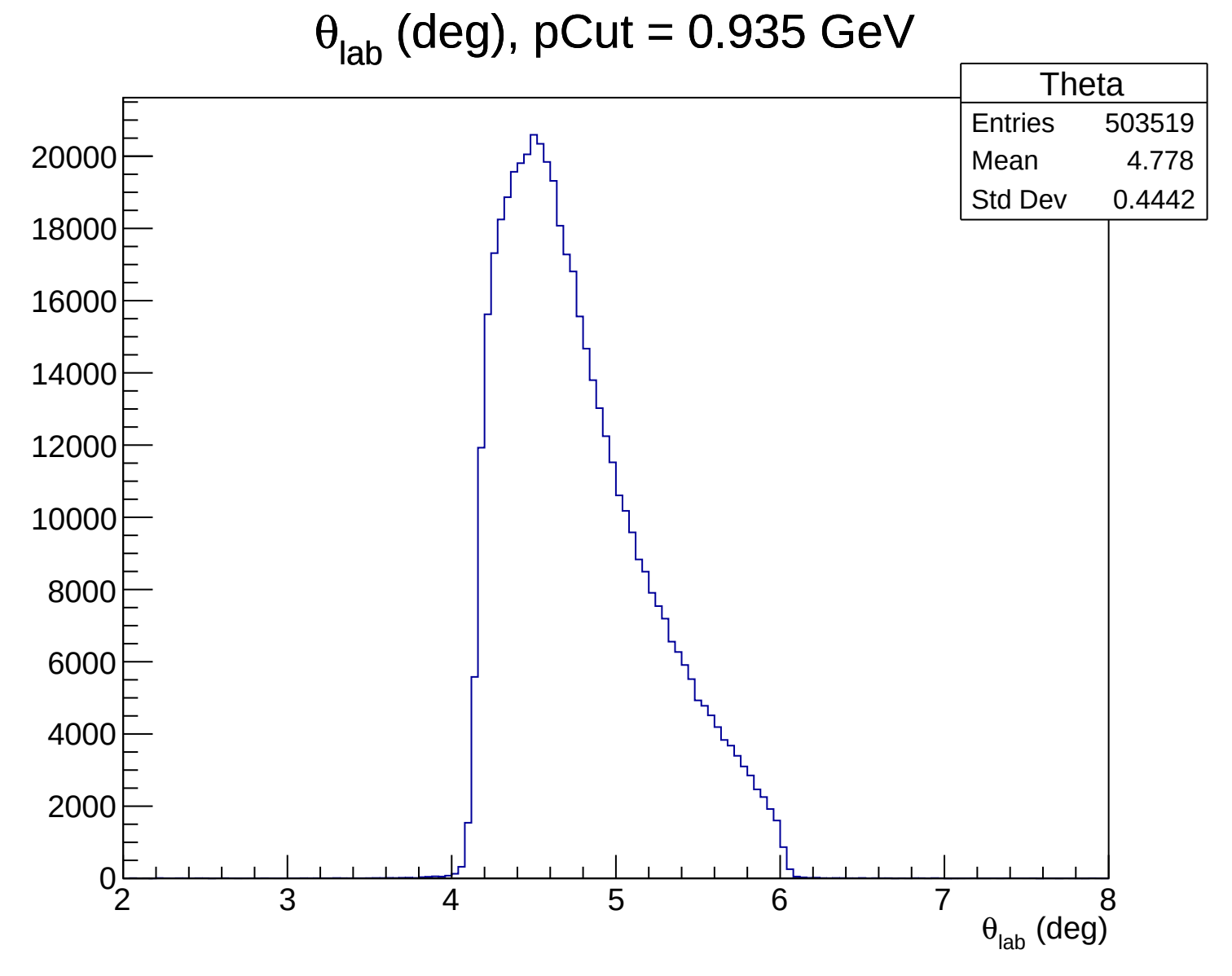

Stretched Asym. (ppm), pCut = 0.934 GeV
SAsym
Entries 512417
Mean 0.5573
Std Dev 0.06854
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1
Stretched Asym. (ppm)

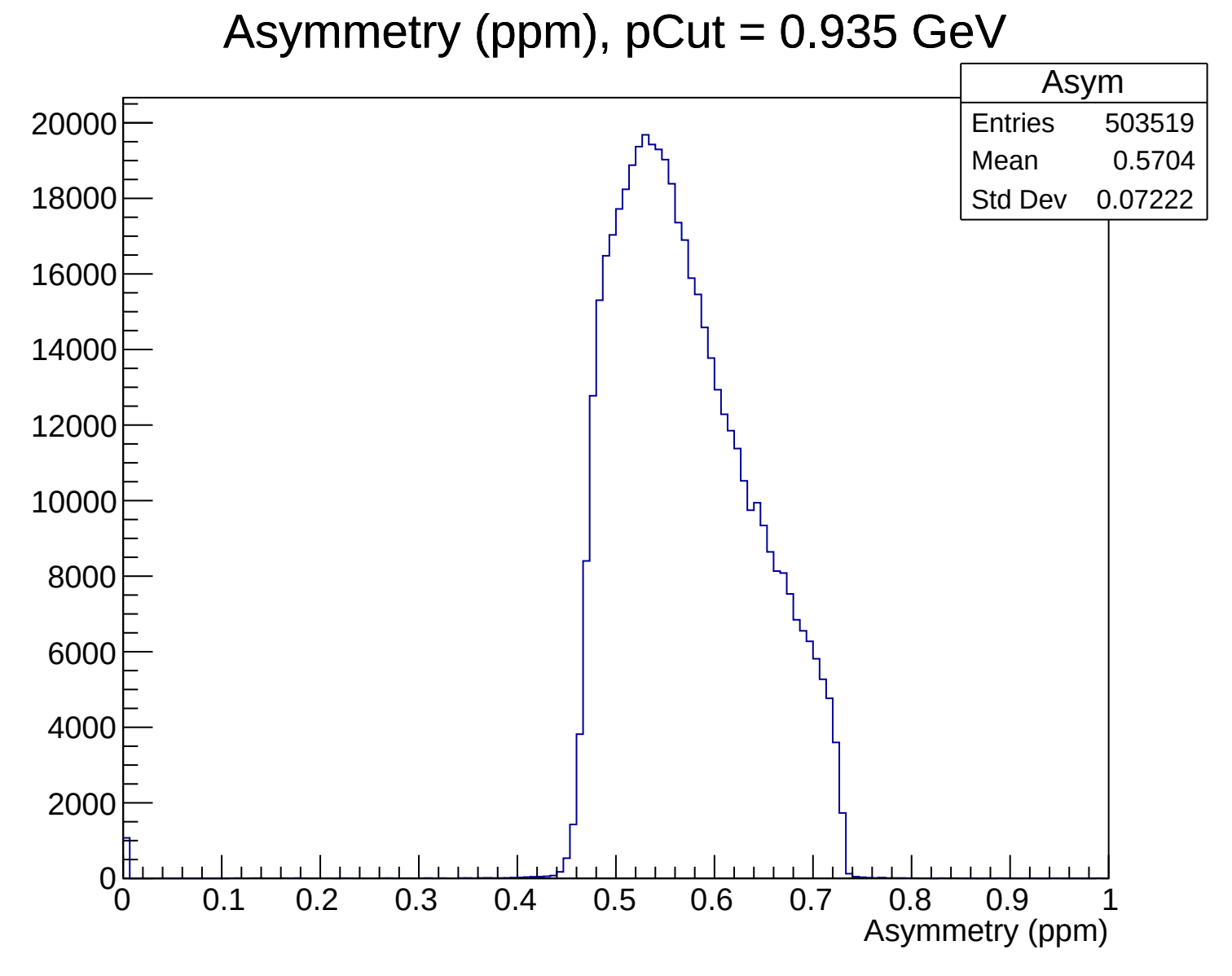

Q^2 (GeV/c)^2, pCut = 0.934 GeV
Q2
Entries 512417
Mean 0.00629
Std Dev 0.001202
22000
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0
0.002
0.004
0.006
0.008
0.01
0.012
0.014
Q^2 (GeV/c)^2

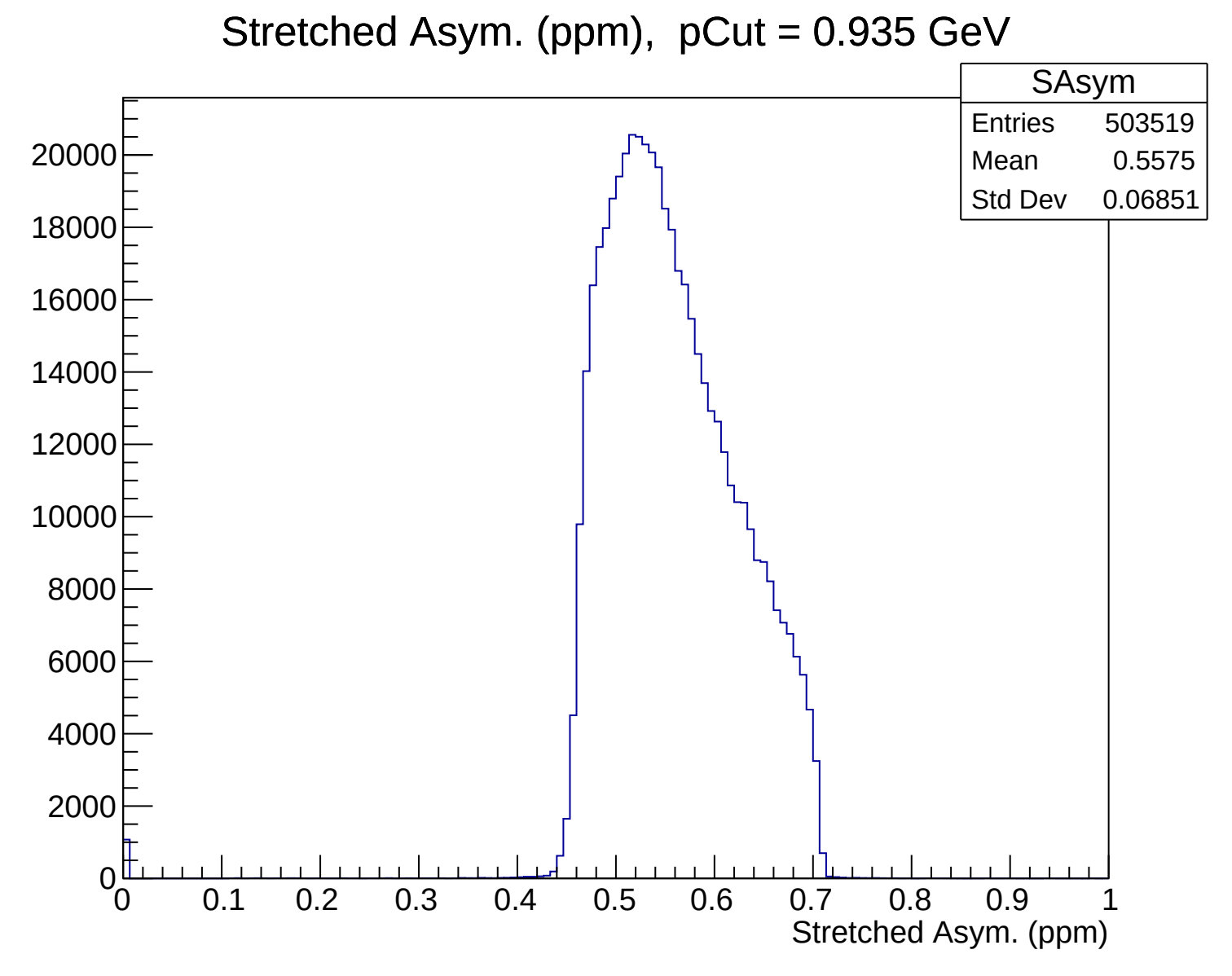

Sensitivity, pCut = 0.934 GeV
sens
Entries 512417
Mean 0.02212
Std Dev 0.003829
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0 0.005 0.01 0.015 0.02 0.025 0.03 0.035 0.04 0.045 0.05

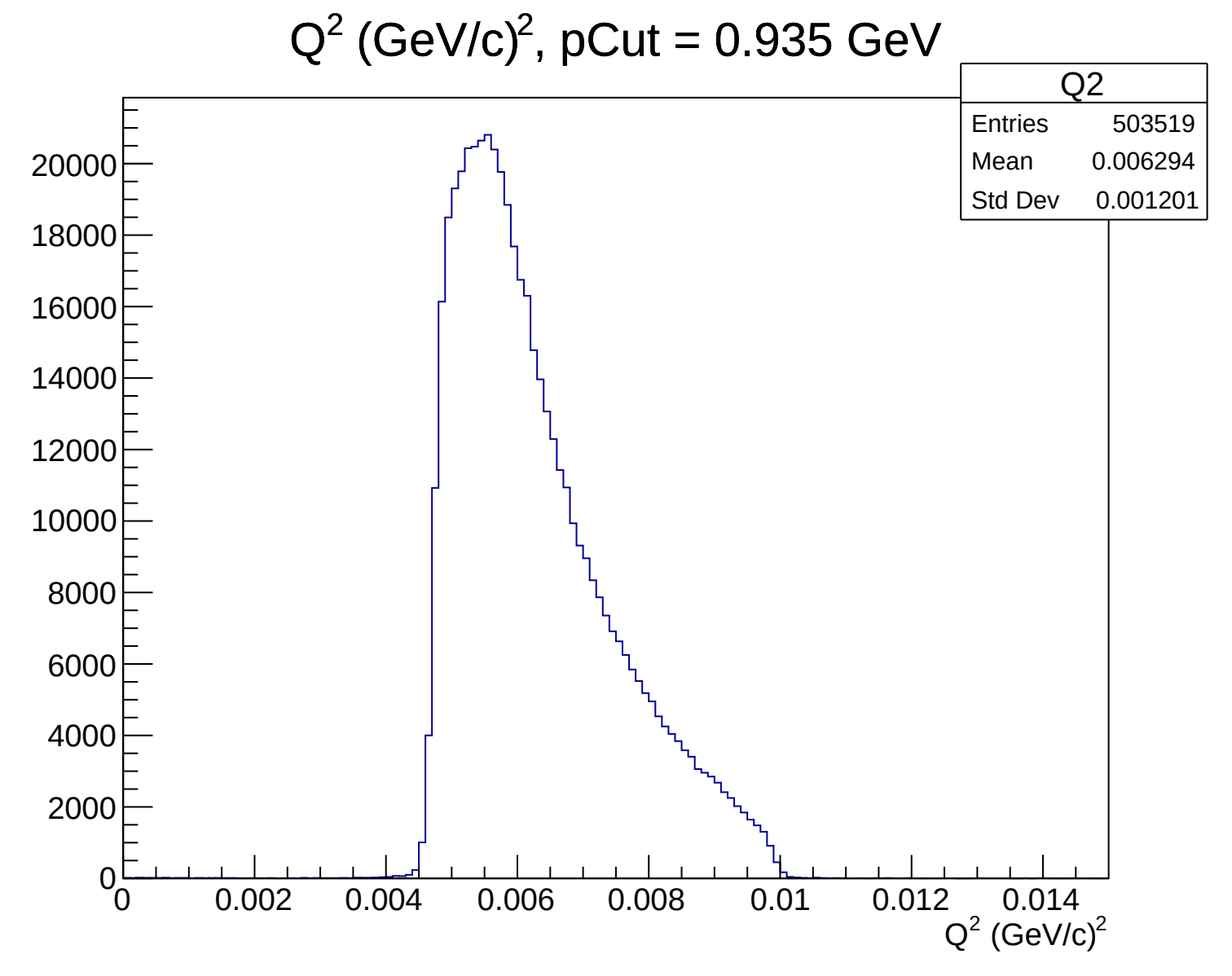

ADC raw (run21121, detZ = 1.3 m)
huq
Entries 738920
Mean 515.4
Std Dev 27.19
P.upQadcR
Ped. cut = 510.5
35000
30000
25000
20000
15000
10000
5000
0
460 480 500 520 540 560 580 600 620 640
ADC raw

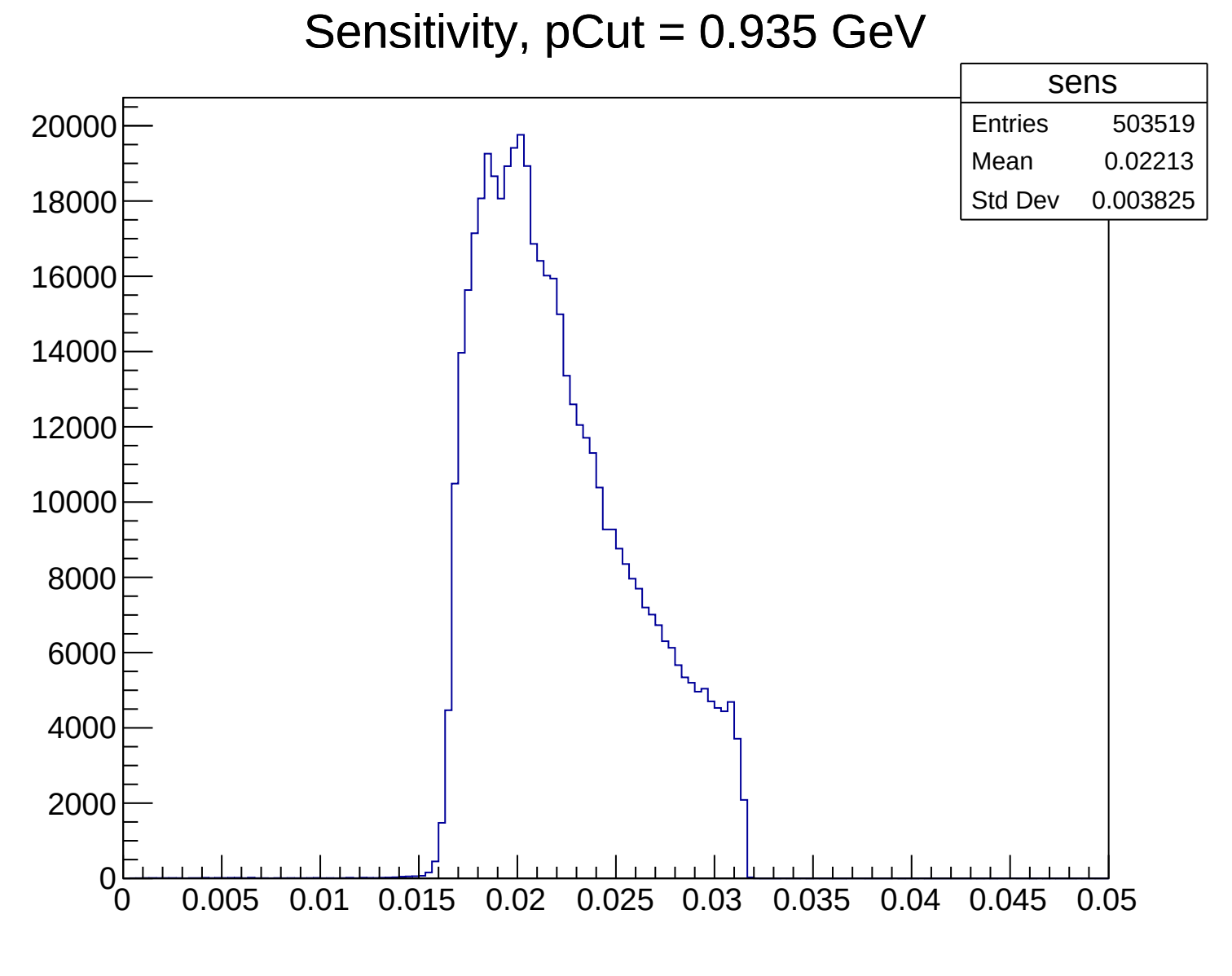

RHRS momentum (run21121)
All events
US accepted
US missed
p@edge = 0.9454 GeV
hp1
Entries 638407
Mean 0.9413
Std Dev 0.008715
hpup2
Entries 330561
Mean 0.9472
Std Dev 0.0008495
hpup3
Entries 307846
Mean 0.935
Std Dev 0.008945
pCut = 0.9350 GeV
50000
40000
30000
20000
10000
0
0.91 0.915 0.92 0.925 0.93 0.935 0.94 0.945 0.95 0.955
R.gold.p (GeV)

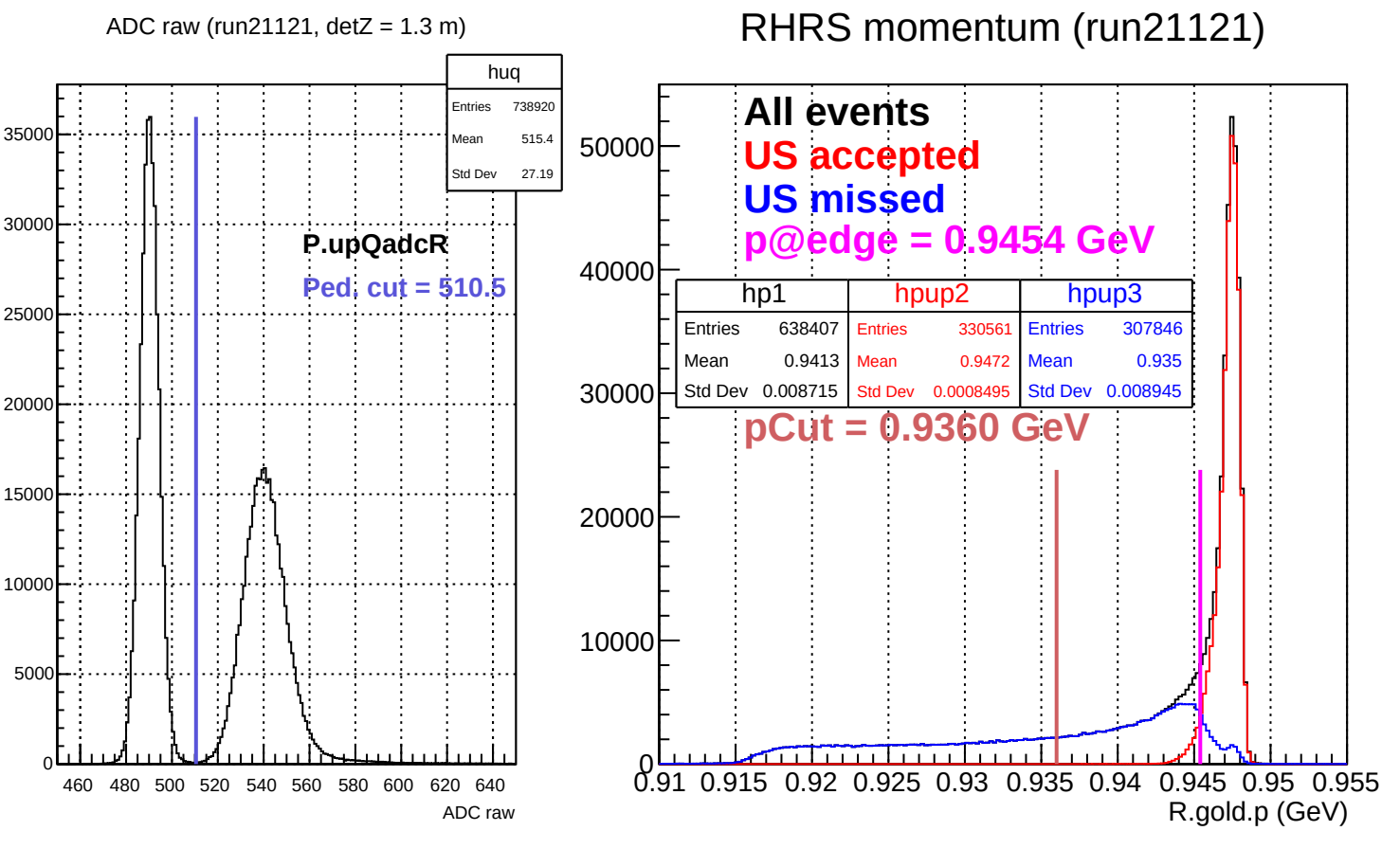

θlab (deg), pCut = 0.935 GeV
Theta
Entries 503519
Mean 4.778
Std Dev 0.4442
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
2
3
4
5
6
7
8
θlab (deg)

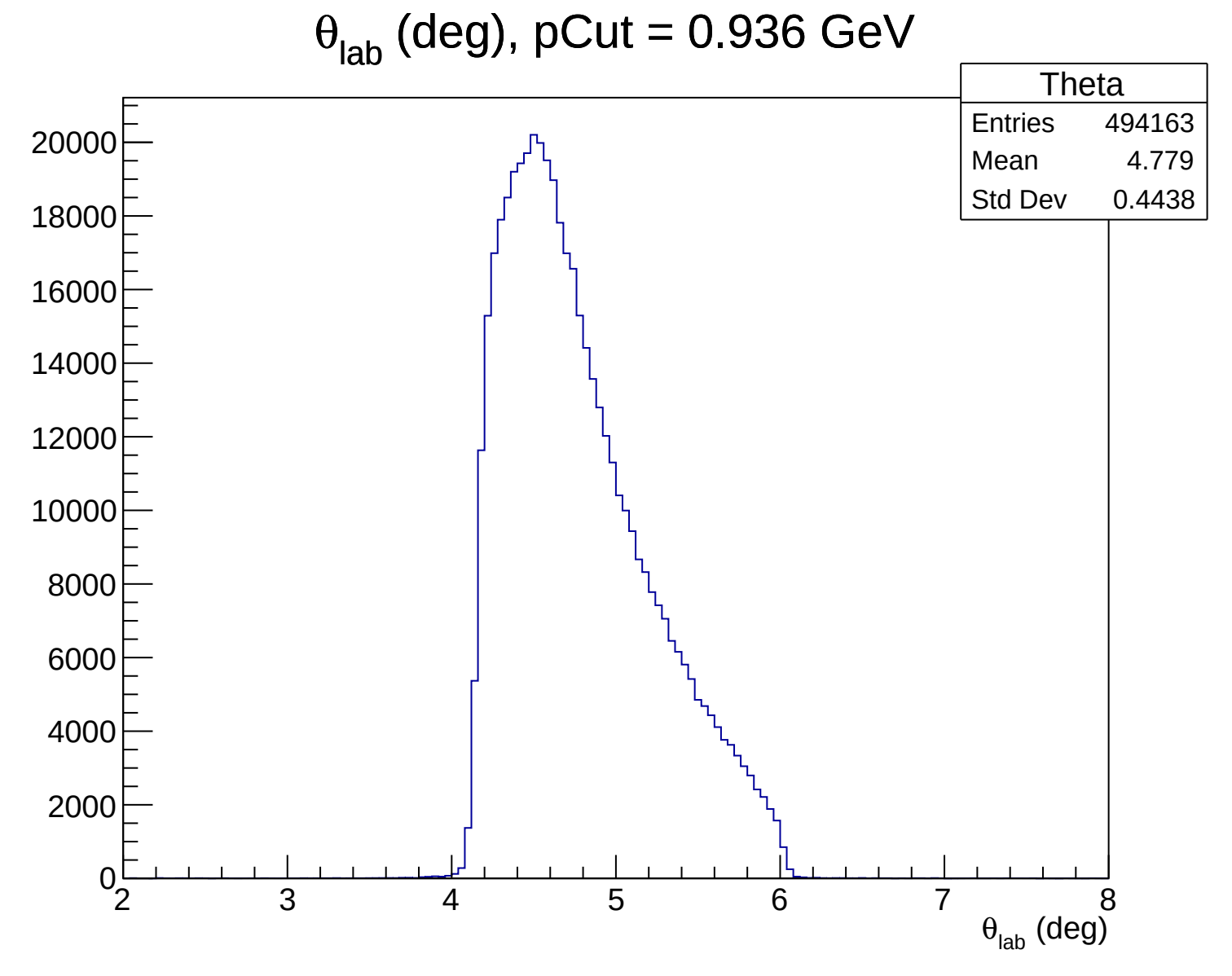

Asymmetry (ppm), pCut = 0.935 GeV
Asym
Entries 503519
Mean 0.5704
Std Dev 0.07222
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1
Asymmetry (ppm)

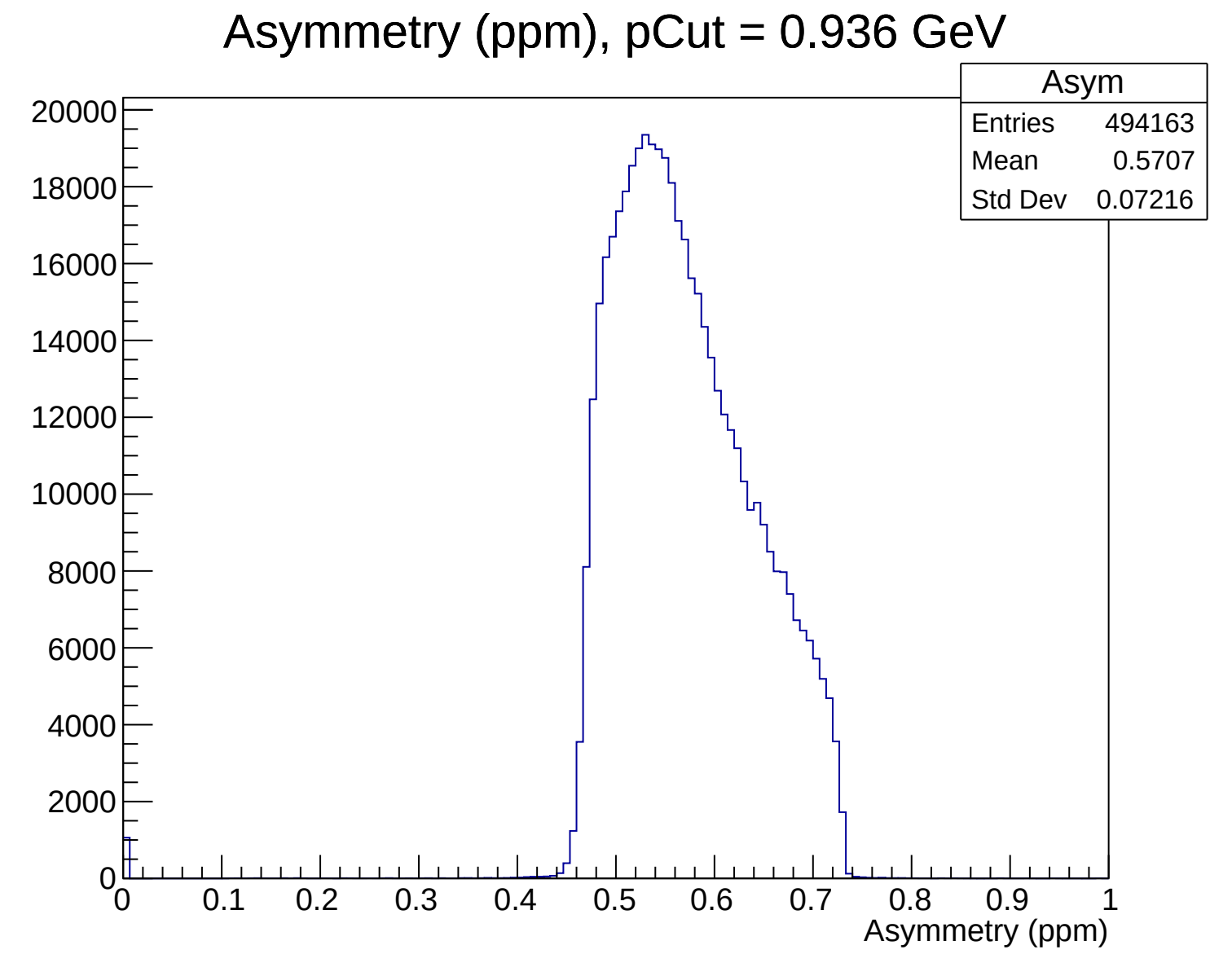

Stretched Asym. (ppm), pCut = 0.935 GeV
SAsym
Entries 503519
Mean 0.5575
Std Dev 0.06851
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1
Stretched Asym. (ppm)

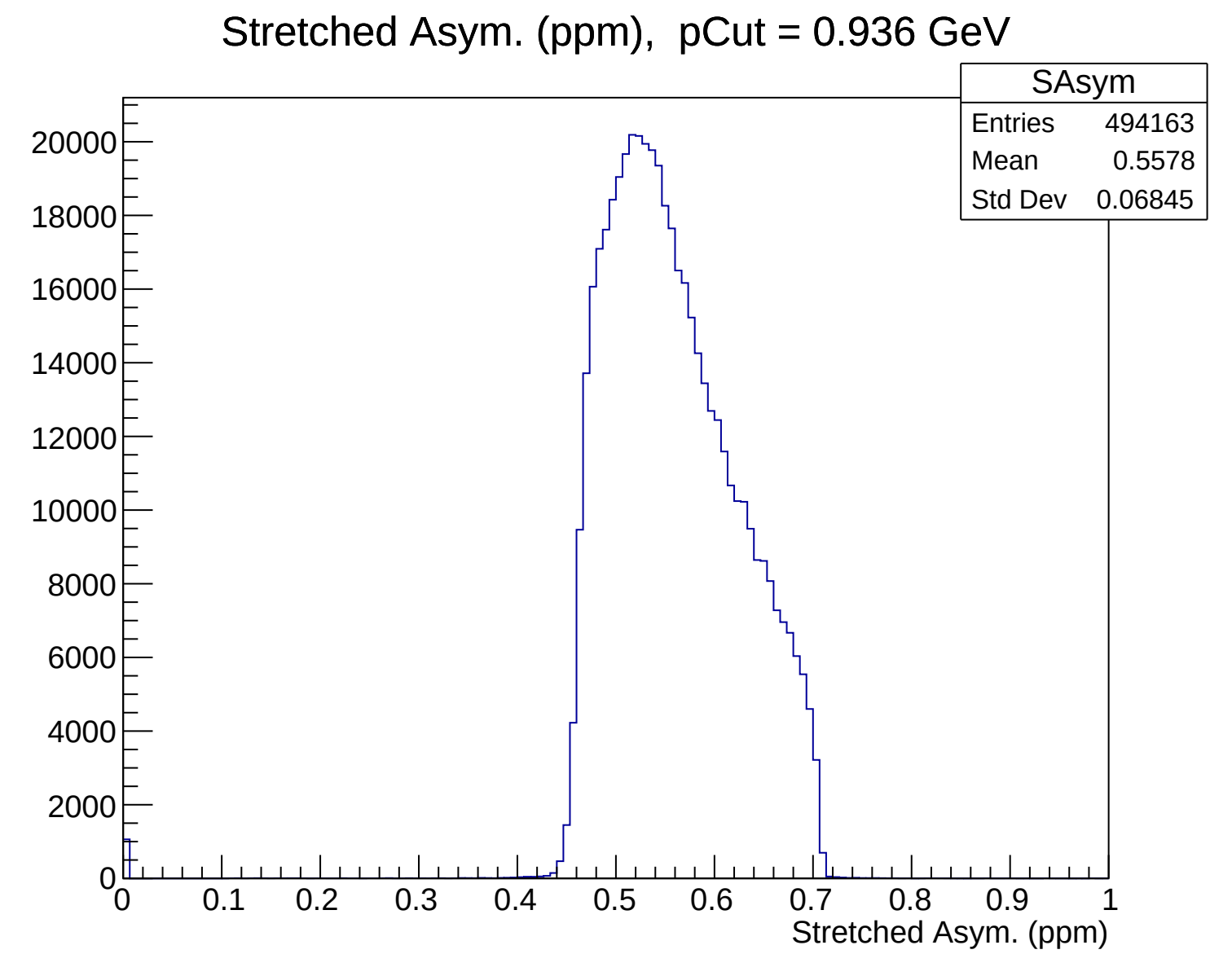

Q^2 (GeV/c)^2, pCut = 0.935 GeV
Q2
Entries 503519
Mean 0.006294
Std Dev 0.001201
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0
0.002
0.004
0.006
0.008
0.01
0.012
0.014
Q^2 (GeV/c)^2

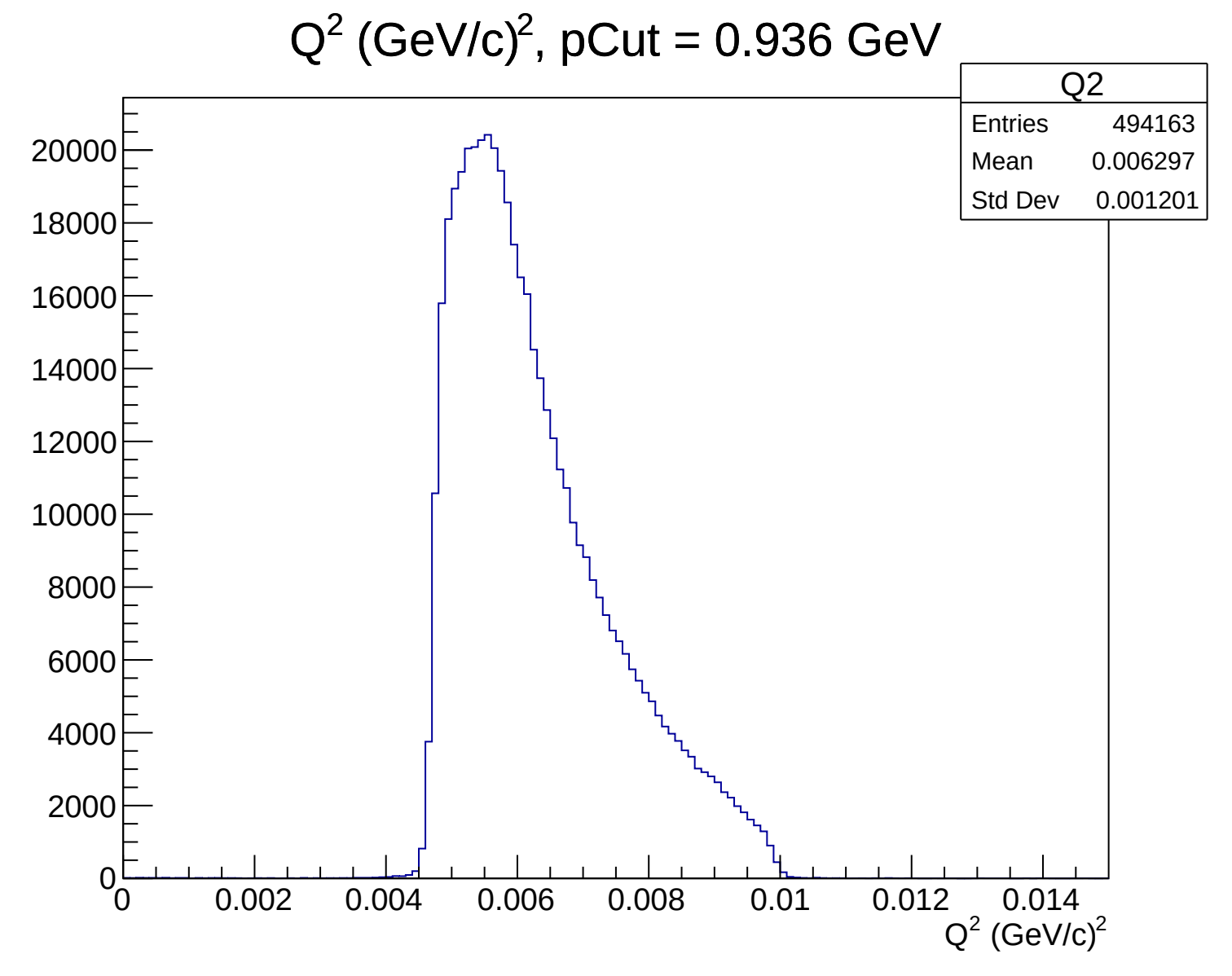

Sensitivity, pCut = 0.935 GeV
sens
Entries 503519
Mean 0.02213
Std Dev 0.003825
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0 0.005 0.01 0.015 0.02 0.025 0.03 0.035 0.04 0.045 0.05

