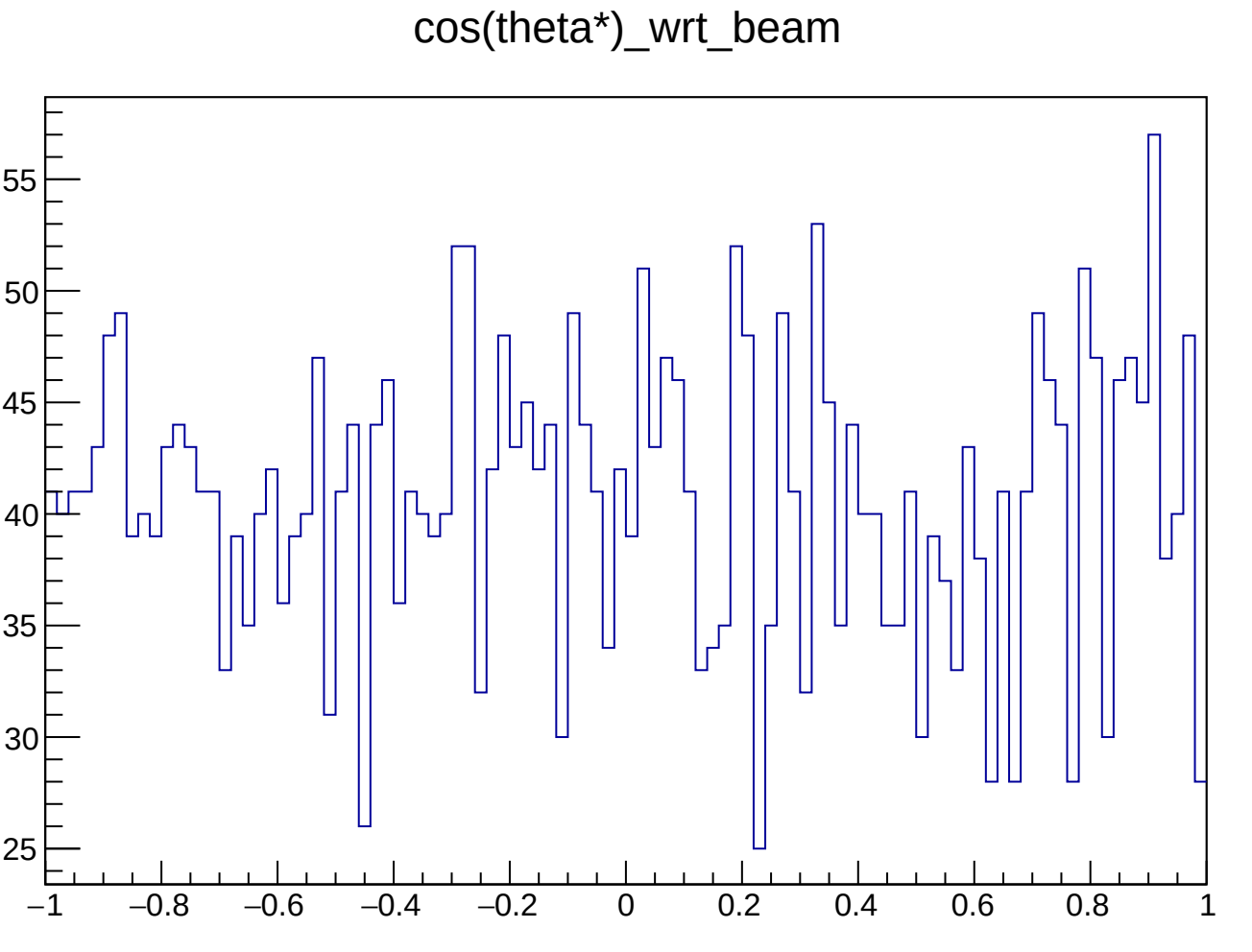
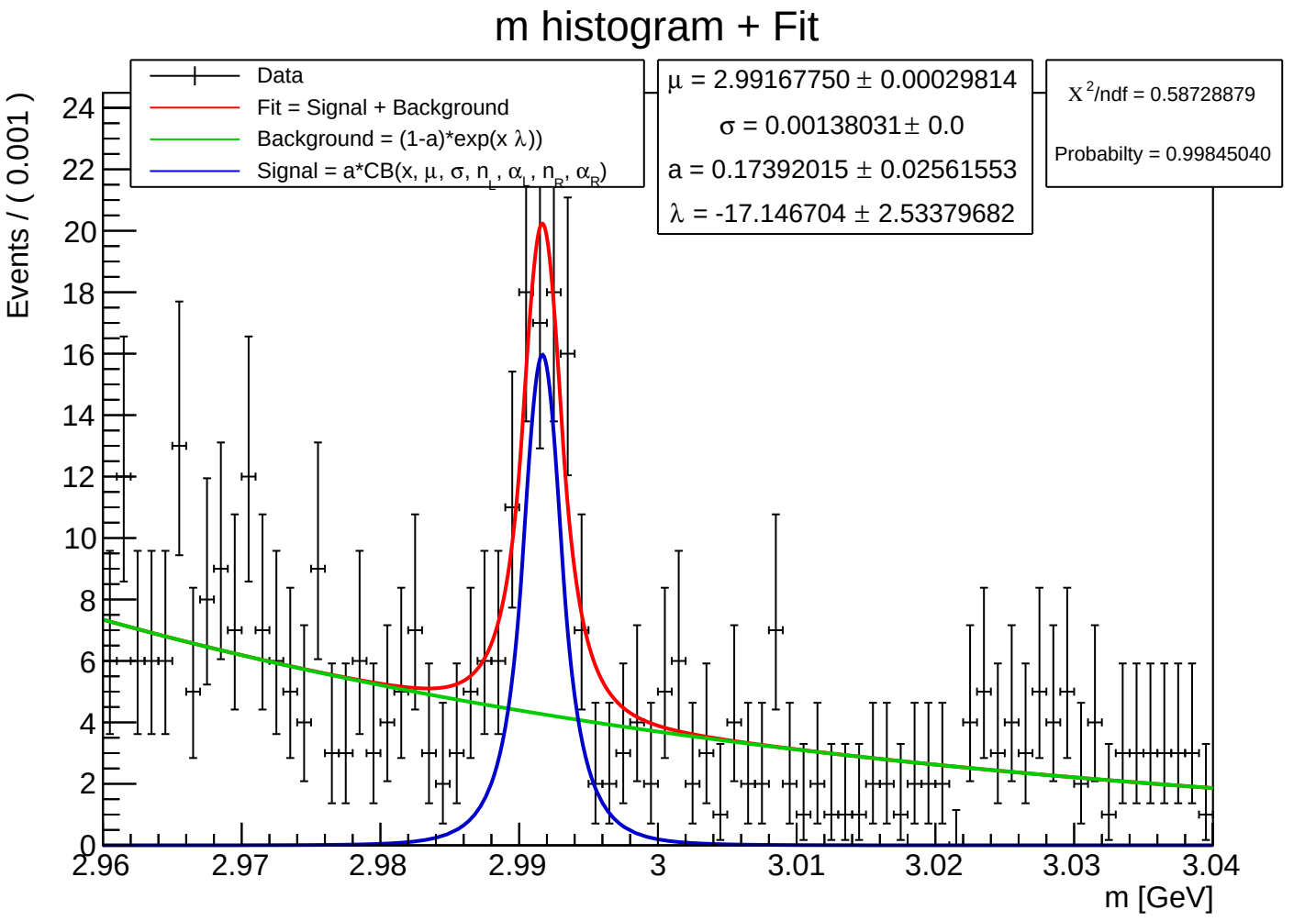
