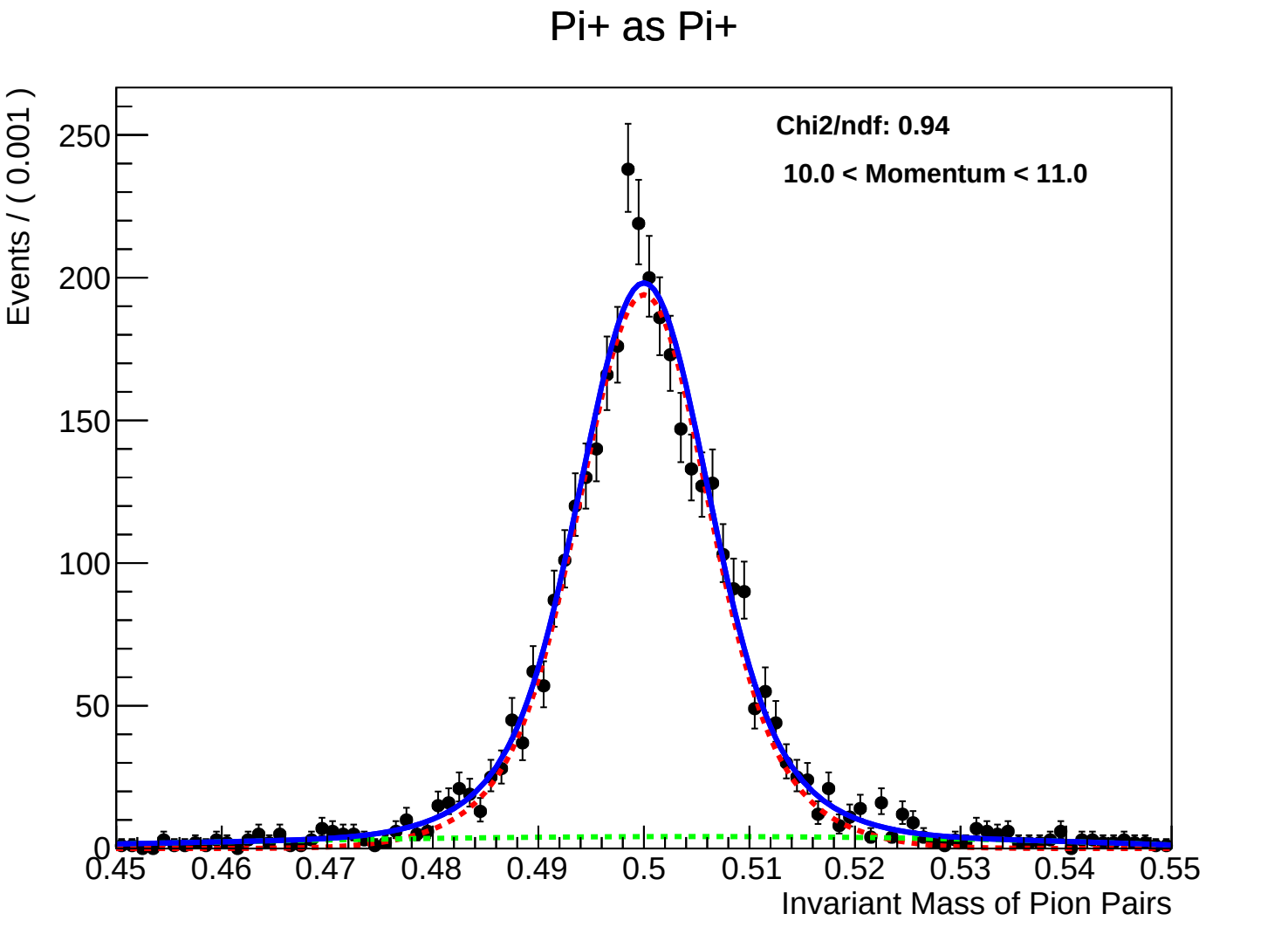
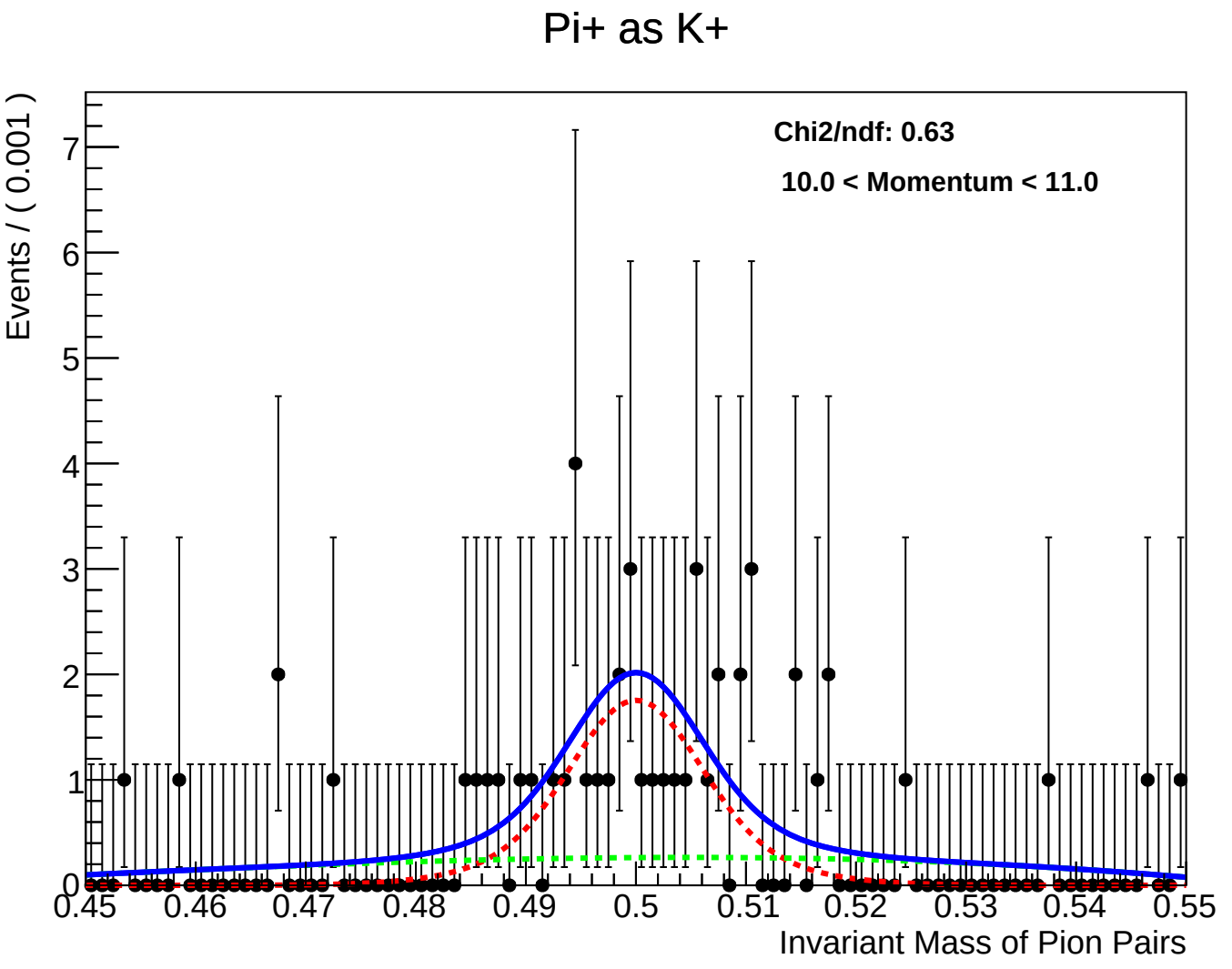