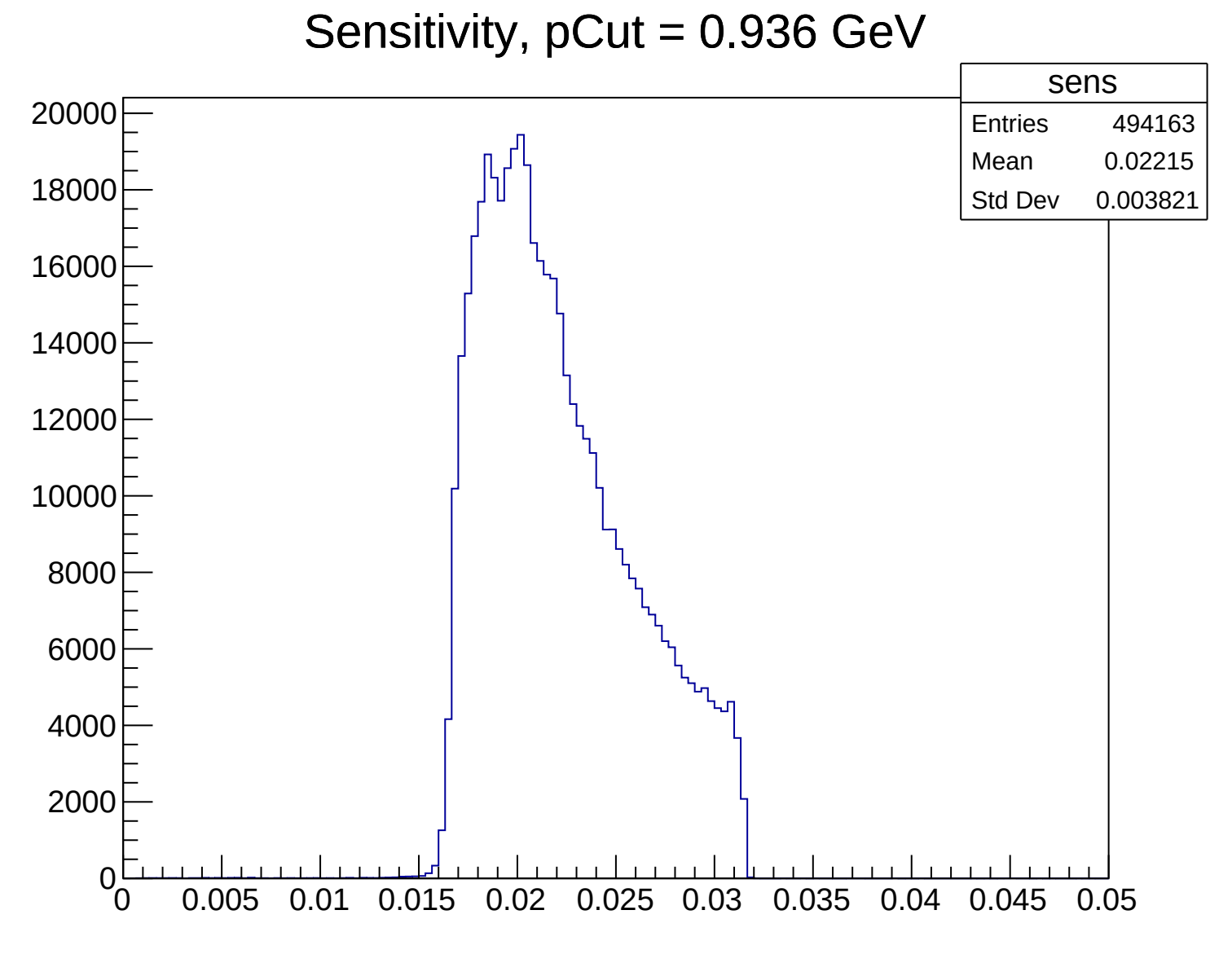

ADC raw (run21121, detZ = 1.3 m)
huq
Entries 738920
Mean 515.4
Std Dev 27.19
P.upQadcR
Ped. cut = 510.5
ADC raw
RHRS momentum (run21121)
All events
US accepted
US missed
p@edge = 0.9454 GeV
hp1
Entries 638407
Mean 0.9413
Std Dev 0.008715
hpup2
Entries 330561
Mean 0.9472
Std Dev 0.0008495
hpup3
Entries 307846
Mean 0.935
Std Dev 0.008945
pCut = 0.9360 GeV
R.gold.p (GeV)

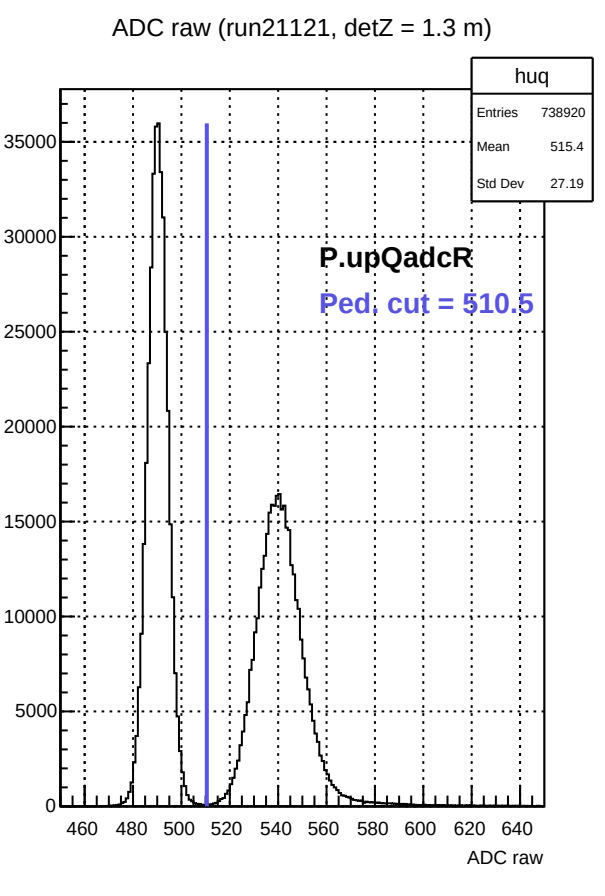

θlab (deg), pCut = 0.936 GeV
Theta
Entries 494163
Mean 4.779
Std Dev 0.4438
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
2
3
4
5
6
7
8
θlab (deg)

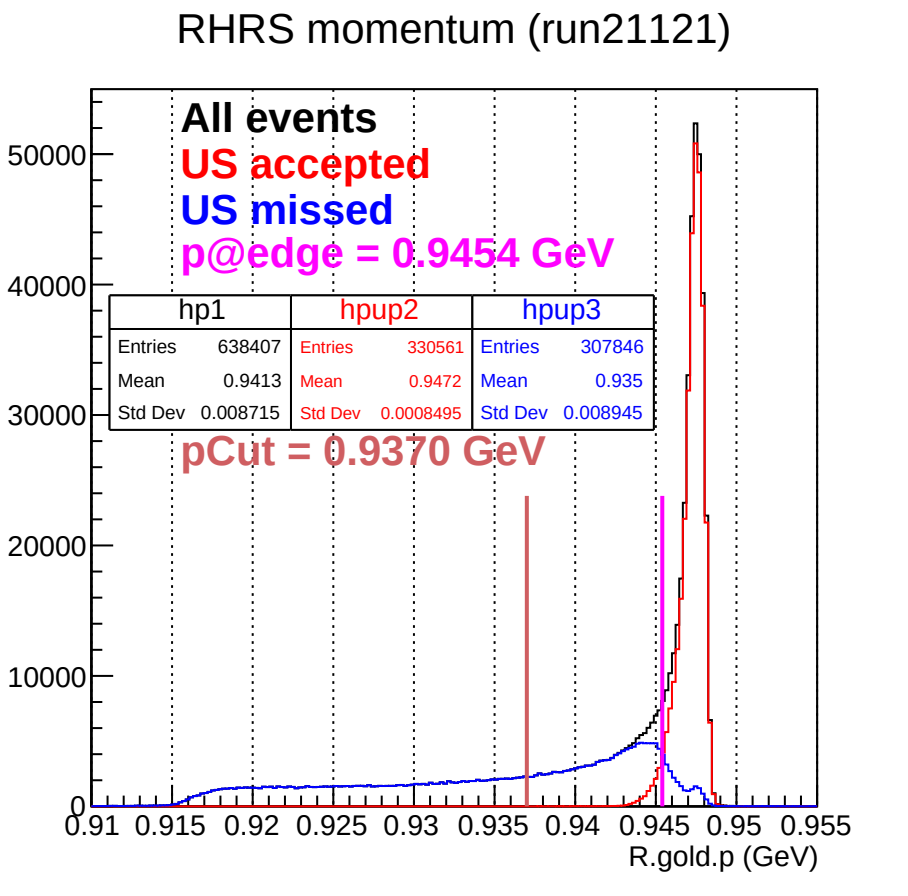

Asymmetry (ppm), pCut = 0.936 GeV
Asym
Entries 494163
Mean 0.5707
Std Dev 0.07216
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1
Asymmetry (ppm)

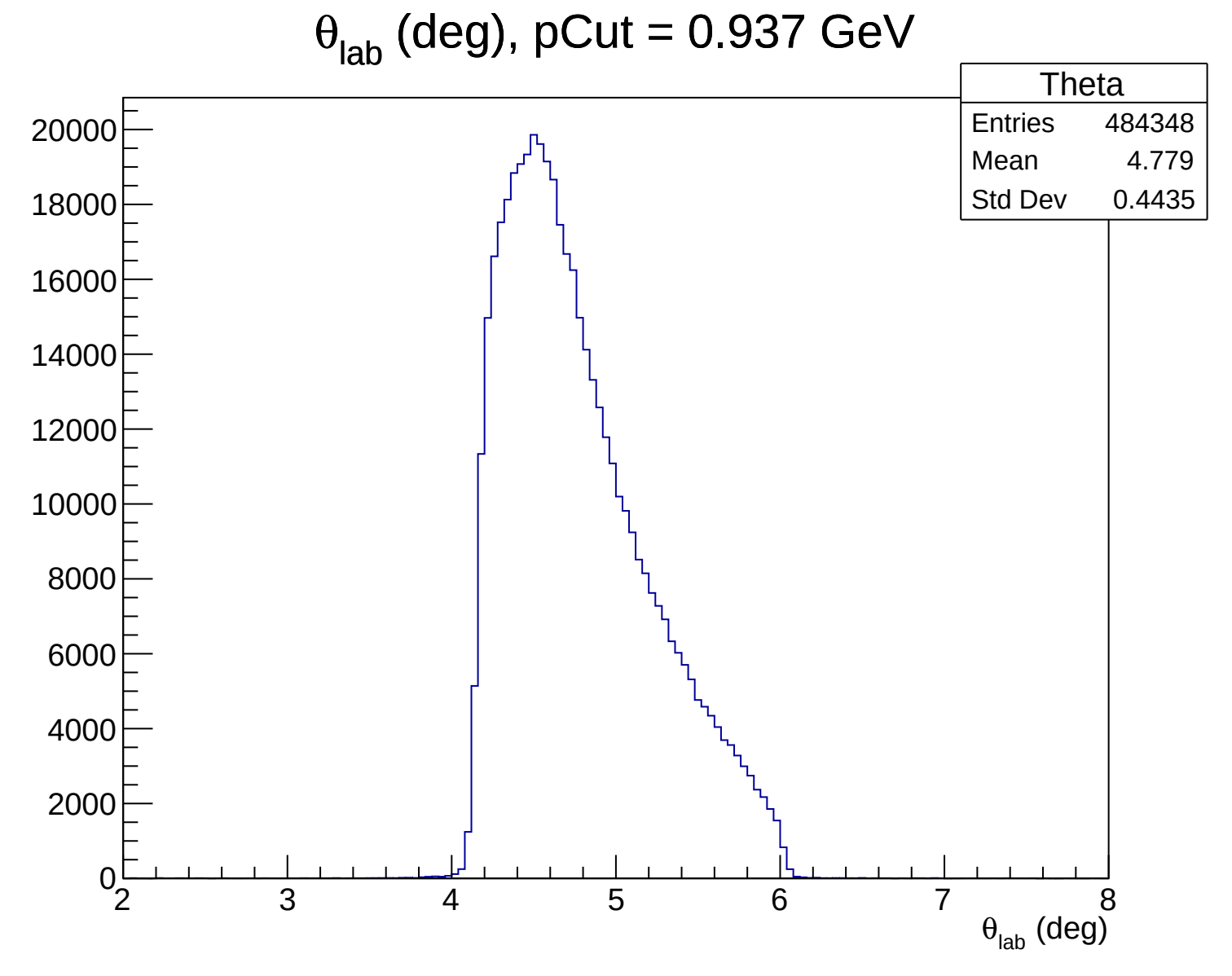

Stretched Asym. (ppm), pCut = 0.936 GeV
SAsym
Entries 494163
Mean 0.5578
Std Dev 0.06845
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1
Stretched Asym. (ppm)

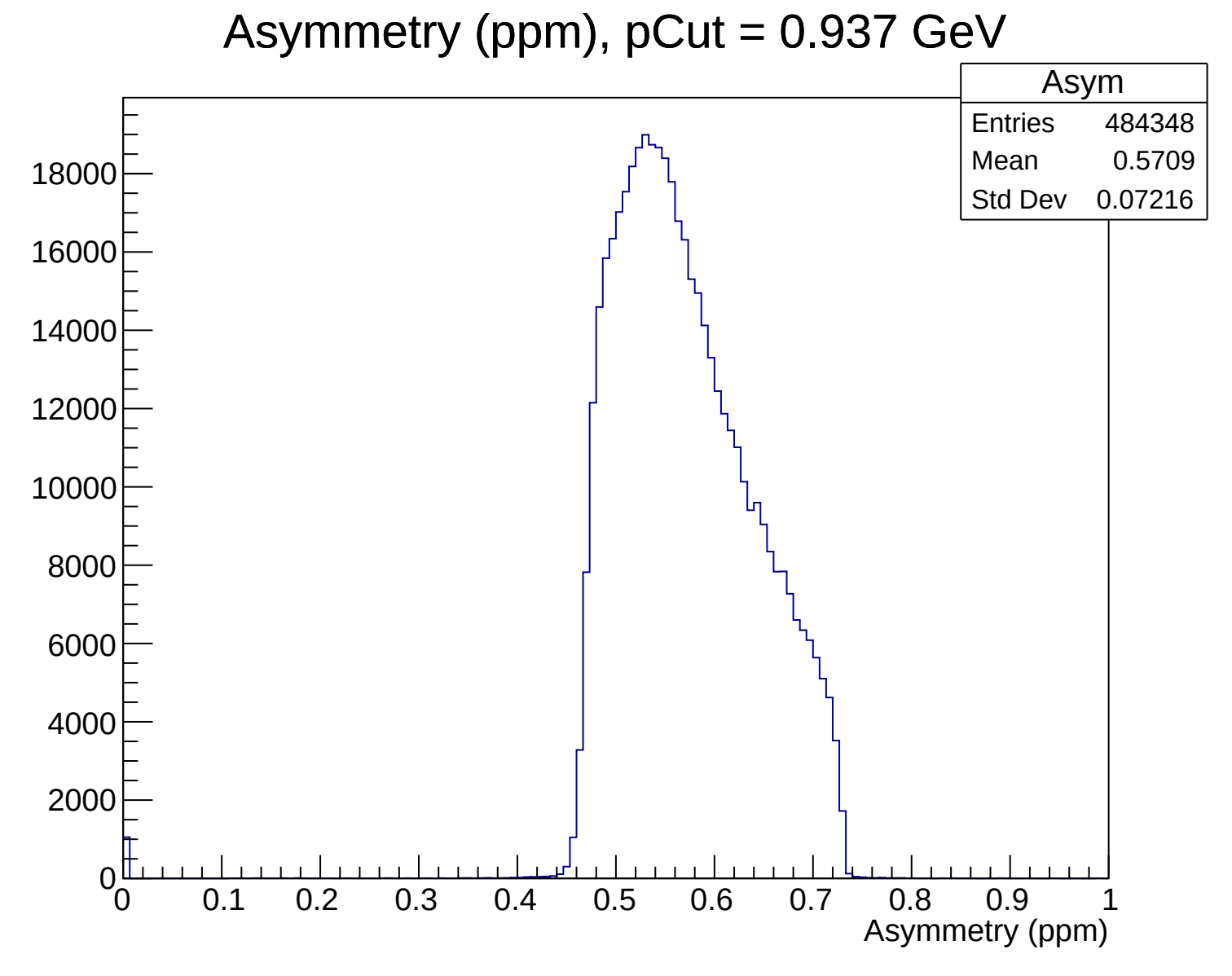

Q^2 (GeV/c)^2, pCut = 0.936 GeV
Q2
Entries 494163
Mean 0.006297
Std Dev 0.001201
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0
0.002
0.004
0.006
0.008
0.01
0.012
0.014
Q^2 (GeV/c)^2

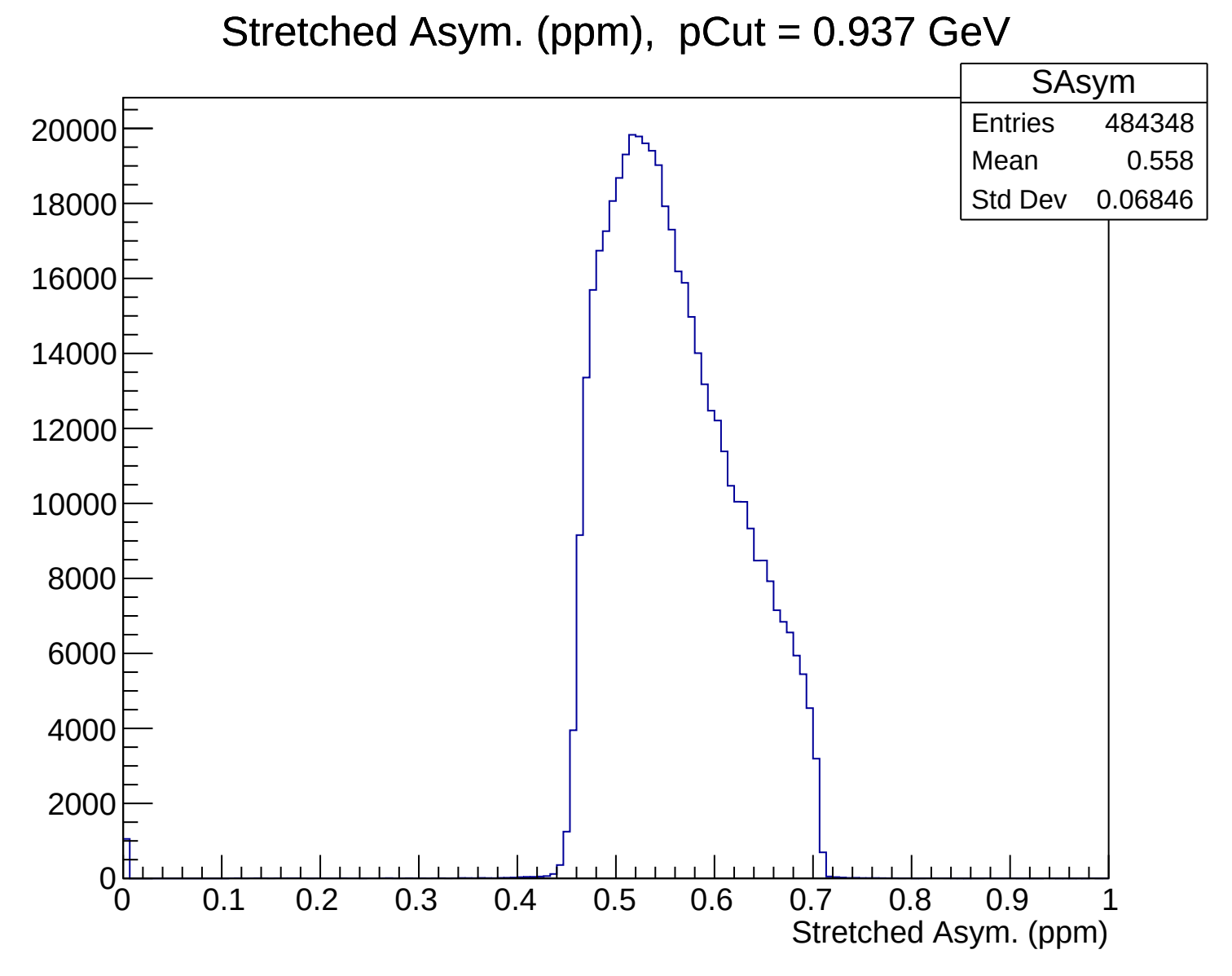

Sensitivity, pCut = 0.936 GeV
sens
Entries 494163
Mean 0.02215
Std Dev 0.003821
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0 0.005 0.01 0.015 0.02 0.025 0.03 0.035 0.04 0.045 0.05

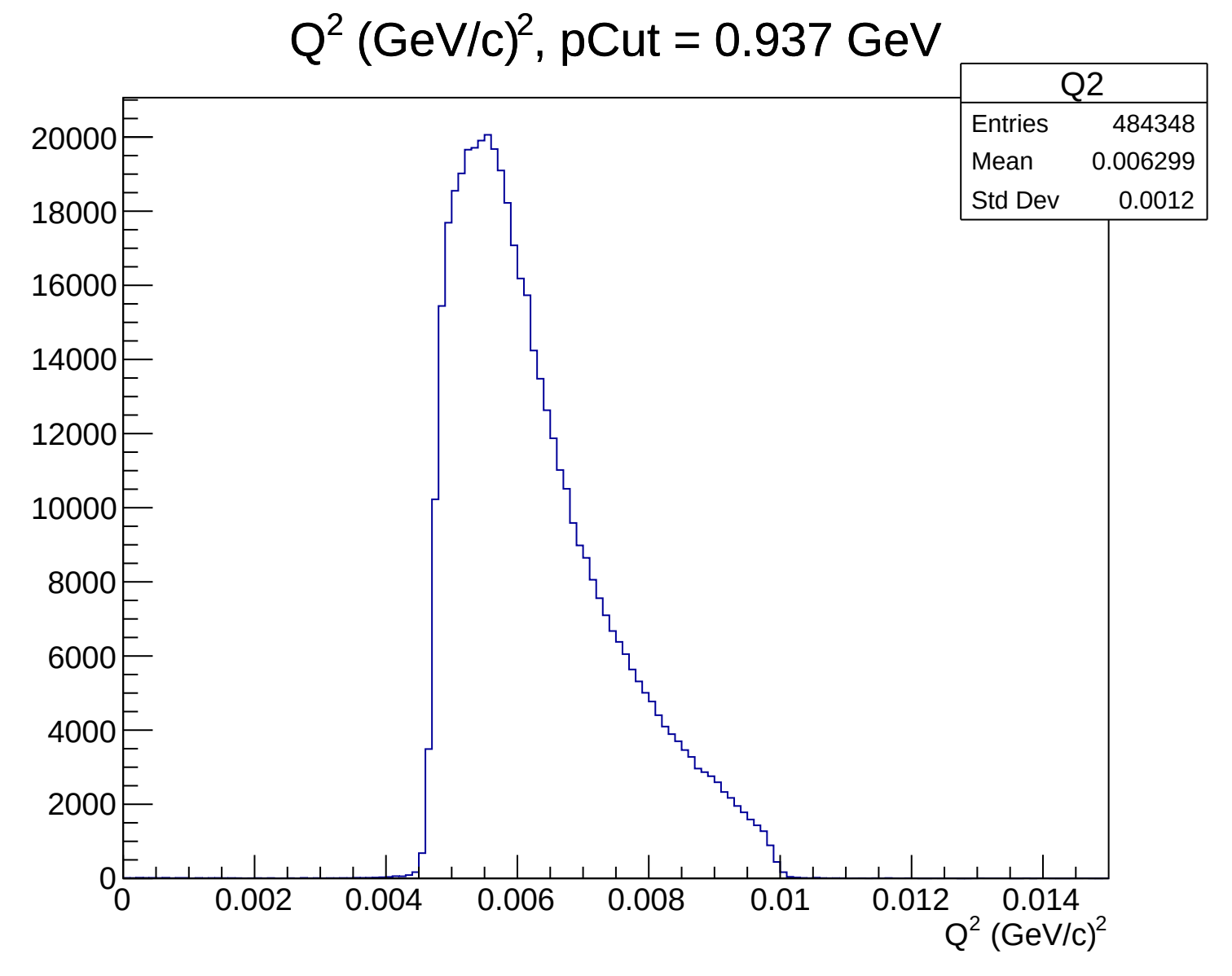

ADC raw (run21121, detZ = 1.3 m)
huq
Entries 738920
Mean 515.4
Std Dev 27.19
P.upQadcR
Ped. cut = 510.5
35000
30000
25000
20000
15000
10000
5000
0
460 480 500 520 540 560 580 600 620 640
ADC raw

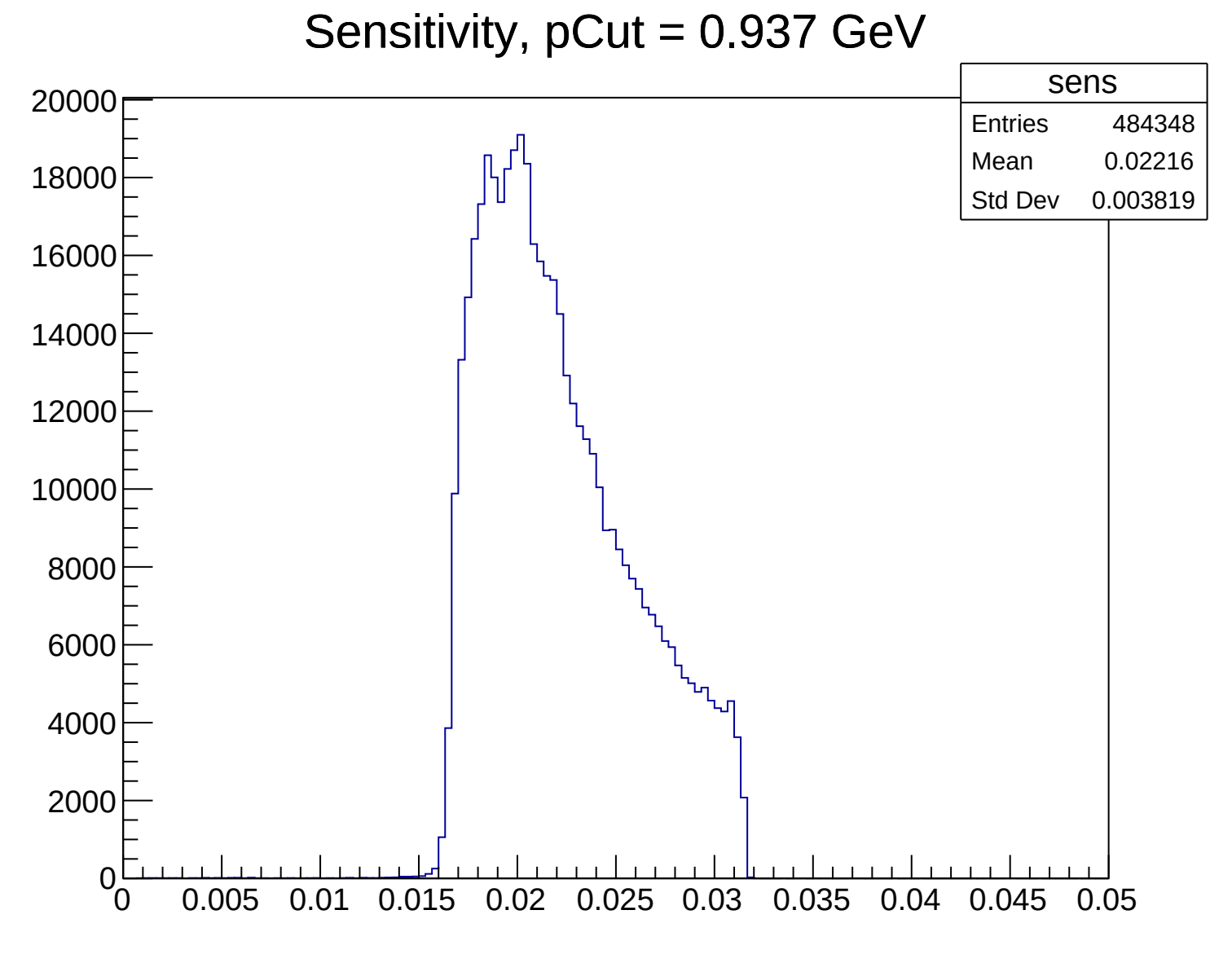

RHRS momentum (run21121)
All events
US accepted
US missed
p@edge = 0.9454 GeV
hp1
Entries 638407
Mean 0.9413
Std Dev 0.008715
hpup2
Entries 330561
Mean 0.9472
Std Dev 0.0008495
hpup3
Entries 307846
Mean 0.935
Std Dev 0.008945
pCut = 0.9370 GeV
50000
40000
30000
20000
10000
0
0.91 0.915 0.92 0.925 0.93 0.935 0.94 0.945 0.95 0.955
R.gold.p (GeV)

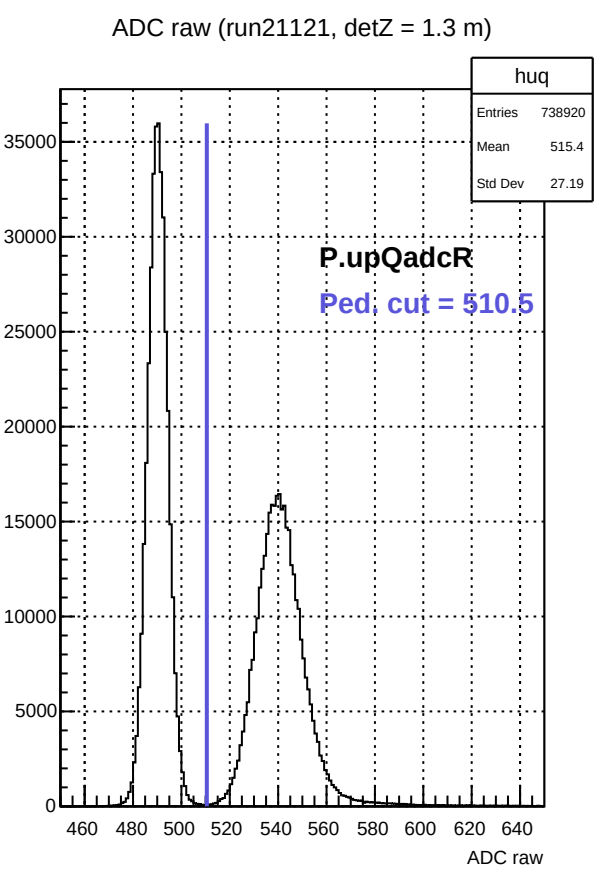

θlab (deg), pCut = 0.937 GeV
Theta
Entries 484348
Mean 4.779
Std Dev 0.4435
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
2
3
4
5
6
7
8
θlab (deg)

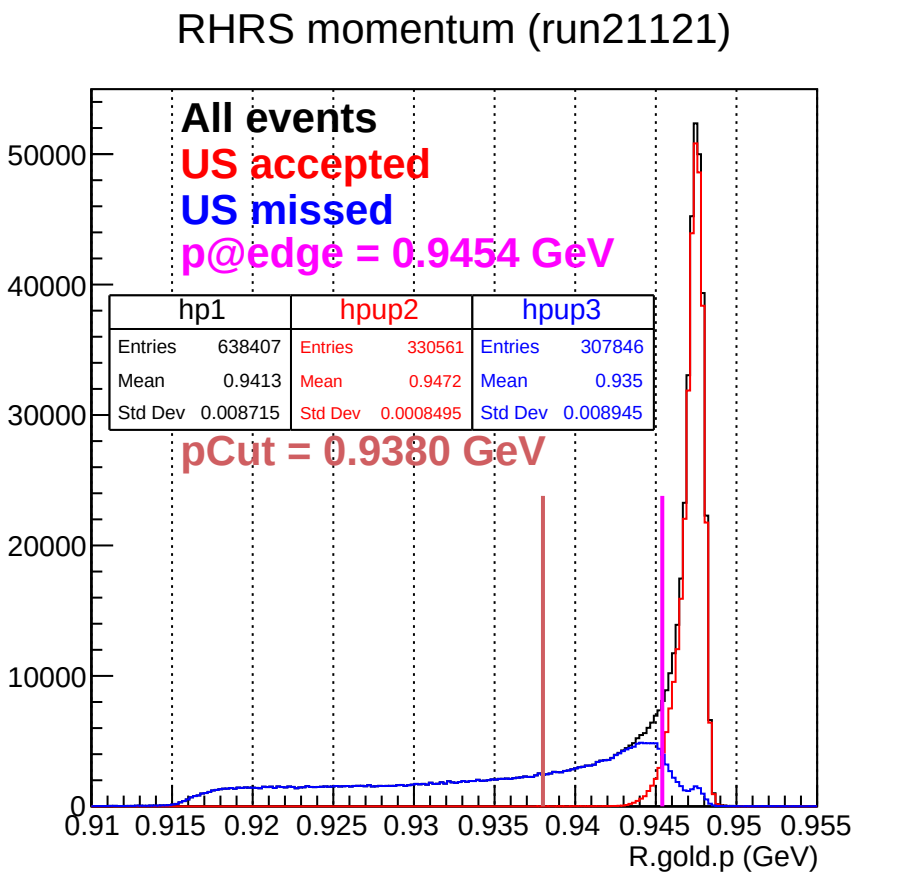

Asymmetry (ppm), pCut = 0.937 GeV
Asym
Entries 484348
Mean 0.5709
Std Dev 0.07216
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1
Asymmetry (ppm)

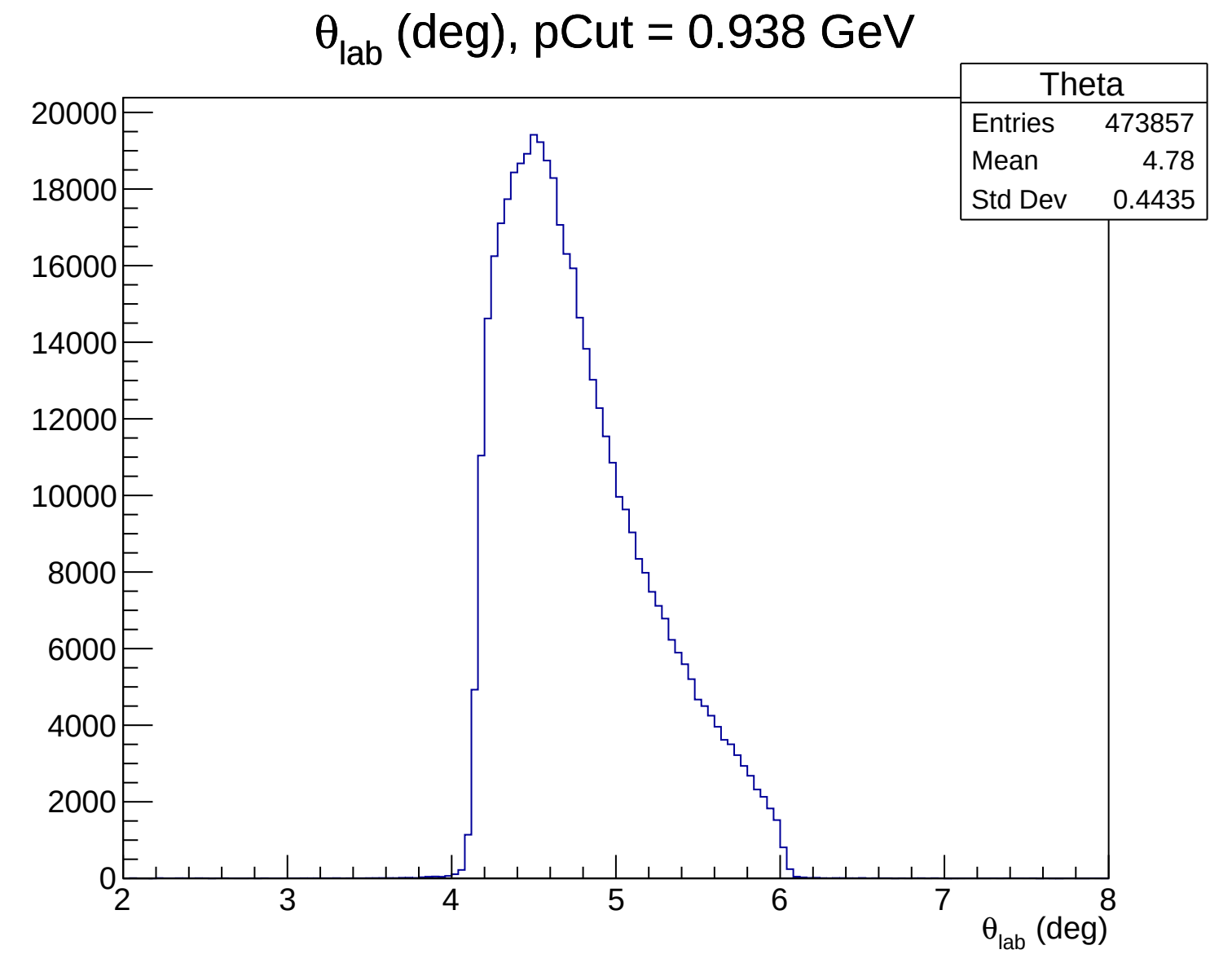

Stretched Asym. (ppm), pCut = 0.937 GeV
SAsym
Entries 484348
Mean 0.558
Std Dev 0.06846
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1
Stretched Asym. (ppm)