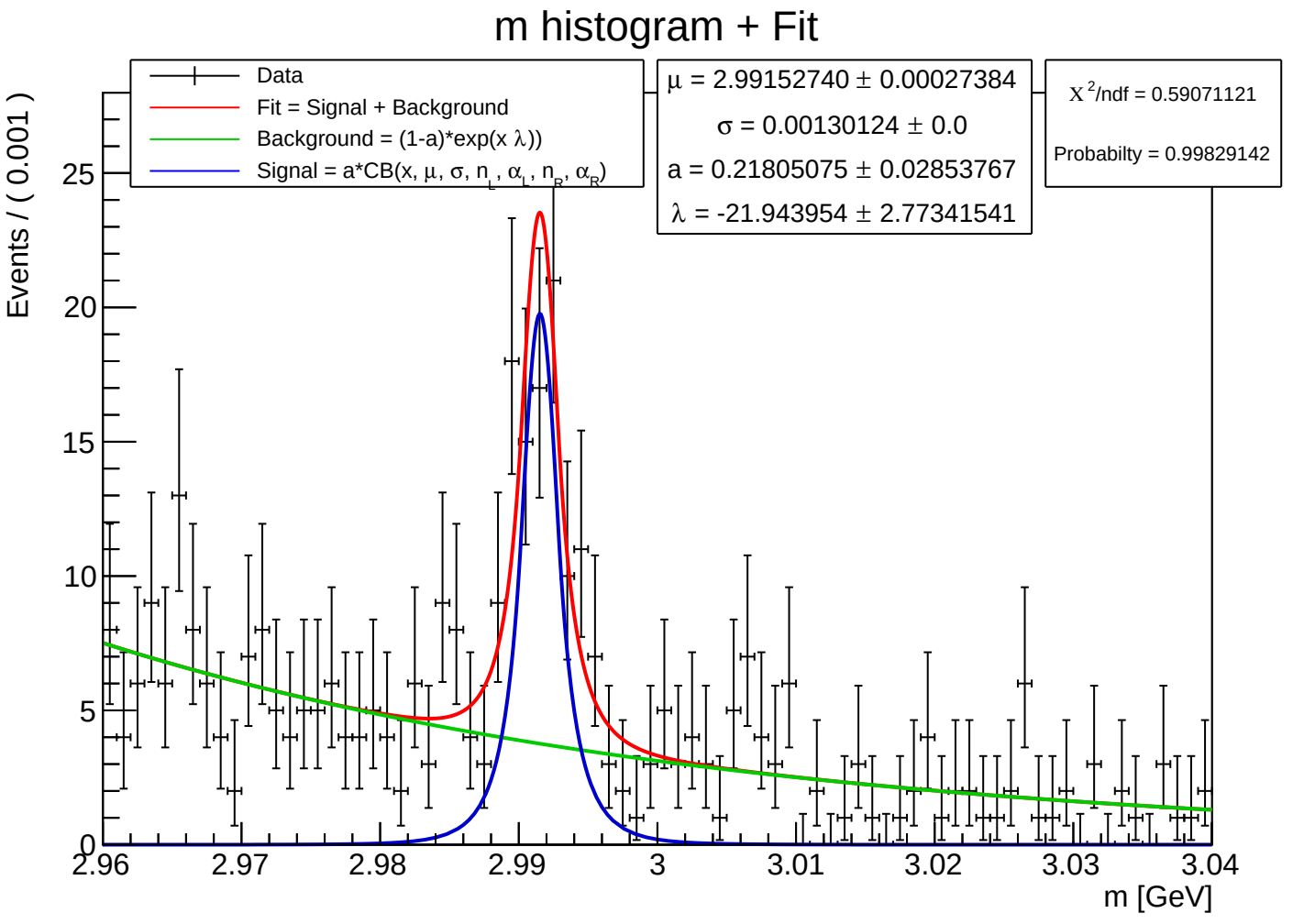
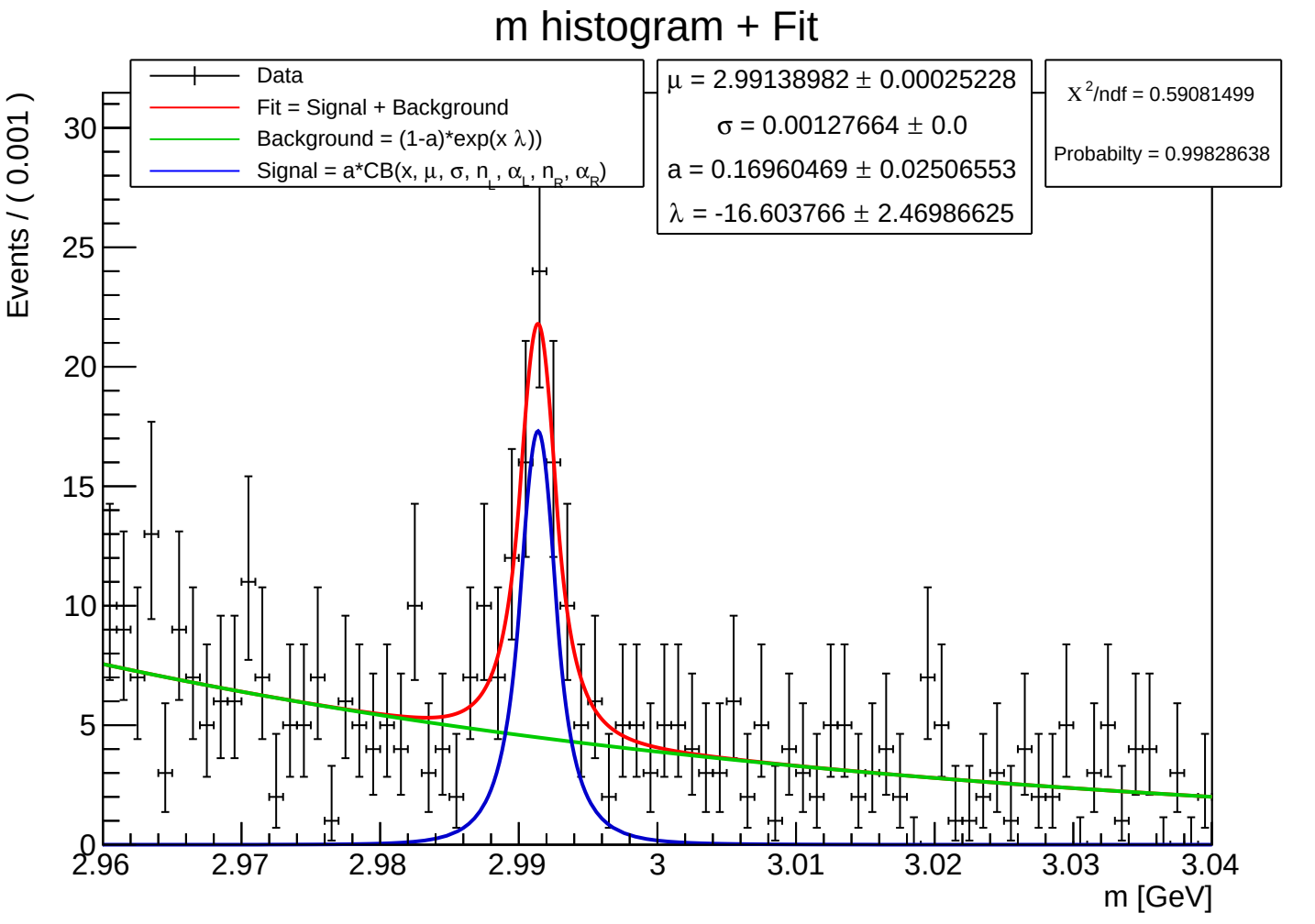