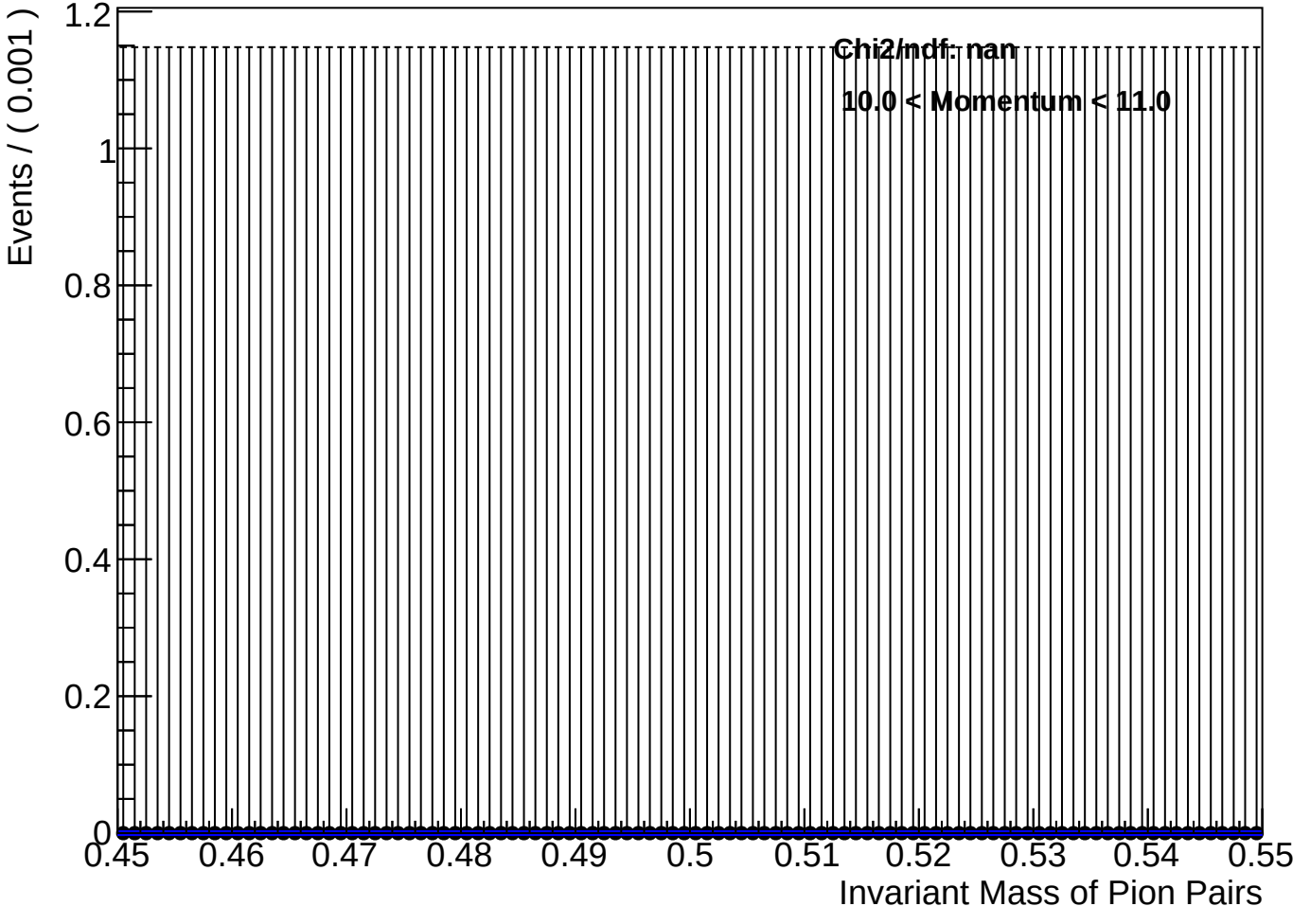
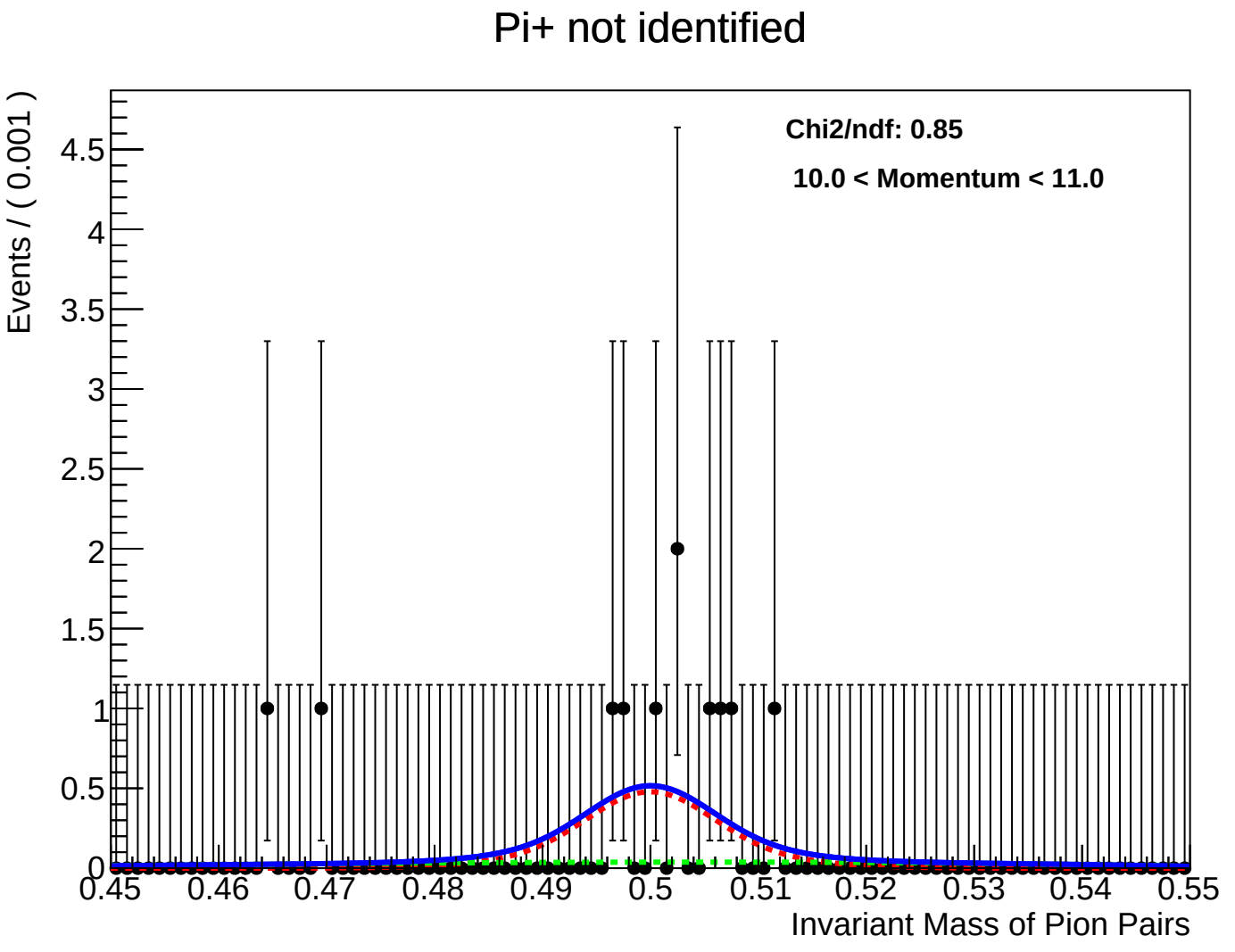