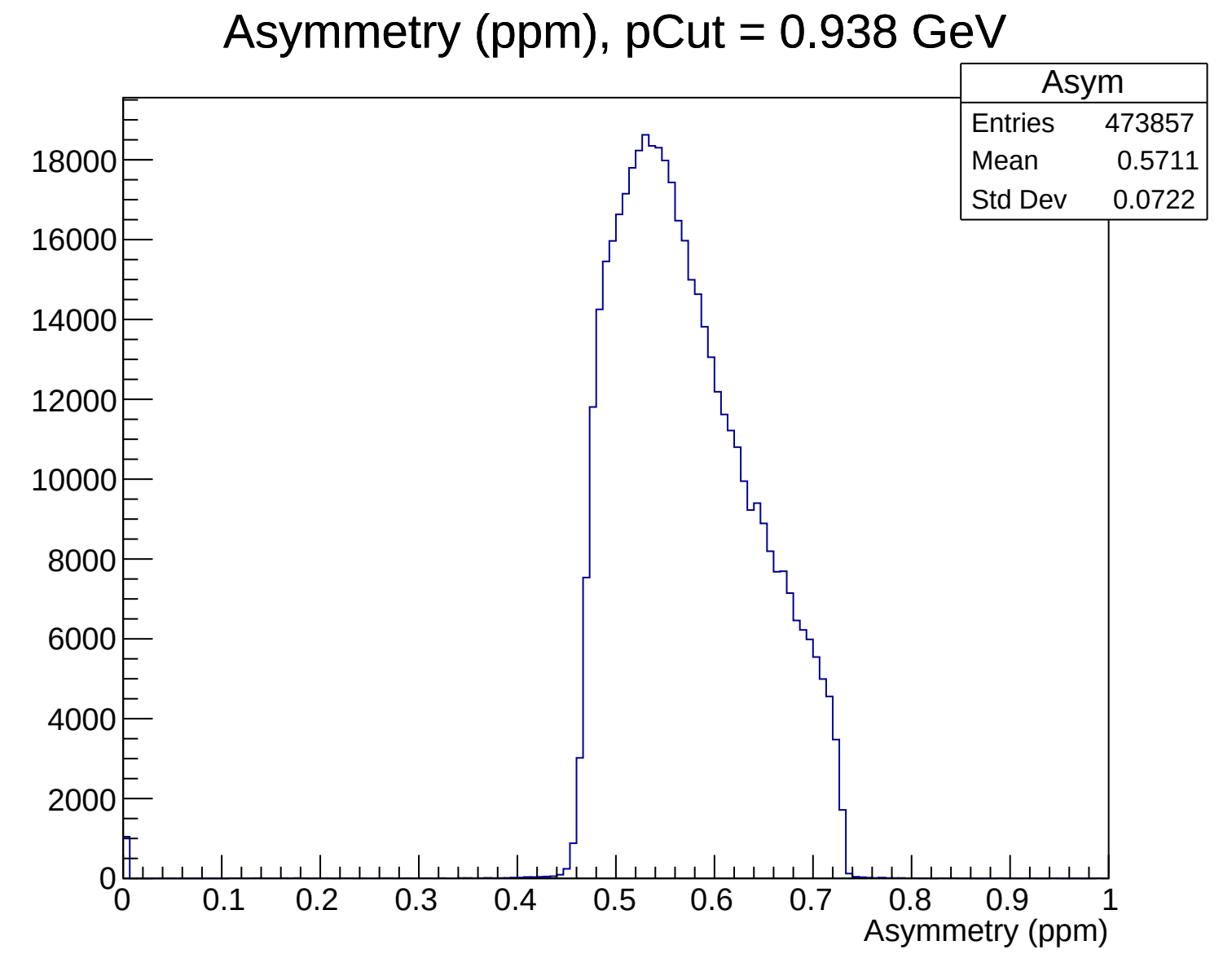

Q^2 (GeV/c)^2, pCut = 0.937 GeV
Q2
Entries 484348
Mean 0.006299
Std Dev 0.0012
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0
0.002
0.004
0.006
0.008
0.01
0.012
0.014
Q^2 (GeV/c)^2

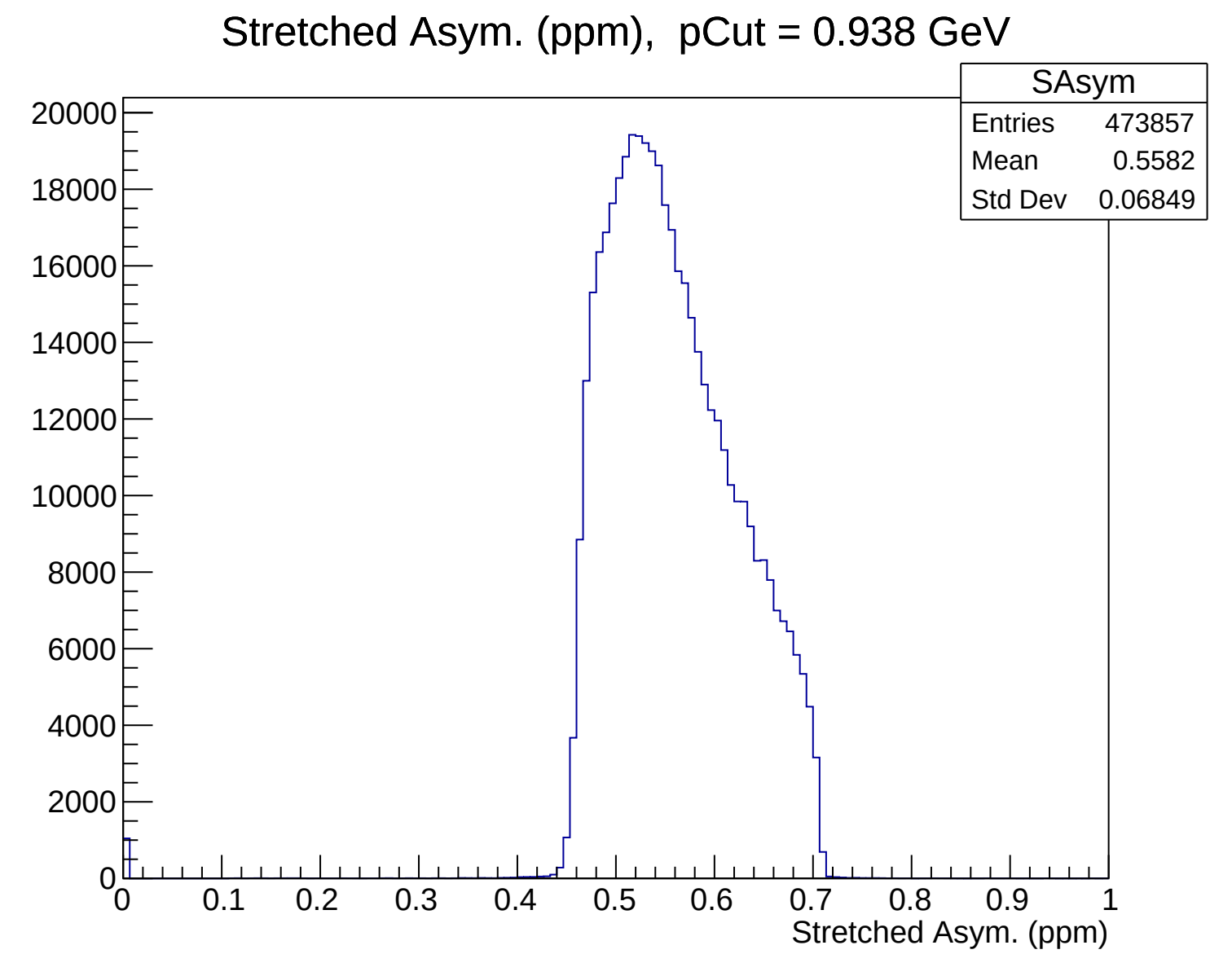

Sensitivity, pCut = 0.937 GeV
sens
Entries 484348
Mean 0.02216
Std Dev 0.003819
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0 0.005 0.01 0.015 0.02 0.025 0.03 0.035 0.04 0.045 0.05

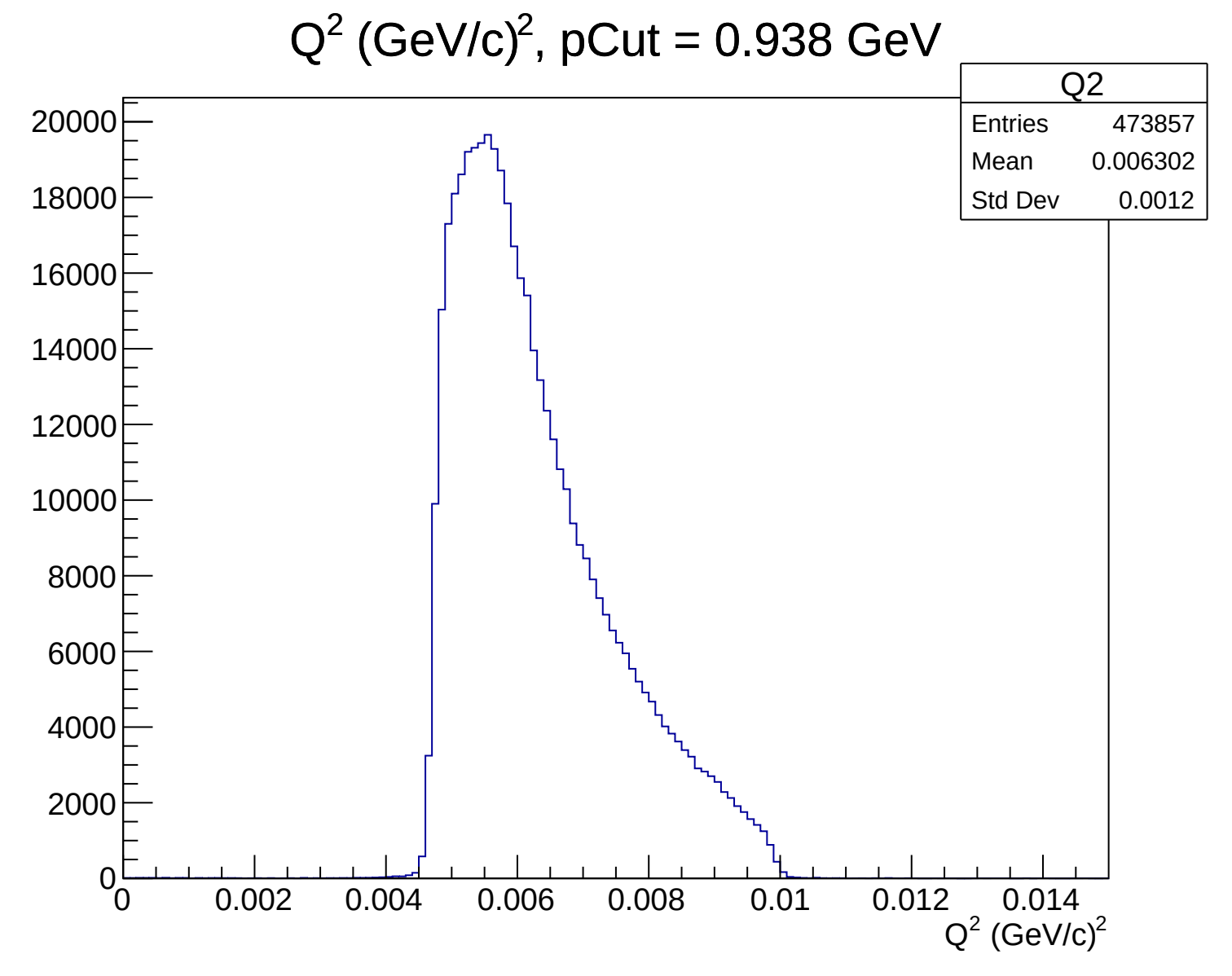

ADC raw (run21121, detZ = 1.3 m)
huq
Entries 738920
Mean 515.4
Std Dev 27.19
P.upQadcR
Ped. cut = 510.5
35000
30000
25000
20000
15000
10000
5000
0
460 480 500 520 540 560 580 600 620 640
ADC raw

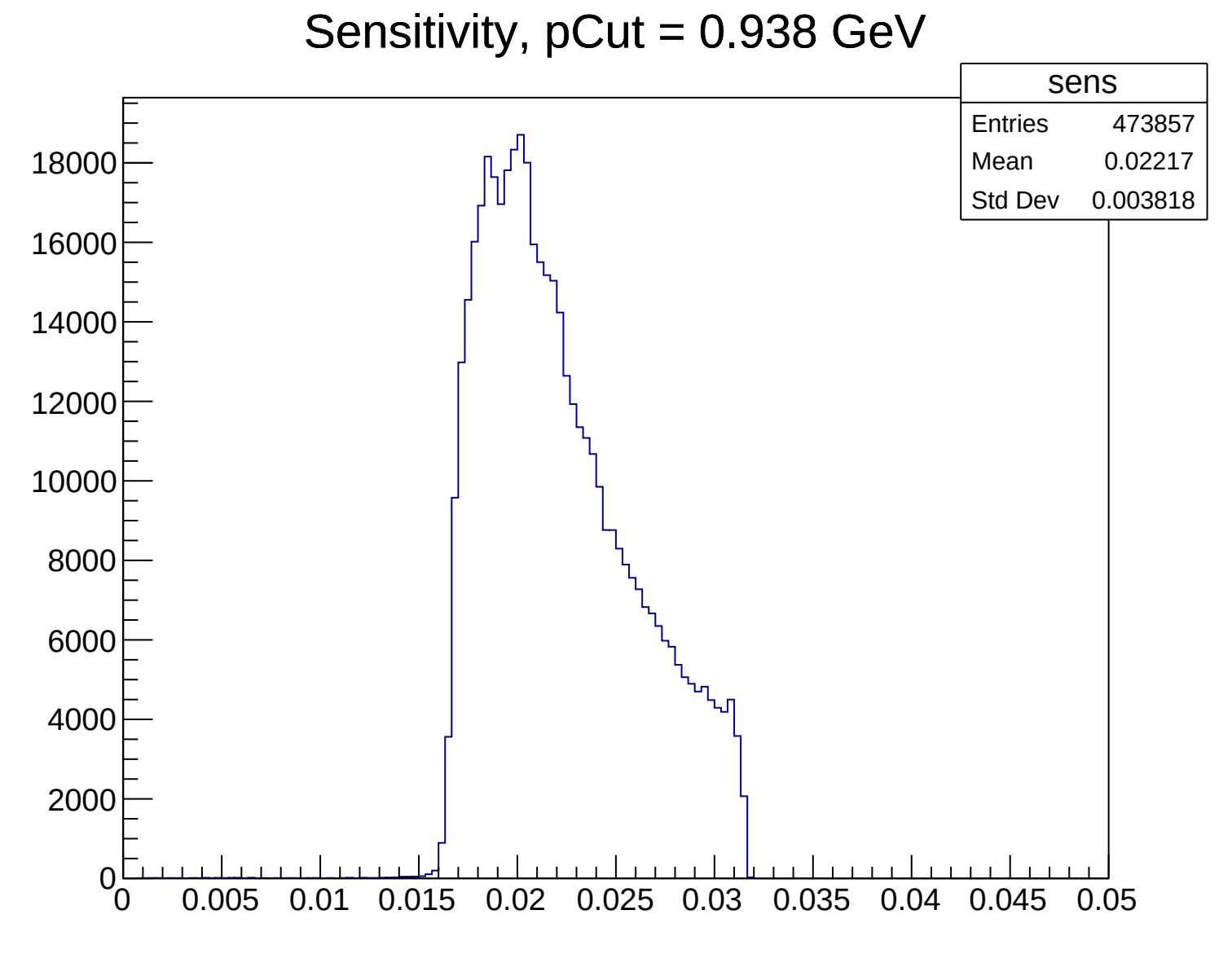

RHRS momentum (run21121)
All events
US accepted
US missed
p@edge = 0.9454 GeV
hp1
Entries 638407
Mean 0.9413
Std Dev 0.008715
hpup2
Entries 330561
Mean 0.9472
Std Dev 0.0008495
hpup3
Entries 307846
Mean 0.935
Std Dev 0.008945
pCut = 0.9380 GeV
50000
40000
30000
20000
10000
0
0.91 0.915 0.92 0.925 0.93 0.935 0.94 0.945 0.95 0.955
R.gold.p (GeV)

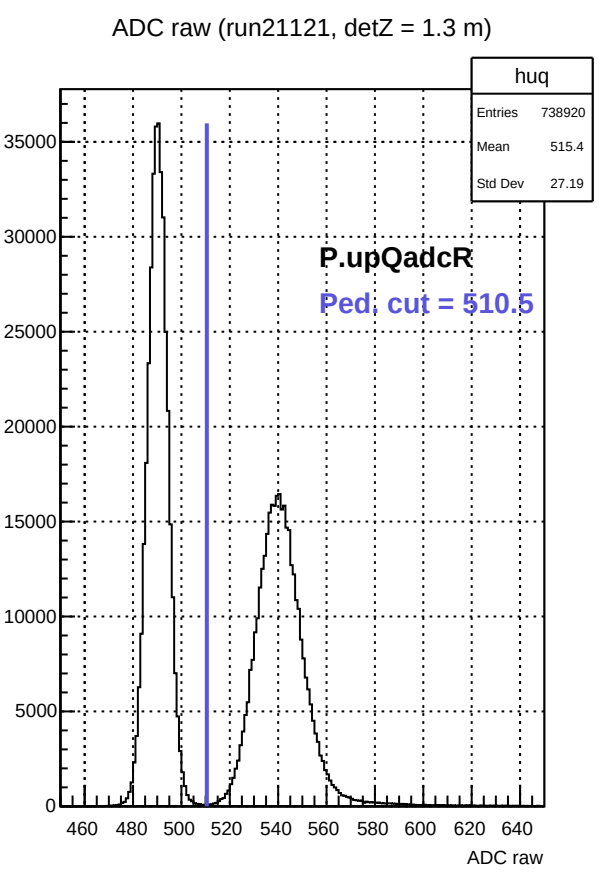

θlab (deg), pCut = 0.938 GeV
Theta
Entries 473857
Mean 4.78
Std Dev 0.4435
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
2
3
4
5
6
7
8
θlab (deg)

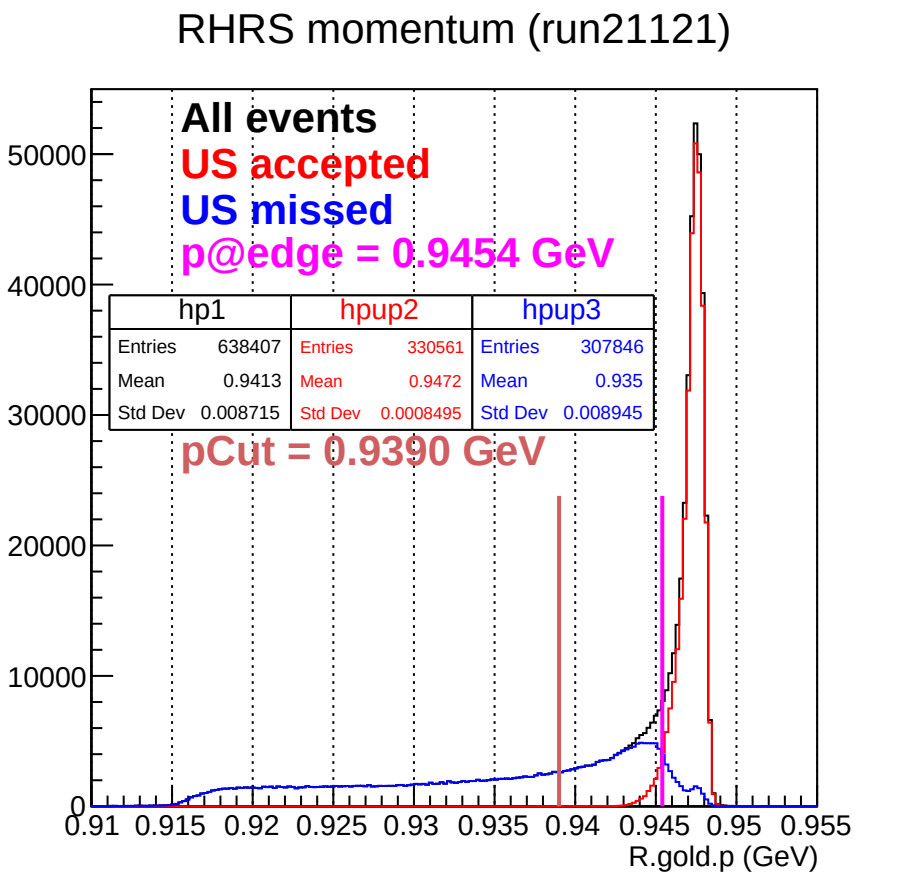

Asymmetry (ppm), pCut = 0.938 GeV
Asym
Entries 473857
Mean 0.5711
Std Dev 0.0722
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1
Asymmetry (ppm)

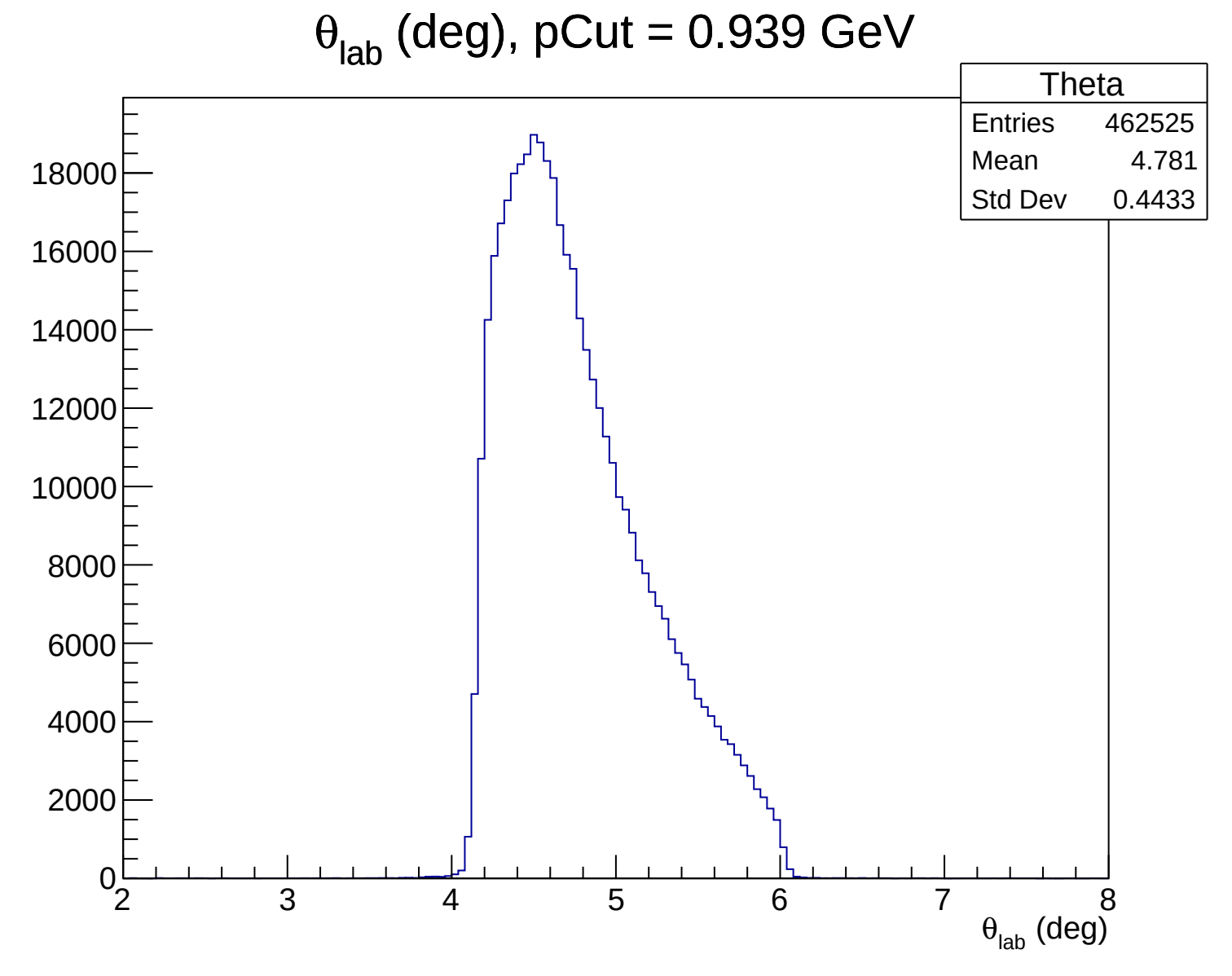

Stretched Asym. (ppm), pCut = 0.938 GeV
SAsym
Entries 473857
Mean 0.5582
Std Dev 0.06849
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1
Stretched Asym. (ppm)

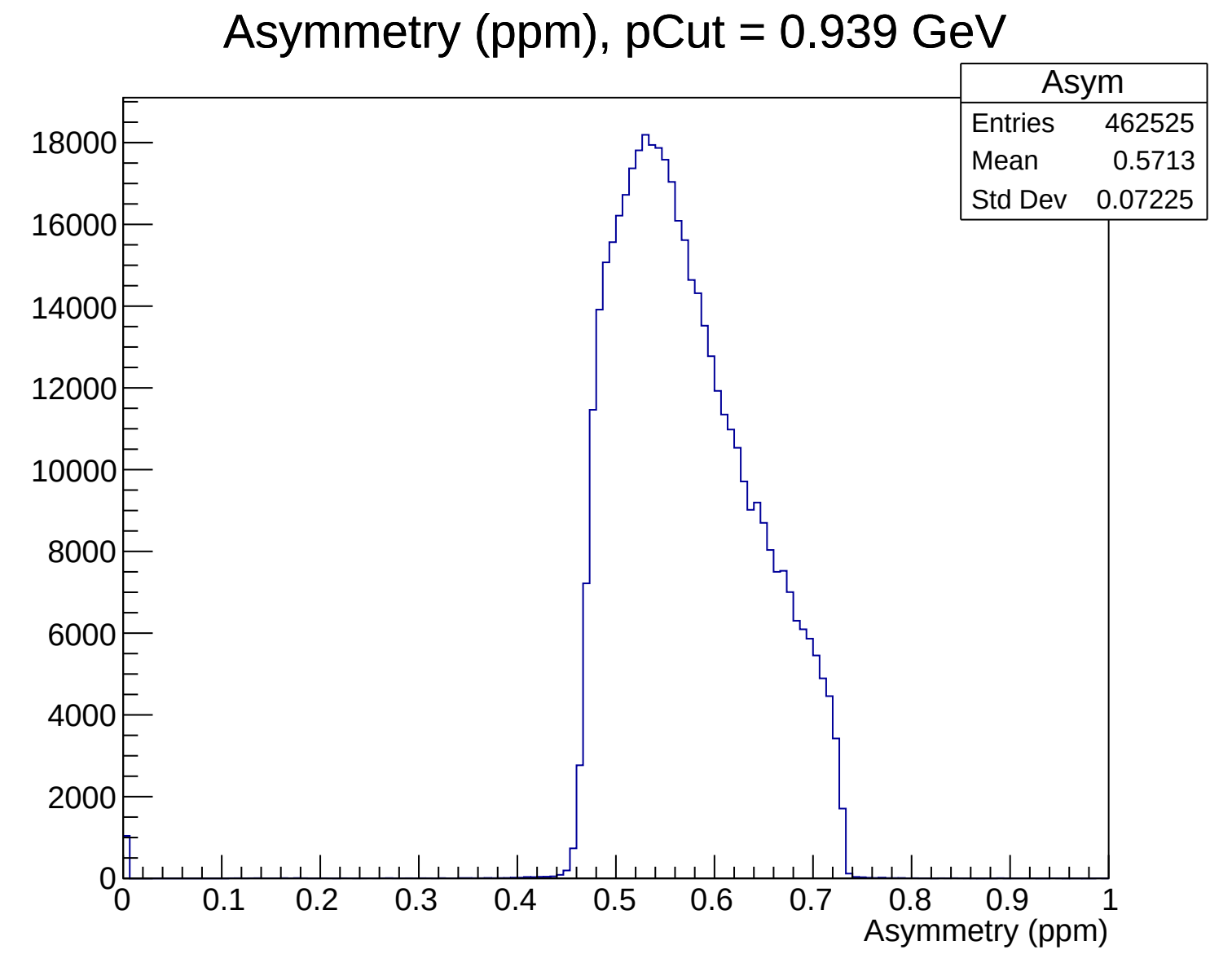

Q^2 (GeV/c)^2, pCut = 0.938 GeV
Q2
Entries 473857
Mean 0.006302
Std Dev 0.0012
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0
0.002
0.004
0.006
0.008
0.01
0.012
0.014
Q^2 (GeV/c)^2

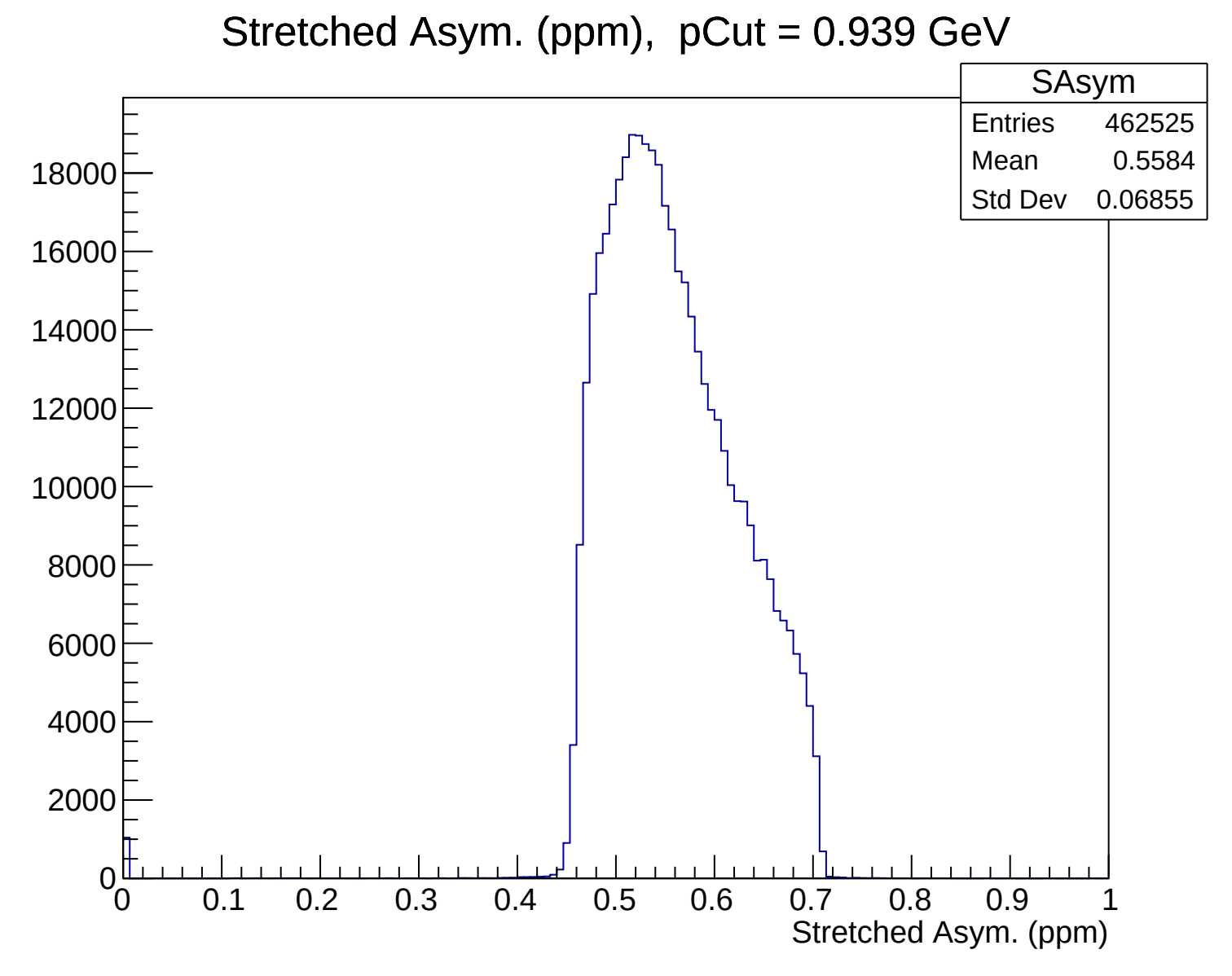

Sensitivity, pCut = 0.938 GeV
sens
Entries 473857
Mean 0.02217
Std Dev 0.003818
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0 0.005 0.01 0.015 0.02 0.025 0.03 0.035 0.04 0.045 0.05

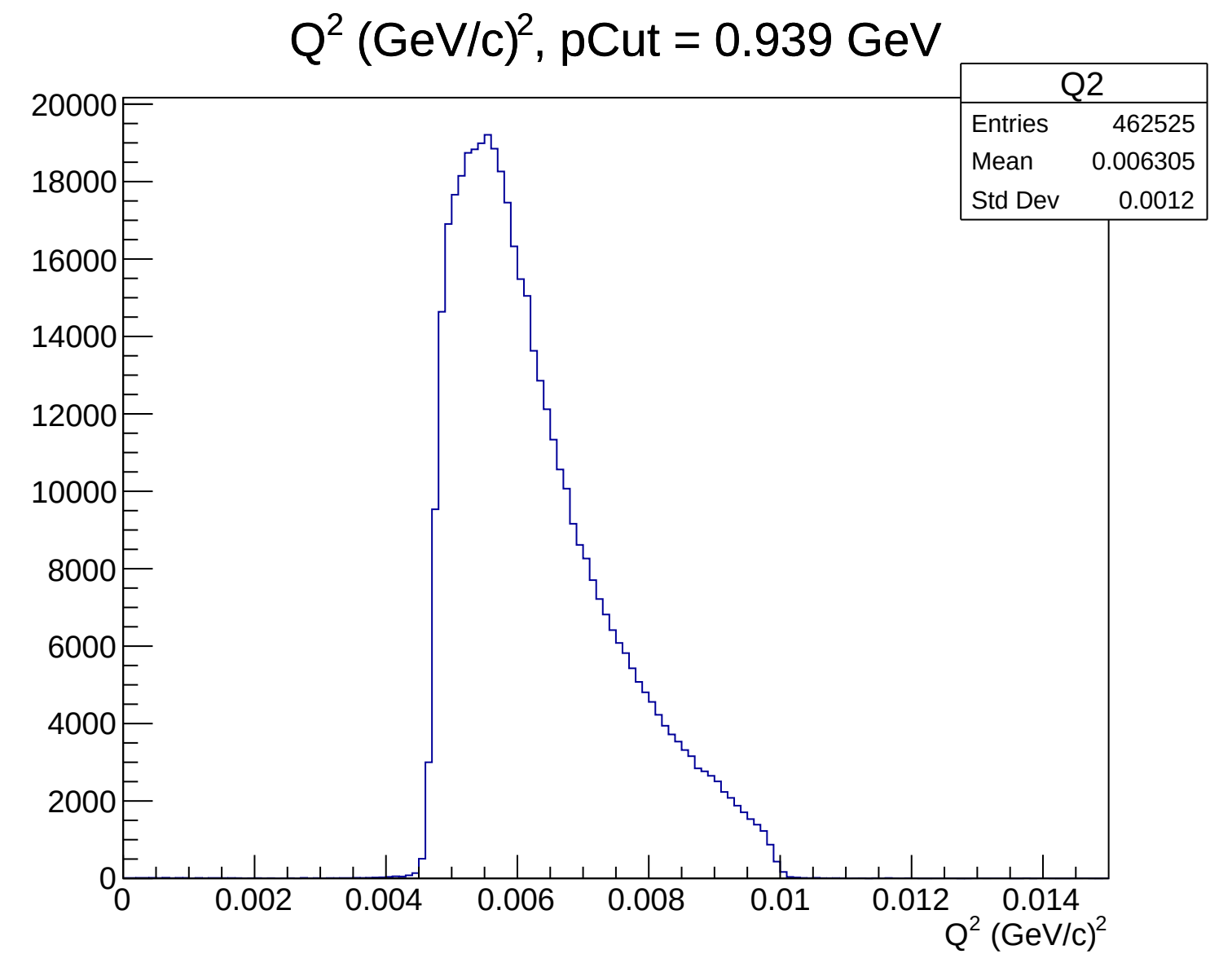

ADC raw (run21121, detZ = 1.3 m)
huq
Entries 738920
Mean 515.4
Std Dev 27.19
P.upQadcR
Ped. cut = 510.5
35000
30000
25000
20000
15000
10000
5000
0
460 480 500 520 540 560 580 600 620 640
ADC raw

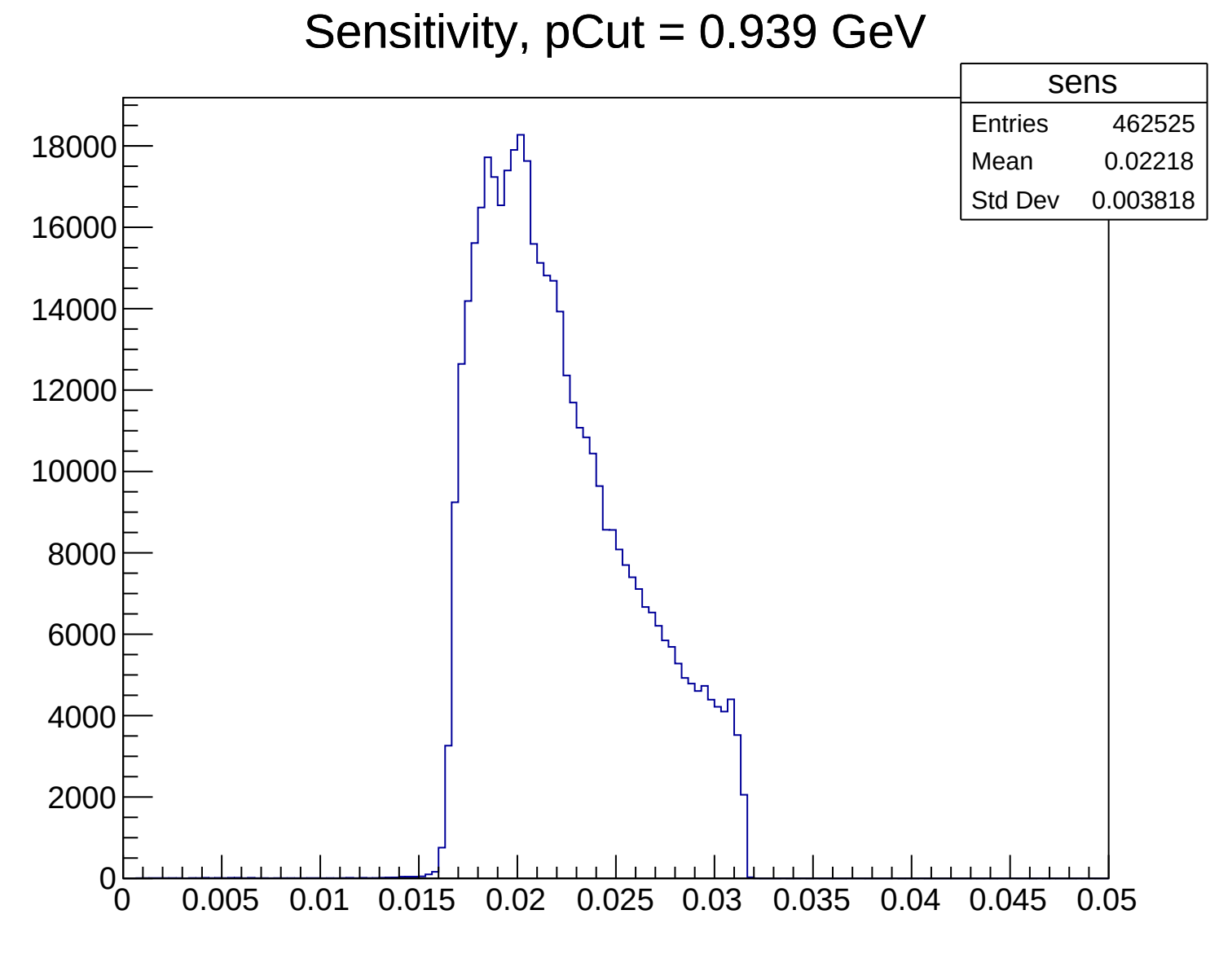

RHRS momentum (run21121)
All events
US accepted
US missed
p@edge = 0.9454 GeV
hp1
Entries 638407
Mean 0.9413
Std Dev 0.008715
hpup2
Entries 330561
Mean 0.9472
Std Dev 0.0008495
hpup3
Entries 307846
Mean 0.935
Std Dev 0.008945
pCut = 0.9390 GeV
50000
40000
30000
20000
10000
0
0.91 0.915 0.92 0.925 0.93 0.935 0.94 0.945 0.95 0.955
R.gold.p (GeV)