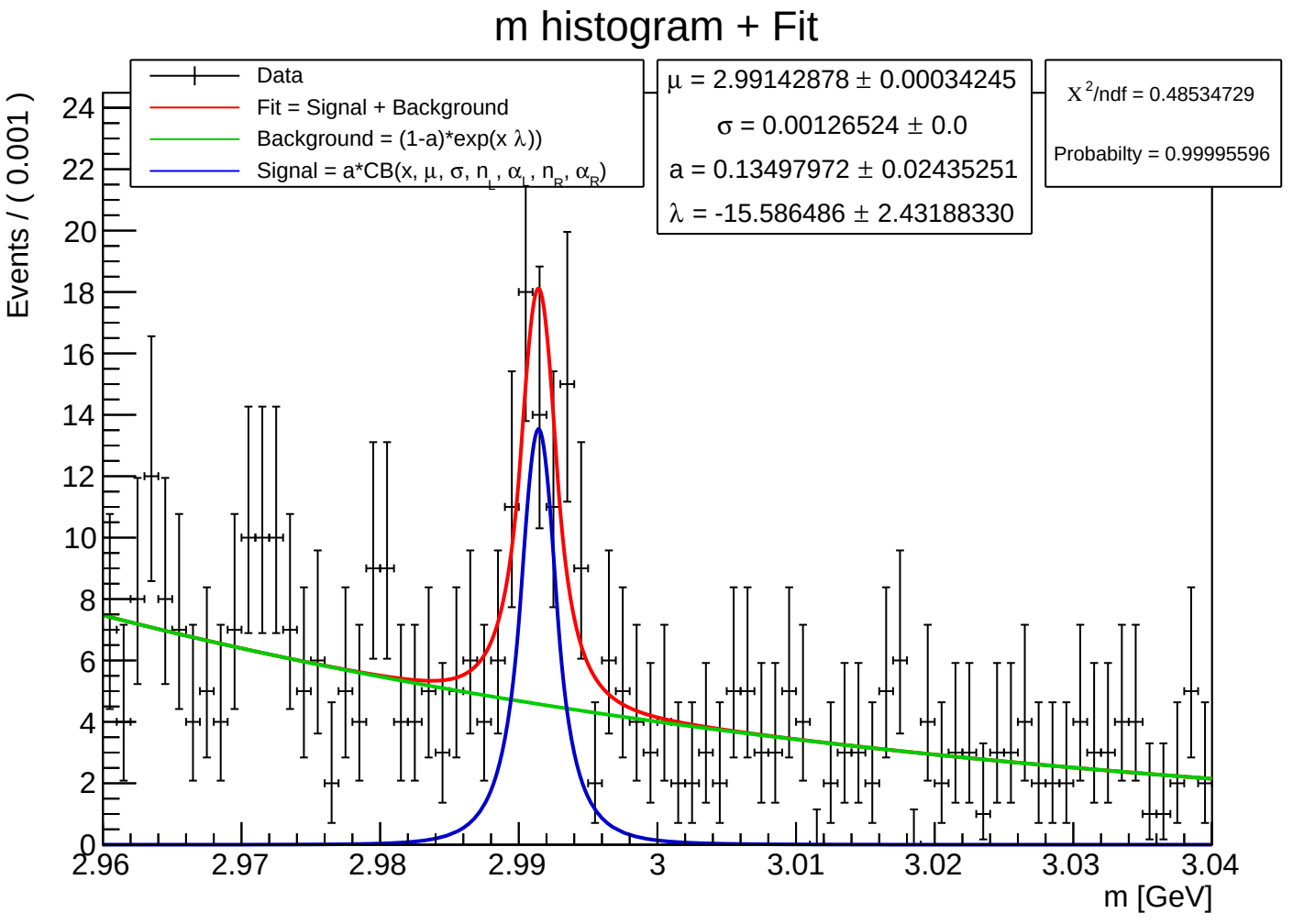
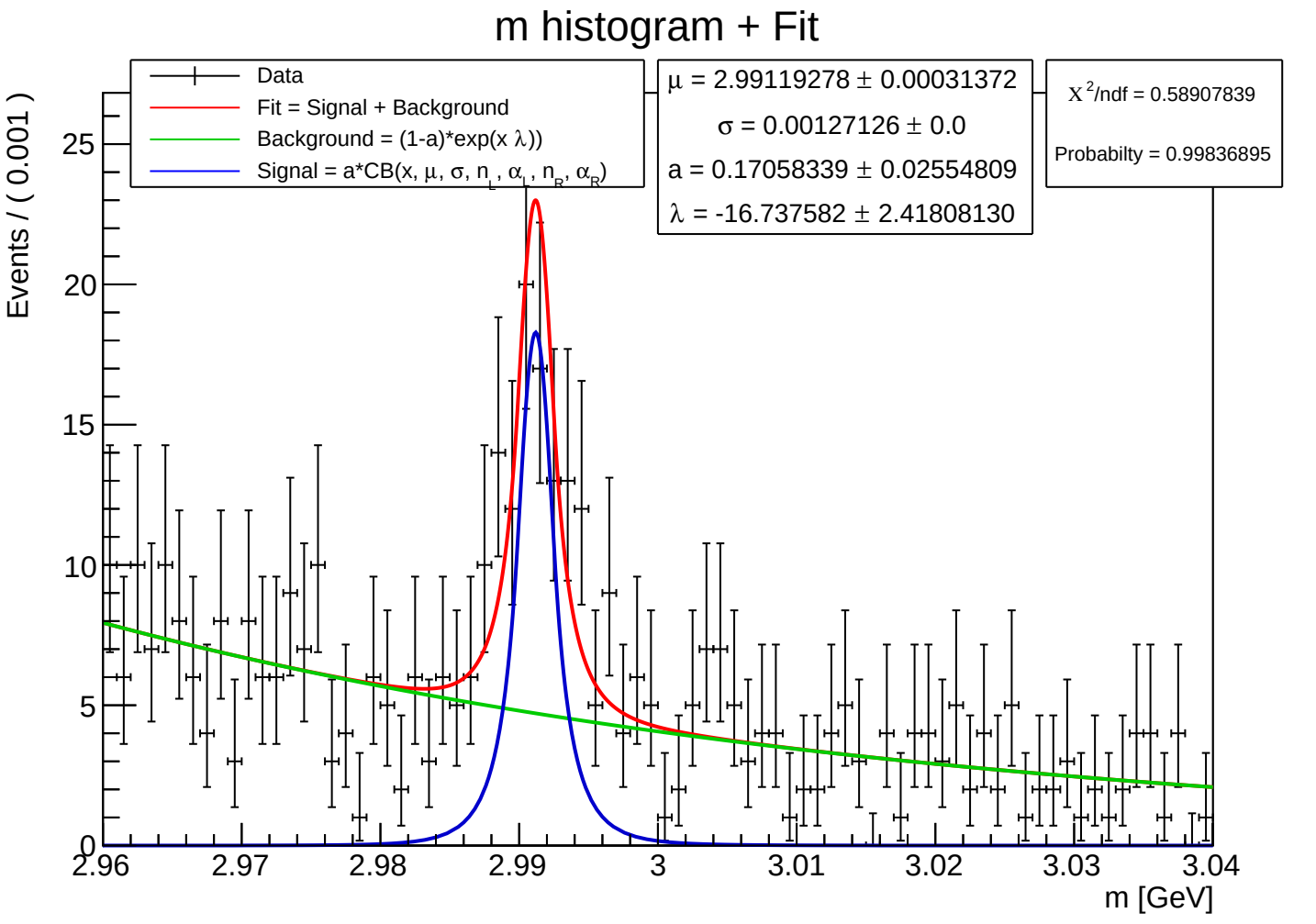