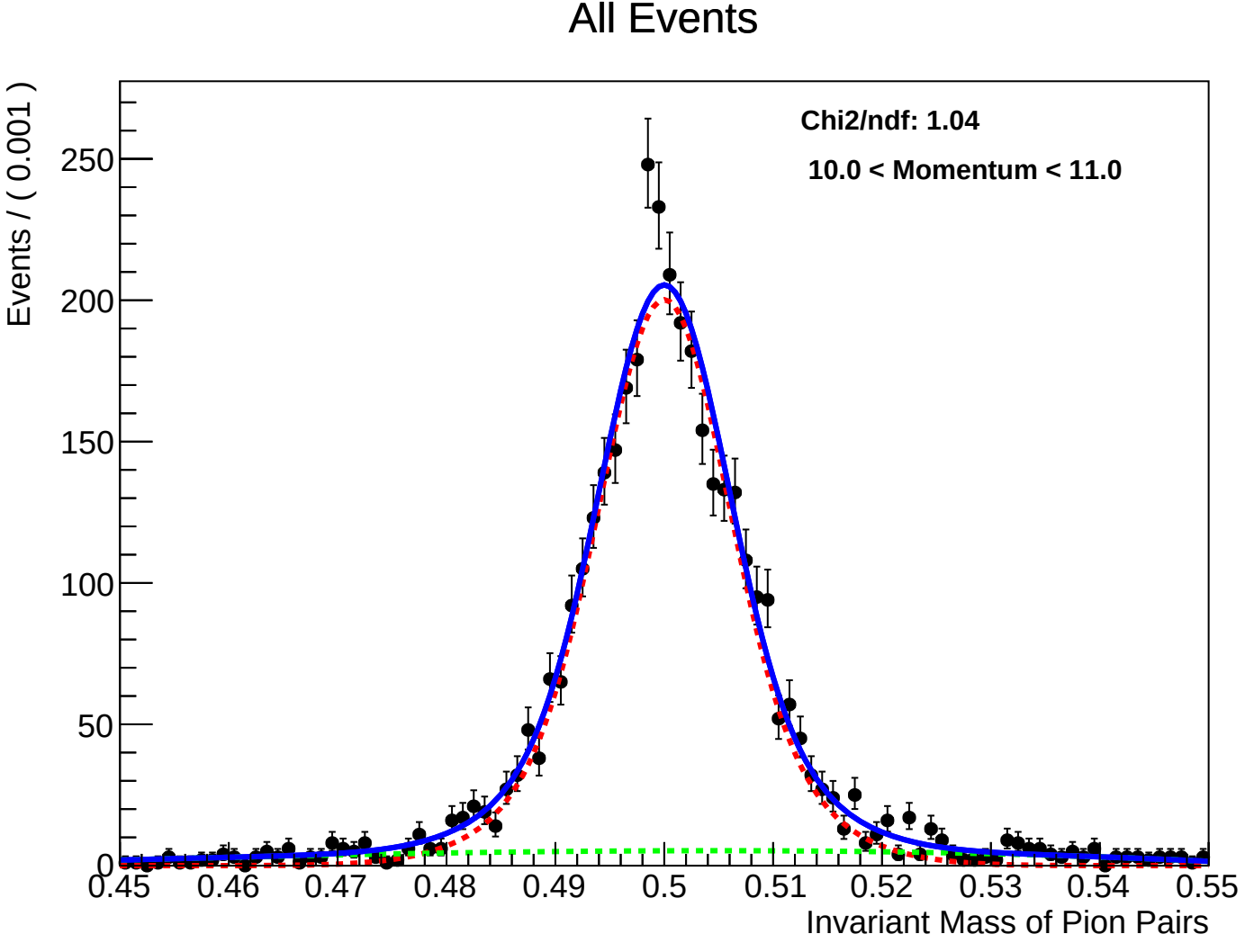
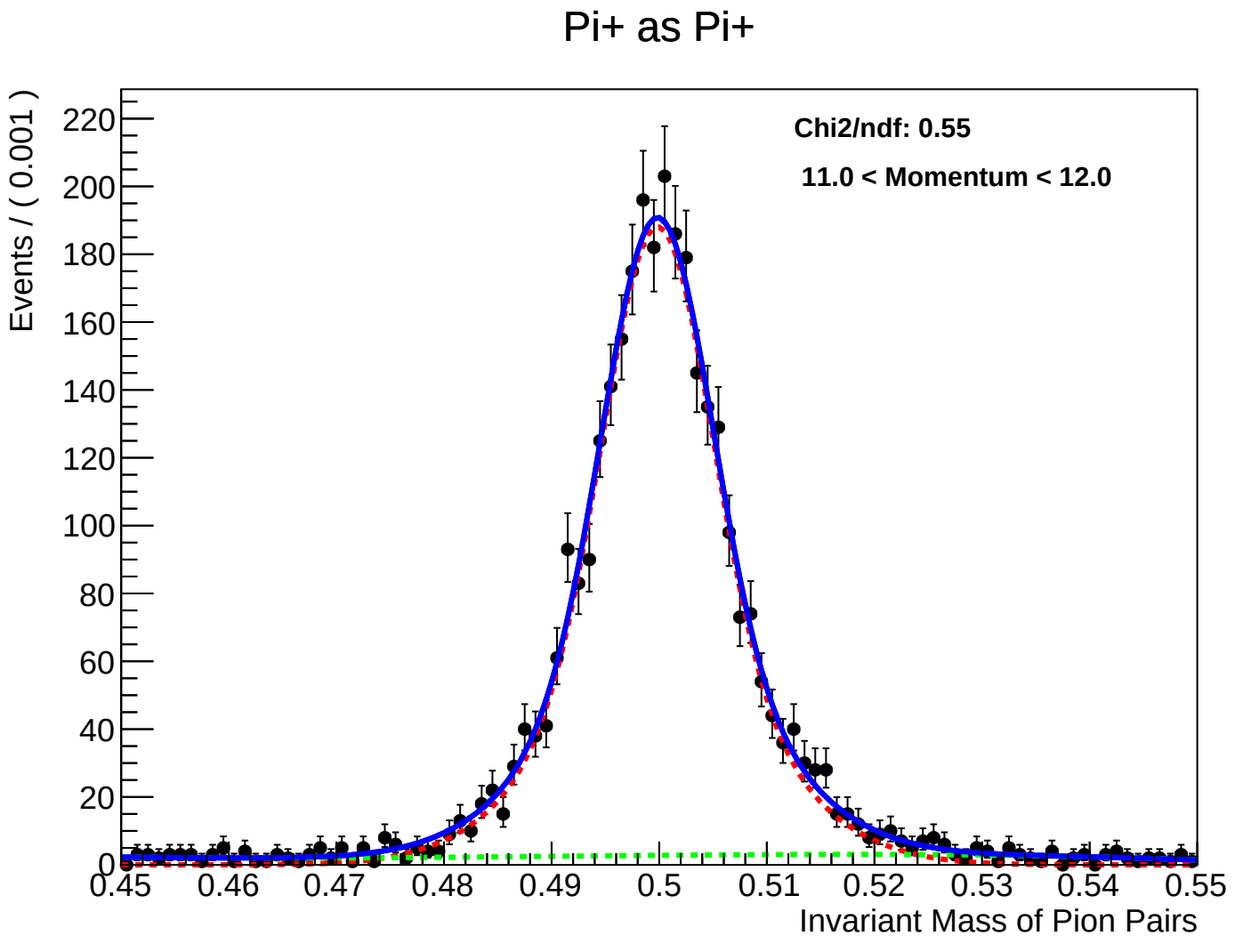

Pi+ as Pi+
Chi2/ndf: 0.94