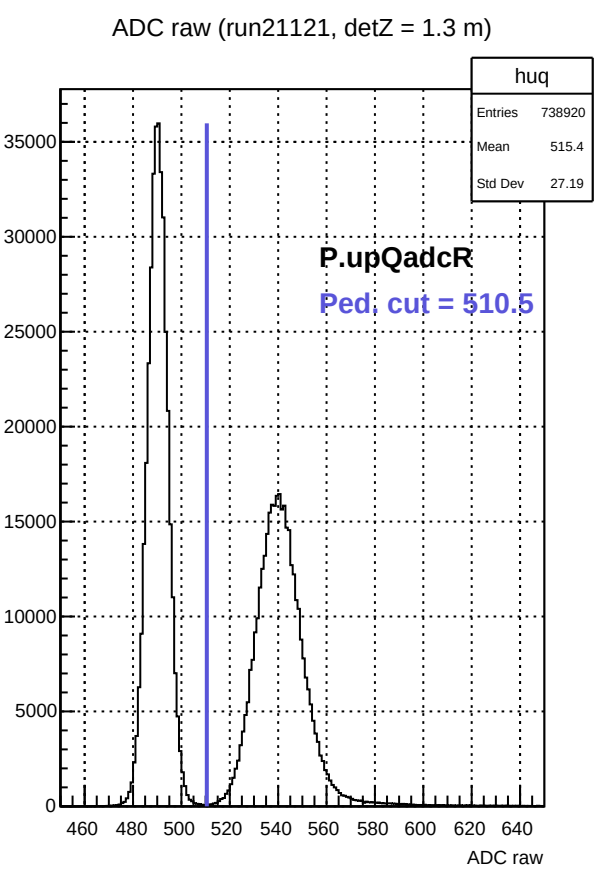

θlab (deg), pCut = 0.939 GeV
Theta
Entries 462525
Mean 4.781
Std Dev 0.4433
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
2
3
4
5
6
7
8
θlab (deg)

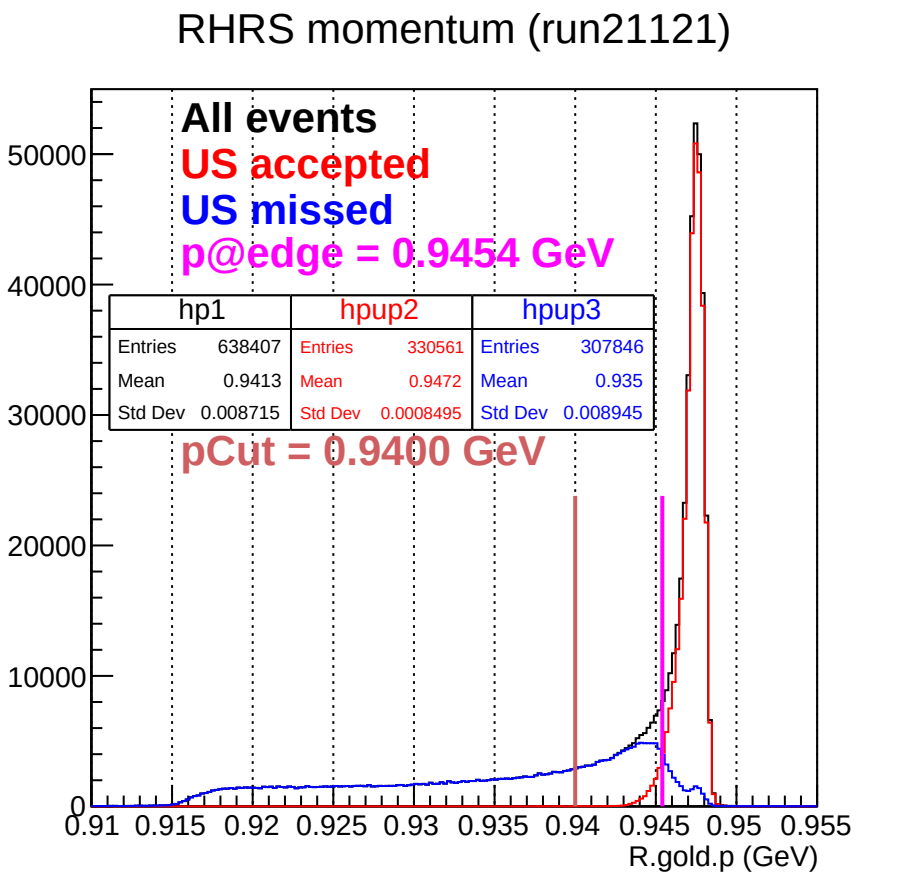

Asymmetry (ppm), pCut = 0.939 GeV
Asym
Entries 462525
Mean 0.5713
Std Dev 0.07225
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1
Asymmetry (ppm)

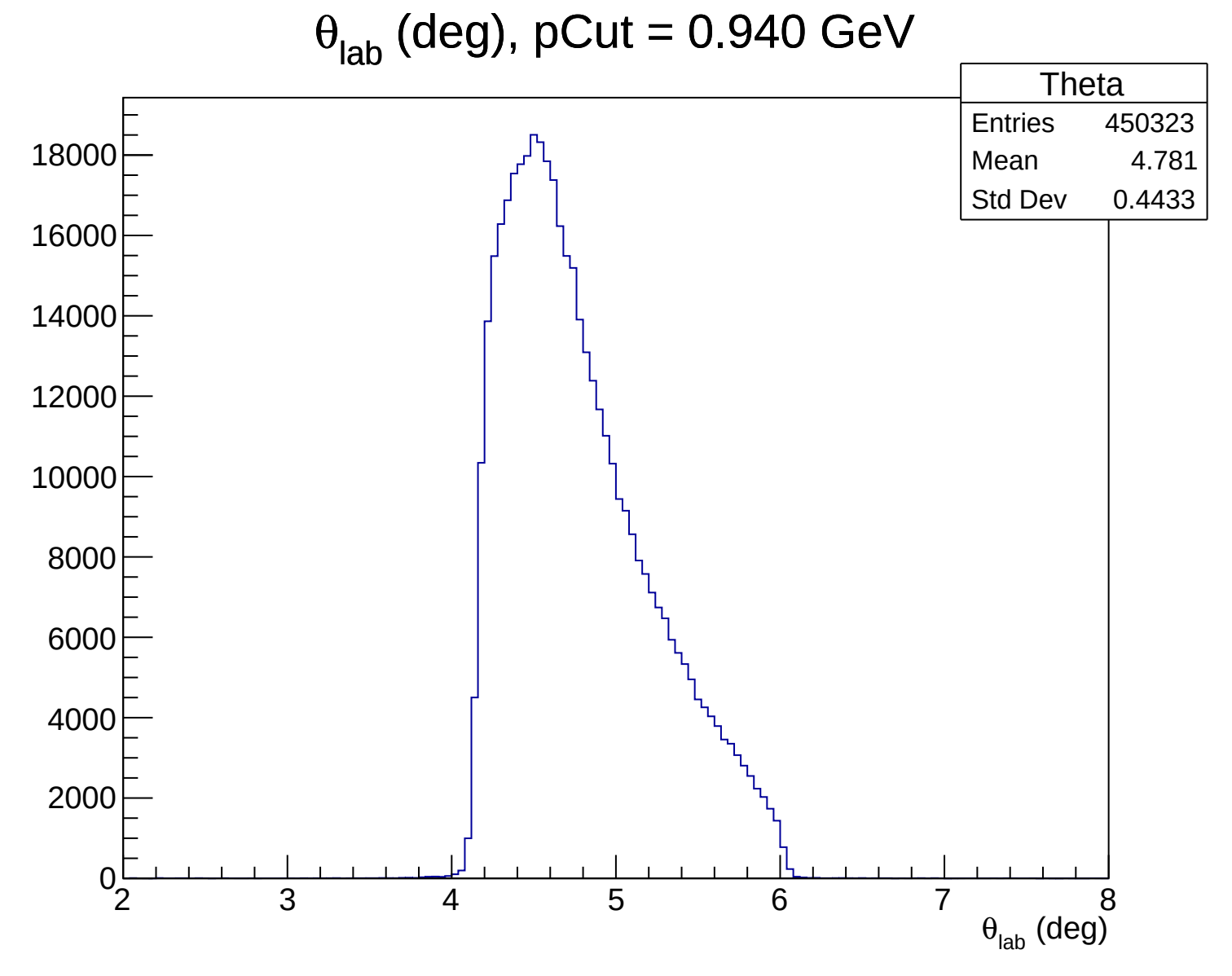

Stretched Asym. (ppm), pCut = 0.939 GeV
SAsym
Entries 462525
Mean 0.5584
Std Dev 0.06855
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1
Stretched Asym. (ppm)

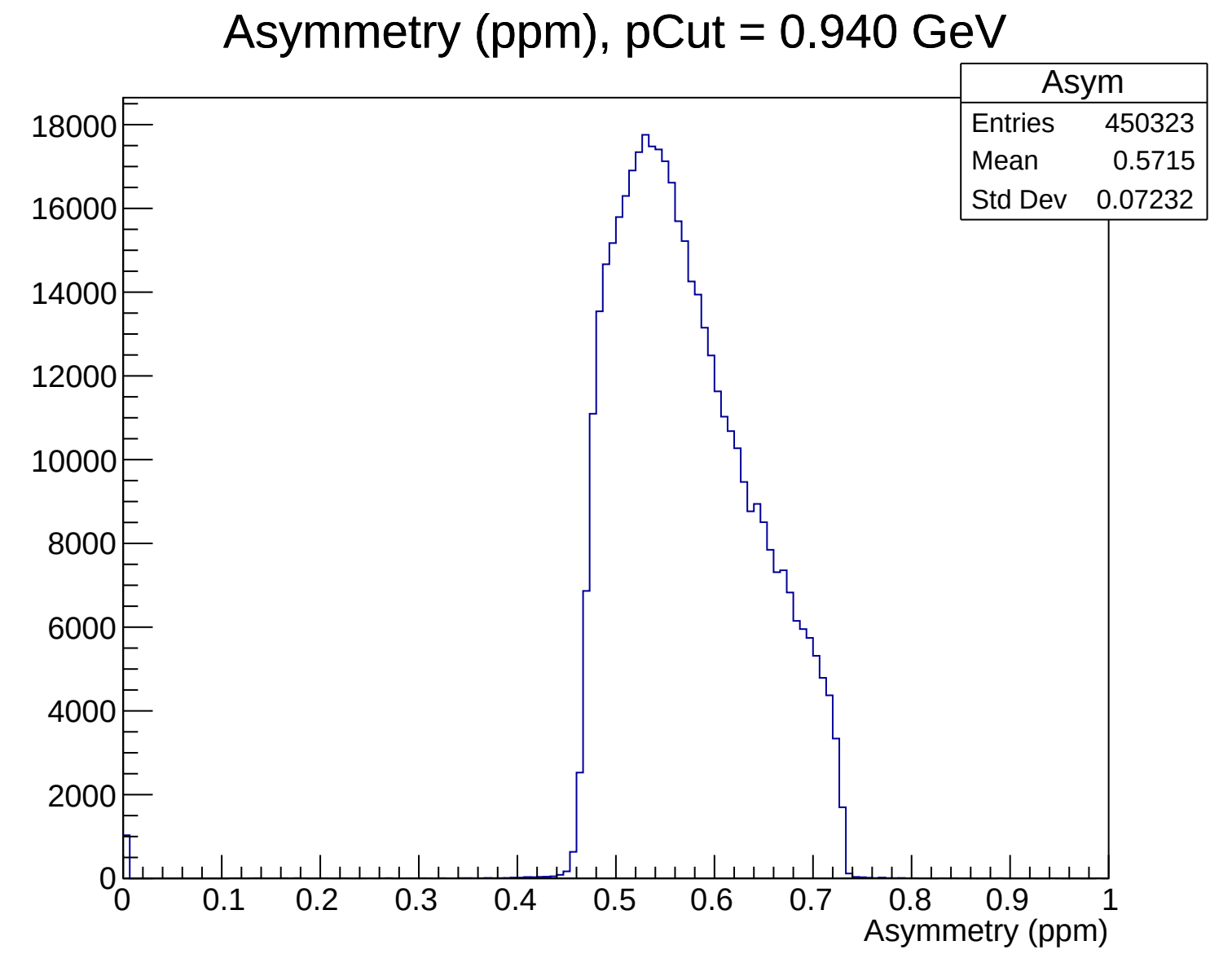

Q^2 (GeV/c)^2, pCut = 0.939 GeV
Q2
Entries 462525
Mean 0.006305
Std Dev 0.0012
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0
0.002
0.004
0.006
0.008
0.01
0.012
0.014
Q^2 (GeV/c)^2

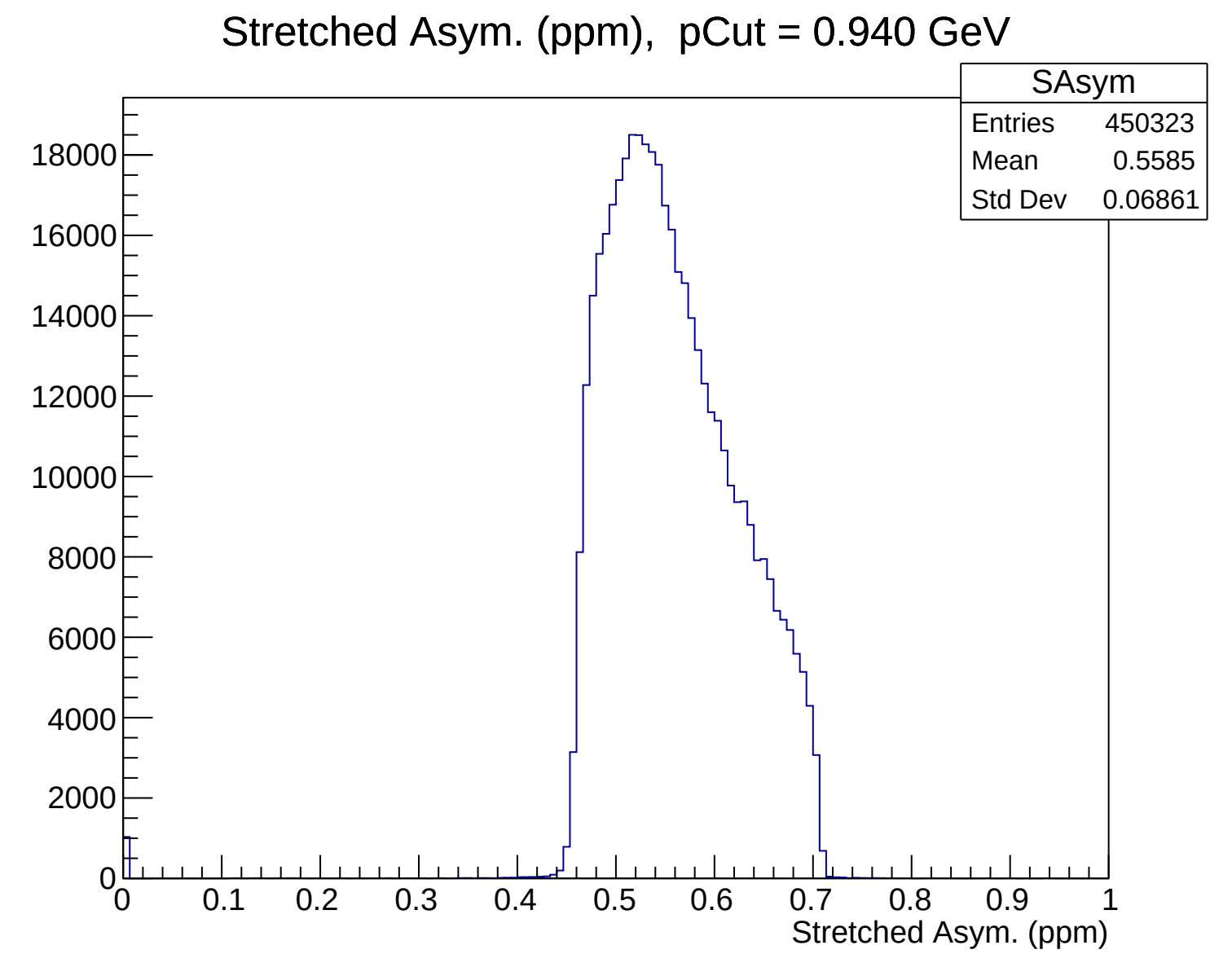

Sensitivity, pCut = 0.939 GeV
sens
Entries 462525
Mean 0.02218
Std Dev 0.003818
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0 0.005 0.01 0.015 0.02 0.025 0.03 0.035 0.04 0.045 0.05

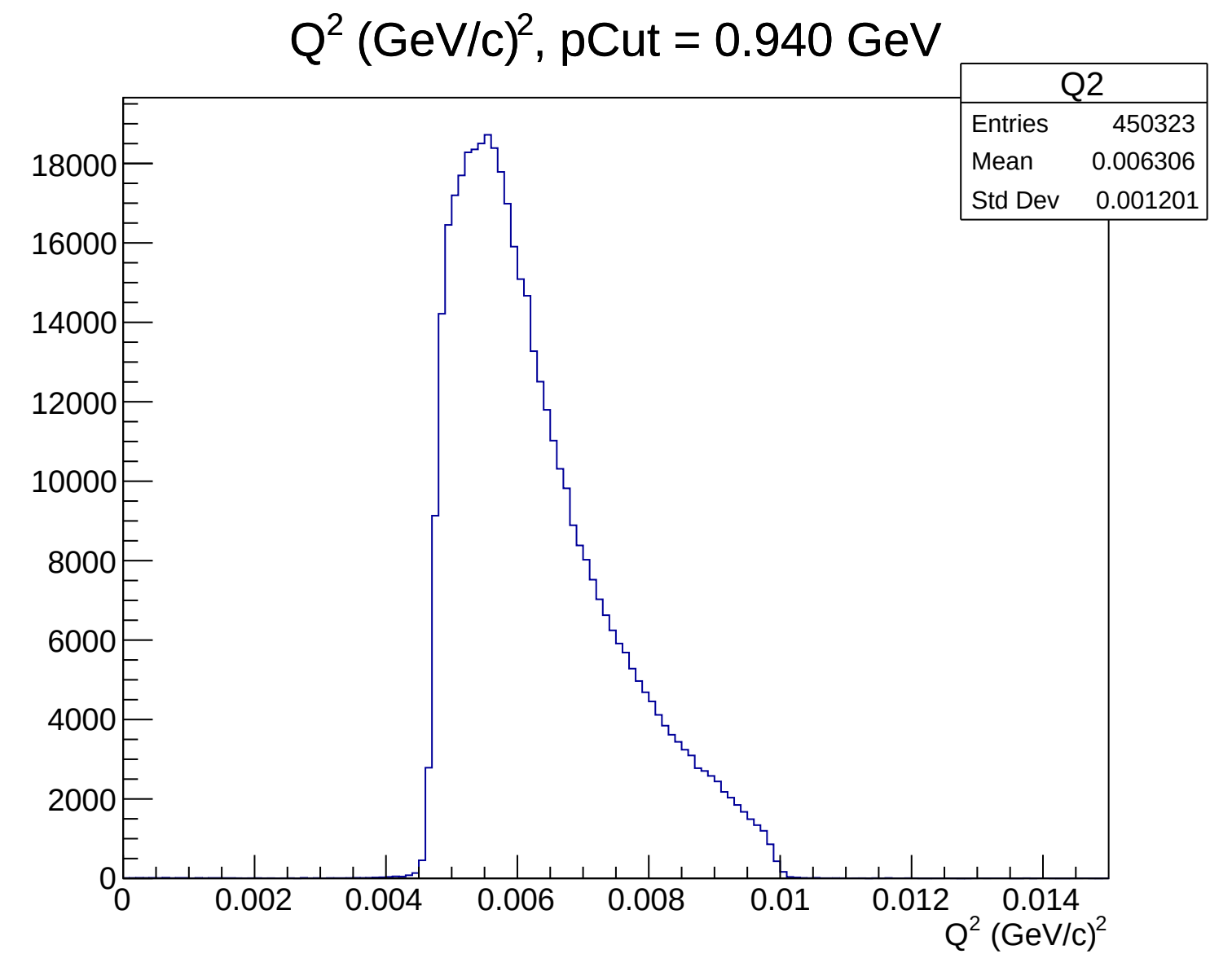

ADC raw (run21121, detZ = 1.3 m)
huq
Entries 738920
Mean 515.4
Std Dev 27.19
P.upQadcR
Ped. cut = 510.5
35000
30000
25000
20000
15000
10000
5000
0
460 480 500 520 540 560 580 600 620 640
ADC raw

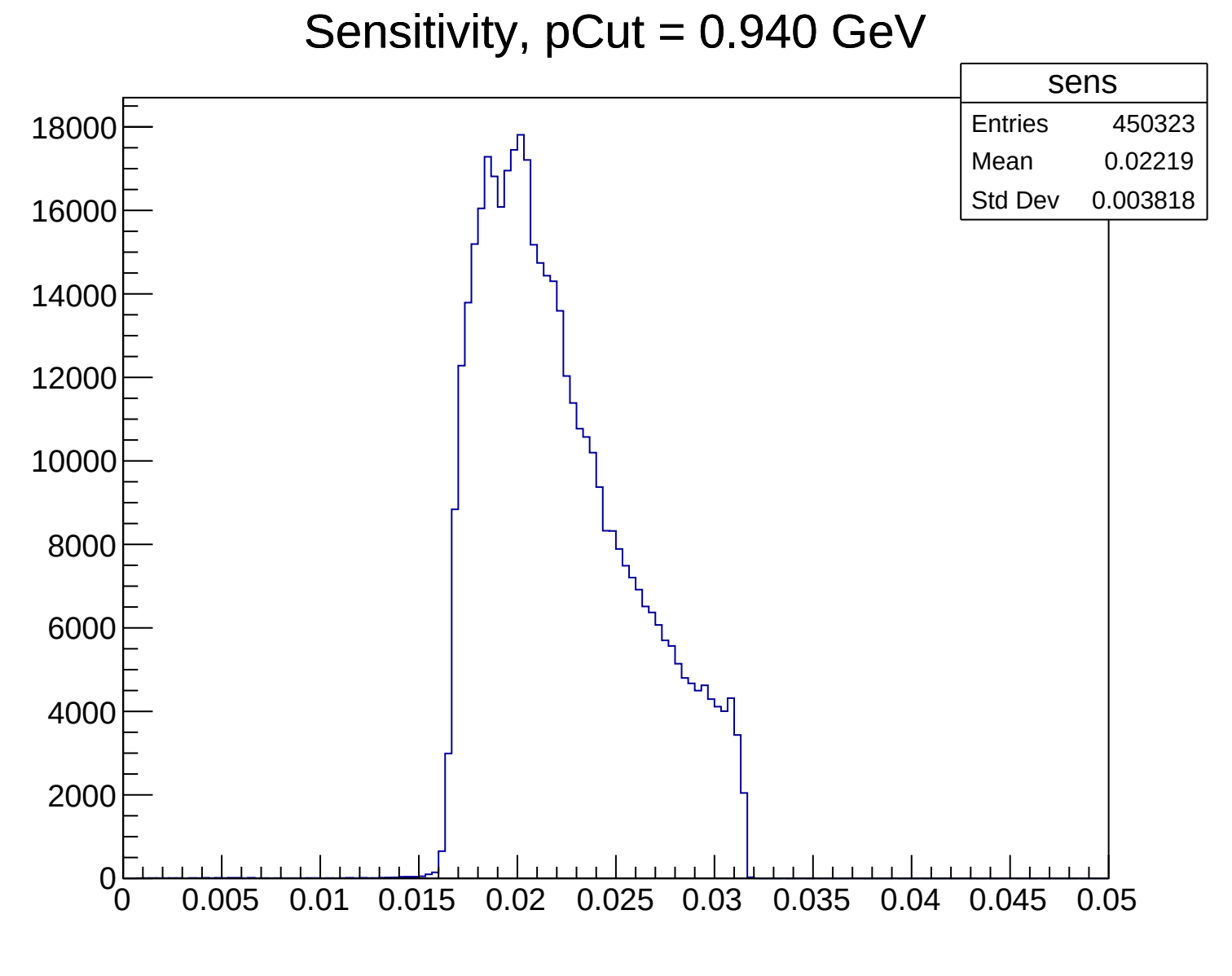

RHRS momentum (run21121)
All events
US accepted
US missed
p@edge = 0.9454 GeV
hp1
Entries 638407
Mean 0.9413
Std Dev 0.008715
hpup2
Entries 330561
Mean 0.9472
Std Dev 0.0008495
hpup3
Entries 307846
Mean 0.935
Std Dev 0.008945
pCut = 0.9400 GeV
50000
40000
30000
20000
10000
0
0.91 0.915 0.92 0.925 0.93 0.935 0.94 0.945 0.95 0.955
R.gold.p (GeV)

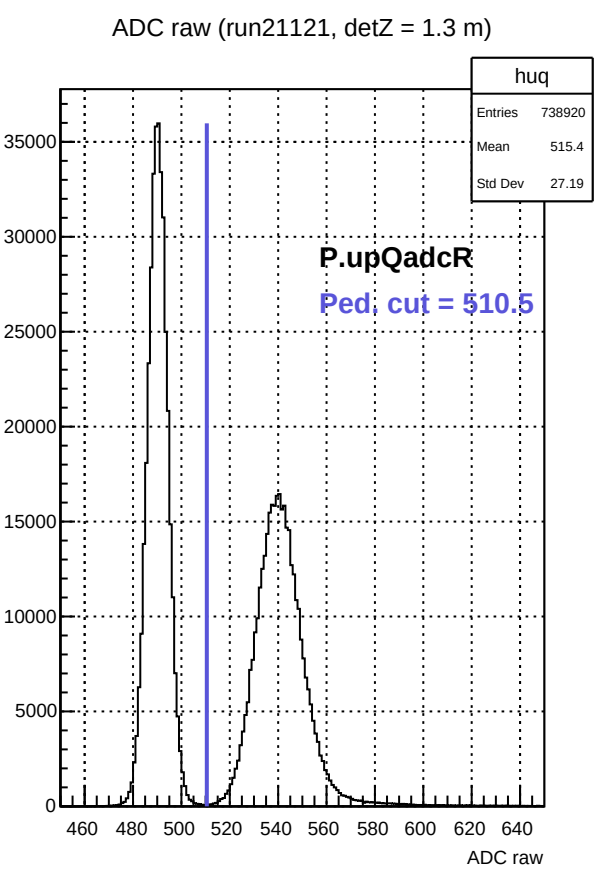

θlab (deg), pCut = 0.940 GeV
Theta
Entries 450323
Mean 4.781
Std Dev 0.4433
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
2
3
4
5
6
7
8
θlab (deg)

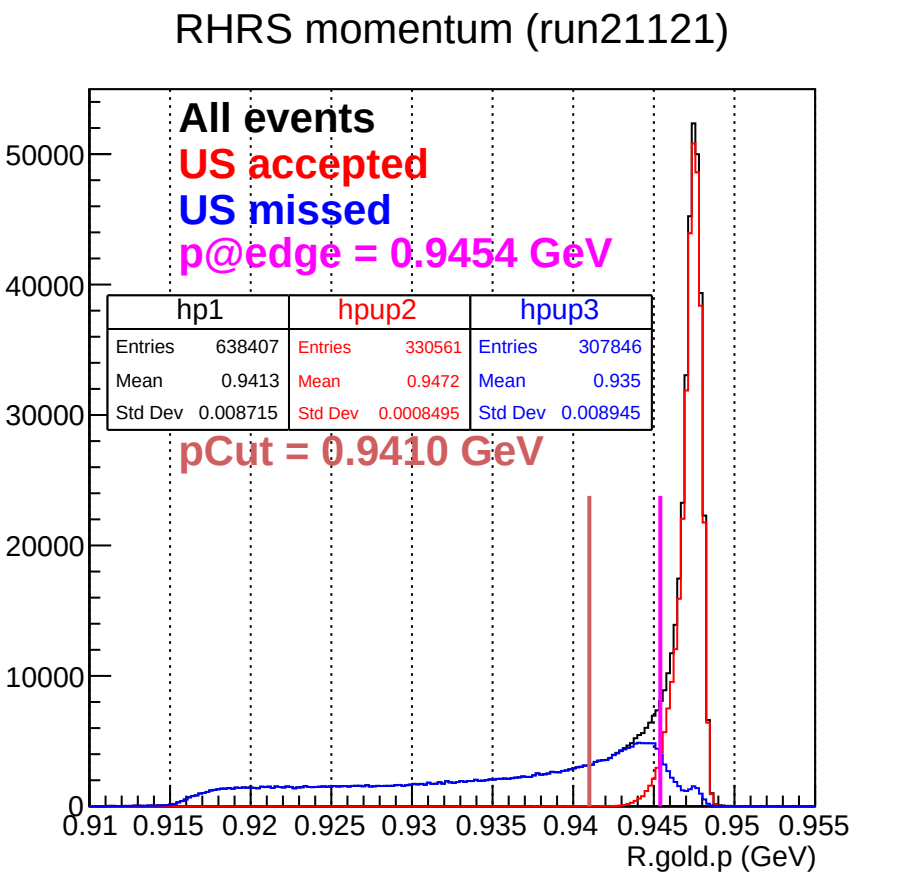

Asymmetry (ppm), pCut = 0.940 GeV
Asym
Entries 450323
Mean 0.5715
Std Dev 0.07232
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1
Asymmetry (ppm)

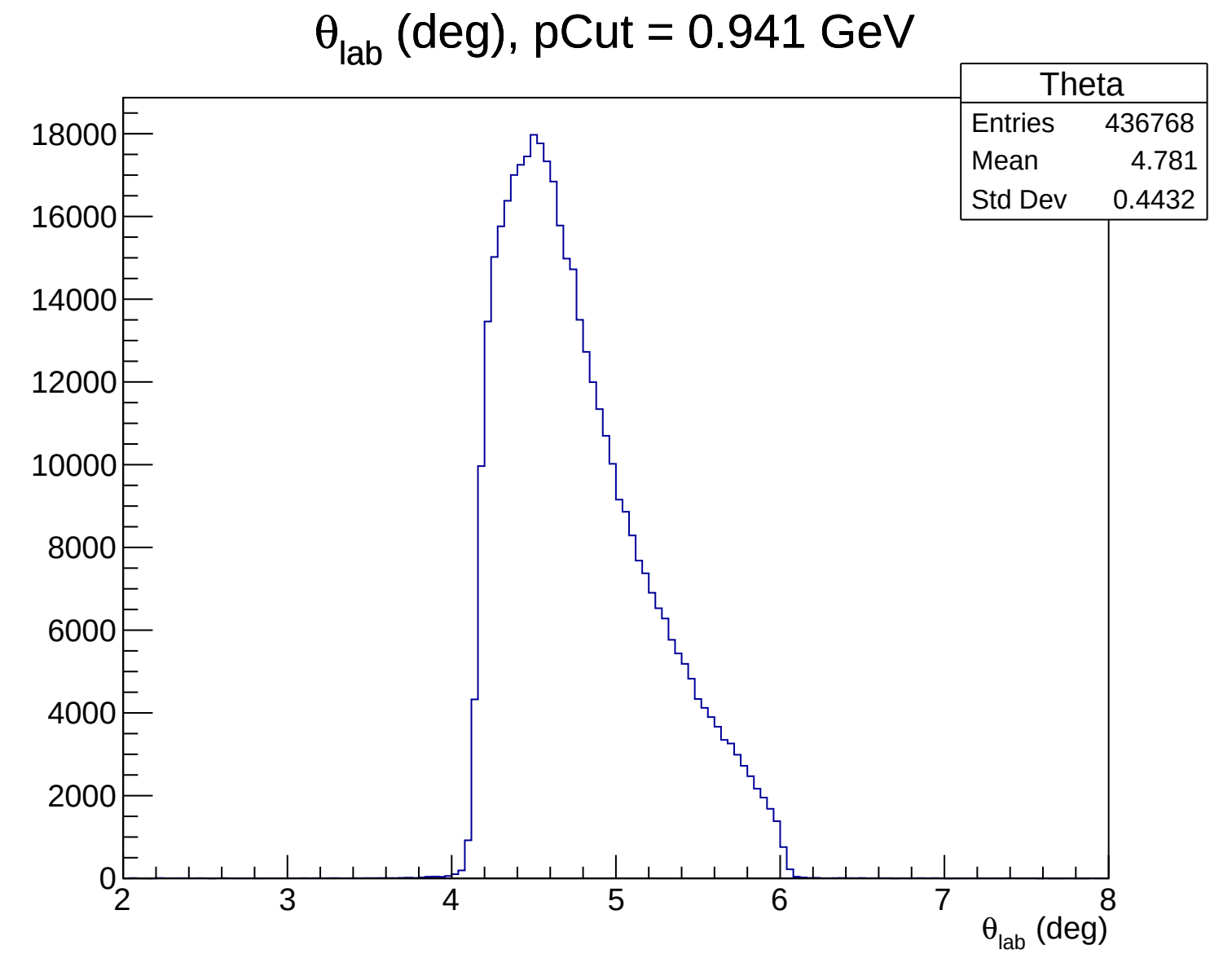

Stretched Asym. (ppm), pCut = 0.940 GeV
SAsym
Entries 450323
Mean 0.5585
Std Dev 0.06861
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1
Stretched Asym. (ppm)

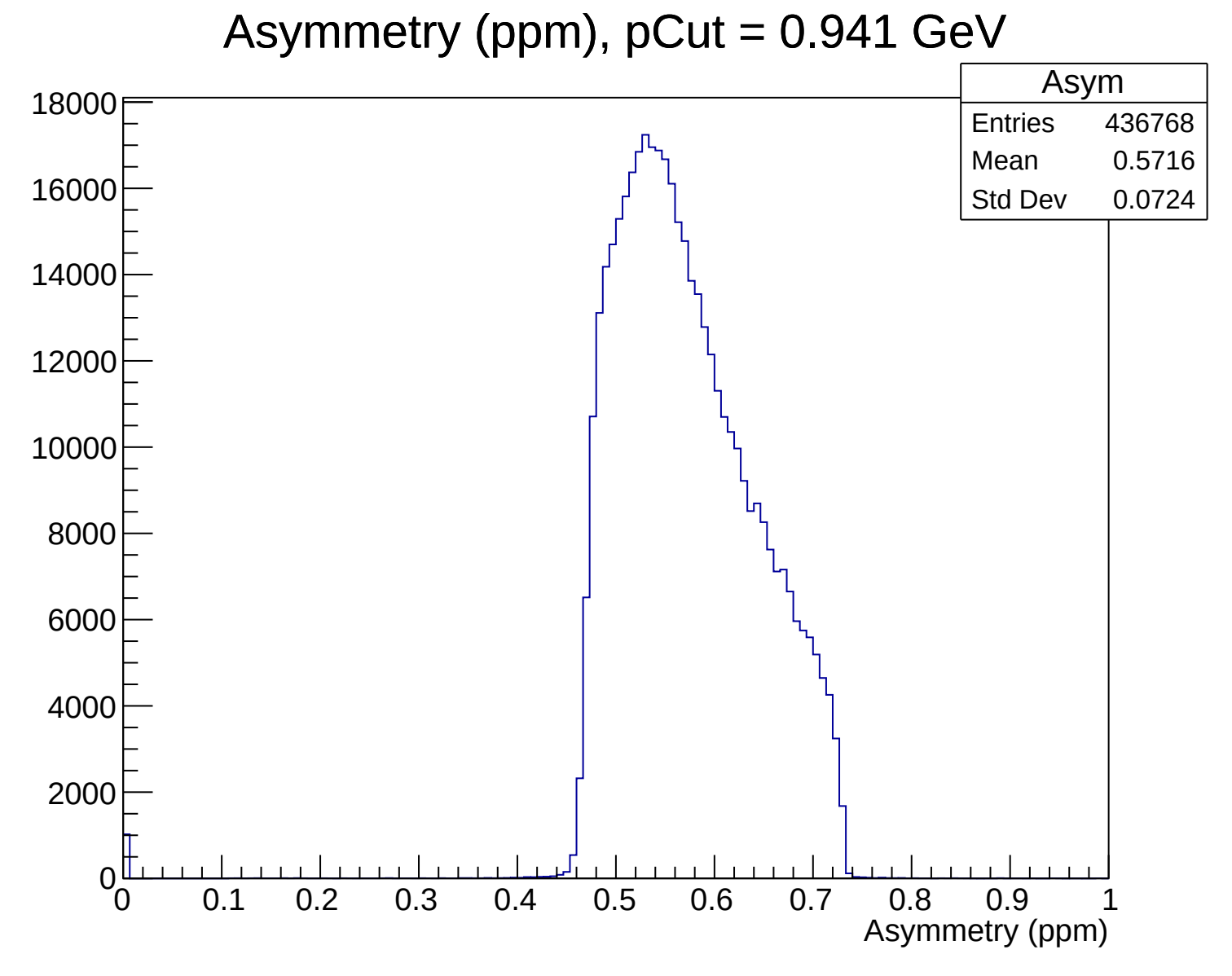

Q^2 (GeV/c)^2, pCut = 0.940 GeV
Q2
Entries 450323
Mean 0.006306
Std Dev 0.001201
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0
0.002
0.004
0.006
0.008
0.01
0.012
0.014
Q^2 (GeV/c)^2

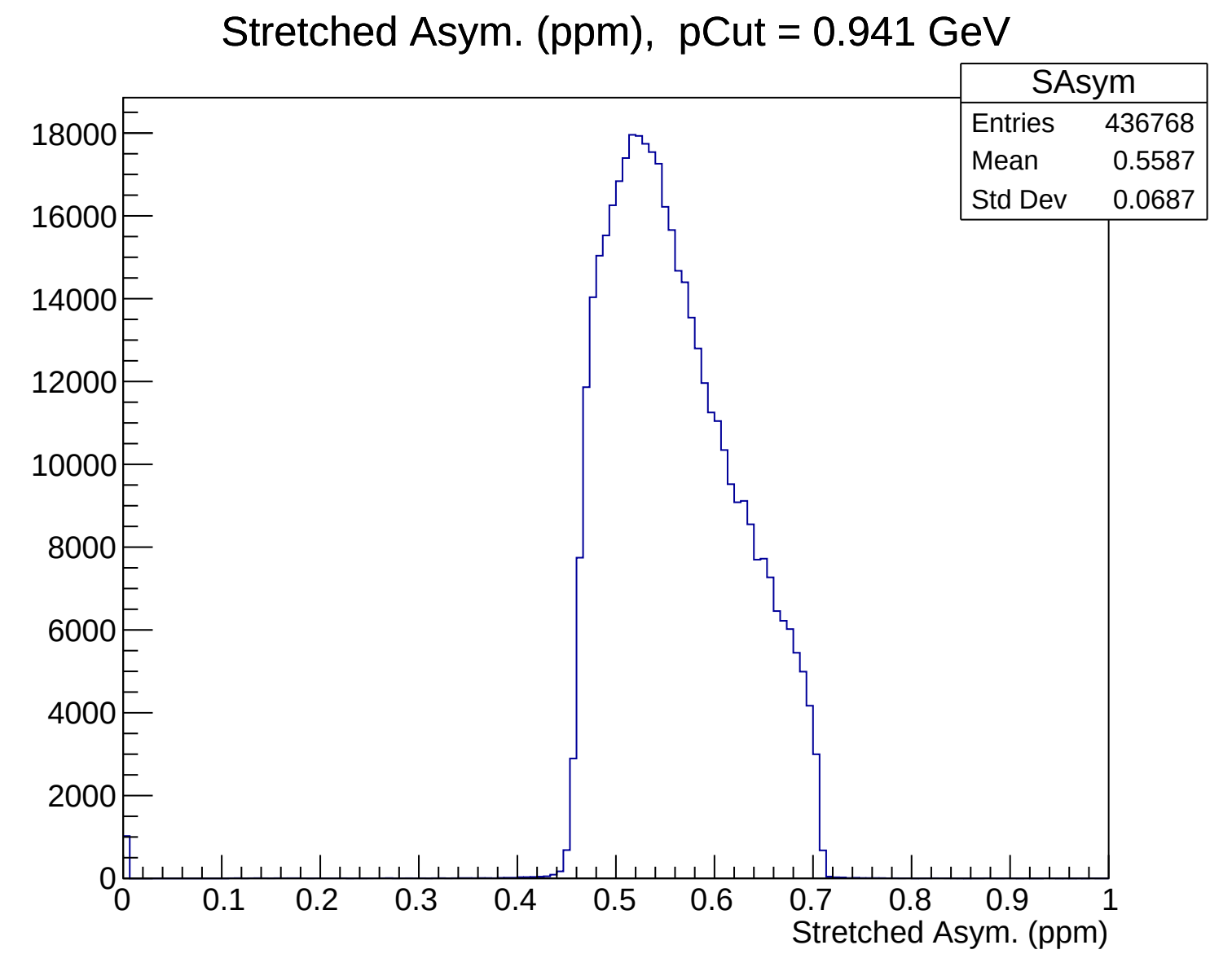

Sensitivity, pCut = 0.940 GeV
sens
Entries 450323
Mean 0.02219
Std Dev 0.003818
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0 0.005 0.01 0.015 0.02 0.025 0.03 0.035 0.04 0.045 0.05