cos(theta*)_wrt_beam
55
50
45
40
35
30
25
−1
−0.8
−0.6
−0.4
−0.2
0
0.2
0.4
0.6
0.8
1

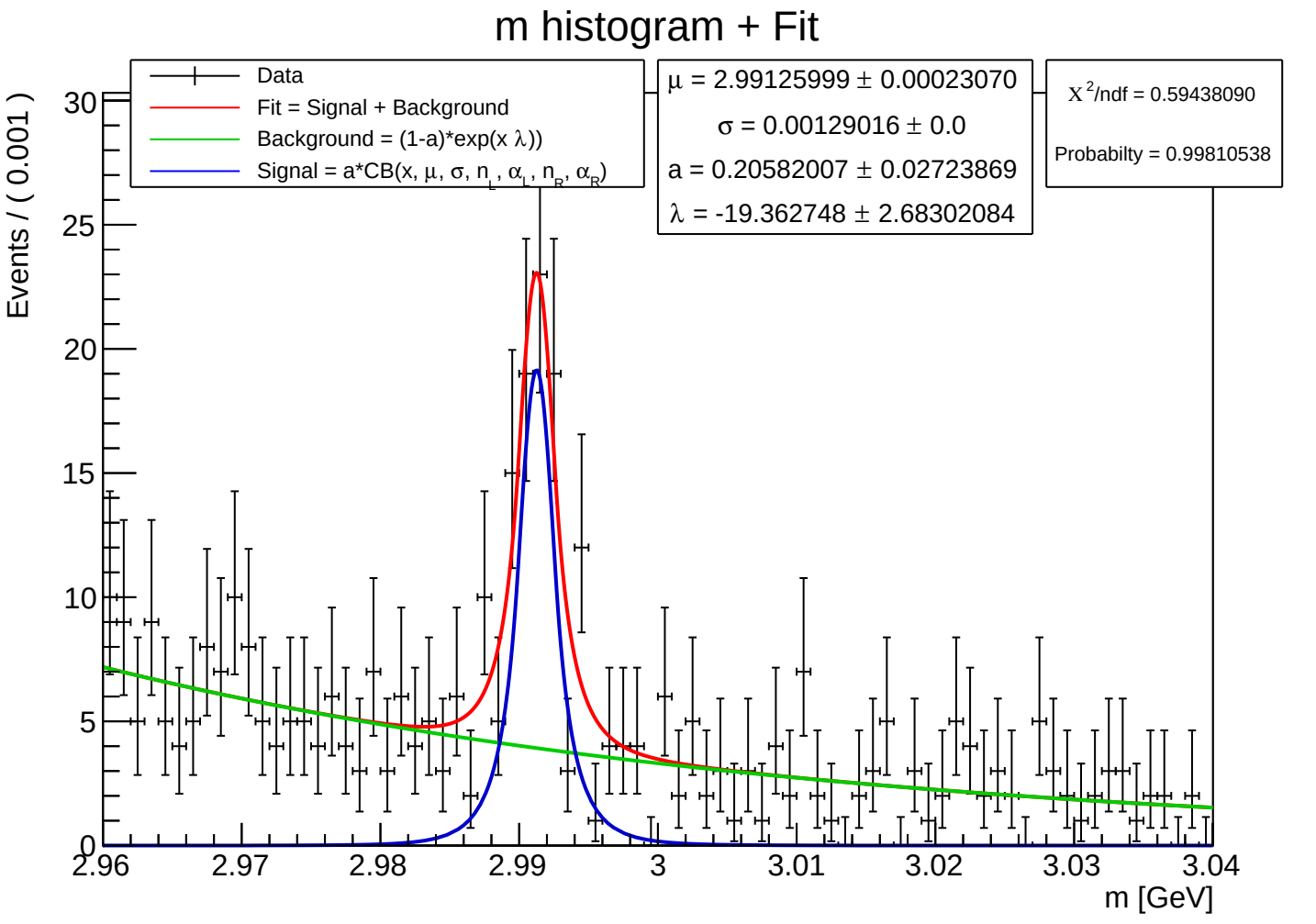

m histogram + Fit
Data
Fit = Signal + Background
Background = (1-a)*exp(x λ))
Signal = a*CB(x, μ, σ, n_L , α_L , n_R, α_R)
μ = 2.99167750 ± 0.00029814
σ = 0.00138031± 0.0
a = 0.17392015 ± 0.02561553
λ = -17.146704 ± 2.53379682
X 2/ndf = 0.58728879
Probabilty = 0.99845040
Events / (0.001)
m [GeV]
0
2
4
6
8
10
12
14
16
18
20
22
24
2.96
2.97
2.98
2.99
3
3.01
3.02
3.03
3.04