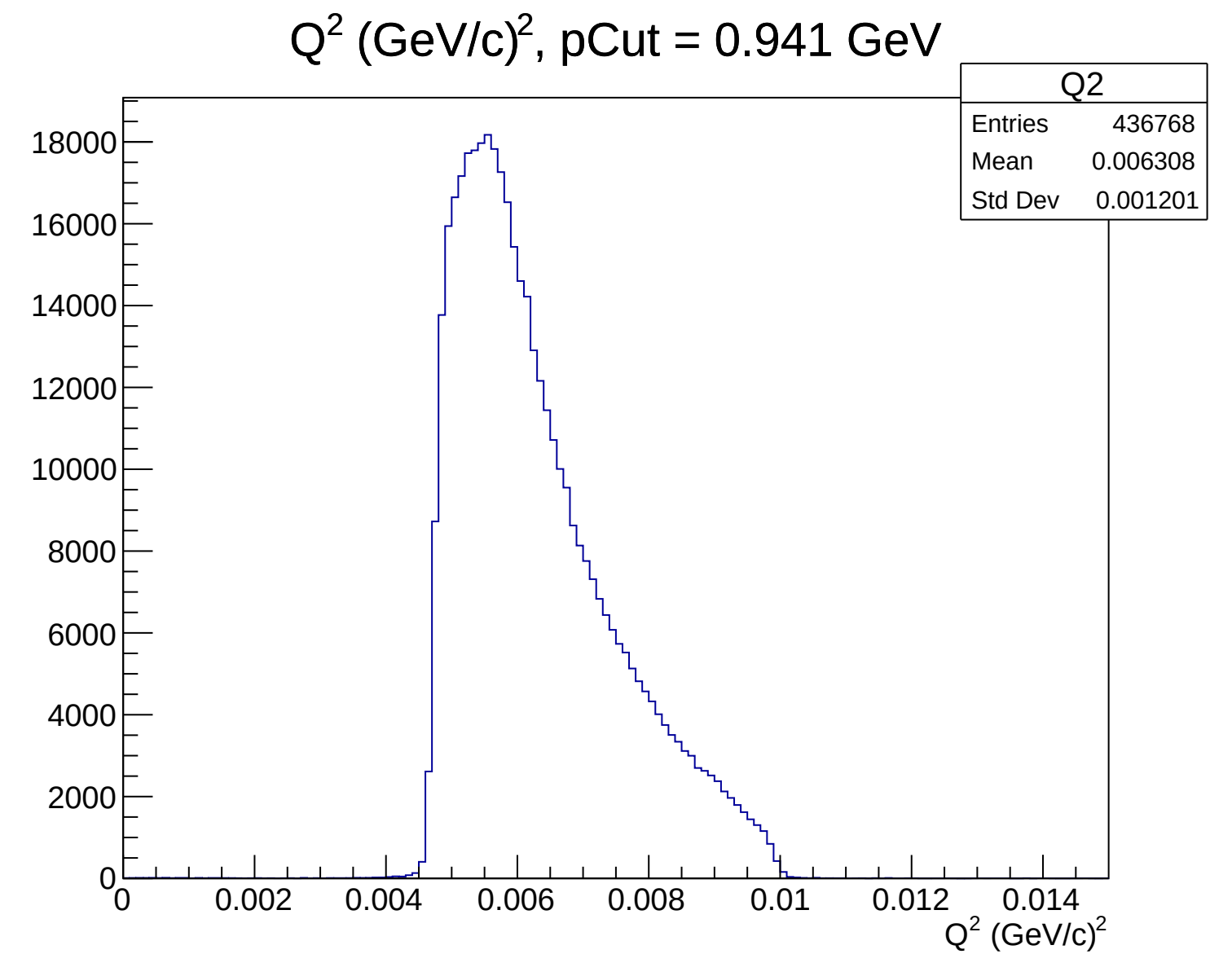

ADC raw (run21121, detZ = 1.3 m)
huq
Entries 738920
Mean 515.4
Std Dev 27.19
P.upQadcR
Ped. cut = 510.5
35000
30000
25000
20000
15000
10000
5000
0
460 480 500 520 540 560 580 600 620 640
ADC raw

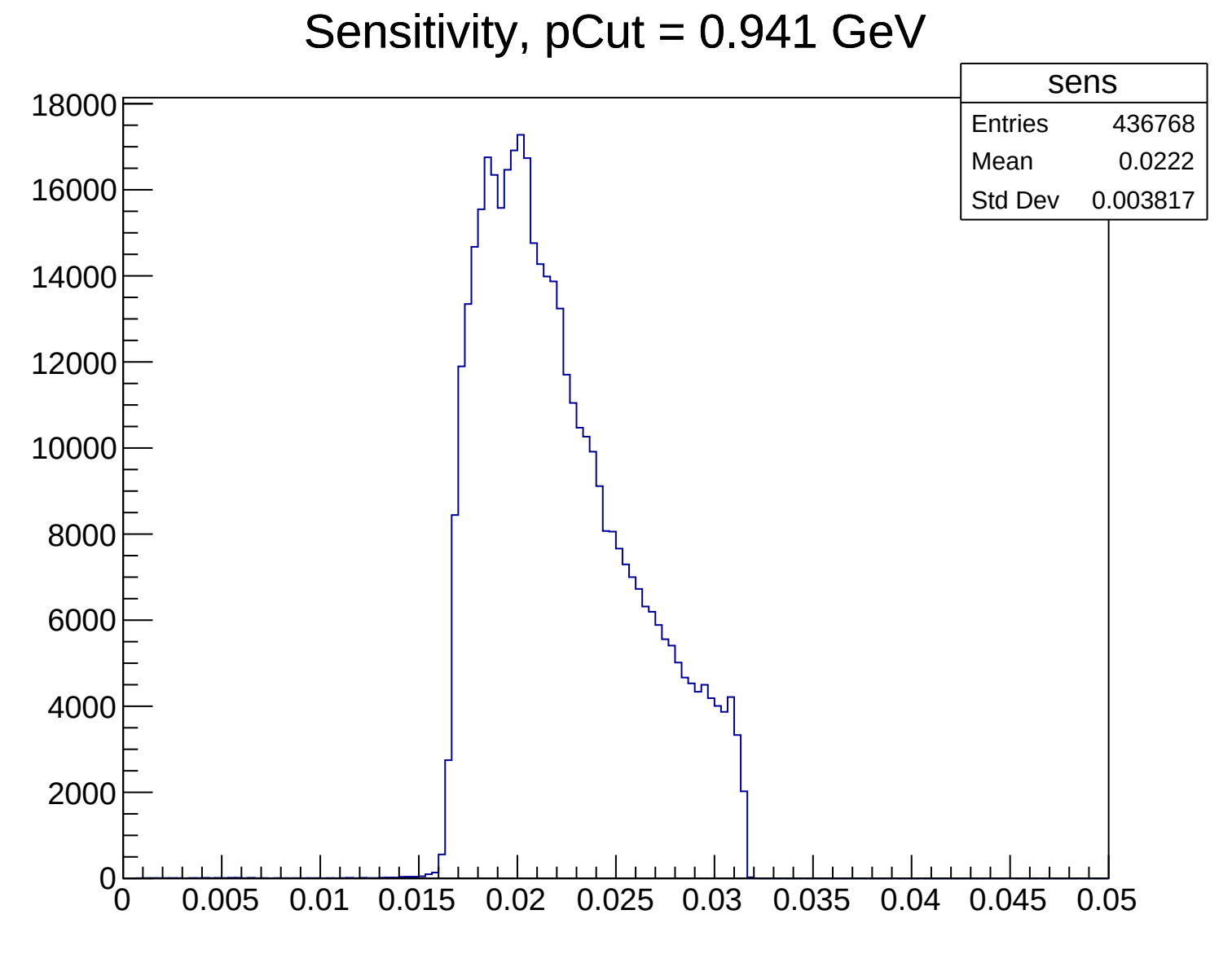

RHRS momentum (run21121)
All events
US accepted
US missed
p@edge = 0.9454 GeV
hp1
Entries 638407
Mean 0.9413
Std Dev 0.008715
hpup2
Entries 330561
Mean 0.9472
Std Dev 0.0008495
hpup3
Entries 307846
Mean 0.935
Std Dev 0.008945
pCut = 0.9410 GeV
50000
40000
30000
20000
10000
0
0.91 0.915 0.92 0.925 0.93 0.935 0.94 0.945 0.95 0.955
R.gold.p (GeV)

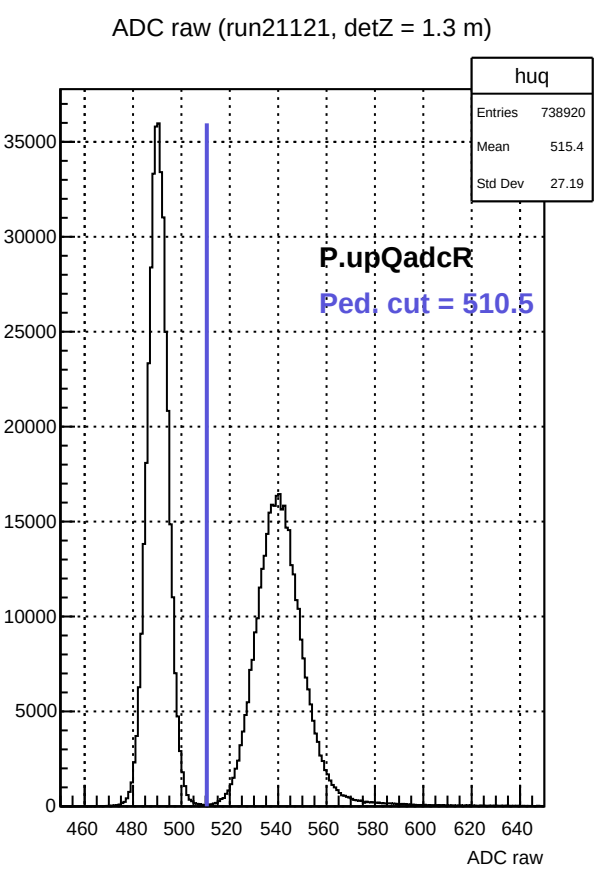

θlab (deg), pCut = 0.941 GeV
Theta
Entries 436768
Mean 4.781
Std Dev 0.4432
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
2
3
4
5
6
7
8
θlab (deg)

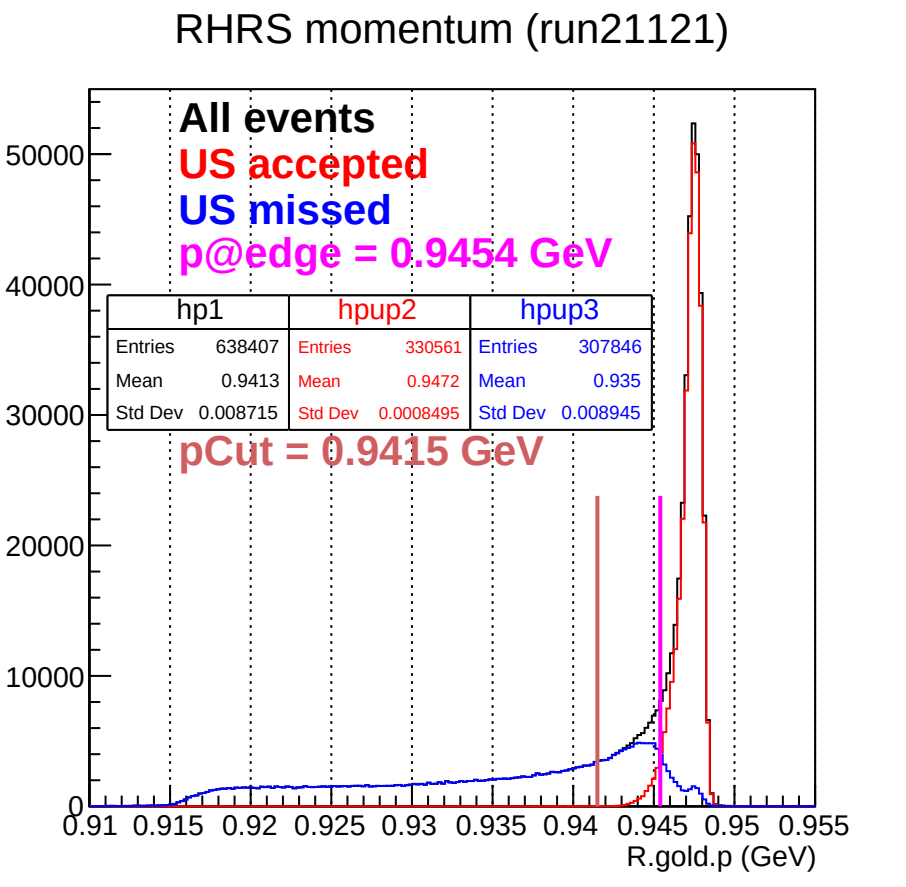

Asymmetry (ppm), pCut = 0.941 GeV
Asym
Entries 436768
Mean 0.5716
Std Dev 0.0724
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1
Asymmetry (ppm)

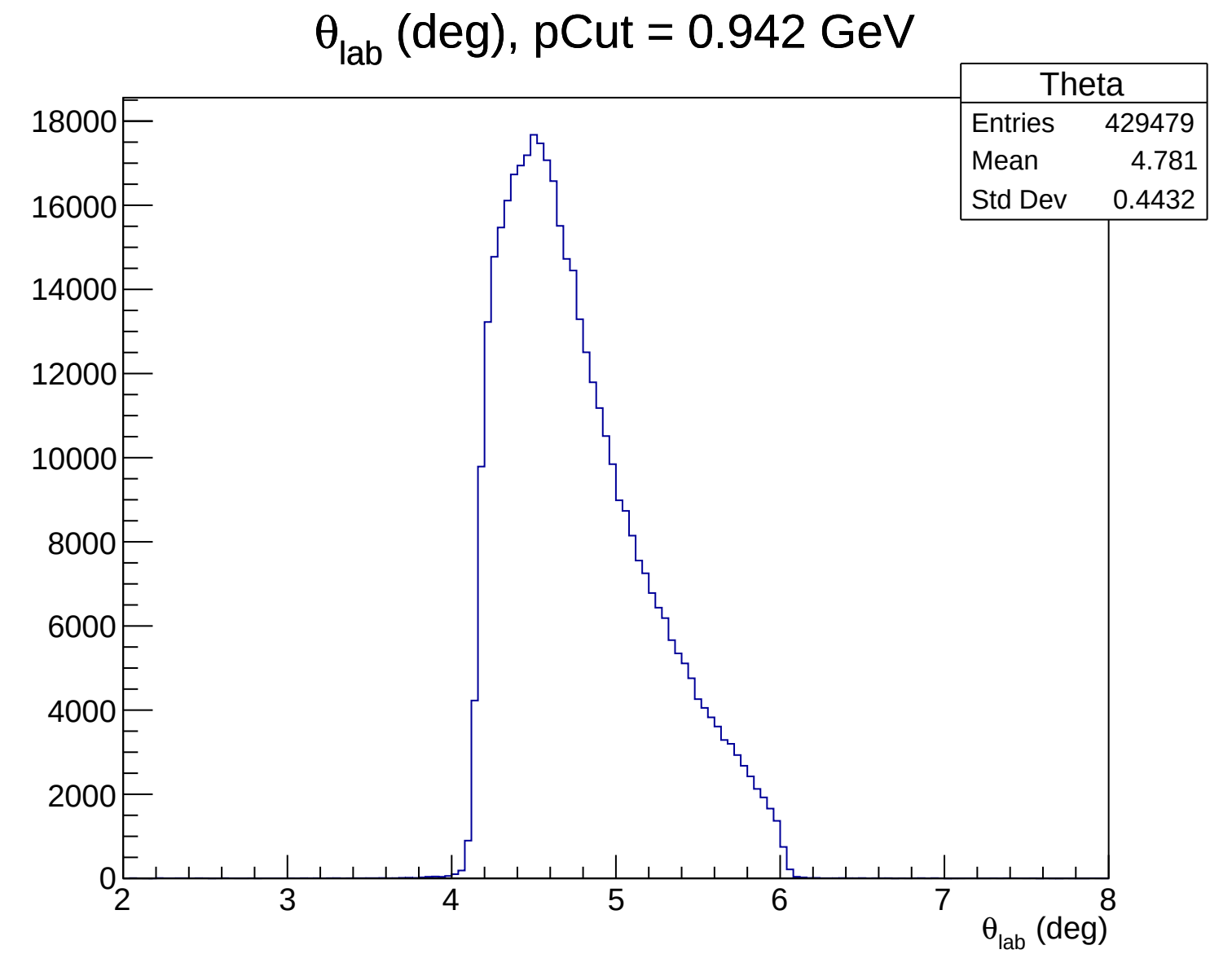

Stretched Asym. (ppm), pCut = 0.941 GeV
SAsym
Entries 436768
Mean 0.5587
Std Dev 0.0687
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1
Stretched Asym. (ppm)

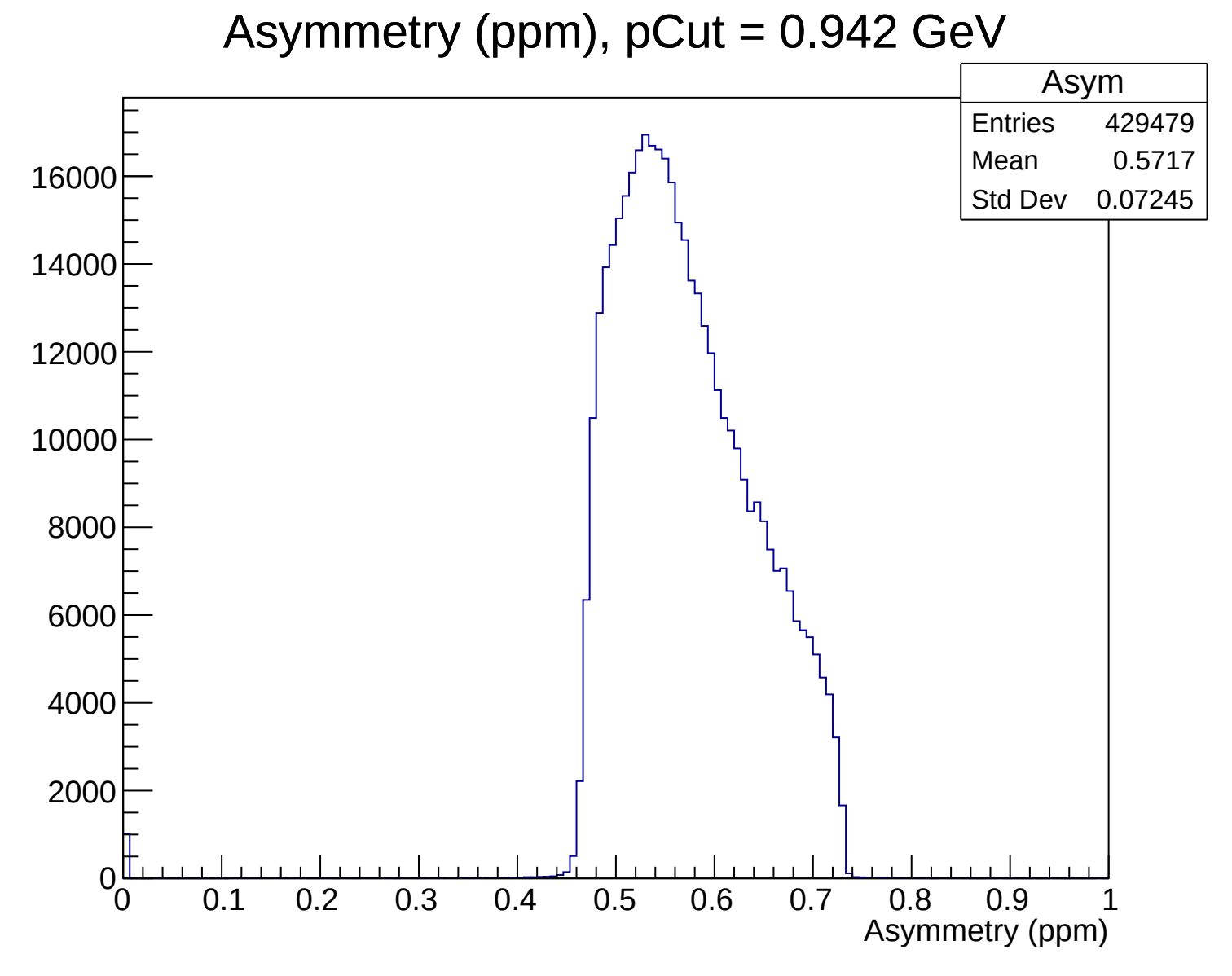

Q^2 (GeV/c)^2, pCut = 0.941 GeV
Q2
Entries 436768
Mean 0.006308
Std Dev 0.001201
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0
0.002
0.004
0.006
0.008
0.01
0.012
0.014
Q^2 (GeV/c)^2

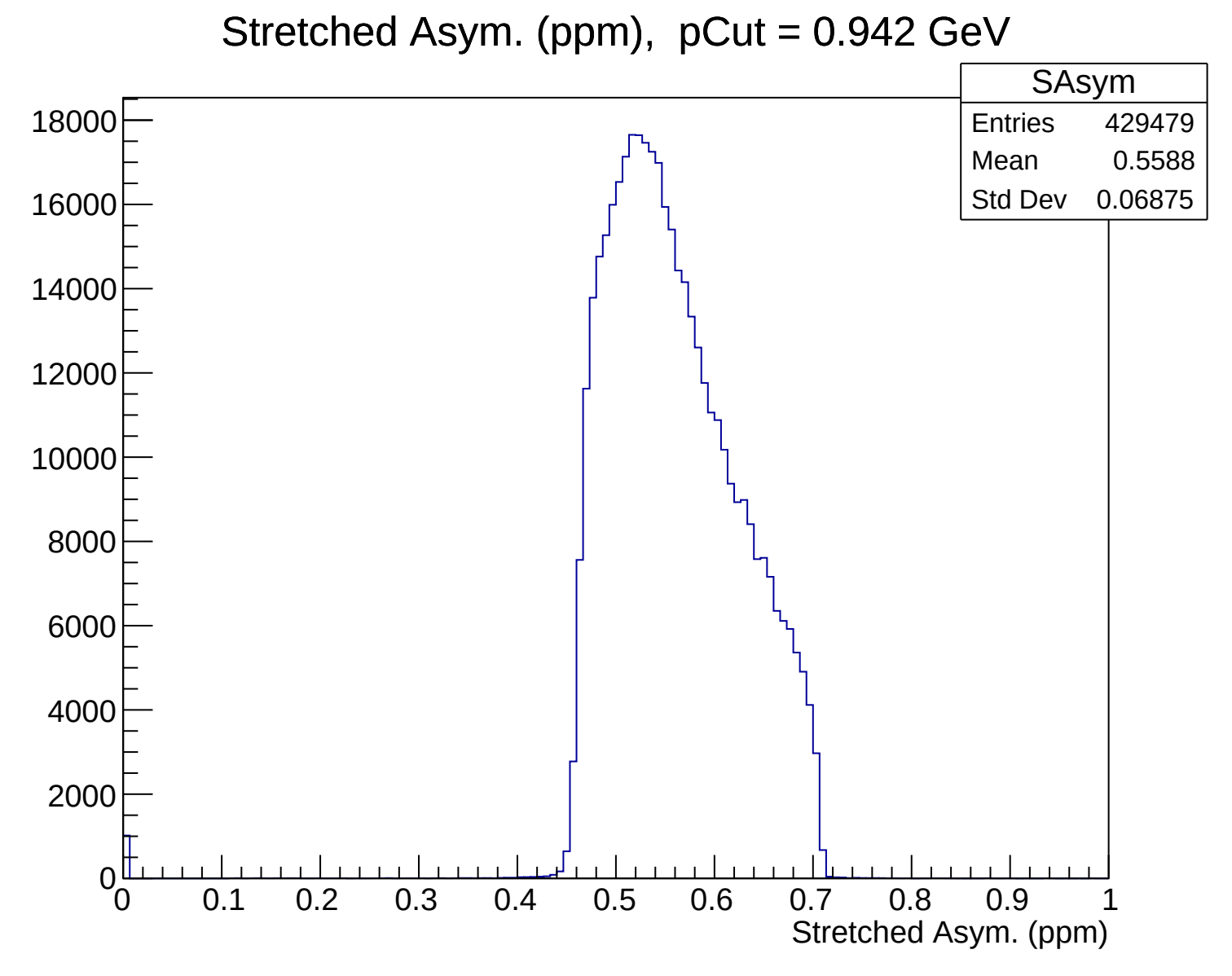

Sensitivity, pCut = 0.941 GeV
sens
Entries 436768
Mean 0.0222
Std Dev 0.003817
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0 0.005 0.01 0.015 0.02 0.025 0.03 0.035 0.04 0.045 0.05

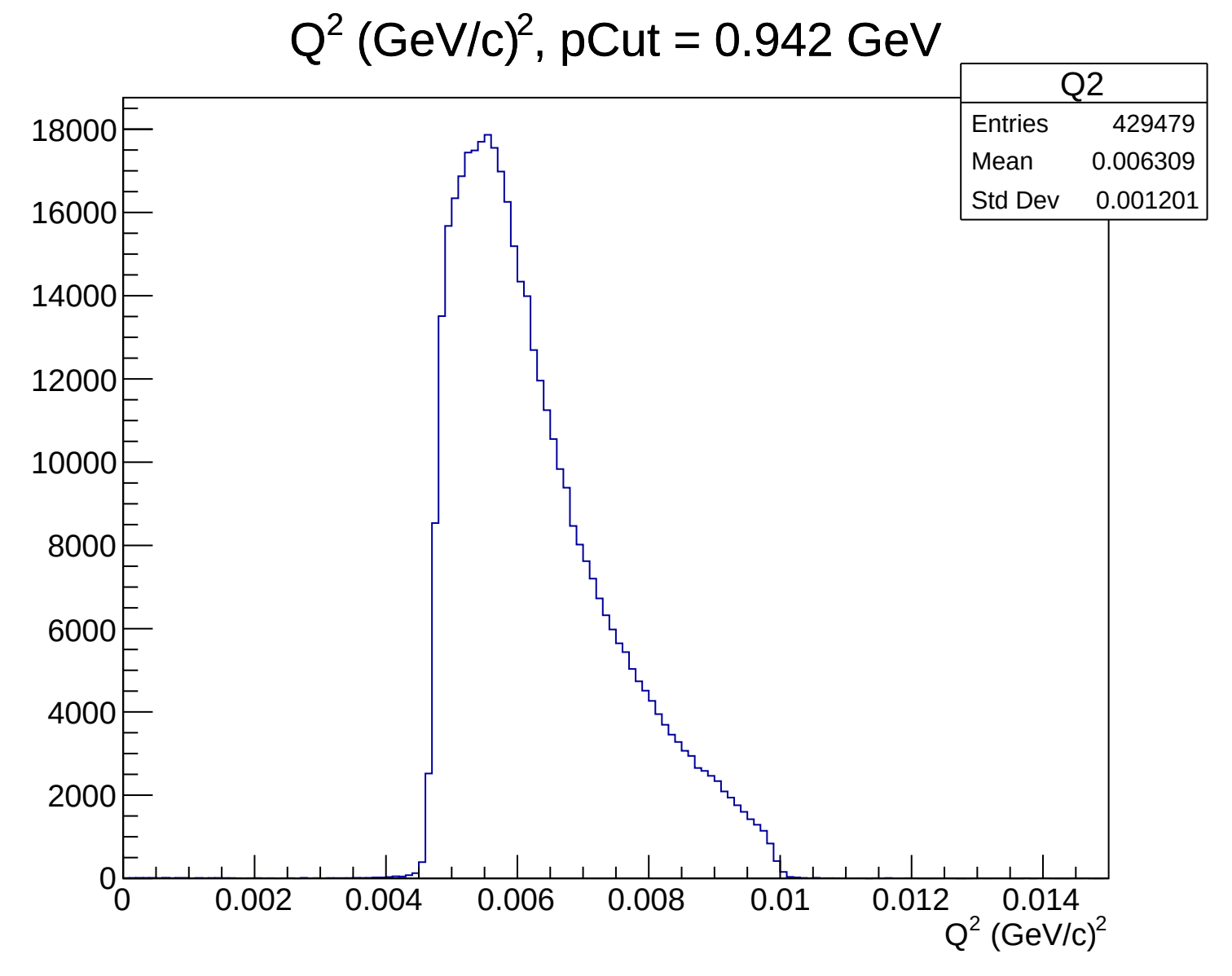

ADC raw (run21121, detZ = 1.3 m)
huq
Entries 738920
Mean 515.4
Std Dev 27.19
P.upQadcR
Ped. cut = 510.5
35000
30000
25000
20000
15000
10000
5000
0
460 480 500 520 540 560 580 600 620 640
ADC raw

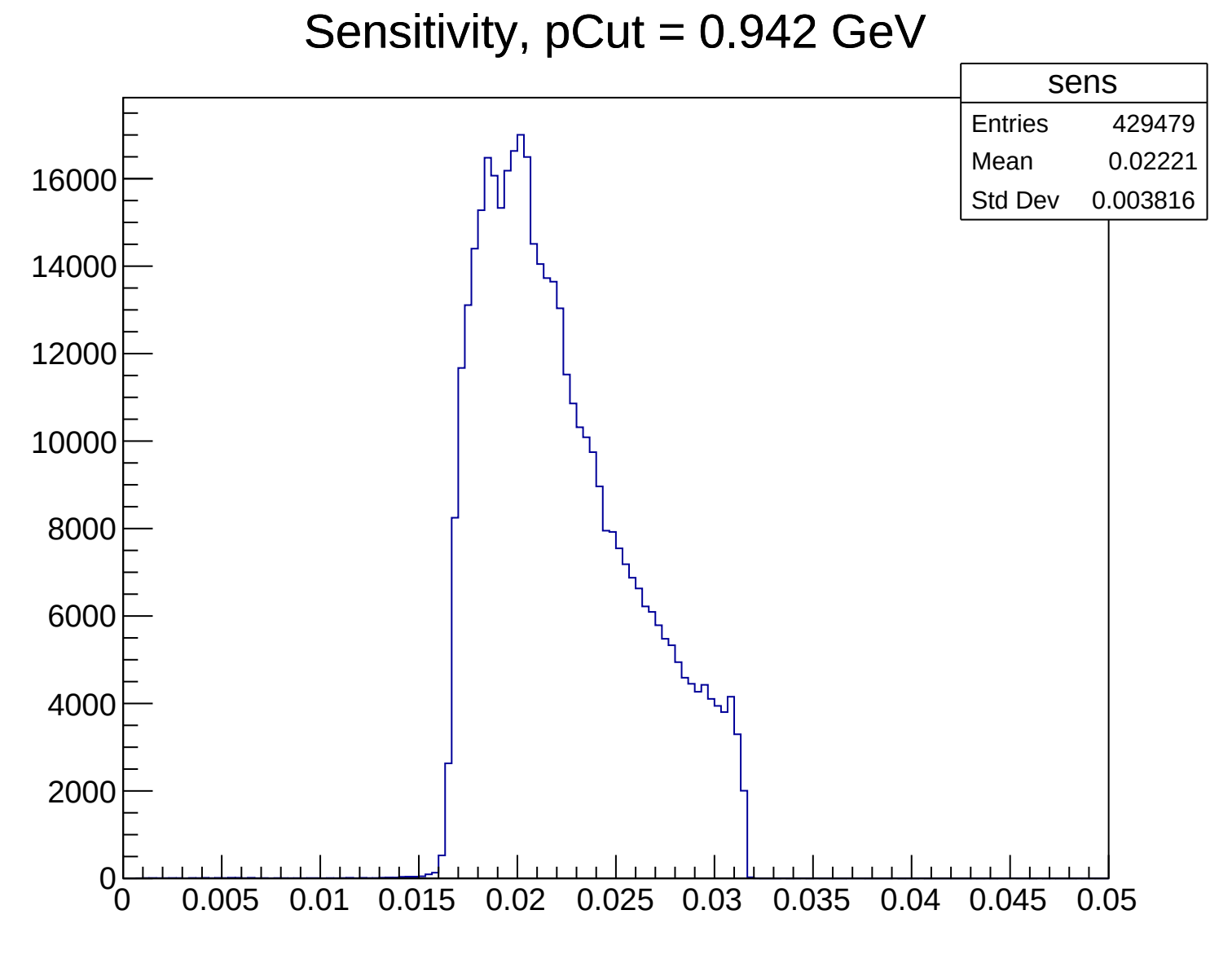

RHRS momentum (run21121)
All events
US accepted
US missed
p@edge = 0.9454 GeV
hp1
Entries 638407
Mean 0.9413
Std Dev 0.008715
hpup2
Entries 330561
Mean 0.9472
Std Dev 0.0008495
hpup3
Entries 307846
Mean 0.935
Std Dev 0.008945
pCut = 0.9415 GeV
50000
40000
30000
20000
10000
0
0.91 0.915 0.92 0.925 0.93 0.935 0.94 0.945 0.95 0.955
R.gold.p (GeV)

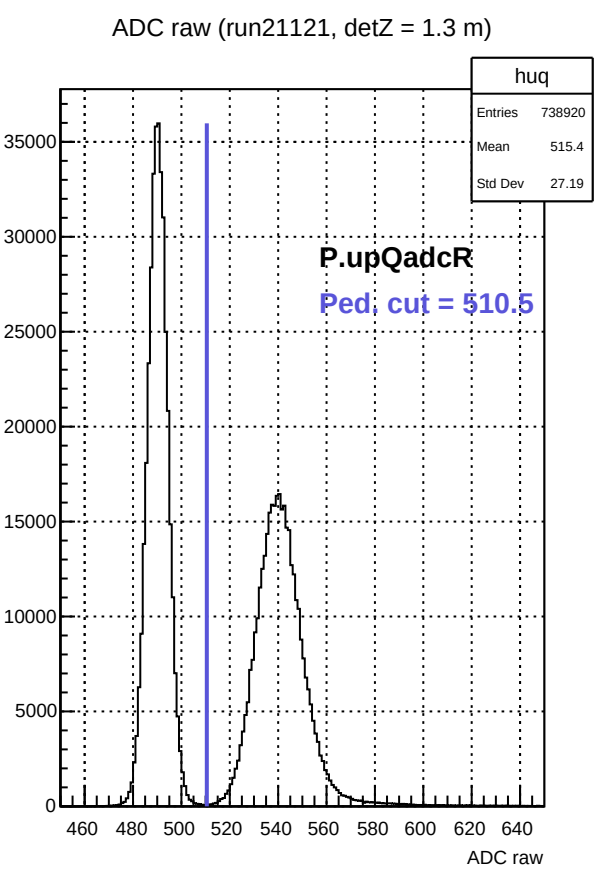

θlab (deg), pCut = 0.942 GeV
Theta
Entries 429479
Mean 4.781
Std Dev 0.4432
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
2
3
4
5
6
7
8
θlab (deg)

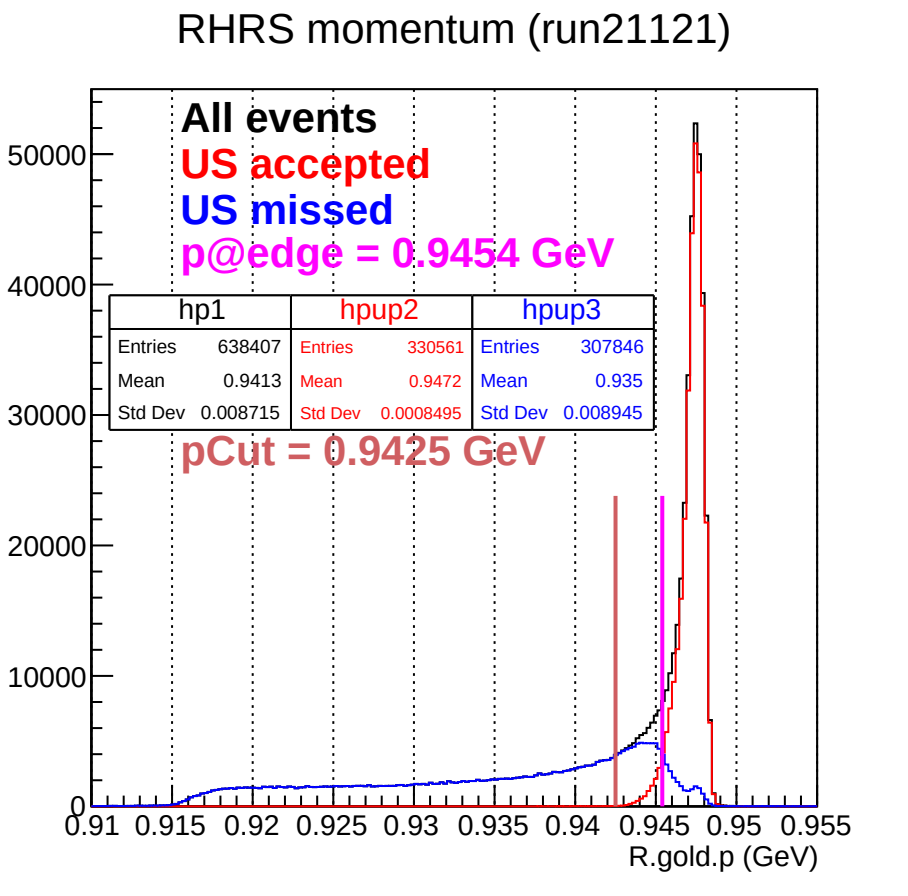

Asymmetry (ppm), pCut = 0.942 GeV
Asym
Entries 429479
Mean 0.5717
Std Dev 0.07245
16000
14000
12000
10000
8000
6000
4000
2000
0
0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1
Asymmetry (ppm)