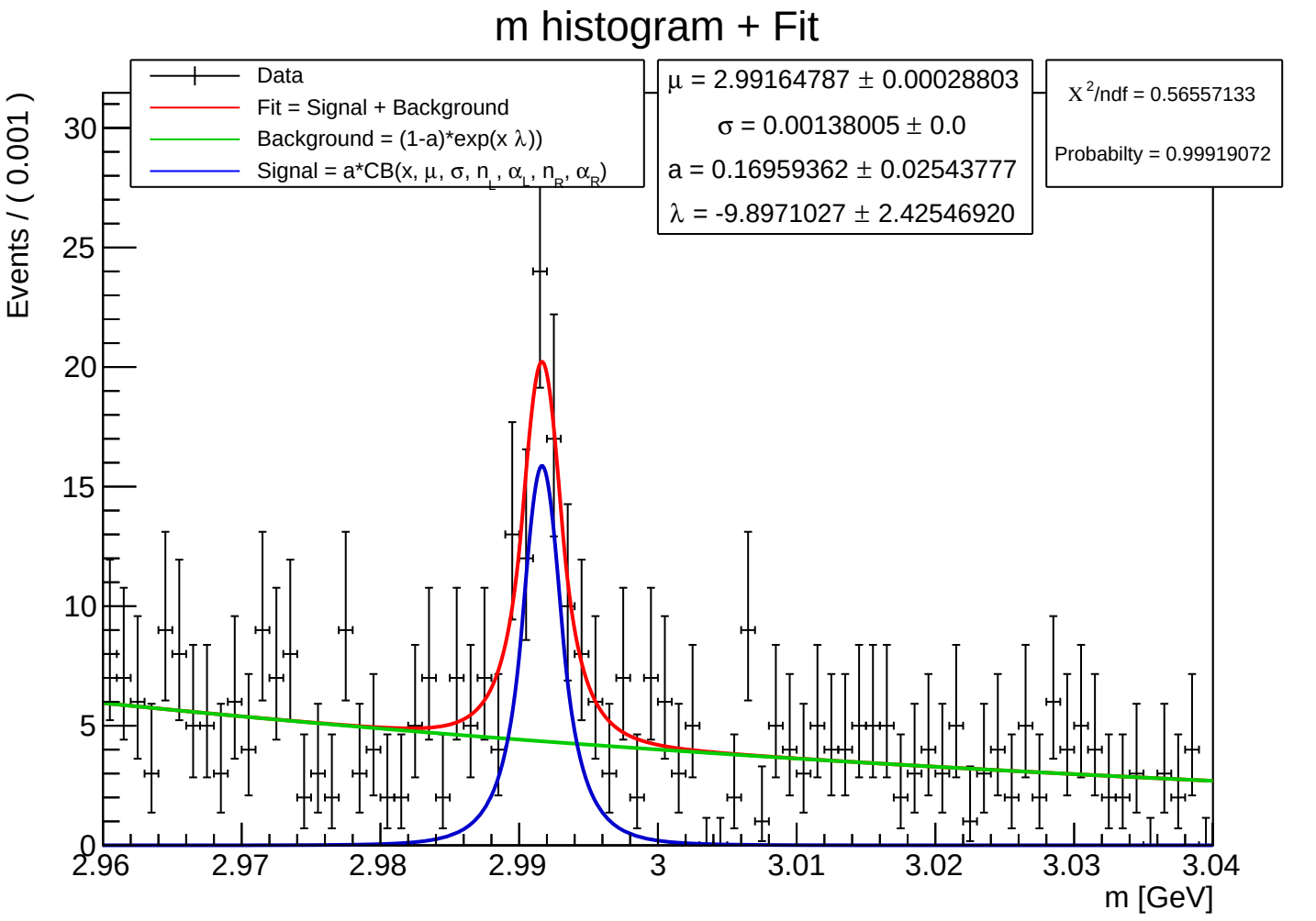

m histogram + Fit
Data
Fit = Signal + Background
Background = (1-a)*exp(x λ))
Signal = a*CB(x, μ, σ, n_L, α_L, n_R, α_R)
μ = 2.99152740 ± 0.00027384
σ = 0.00130124 ± 0.0
a = 0.21805075 ± 0.02853767
λ = -21.943954 ± 2.77341541
X 2/ndf = 0.59071121
Probabilty = 0.99829142
Events / (0.001)
m [GeV]
0
5
10
15
20
25
2.96
2.97
2.98
2.99
3
3.01
3.02
3.03
3.04