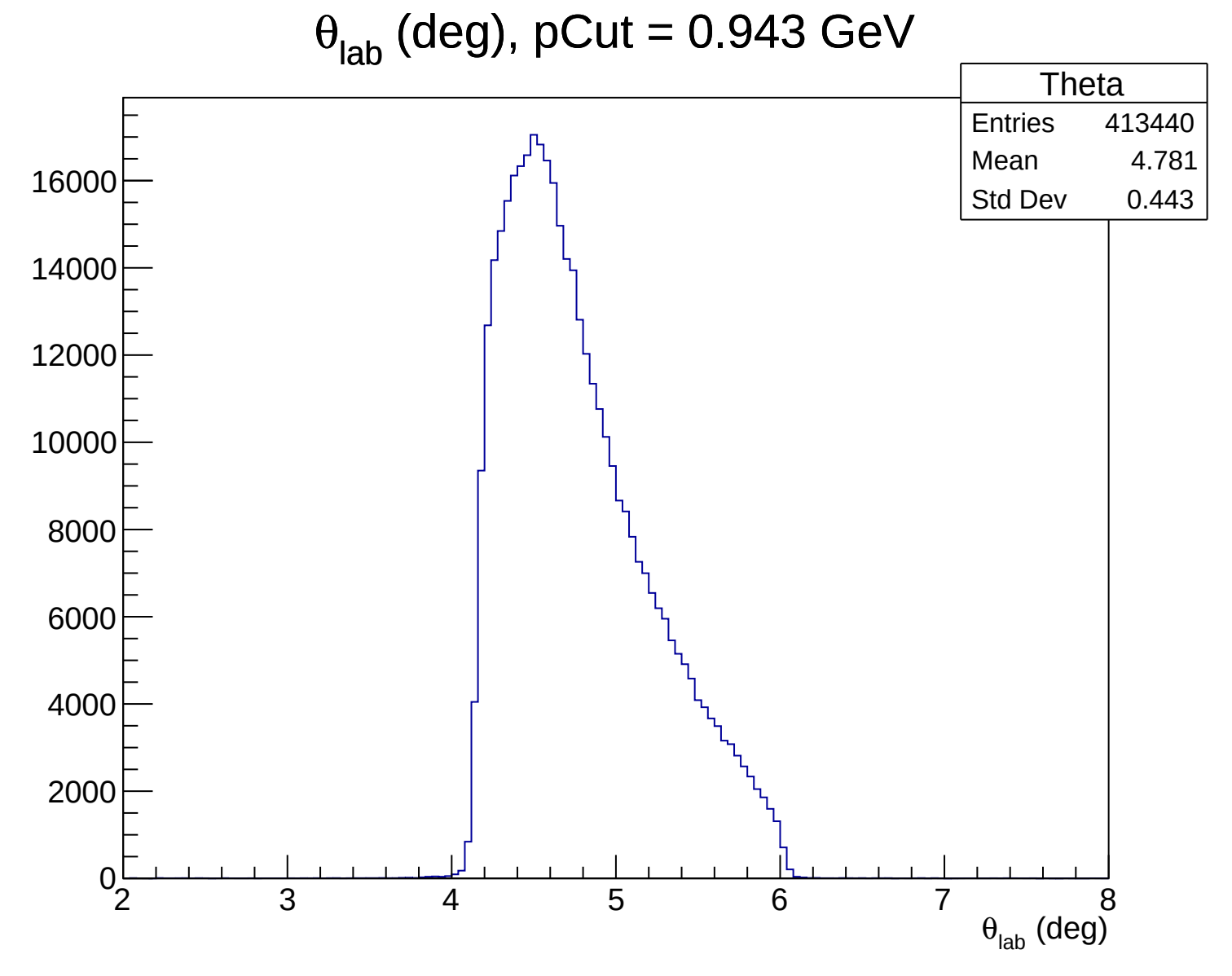

Stretched Asym. (ppm), pCut = 0.942 GeV
SAsym
Entries 429479
Mean 0.5588
Std Dev 0.06875
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1
Stretched Asym. (ppm)

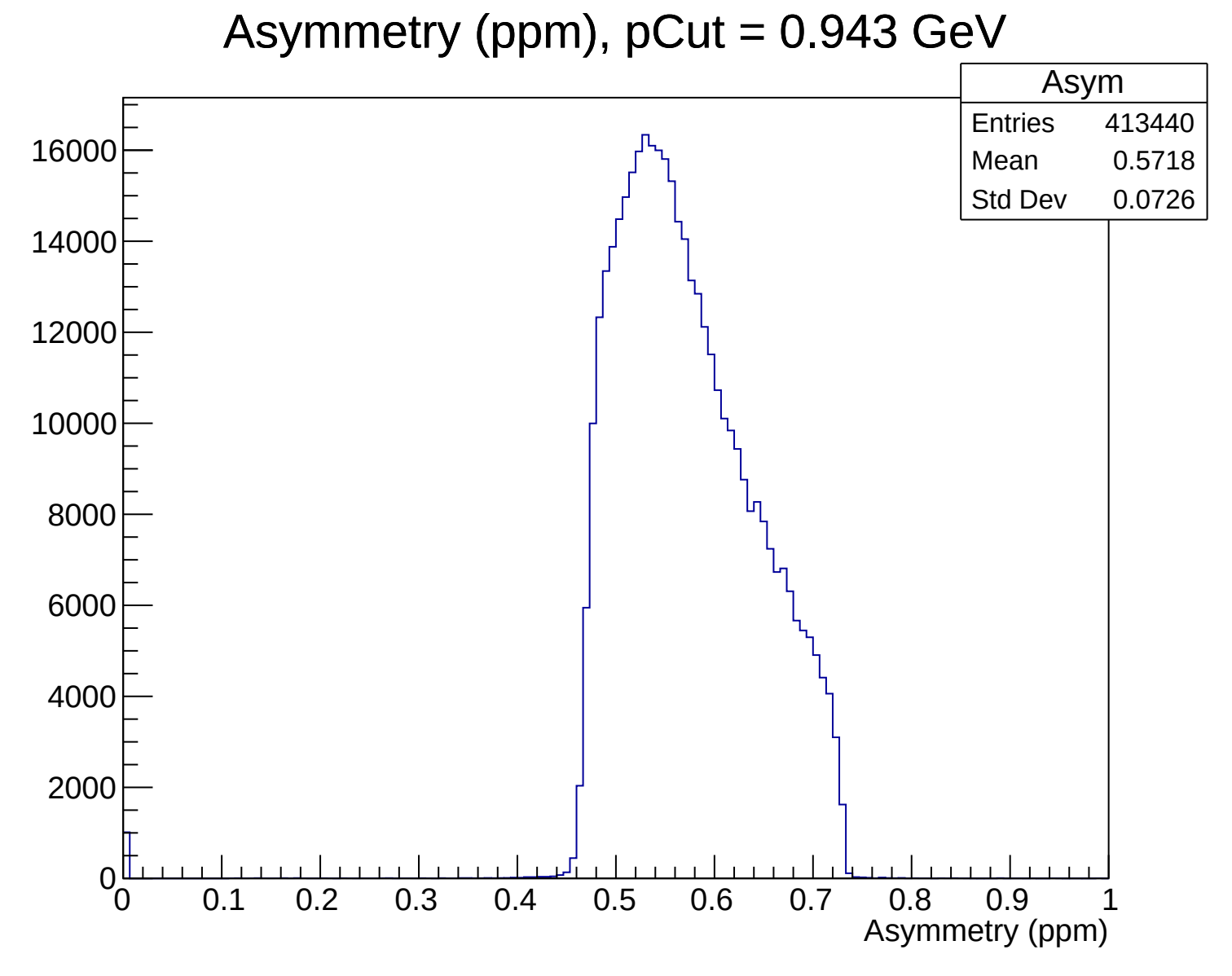

Q^2 (GeV/c)^2, pCut = 0.942 GeV
Q2
Entries 429479
Mean 0.006309
Std Dev 0.001201
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0
0.002
0.004
0.006
0.008
0.01
0.012
0.014
Q^2 (GeV/c)^2

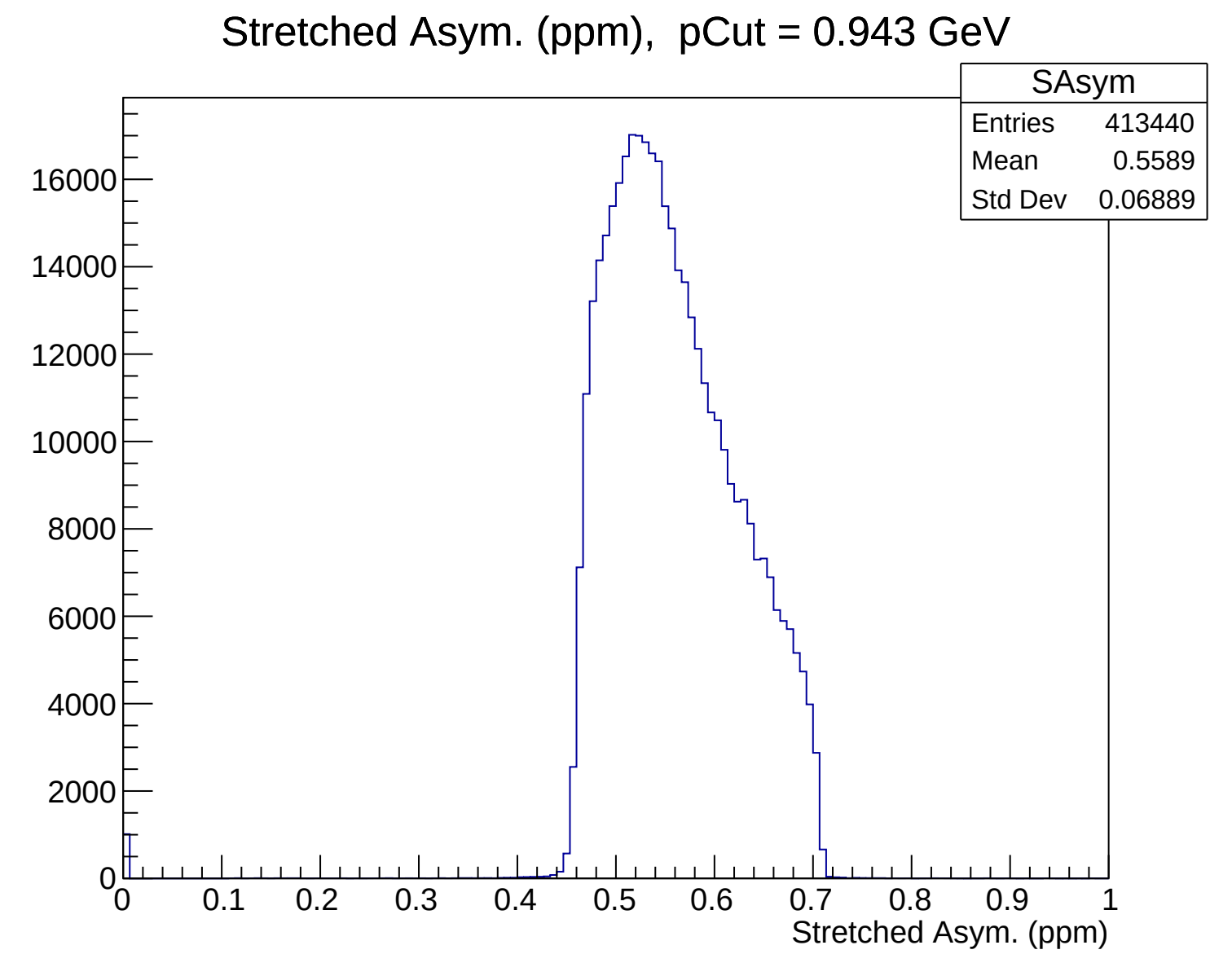

Sensitivity, pCut = 0.942 GeV
sens
Entries 429479
Mean 0.02221
Std Dev 0.003816
16000
14000
12000
10000
8000
6000
4000
2000
0
0 0.005 0.01 0.015 0.02 0.025 0.03 0.035 0.04 0.045 0.05

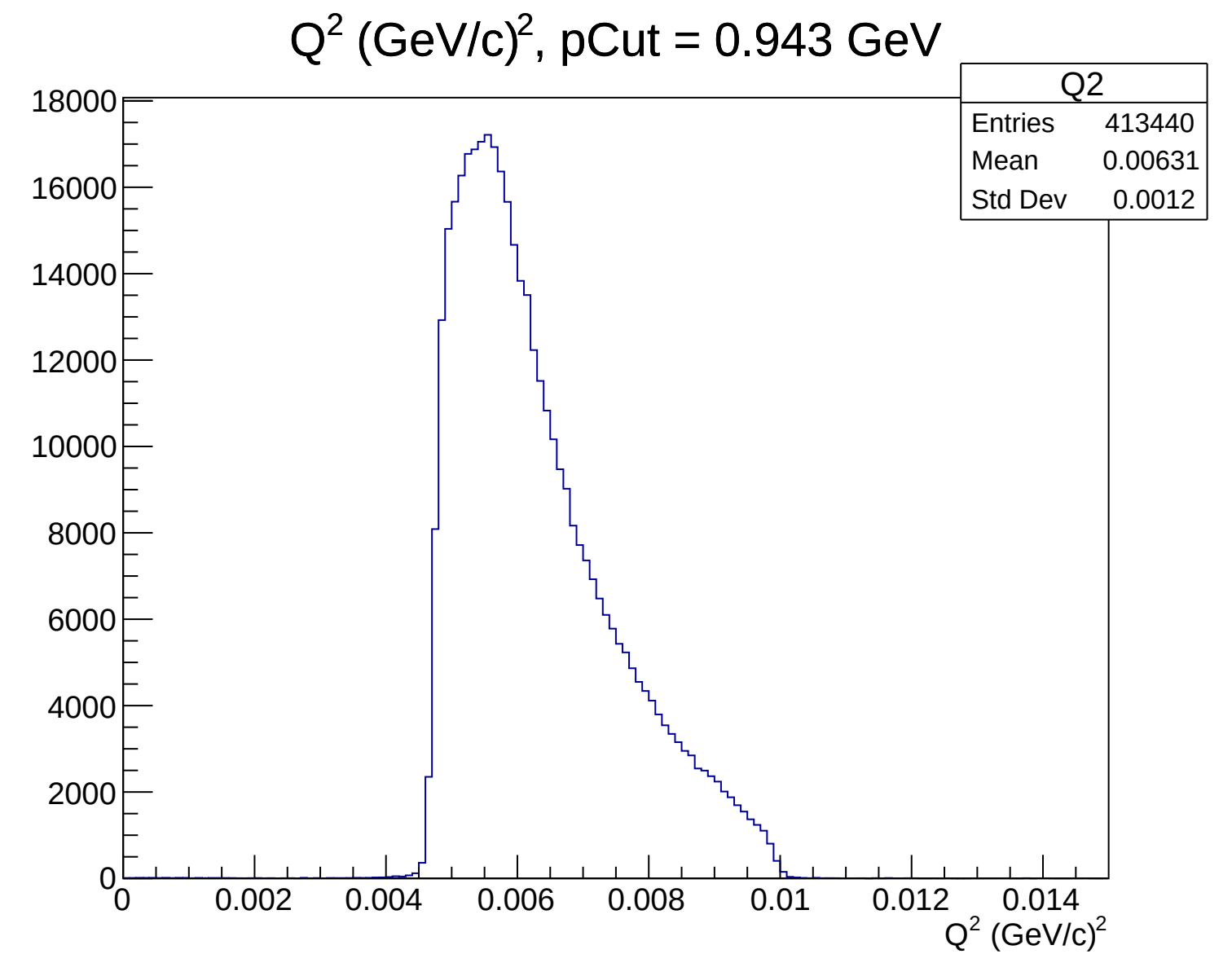

ADC raw (run21121, detZ = 1.3 m)
huq
Entries 738920
Mean 515.4
Std Dev 27.19
P.upQadcR
Ped. cut = 510.5
35000
30000
25000
20000
15000
10000
5000
0
460 480 500 520 540 560 580 600 620 640
ADC raw

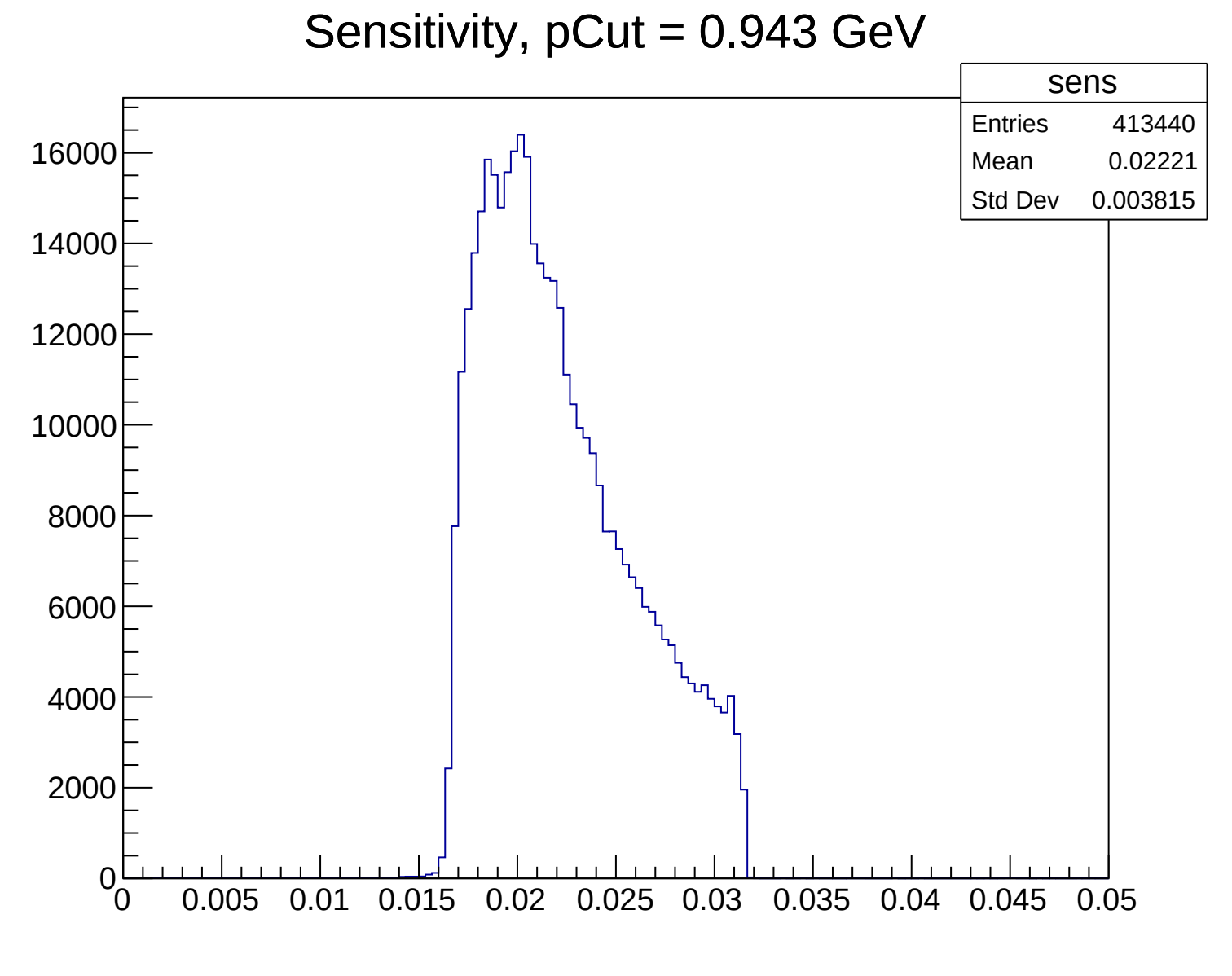

RHRS momentum (run21121)
All events
US accepted
US missed
p@edge = 0.9454 GeV
hp1
Entries 638407
Mean 0.9413
Std Dev 0.008715
hpup2
Entries 330561
Mean 0.9472
Std Dev 0.0008495
hpup3
Entries 307846
Mean 0.935
Std Dev 0.008945
pCut = 0.9425 GeV
50000
40000
30000
20000
10000
0
0.91 0.915 0.92 0.925 0.93 0.935 0.94 0.945 0.95 0.955
R.gold.p (GeV)

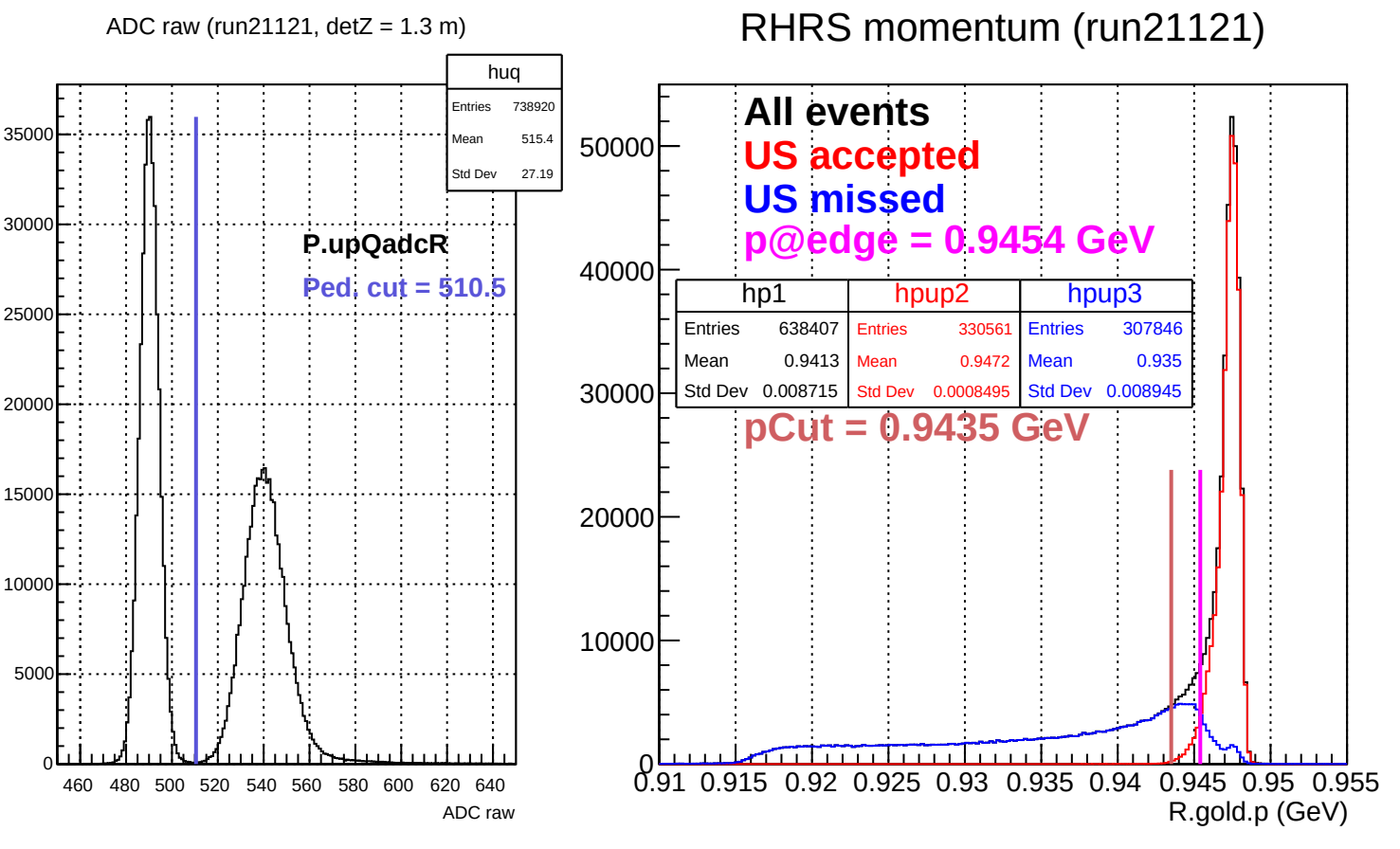

θlab (deg), pCut = 0.943 GeV
Theta
Entries 413440
Mean 4.781
Std Dev 0.443
16000
14000
12000
10000
8000
6000
4000
2000
0
2
3
4
5
6
7
8
θlab (deg)

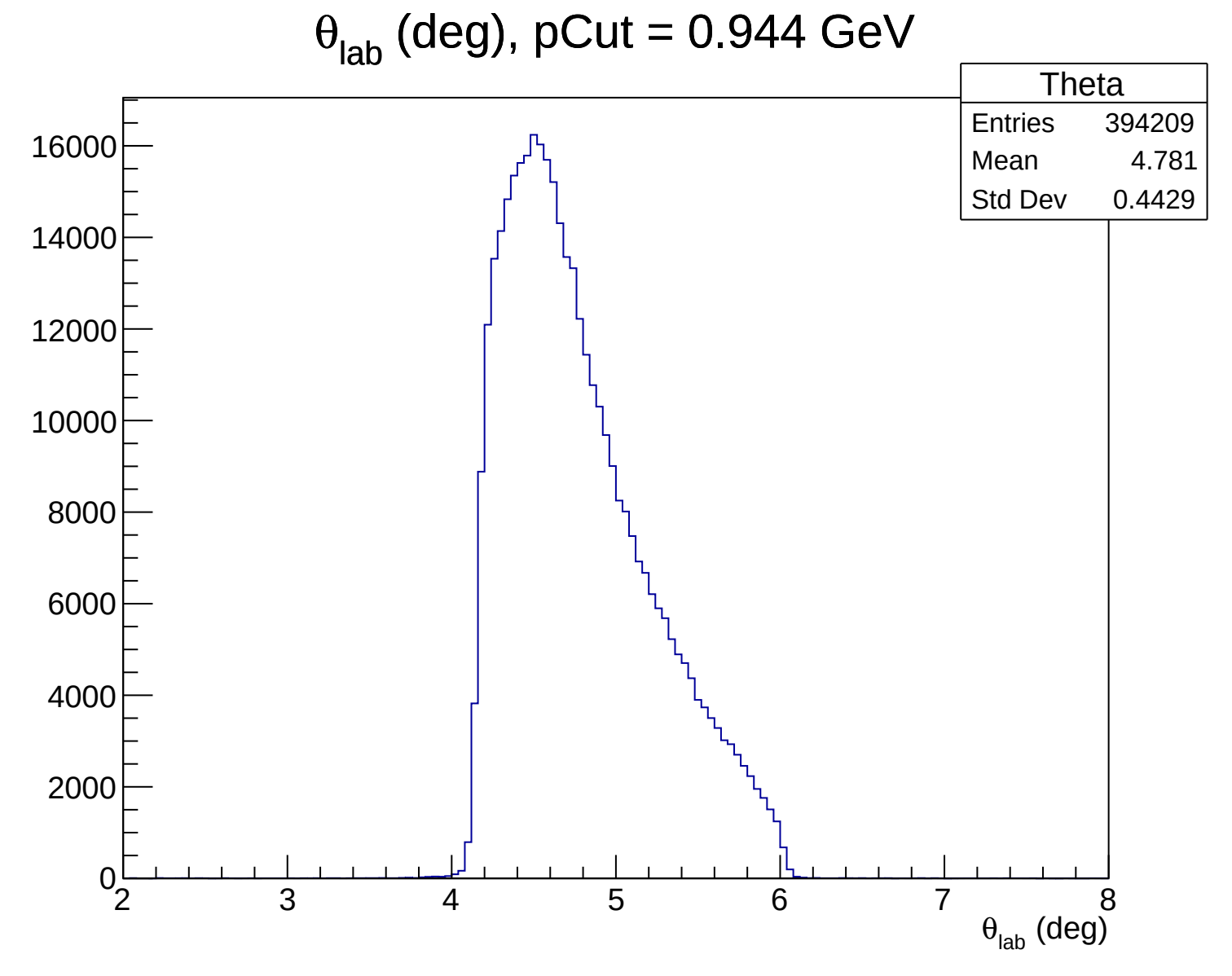

Asymmetry (ppm), pCut = 0.943 GeV
Asym
Entries 413440
Mean 0.5718
Std Dev 0.0726
16000
14000
12000
10000
8000
6000
4000
2000
0
0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1
Asymmetry (ppm)

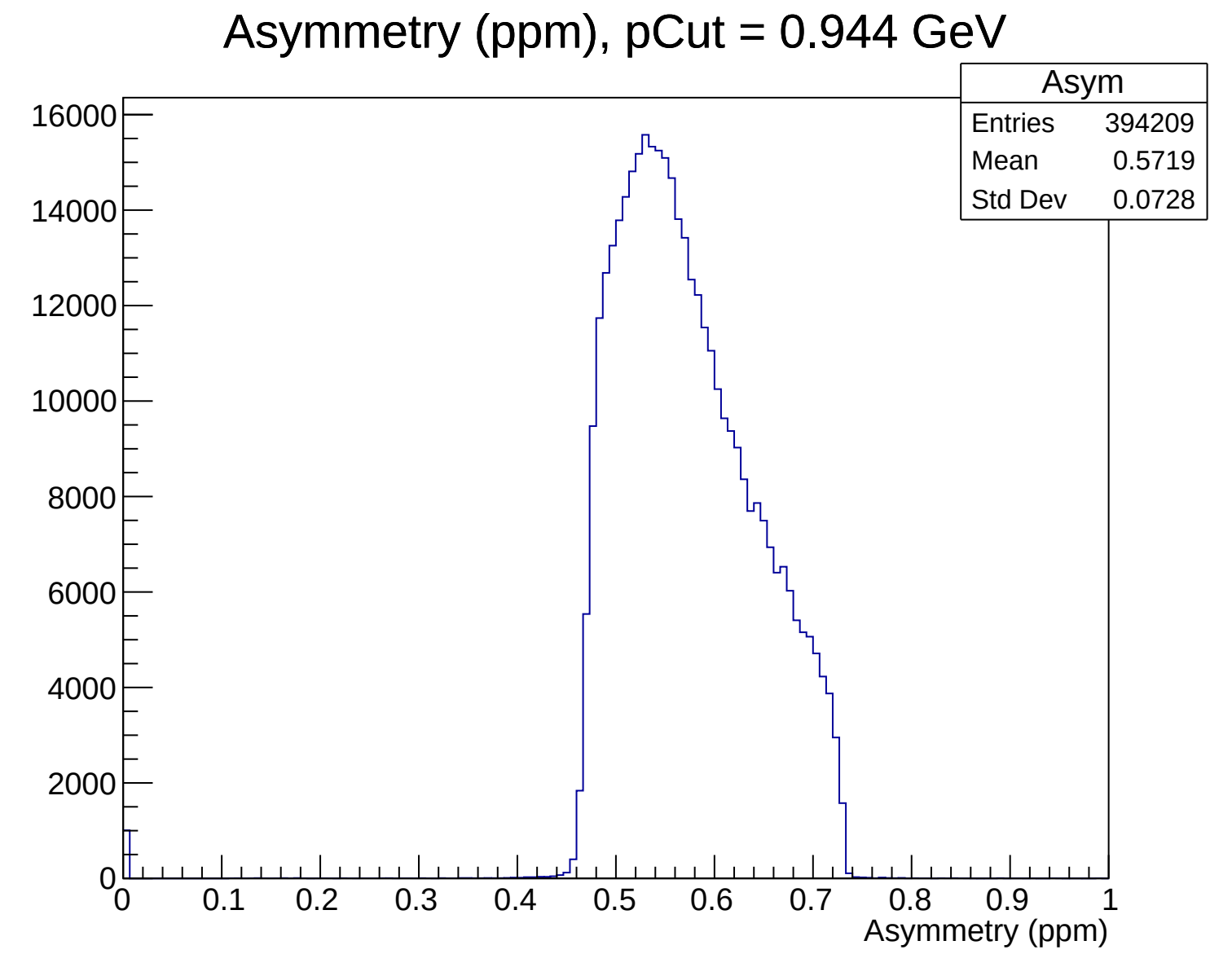

Stretched Asym. (ppm), pCut = 0.943 GeV
SAsym
Entries 413440
Mean 0.5589
Std Dev 0.06889
16000
14000
12000
10000
8000
6000
4000
2000
0
0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1
Stretched Asym. (ppm)

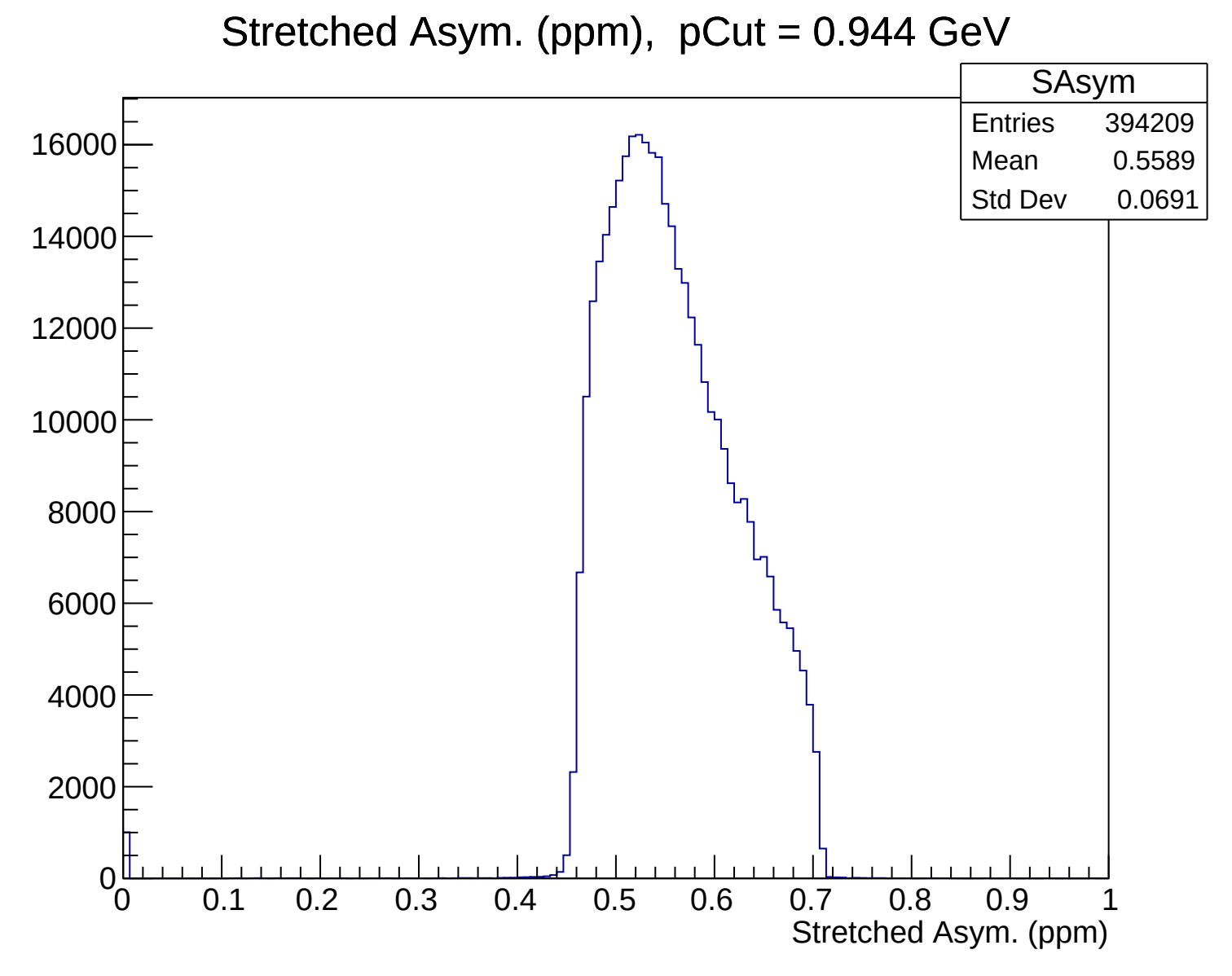

Q^2 (GeV/c)^2, pCut = 0.943 GeV
Q2
Entries 413440
Mean 0.00631
Std Dev 0.0012
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0
0.002
0.004
0.006
0.008
0.01
0.012
0.014
Q^2 (GeV/c)^2

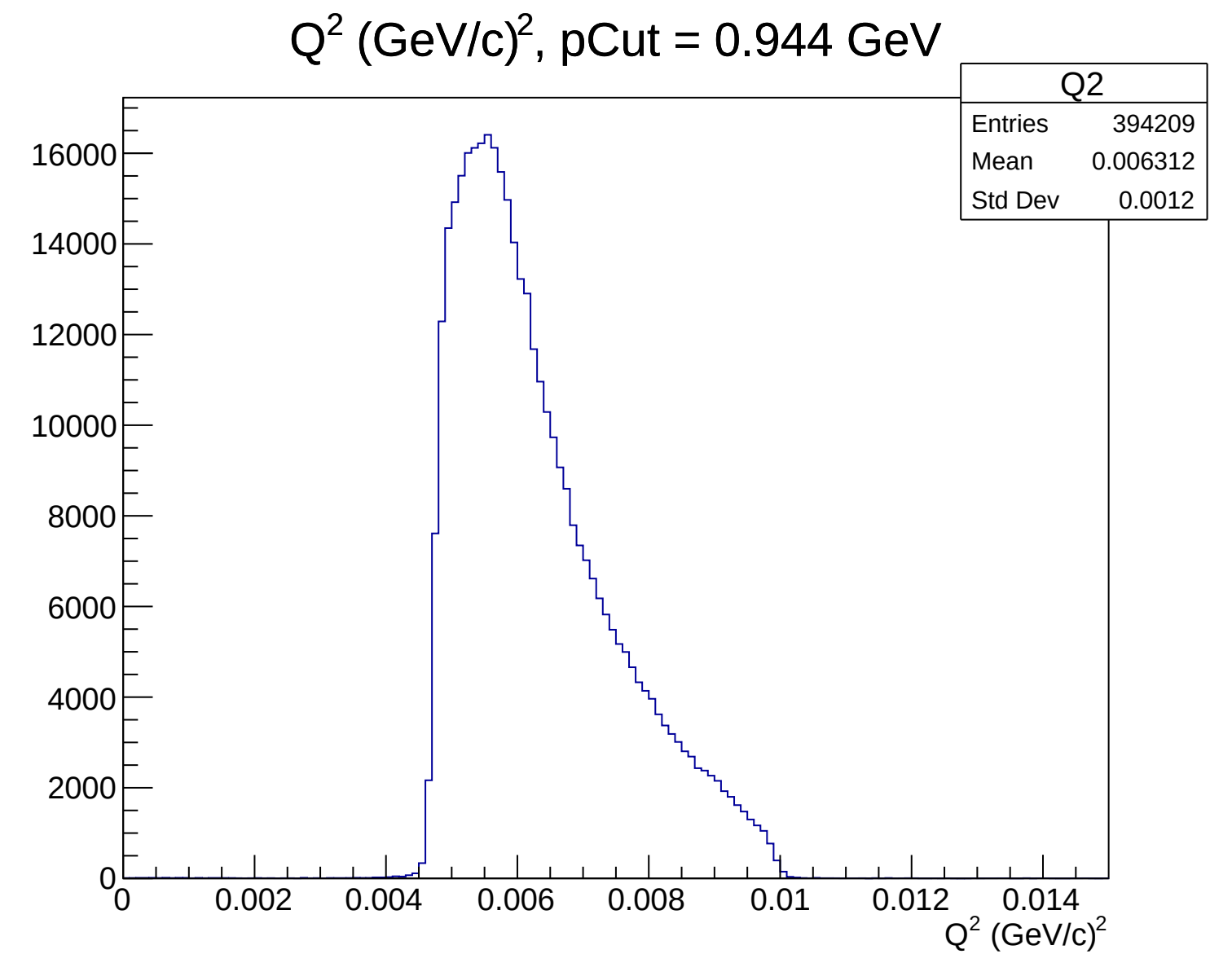

Sensitivity, pCut = 0.943 GeV
sens
Entries 413440
Mean 0.02221
Std Dev 0.003815
16000
14000
12000
10000
8000
6000
4000
2000
0
0
0.005
0.01
0.015
0.02
0.025
0.03
0.035
0.04
0.045
0.05

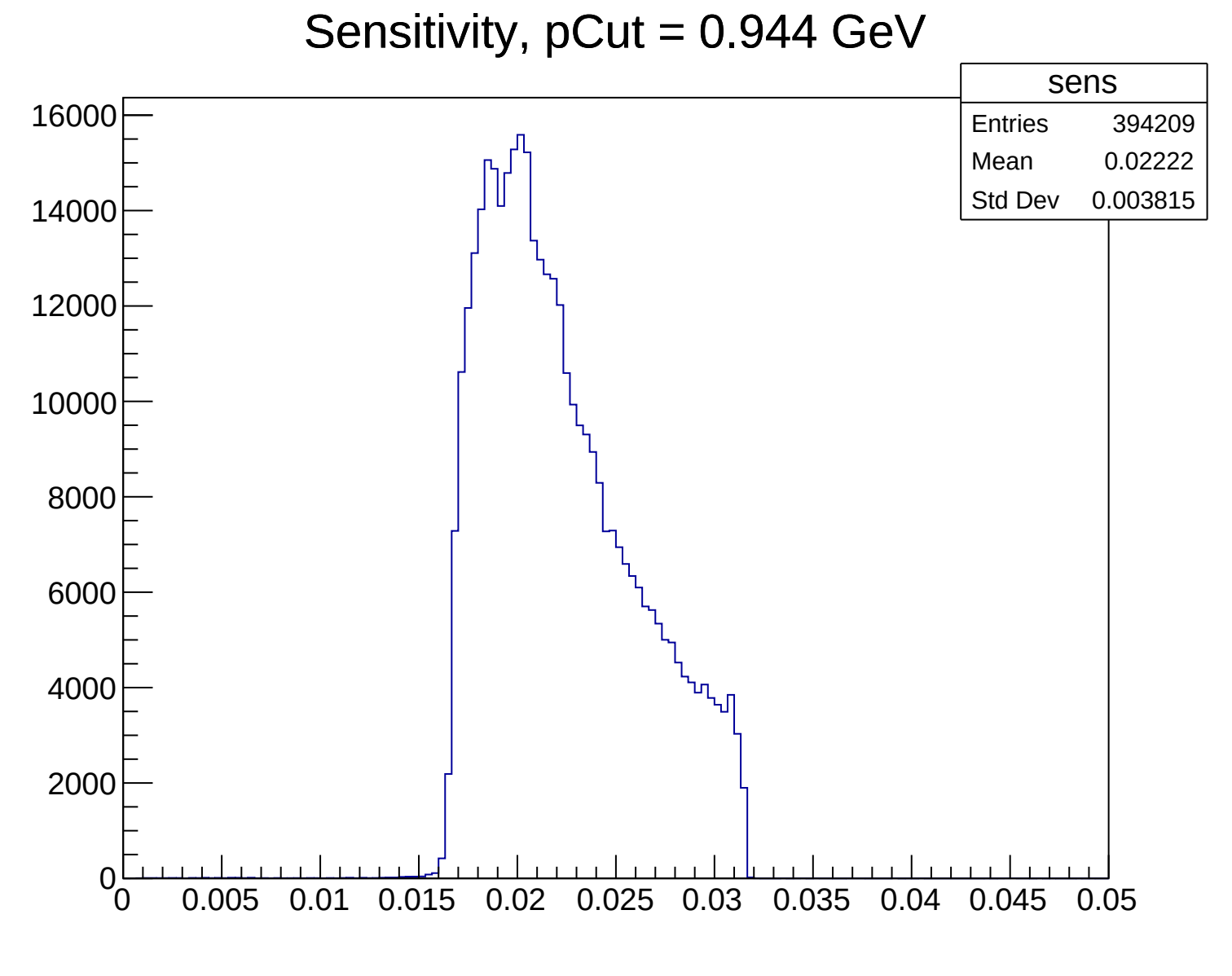

ADC raw (run21121, detZ = 1.3 m)
huq
Entries 738920
Mean 515.4
Std Dev 27.19
P.upQadcR
Ped. cut = 510.5
ADC raw
RHRS momentum (run21121)
All events
US accepted
US missed
p@edge = 0.9454 GeV
hp1
Entries 638407
Mean 0.9413
Std Dev 0.008715
hpup2
Entries 330561
Mean 0.9472
Std Dev 0.0008495
hpup3
Entries 307846
Mean 0.935
Std Dev 0.008945
pCut = 0.9435 GeV
R.gold.p (GeV)

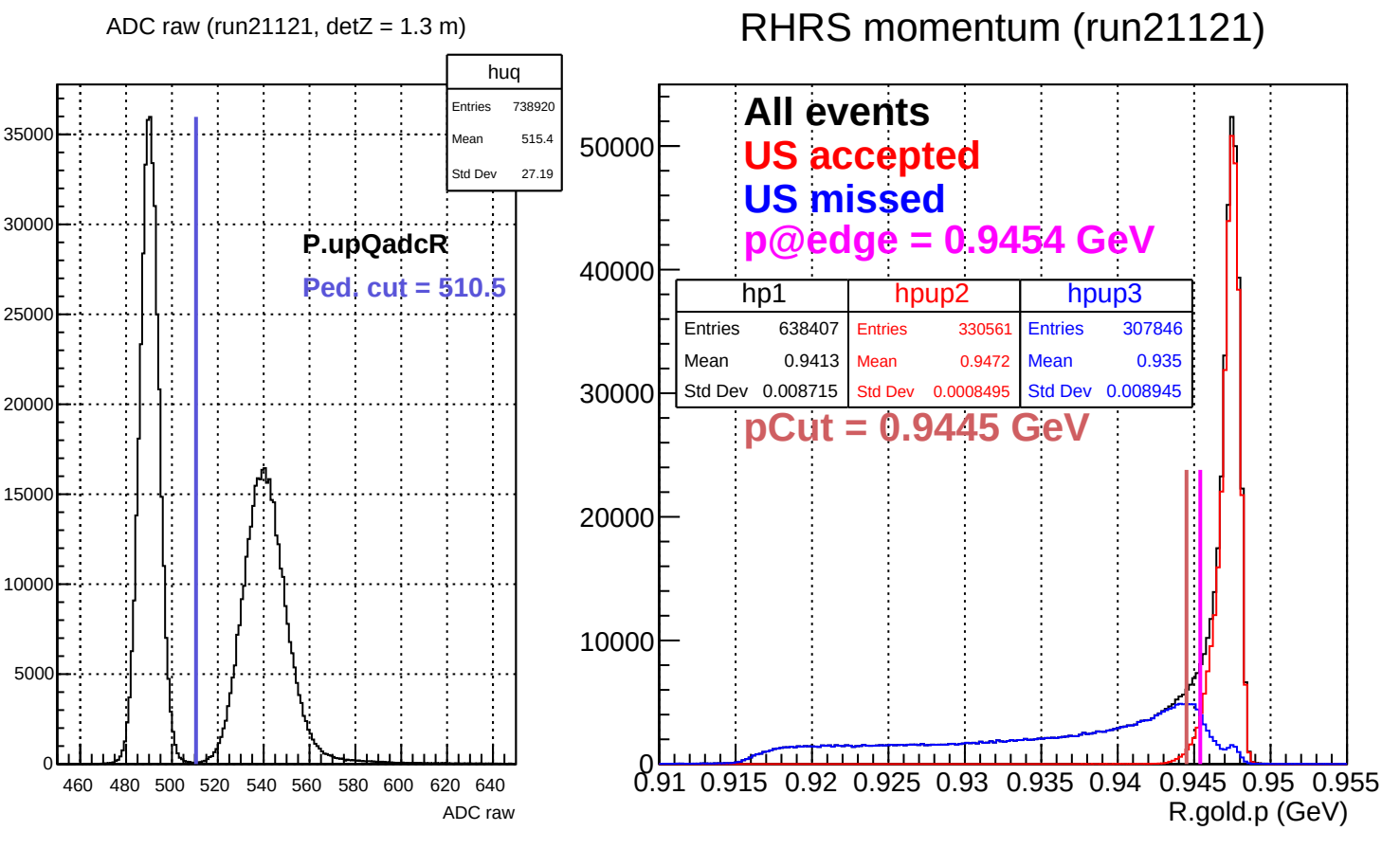

θlab (deg), pCut = 0.944 GeV
Theta
Entries 394209
Mean 4.781
Std Dev 0.4429
16000
14000
12000
10000
8000
6000
4000
2000
0
2
3
4
5
6
7
8
θlab (deg)

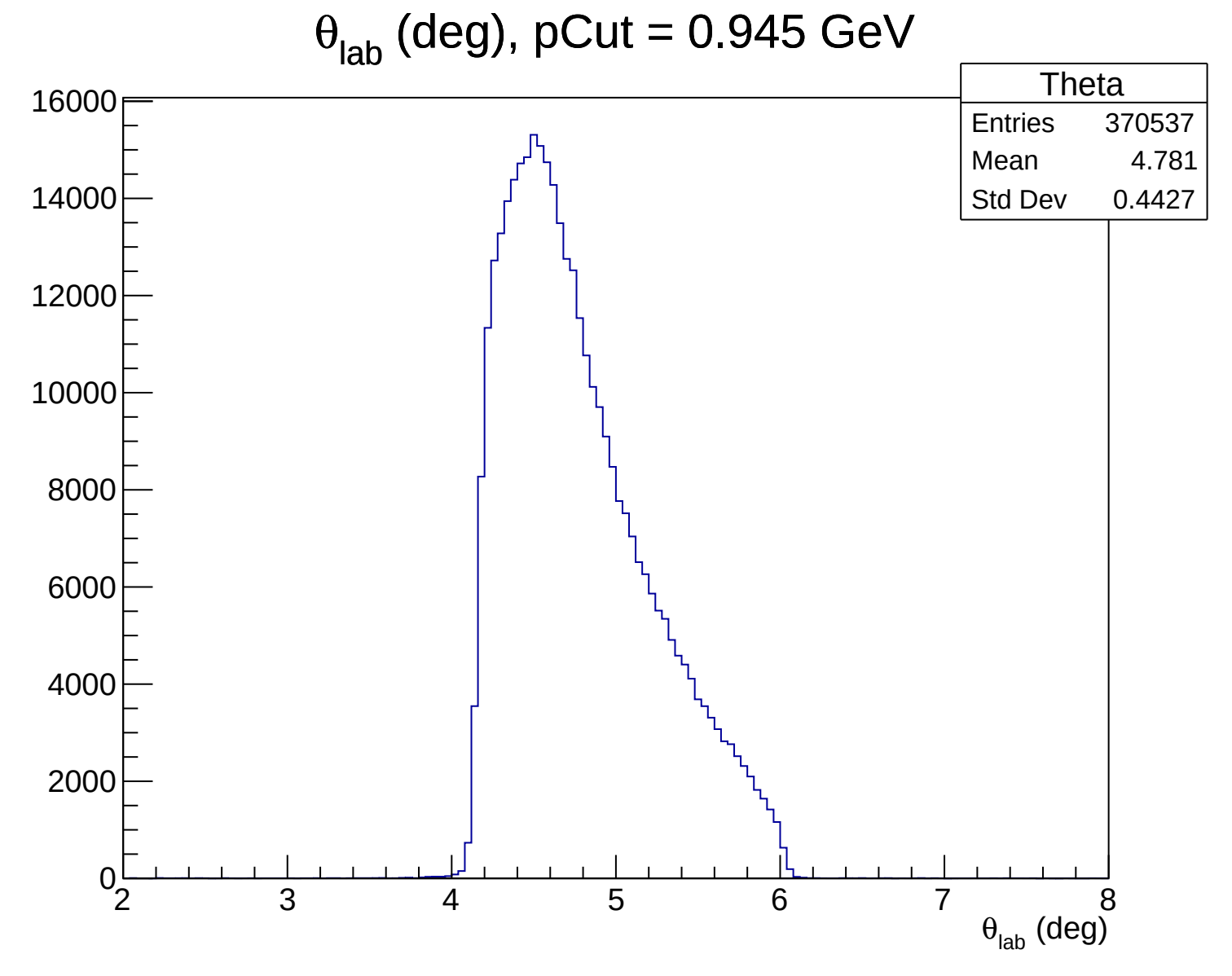

Asymmetry (ppm), pCut = 0.944 GeV
Asym
Entries 394209
Mean 0.5719
Std Dev 0.0728
16000
14000
12000
10000
8000
6000
4000
2000
0
0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1
Asymmetry (ppm)

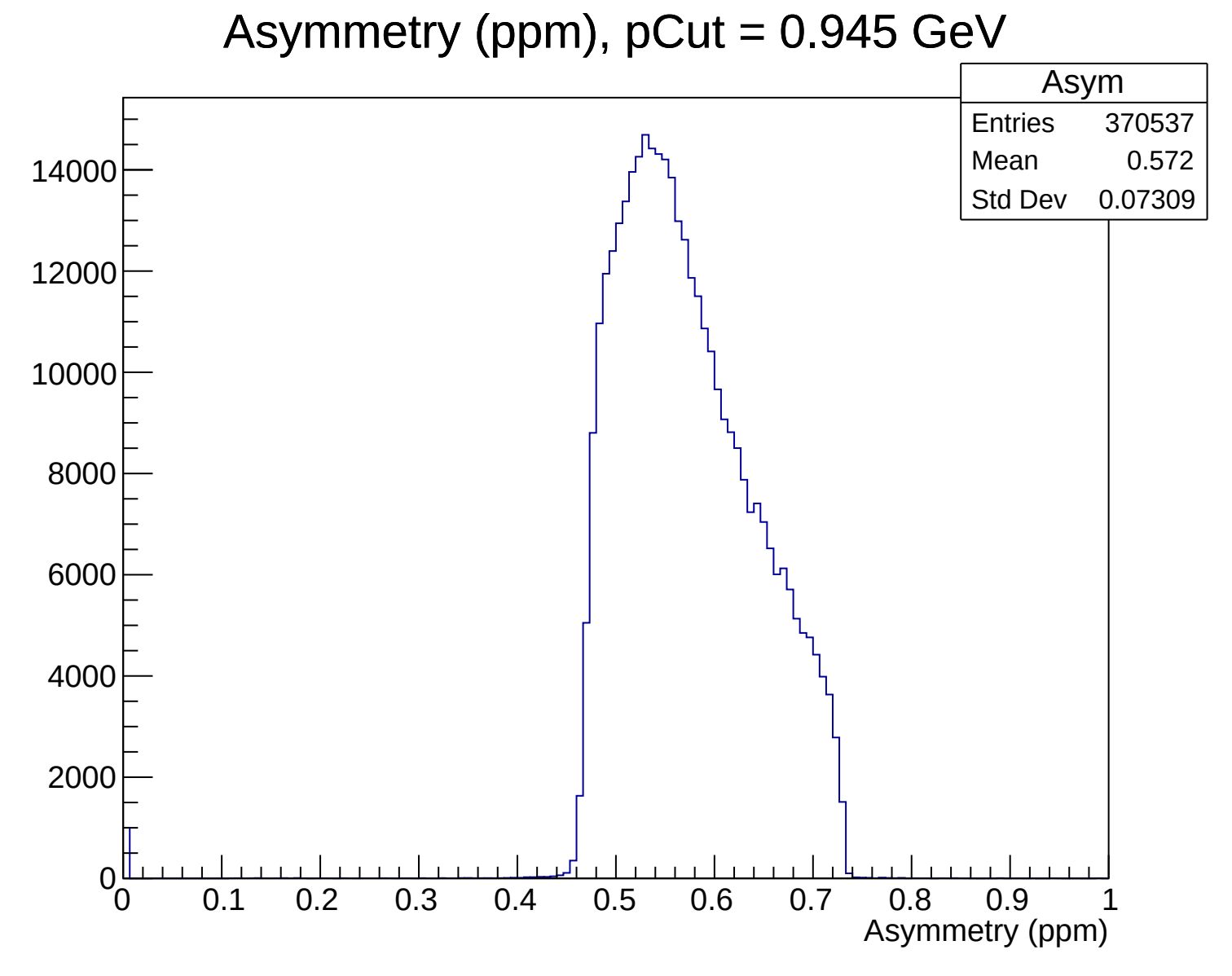

Stretched Asym. (ppm), pCut = 0.944 GeV
SAsym
Entries 394209
Mean 0.5589
Std Dev 0.0691
16000
14000
12000
10000
8000
6000
4000
2000
0
0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1
Stretched Asym. (ppm)

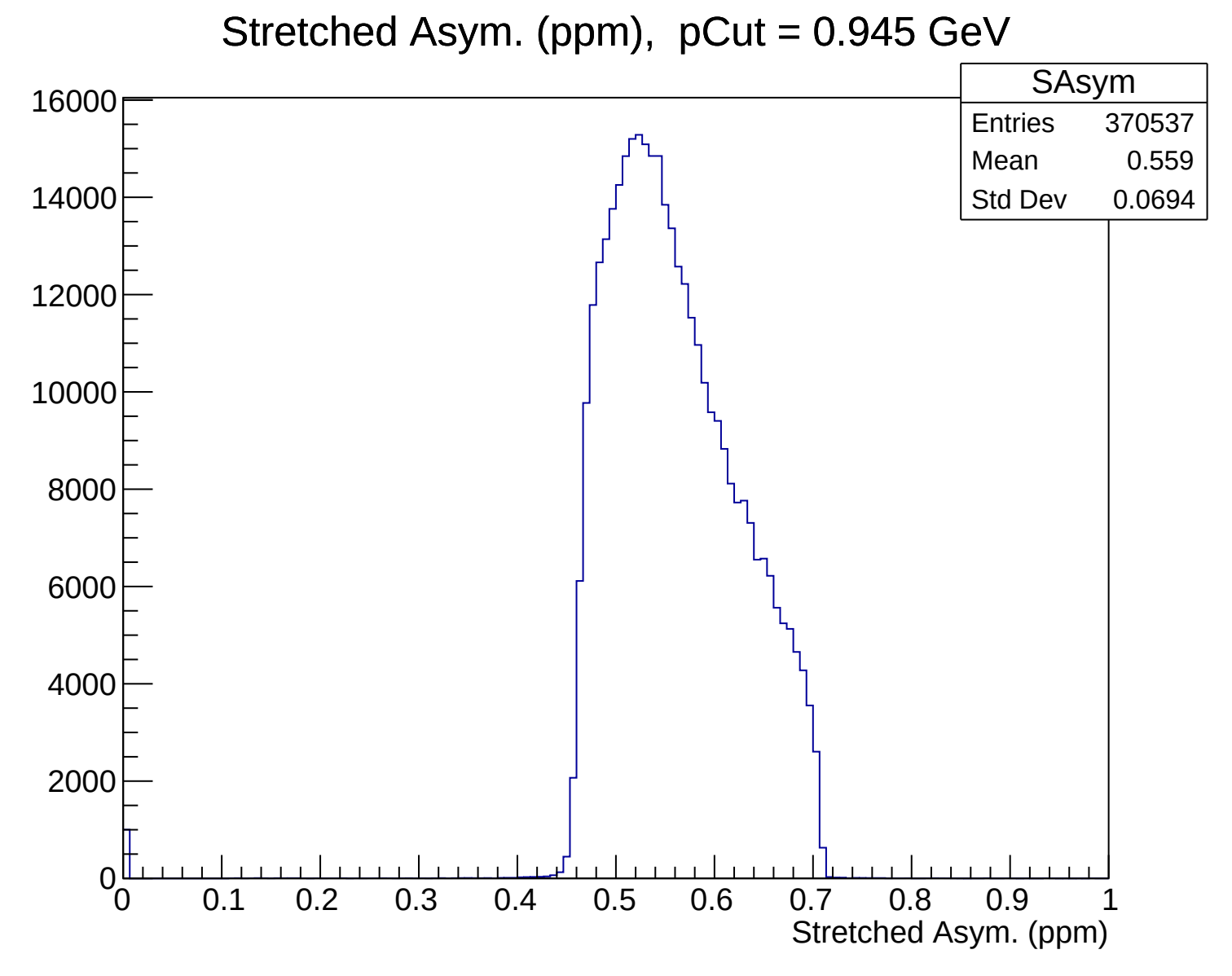

Q^2 (GeV/c)^2, pCut = 0.944 GeV
Q2
Entries 394209
Mean 0.006312
Std Dev 0.0012
16000
14000
12000
10000
8000
6000
4000
2000
0
0
0.002
0.004
0.006
0.008
0.01
0.012
0.014
Q^2 (GeV/c)^2

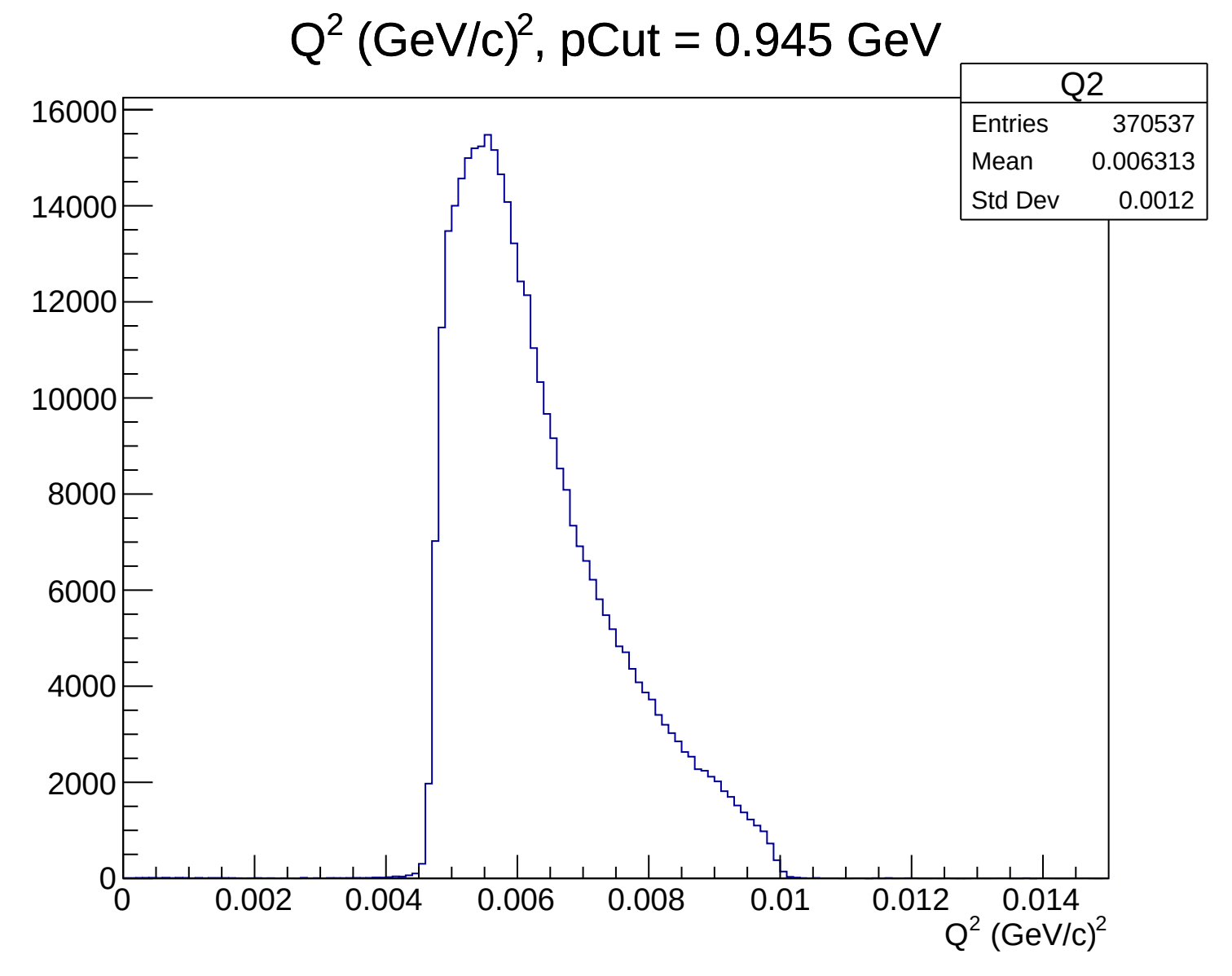

Sensitivity, pCut = 0.944 GeV
sens
Entries 394209
Mean 0.02222
Std Dev 0.003815
16000
14000
12000
10000
8000
6000
4000
2000
0
0
0.005
0.01
0.015
0.02
0.025
0.03
0.035
0.04
0.045
0.05

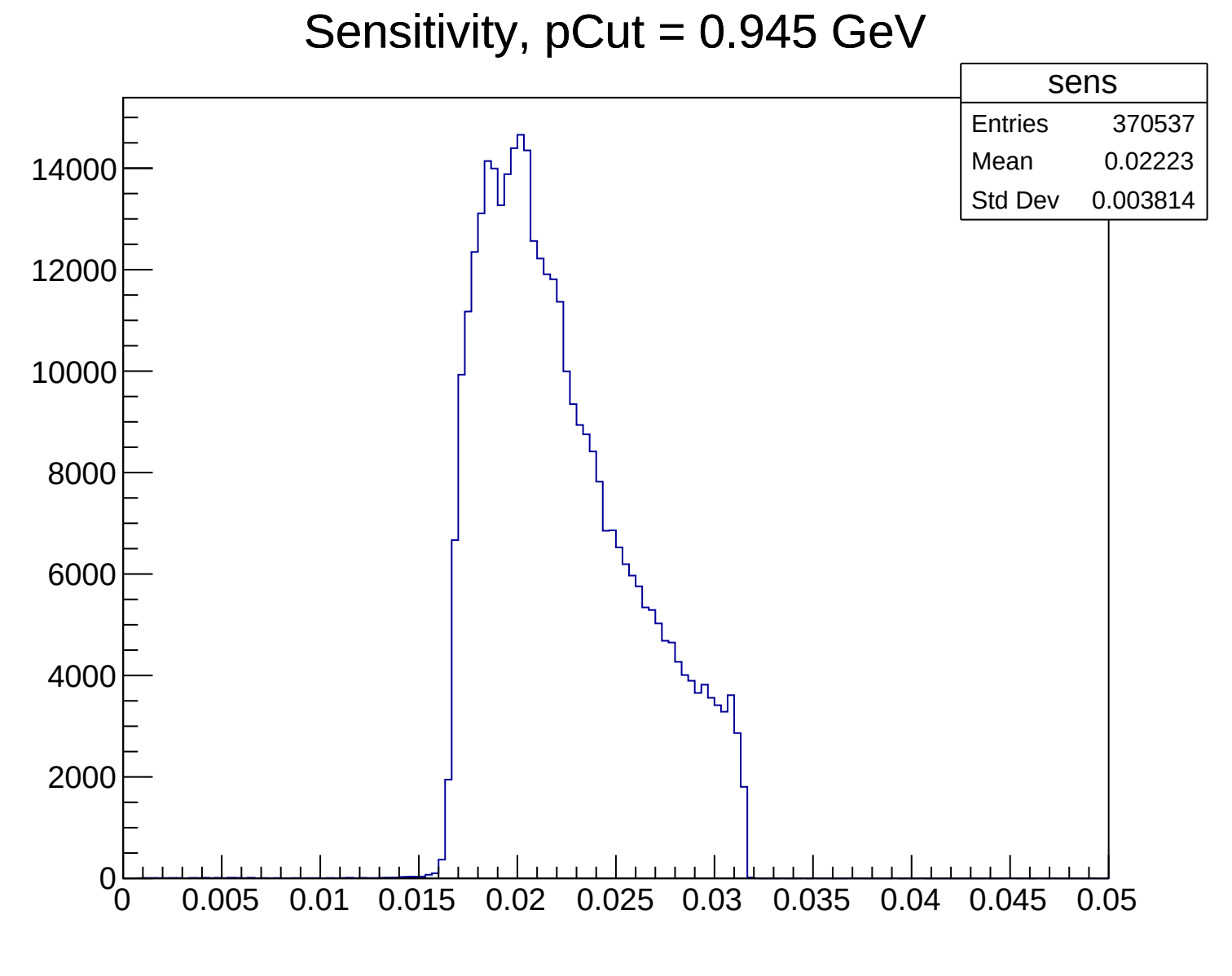

ADC raw (run21121, detZ = 1.3 m)
huq
Entries 738920
Mean 515.4
Std Dev 27.19
P.upQadcR
Ped. cut = 510.5
ADC raw
RHRS momentum (run21121)
All events
US accepted
US missed
p@edge = 0.9454 GeV
hp1
Entries 638407
Mean 0.9413
Std Dev 0.008715
hpup2
Entries 330561
Mean 0.9472
Std Dev 0.0008495
hpup3
Entries 307846
Mean 0.935
Std Dev 0.008945
pCut = 0.9445 GeV
R.gold.p (GeV)

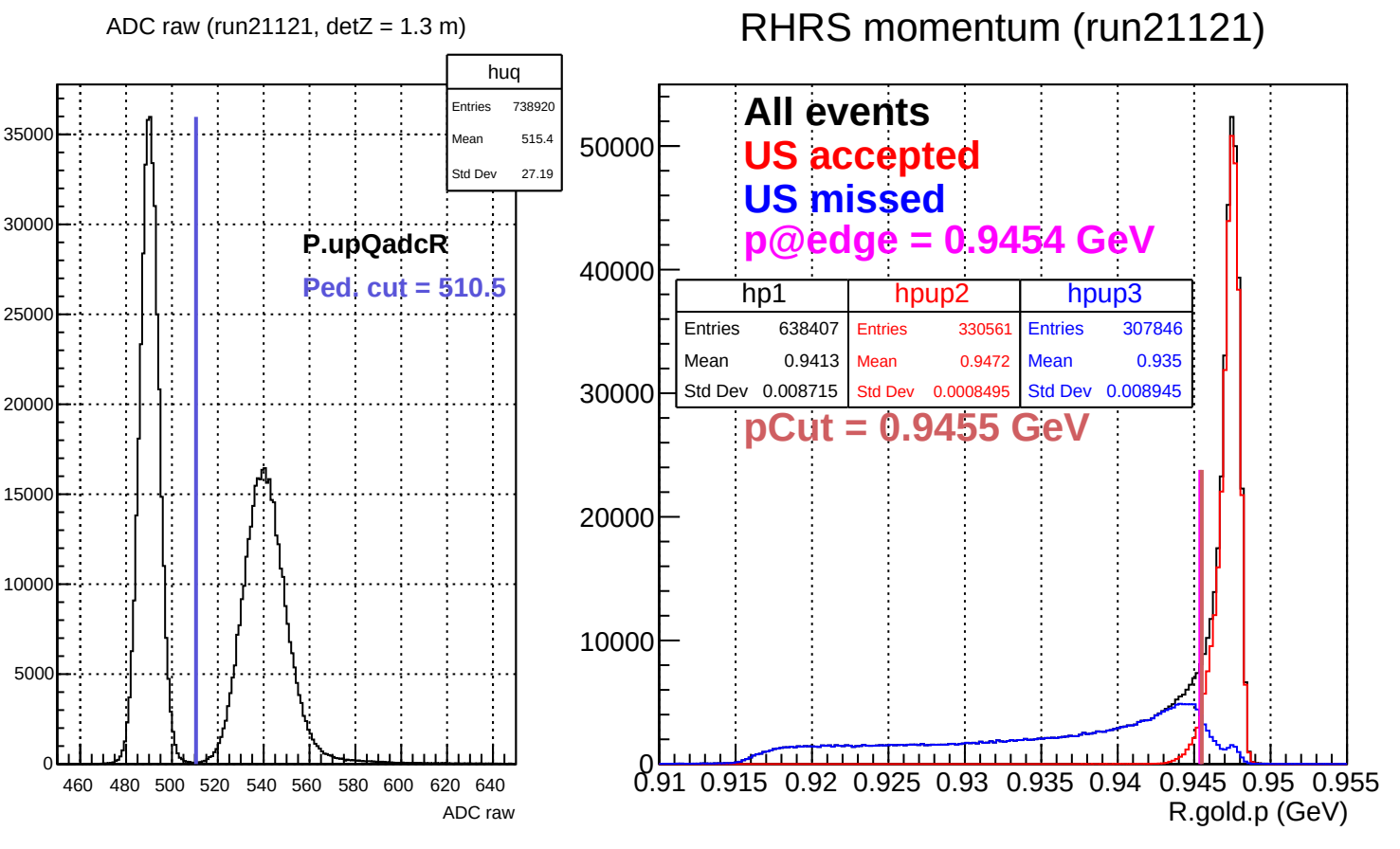

θlab (deg), pCut = 0.945 GeV
Theta
Entries 370537
Mean 4.781
Std Dev 0.4427
16000
14000
12000
10000
8000
6000
4000
2000
0
2
3
4
5
6
7
8
θlab (deg)

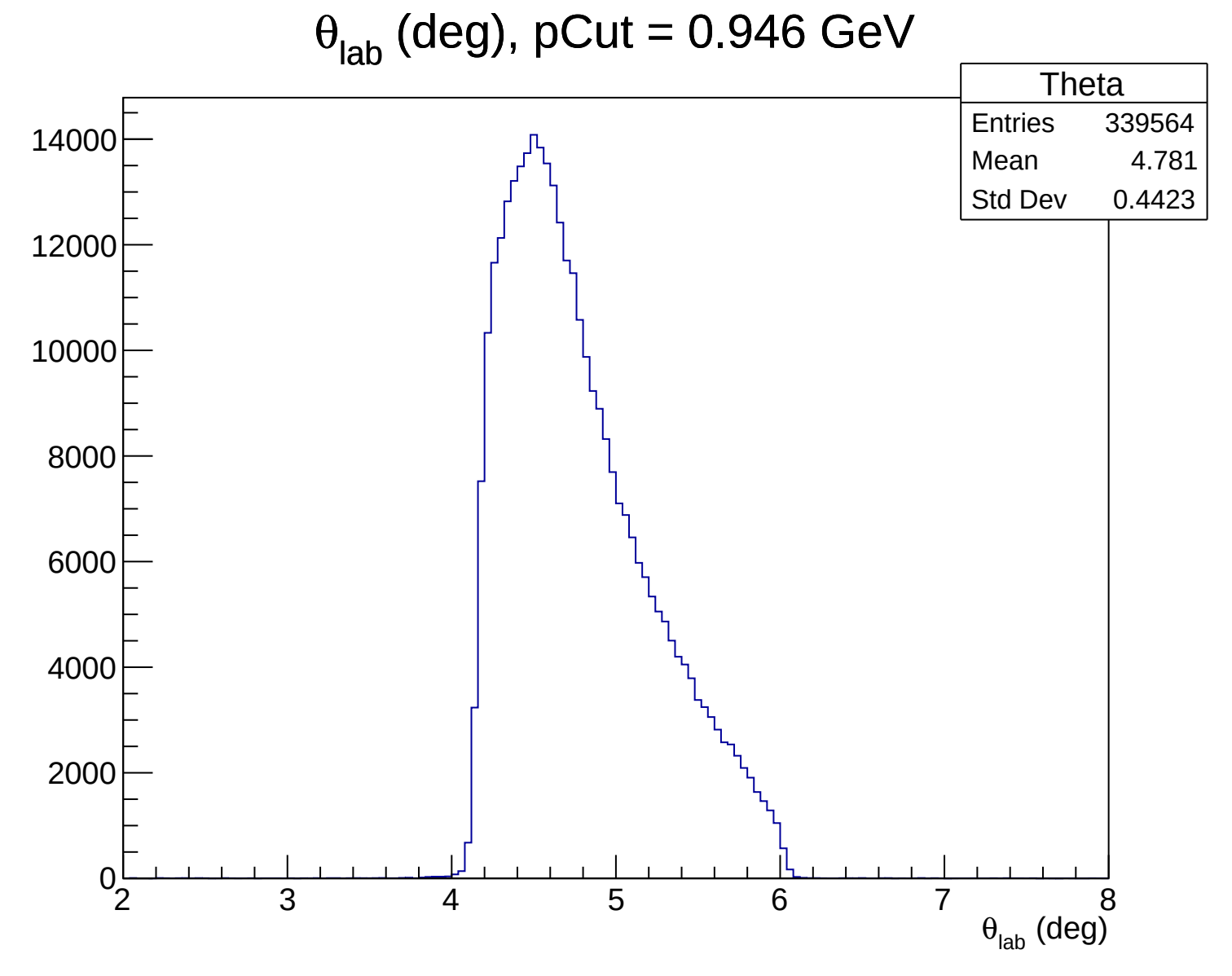

Asymmetry (ppm), pCut = 0.945 GeV
Asym
Entries 370537
Mean 0.572
Std Dev 0.07309
14000
12000
10000
8000
6000
4000
2000
0
0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1
Asymmetry (ppm)

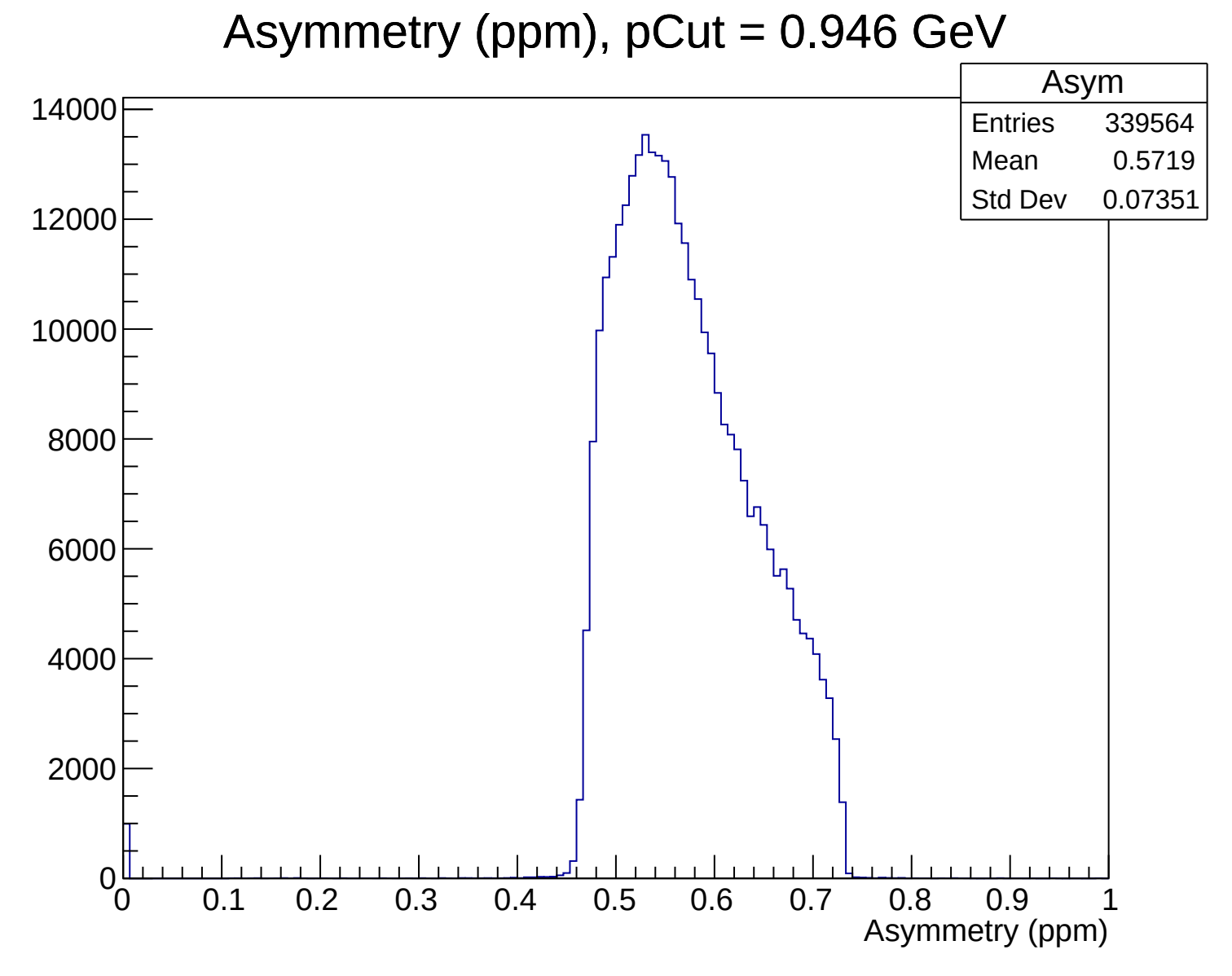

Stretched Asym. (ppm), pCut = 0.945 GeV
SAsym
Entries 370537
Mean 0.559
Std Dev 0.0694
16000
14000
12000
10000
8000
6000
4000
2000
0
0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1
Stretched Asym. (ppm)