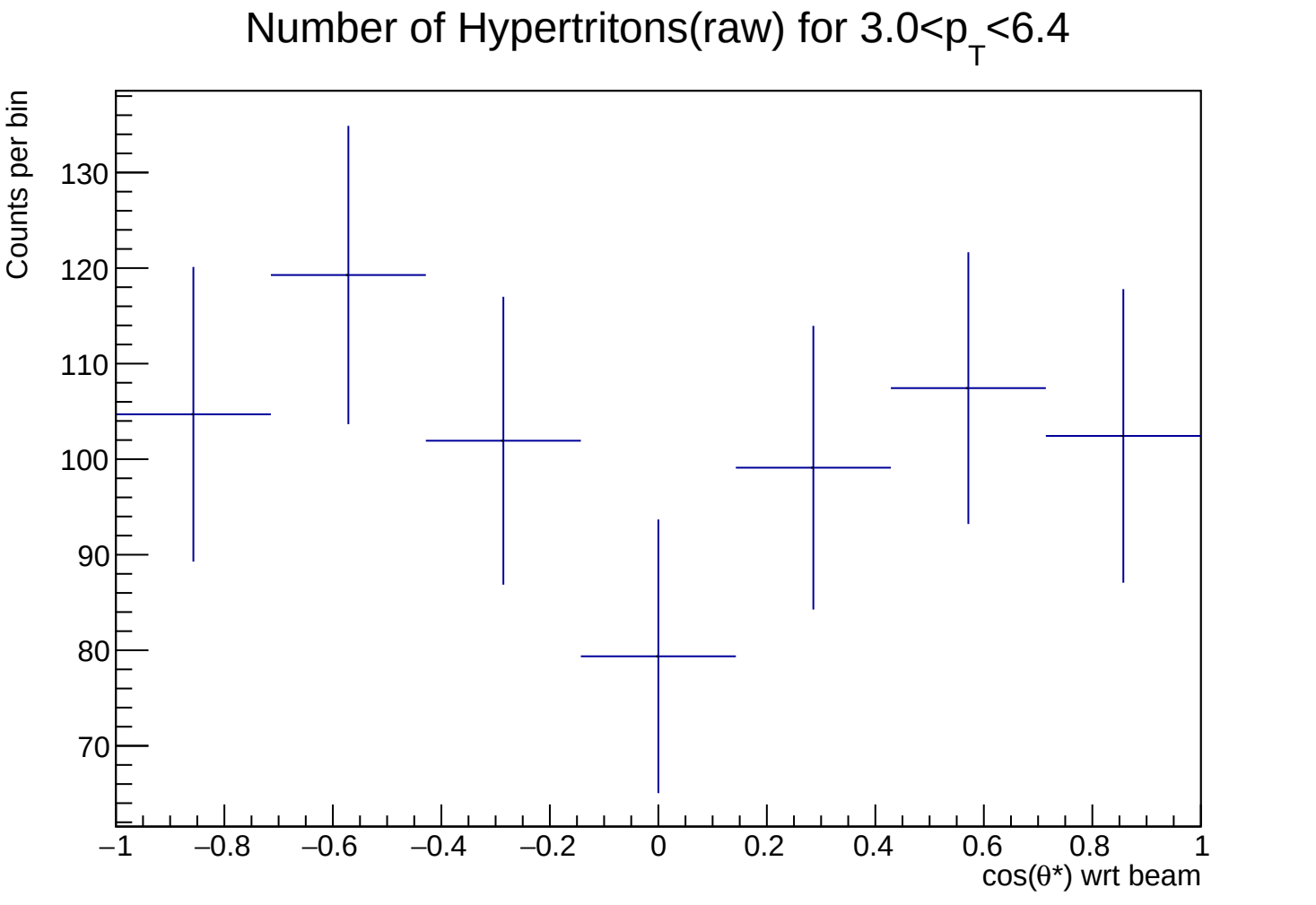

m histogram + Fit
Data
Fit = Signal + Background
Background = (1-a)*exp(x λ))
Signal = a*CB(x, μ, σ, n_L, α_L, n_R, α_R)
μ = 2.99138982 ± 0.00025228
σ = 0.00127664 ± 0.0
a = 0.16960469 ± 0.02506553
λ = -16.603766 ± 2.46986625
X²/ndf = 0.59081499
Probabilty = 0.99828638
Events / (0.001)
m [GeV]
0
5
10
15
20
25
30
2.96
2.97
2.98
2.99
3
3.01
3.02
3.03
3.04

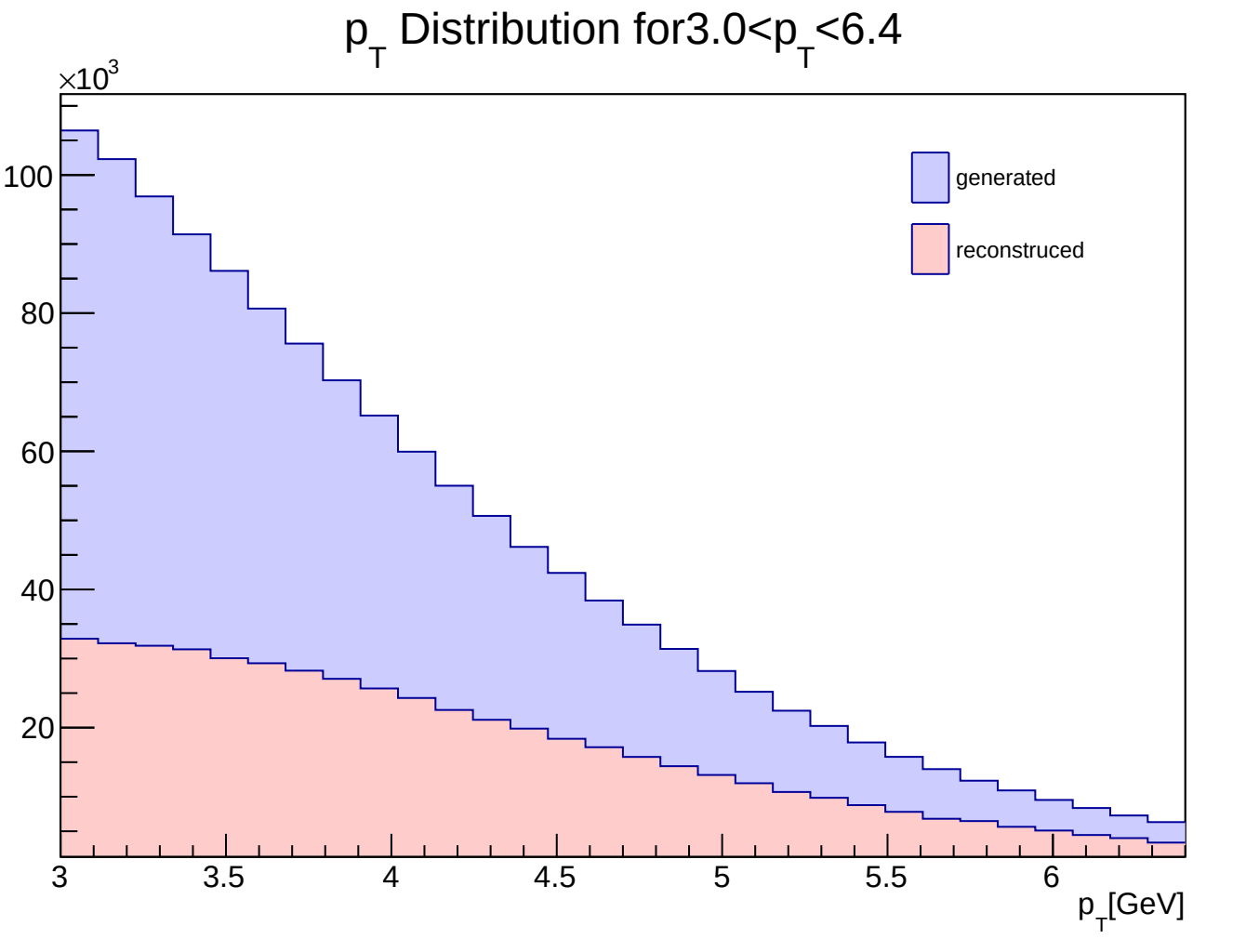

m histogram + Fit
Data
Fit = Signal + Background
Background = (1-a)*exp(x λ))
Signal = a*CB(x, μ, σ, n_L , α_L , n_R, α_R)
μ = 2.99142878 ± 0.00034245
σ = 0.00126524 ± 0.0
a = 0.13497972 ± 0.02435251
λ = -15.586486 ± 2.43188330
X 2/ndf = 0.48534729
Probabilty = 0.99995596
Events / (0.001)
m [GeV]
0
2
4
6
8
10
12
14
16
18
20
22
24
2.96
2.97
2.98
2.99
3
3.01
3.02
3.03
3.04

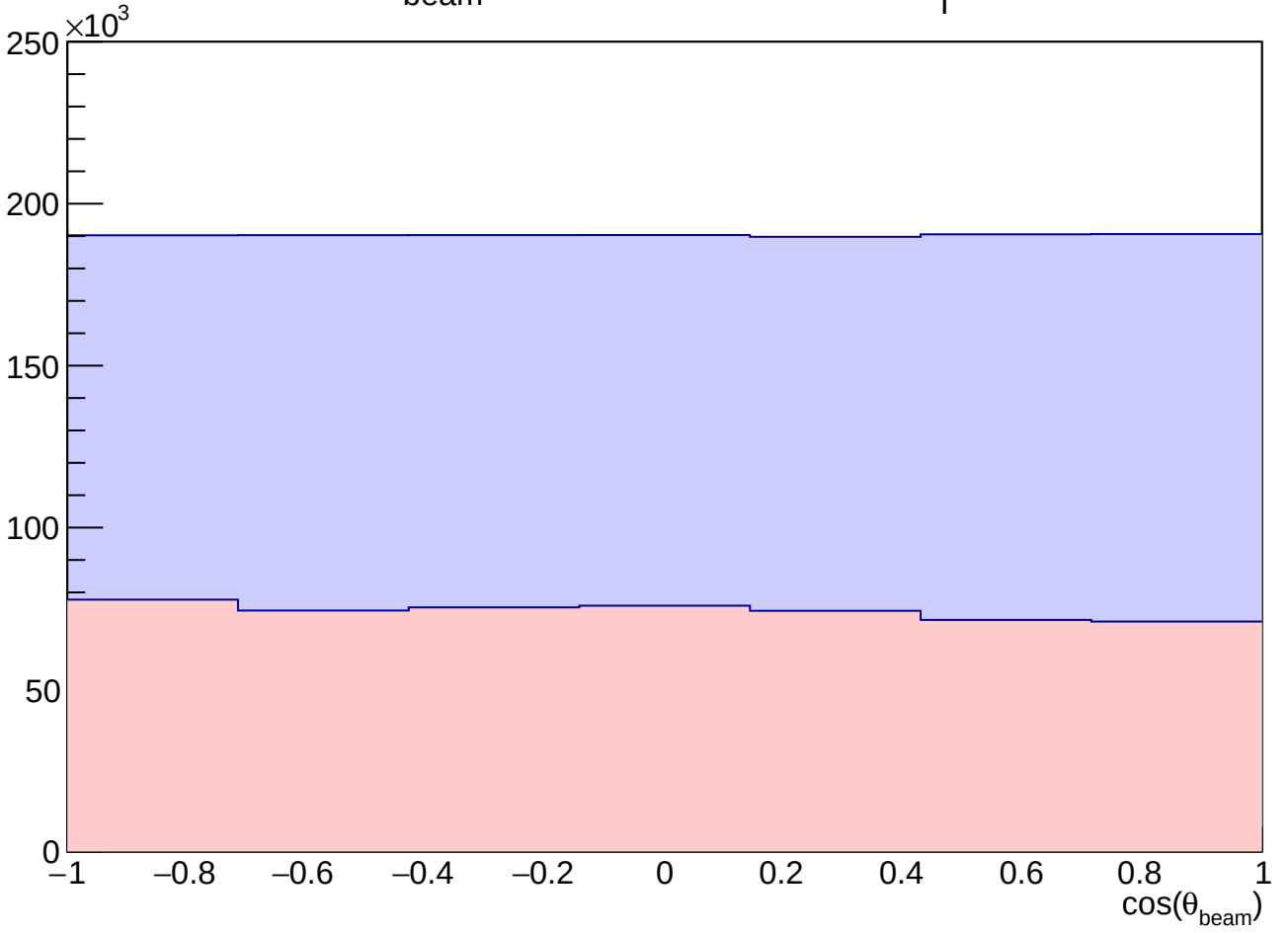

m histogram + Fit
Data
Fit = Signal + Background
Background = (1-a)*exp(x λ))
Signal = a*CB(x, μ, σ, n_L , α_L , n_R, α_R)
μ = 2.99119278 ± 0.00031372
σ = 0.00127126 ± 0.0
a = 0.17058339 ± 0.02554809
λ = -16.737582 ± 2.41808130
X 2/ndf = 0.58907839
Probabilty = 0.99836895
Events / (0.001)
m [GeV]
0
5
10
15
20
25
2.96
2.97
2.98
2.99
3
3.01
3.02
3.03
3.04