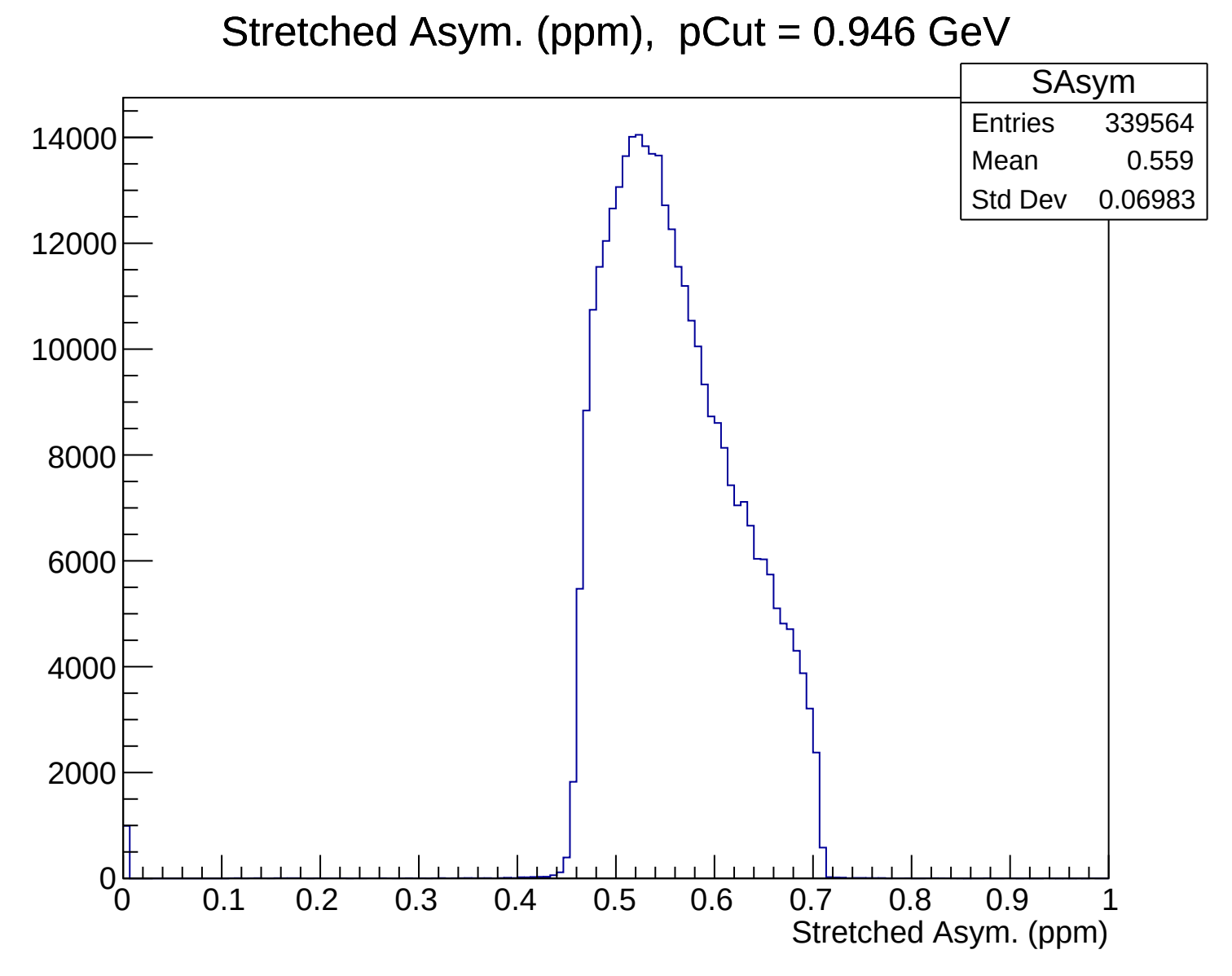

Q^2 (GeV/c)^2, pCut = 0.945 GeV
Q2
Entries 370537
Mean 0.006313
Std Dev 0.0012
16000
14000
12000
10000
8000
6000
4000
2000
0
0
0.002
0.004
0.006
0.008
0.01
0.012
0.014
Q^2 (GeV/c)^2

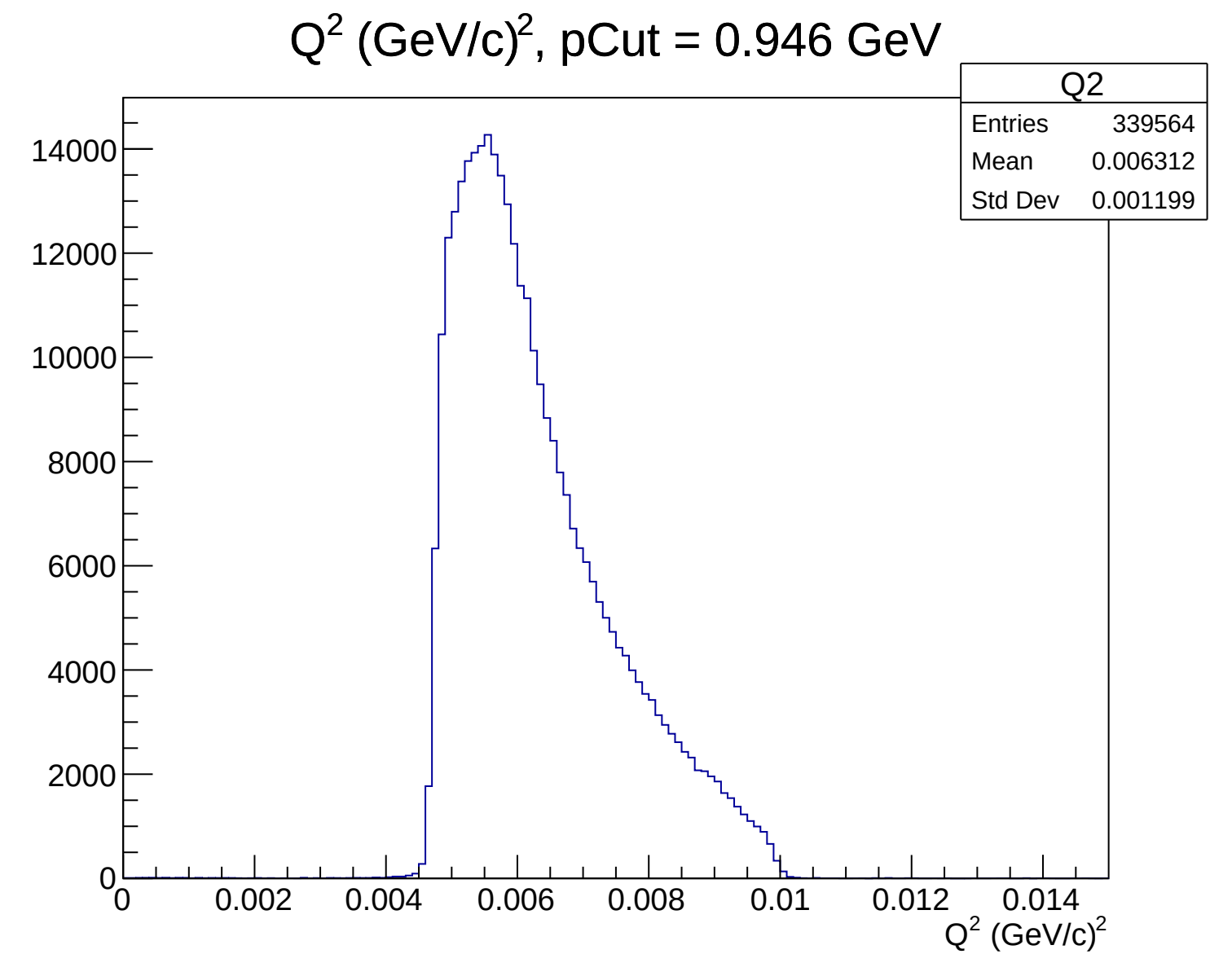

Sensitivity, pCut = 0.945 GeV
sens
Entries 370537
Mean 0.02223
Std Dev 0.003814
14000
12000
10000
8000
6000
4000
2000
0
0
0.005
0.01
0.015
0.02
0.025
0.03
0.035
0.04
0.045
0.05

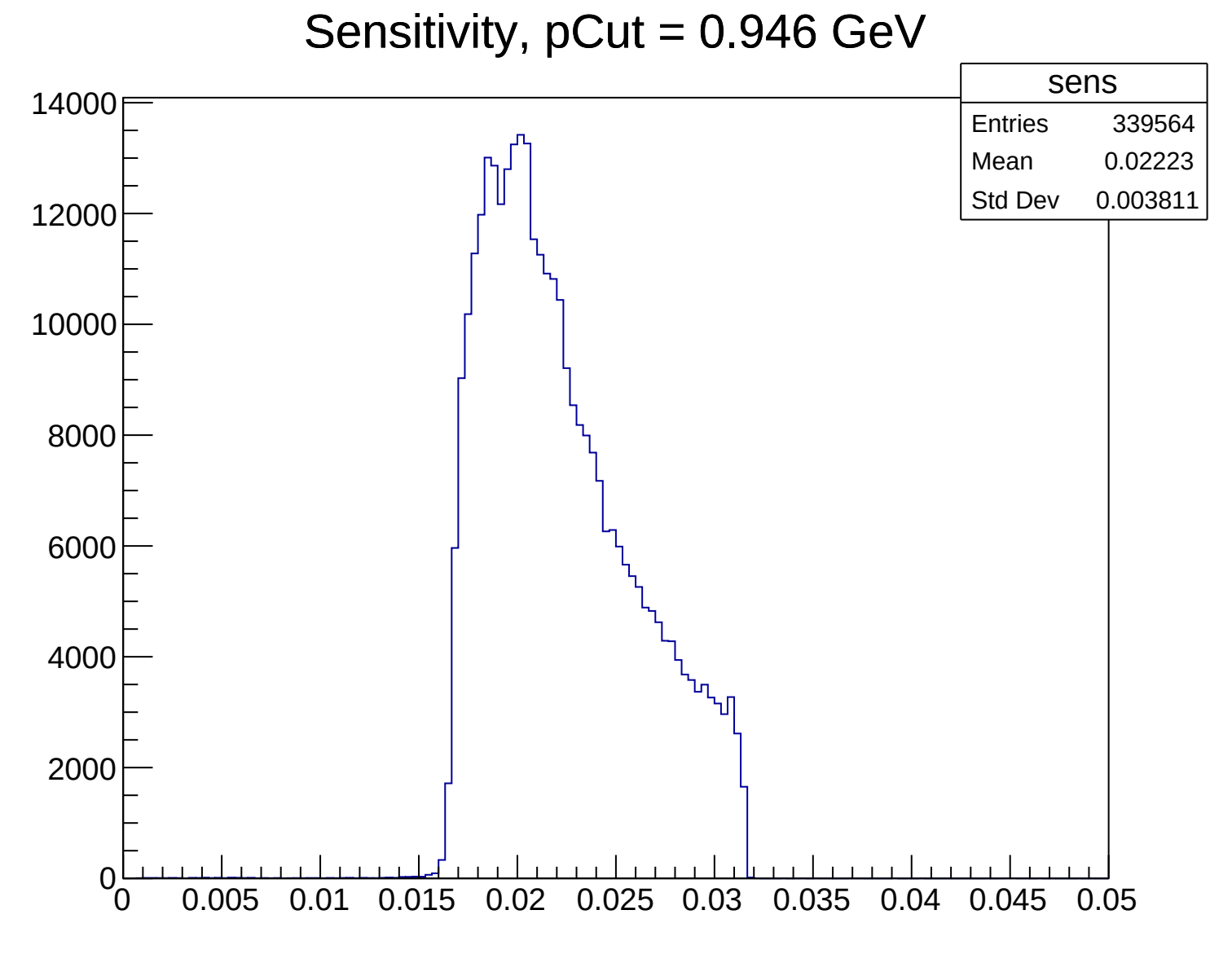

ADC raw (run21121, detZ = 1.3 m)
huq
Entries 738920
Mean 515.4
Std Dev 27.19
P.upQadcR
Ped. cut = 510.5
ADC raw
RHRS momentum (run21121)
All events
US accepted
US missed
p@edge = 0.9454 GeV
hp1
Entries 638407
Mean 0.9413
Std Dev 0.008715
hpup2
Entries 330561
Mean 0.9472
Std Dev 0.0008495
hpup3
Entries 307846
Mean 0.935
Std Dev 0.008945
pCut = 0.9455 GeV
R.gold.p (GeV)

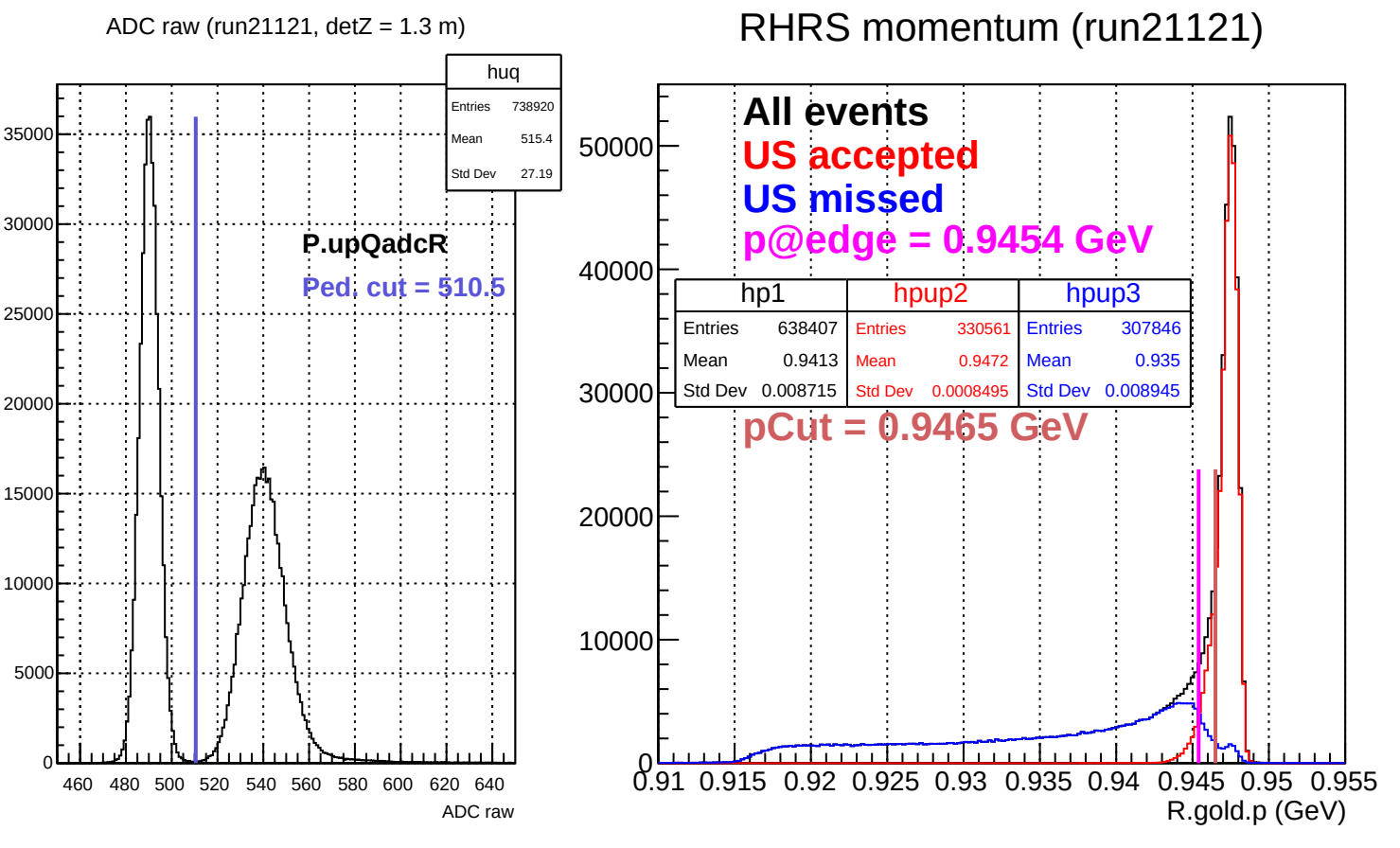

θlab (deg), pCut = 0.946 GeV
Theta
Entries 339564
Mean 4.781
Std Dev 0.4423
14000
12000
10000
8000
6000
4000
2000
0
2
3
4
5
6
7
8
θlab (deg)

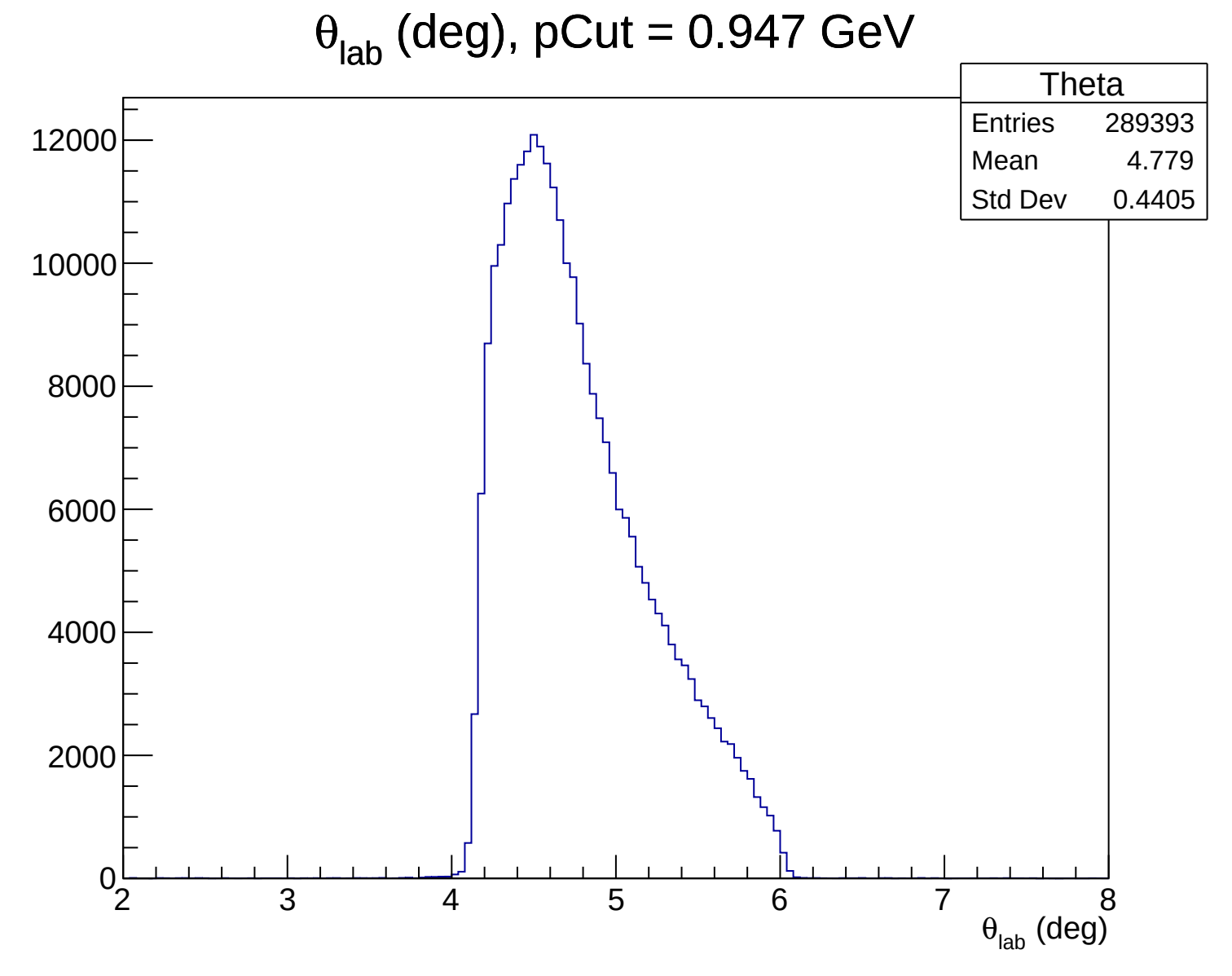

Asymmetry (ppm), pCut = 0.946 GeV
Asym
Entries 339564
Mean 0.5719
Std Dev 0.07351
14000
12000
10000
8000
6000
4000
2000
0
0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1
Asymmetry (ppm)

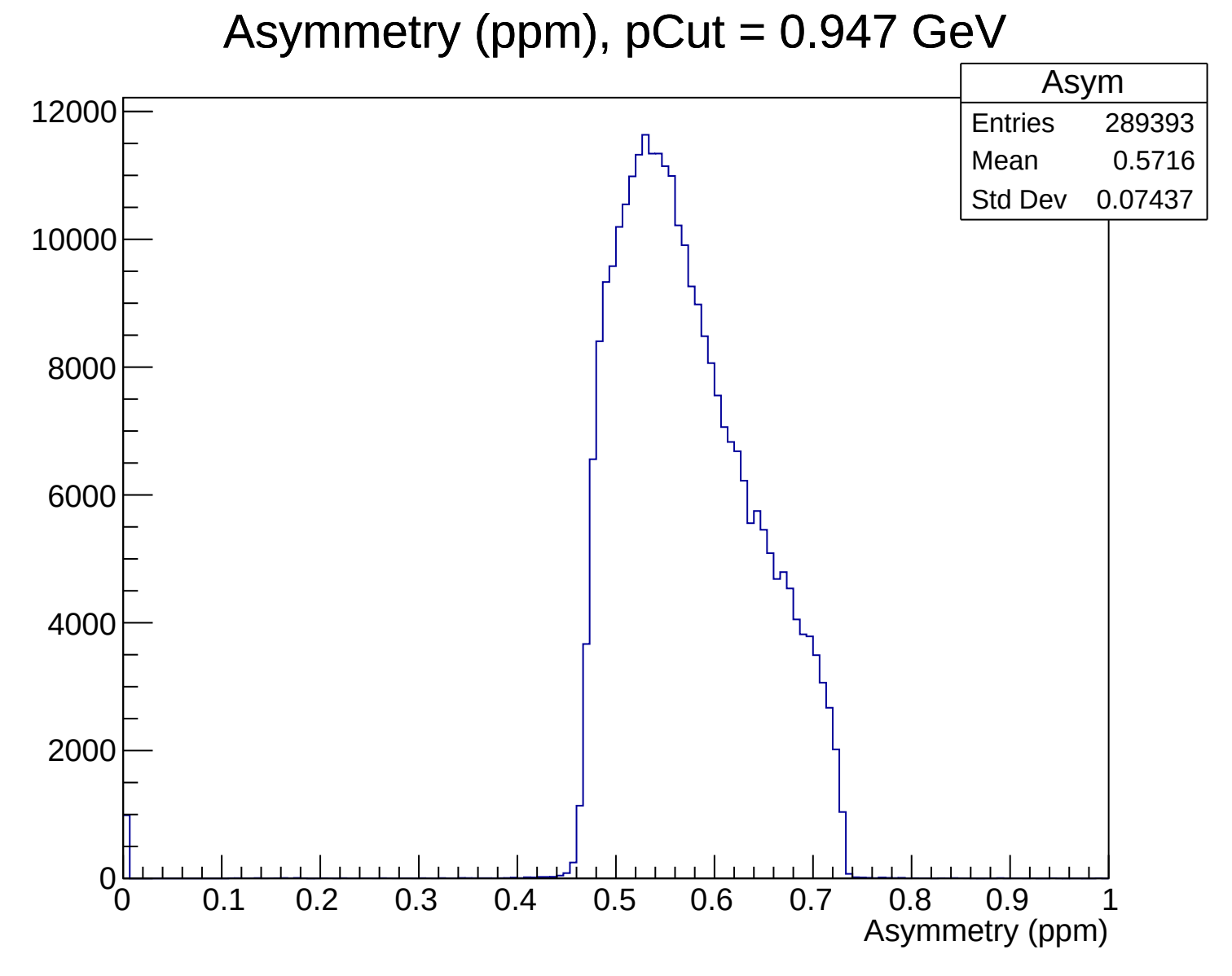

Stretched Asym. (ppm), pCut = 0.946 GeV
SAsym
Entries 339564
Mean 0.559
Std Dev 0.06983
14000
12000
10000
8000
6000
4000
2000
0
0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1
Stretched Asym. (ppm)

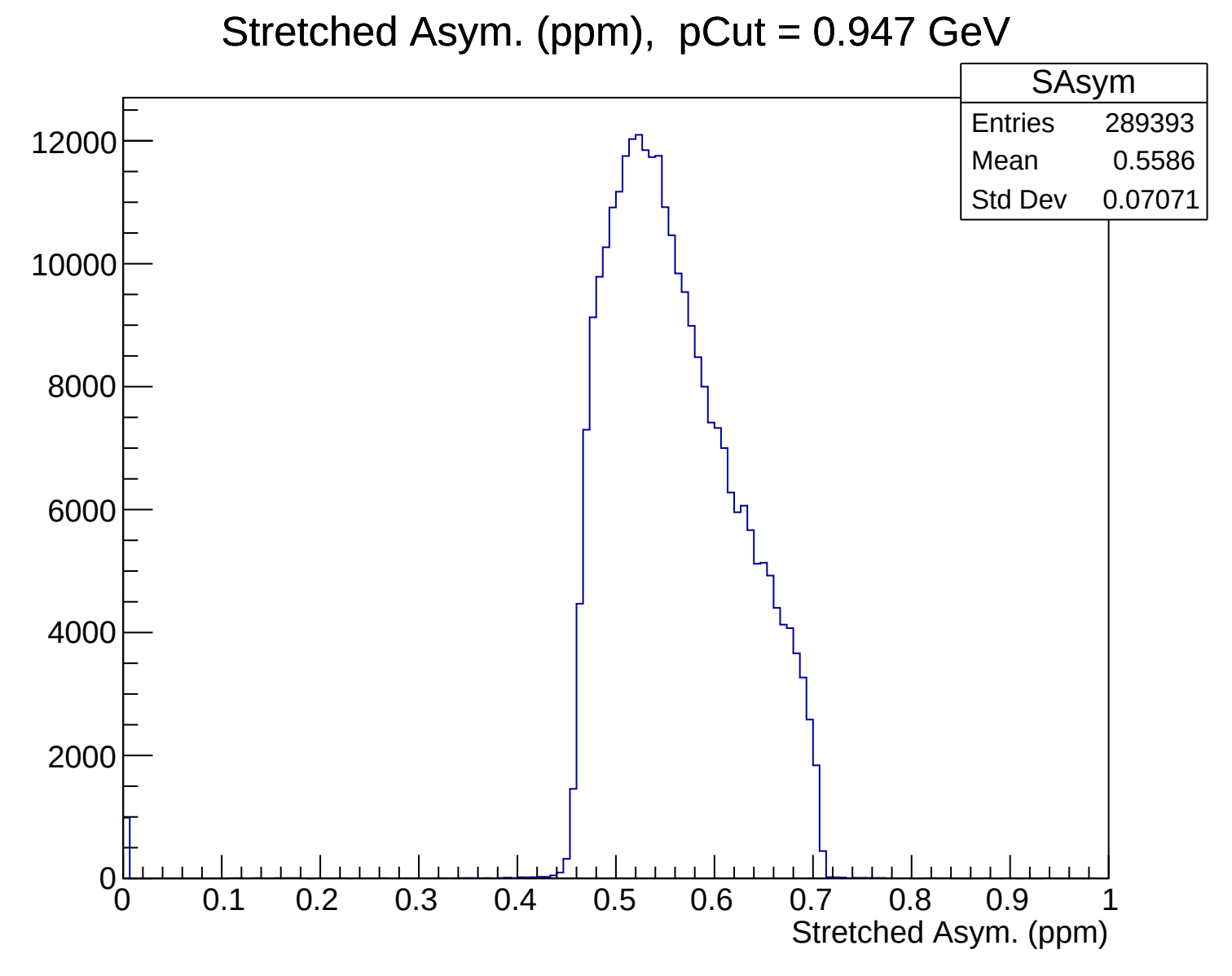

Q^2 (GeV/c)^2, pCut = 0.946 GeV
Q2
Entries 339564
Mean 0.006312
Std Dev 0.001199
14000
12000
10000
8000
6000
4000
2000
0
0
0.002
0.004
0.006
0.008
0.01
0.012
0.014
Q^2 (GeV/c)^2

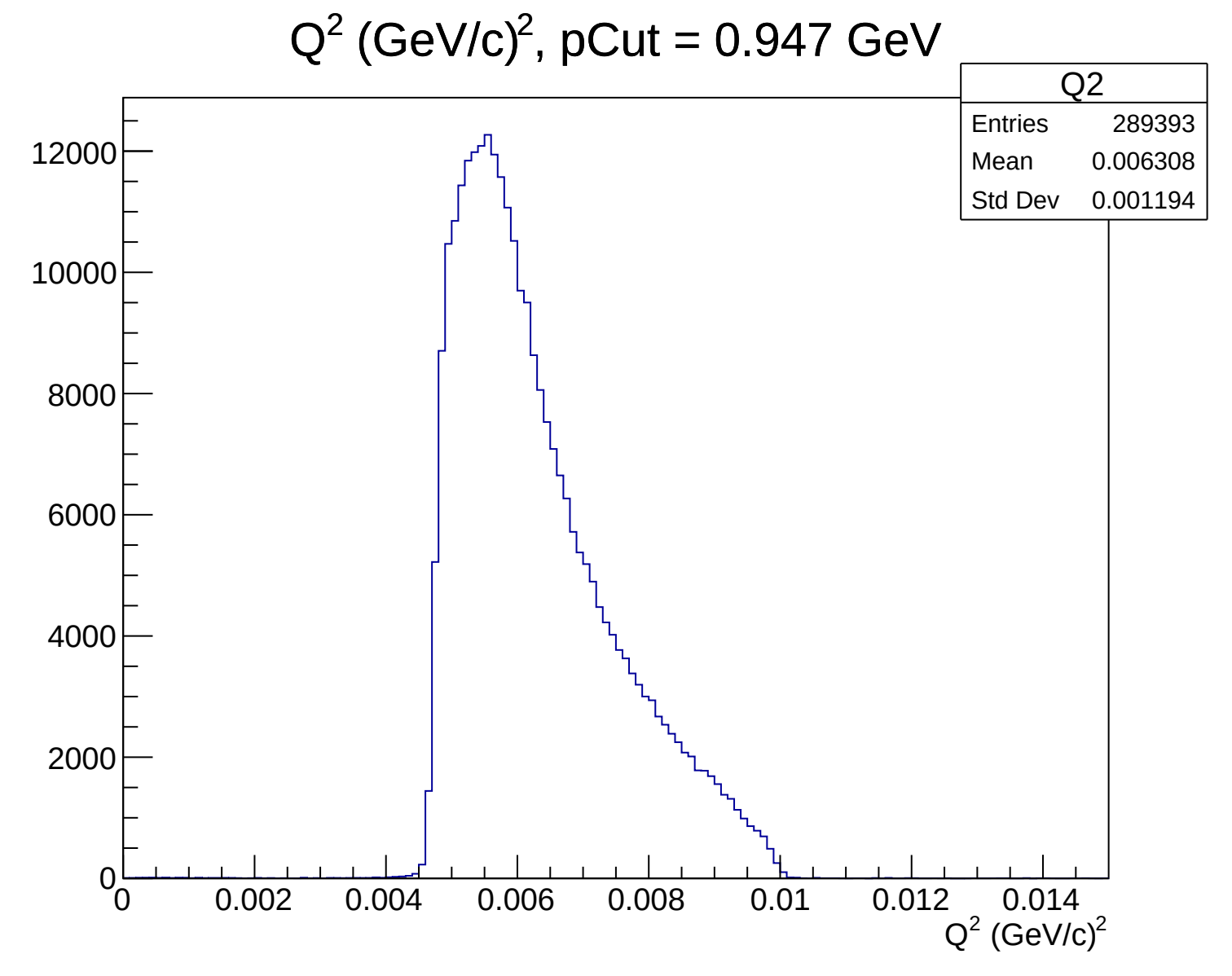

Sensitivity, pCut = 0.946 GeV
sens
Entries 339564
Mean 0.02223
Std Dev 0.003811
14000
12000
10000
8000
6000
4000
2000
0
0
0.005
0.01
0.015
0.02
0.025
0.03
0.035
0.04
0.045
0.05

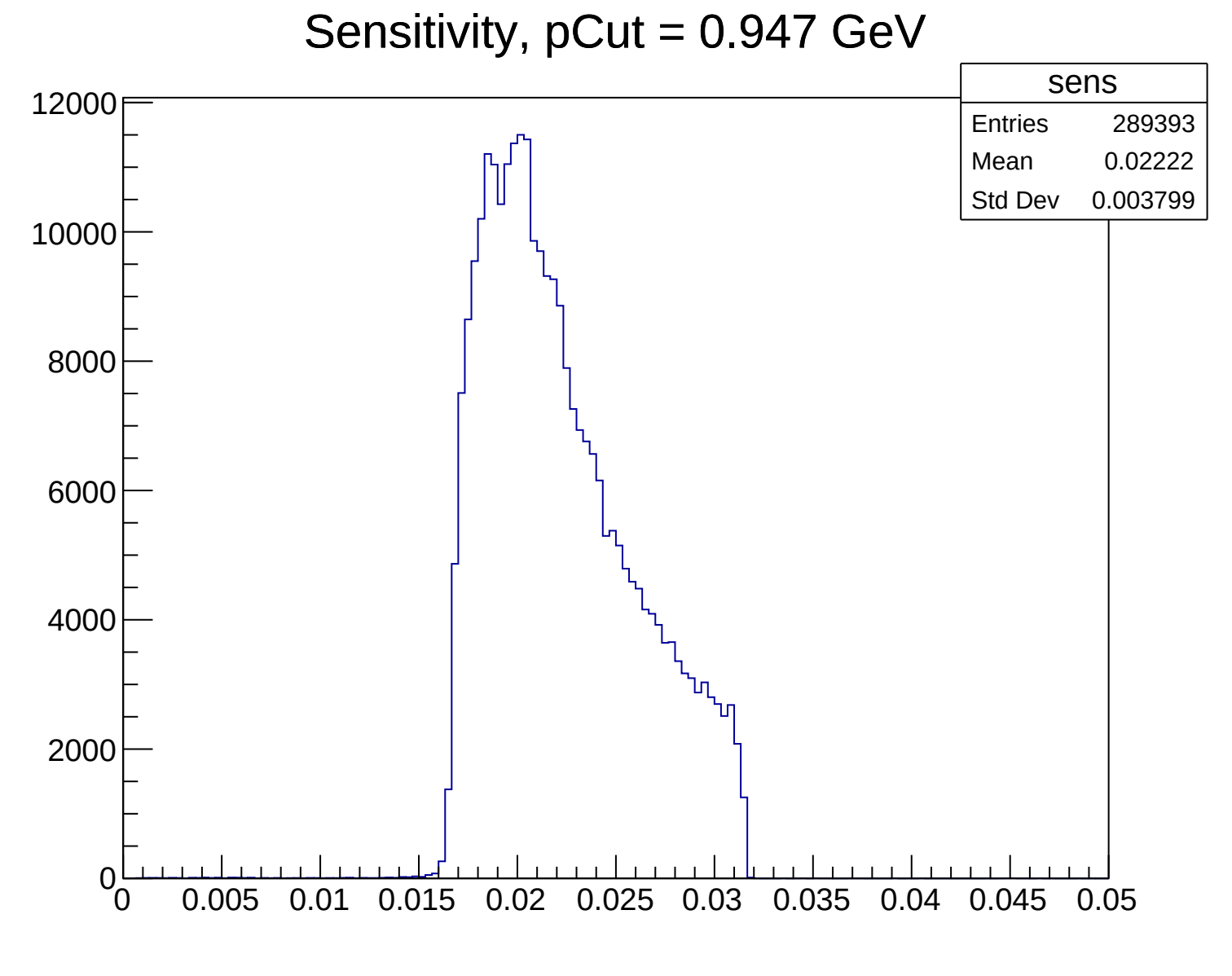

ADC raw (run21121, detZ = 1.3 m)
huq
Entries 738920
Mean 515.4
Std Dev 27.19
P.upQadcR
Ped. cut = 510.5
ADC raw
RHRS momentum (run21121)
All events
US accepted
US missed
p@edge = 0.9454 GeV
hp1
Entries 638407
Mean 0.9413
Std Dev 0.008715
hpup2
Entries 330561
Mean 0.9472
Std Dev 0.0008495
hpup3
Entries 307846
Mean 0.935
Std Dev 0.008945
pCut = 0.9465 GeV
R.gold.p (GeV)


θlab (deg), pCut = 0.947 GeV
Theta
Entries 289393
Mean 4.779
Std Dev 0.4405
12000
10000
8000
6000
4000
2000
0
2
3
4
5
6
7
8
θlab (deg)


Asymmetry (ppm), pCut = 0.947 GeV
Asym
Entries 289393
Mean 0.5716
Std Dev 0.07437
12000
10000
8000
6000
4000
2000
0
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
Asymmetry (ppm)


Stretched Asym. (ppm), pCut = 0.947 GeV
SAsym
Entries 289393
Mean 0.5586
Std Dev 0.07071
12000
10000
8000
6000
4000
2000
0
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
Stretched Asym. (ppm)


Q^2 (GeV/c)^2, pCut = 0.947 GeV
Q2
Entries 289393
Mean 0.006308
Std Dev 0.001194
12000
10000
8000
6000
4000
2000
0
0
0.002
0.004
0.006
0.008
0.01
0.012
0.014
Q^2 (GeV/c)^2


Sensitivity, pCut = 0.947 GeV
sens
Entries 289393
Mean 0.02222
Std Dev 0.003799
12000
10000
8000
6000
4000
2000
0
0
0.005
0.01
0.015
0.02
0.025
0.03
0.035
0.04
0.045
0.05