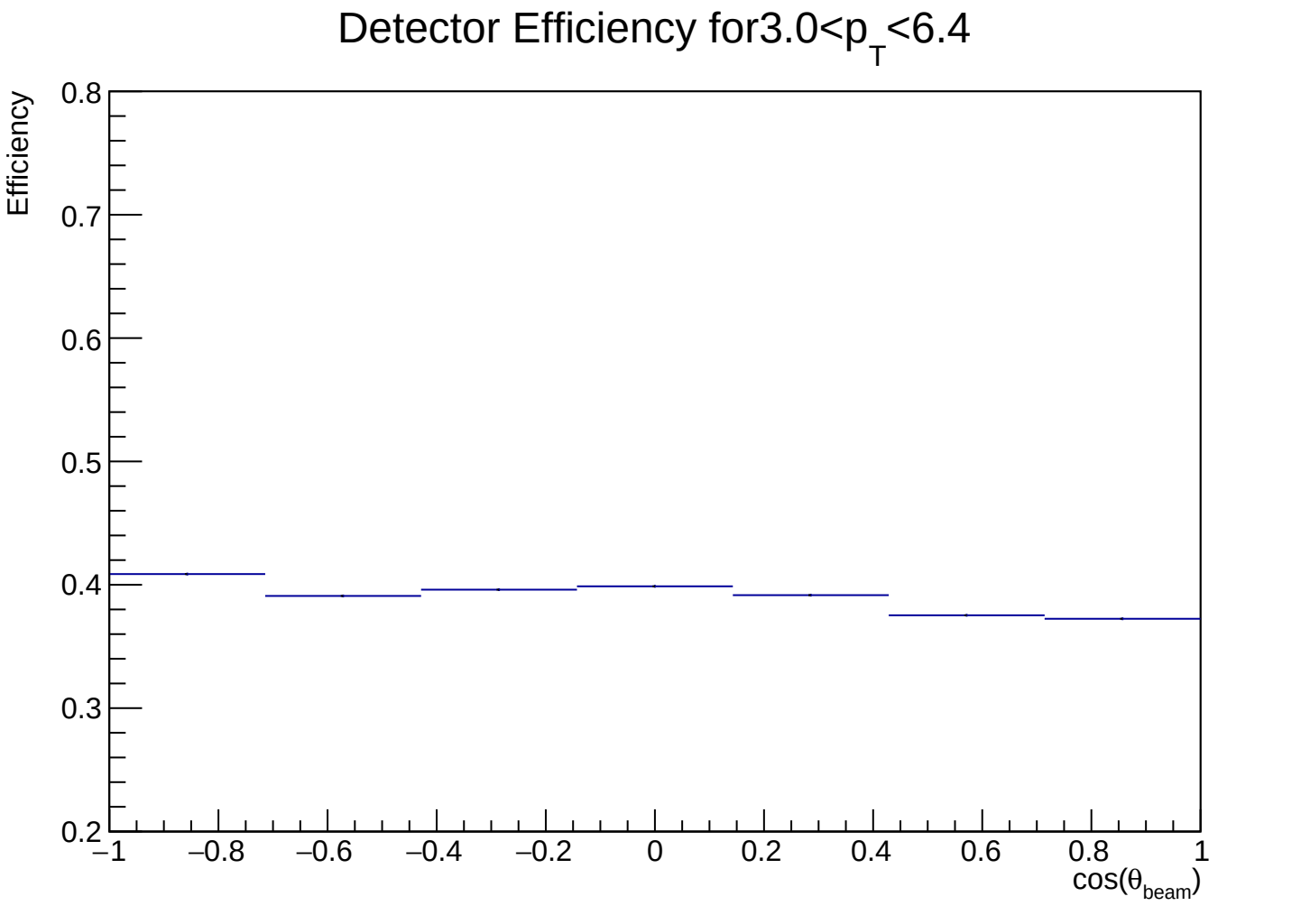

m histogram + Fit
Data
Fit = Signal + Background
Background = (1-a)*exp(x λ))
Signal = a*CB(x, μ, σ, n_L, α_L, n_R, α_R)
μ = 2.99125999 ± 0.00023070
σ = 0.00129016 ± 0.0
a = 0.20582007 ± 0.02723869
λ = -19.362748 ± 2.68302084
X²/ndf = 0.59438090
Probabilty = 0.99810538
Events / (0.001)
m [GeV]
0
5
10
15
20
25
30
2.96
2.97
2.98
2.99
3
3.01
3.02
3.03
3.04

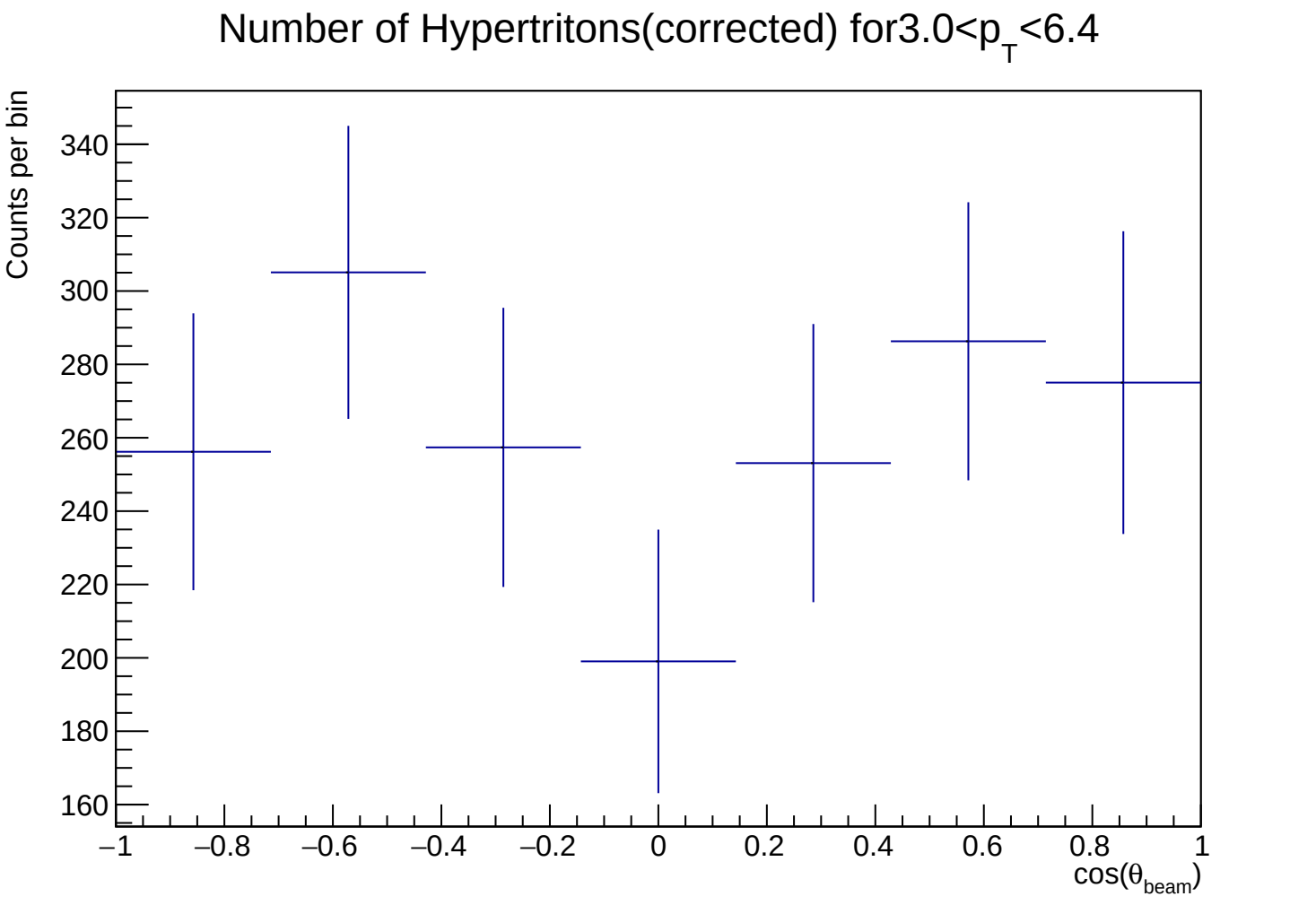

m histogram + Fit
Data
Fit = Signal + Background
Background = (1-a)*exp(x λ))
Signal = a*CB(x, μ, σ, n_L, α_L, n_R, α_R)
μ = 2.99164787 ± 0.00028803
σ = 0.00138005 ± 0.0
a = 0.16959362 ± 0.02543777
λ = -9.8971027 ± 2.42546920
X²/ndf = 0.56557133
Probabilty = 0.99919072
Events / (0.001)
m [GeV]
0
5
10
15
20
25
30
2.96
2.97
2.98
2.99
3
3.01
3.02
3.03
3.04


Number of Hypertritons(raw) for 3.0<p_T<6.4
Counts per bin
130
120
110
100
90
80
70
−1
−0.8
−0.6
−0.4
−0.2
0
0.2
0.4
0.6
0.8
1
cos(θ*) wrt beam


p_T Distribution for3.0<p_T<6.4
×10^3
100
80
60
40
20
3
3.5
4
4.5
5
5.5
6
p_T[GeV]
generated
reconstruced


Cos(θbeam) Distribution for3.0<pT<6.4
×10^3
250
200
150
100
50
0
−1
−0.8
−0.6
−0.4
−0.2
0
0.2
0.4
0.6
0.8
1
cos(θbeam)


Detector Efficiency for3.0<p_T<6.4
Efficiency
0.8
0.7
0.6
0.5
0.4
0.3
0.2
−1
−0.8
−0.6
−0.4
−0.2
0
0.2
0.4
0.6
0.8
1
cos(θ_beam)


Number of Hypertritons(corrected) for3.0<p_T<6.4
Counts per bin
340
320
300
280
260
240
220
200
180
160
−1
−0.8
−0.6
−0.4
−0.2
0
0.2
0.4
0.6
0.8
1
cos(θ_beam)