10.0 < Momentum < 11.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
50
100
150
200
250
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

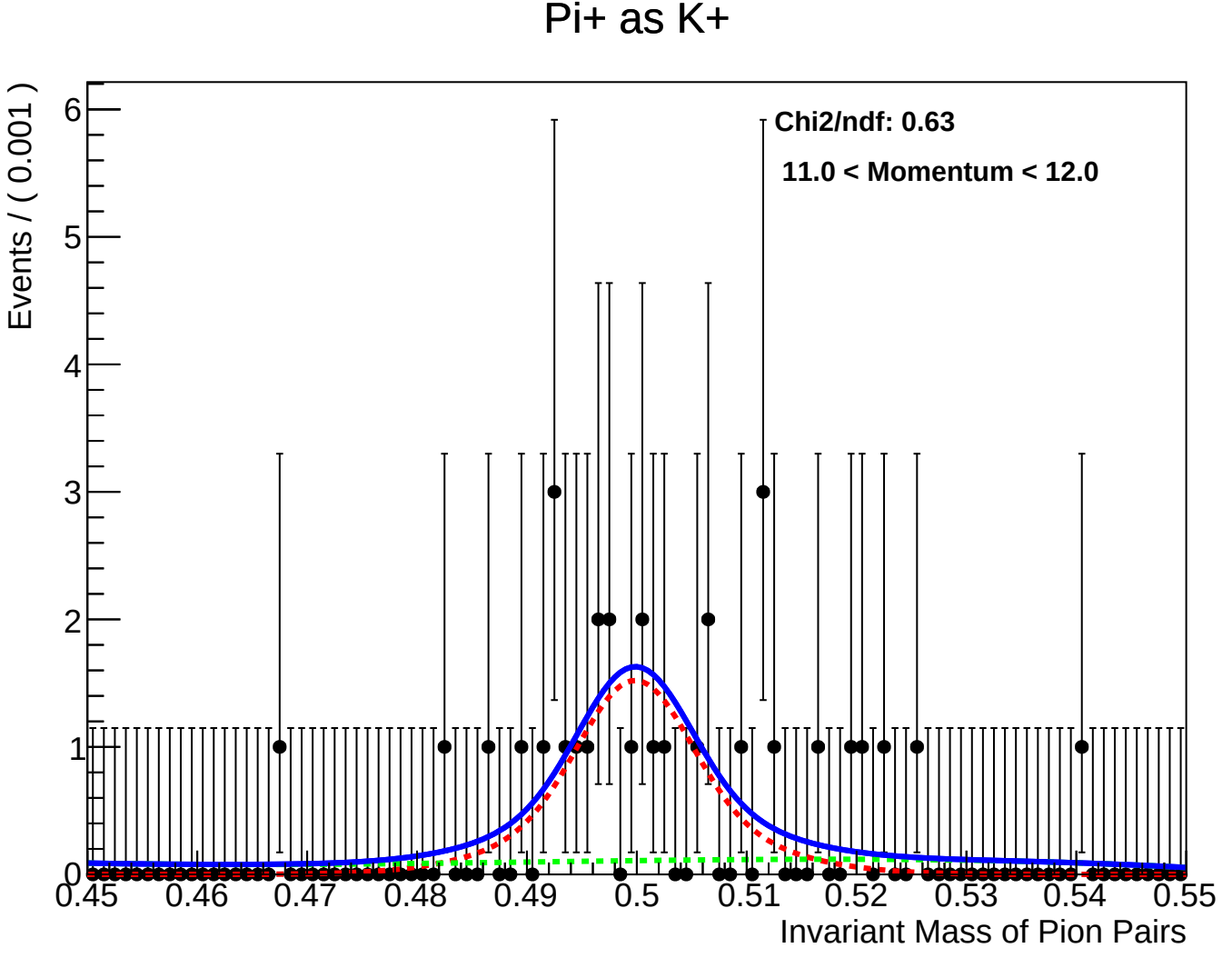

Pi+ as K+
Chi2/ndf: 0.63
10.0 < Momentum < 11.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
1
2
3
4
5
6
7
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

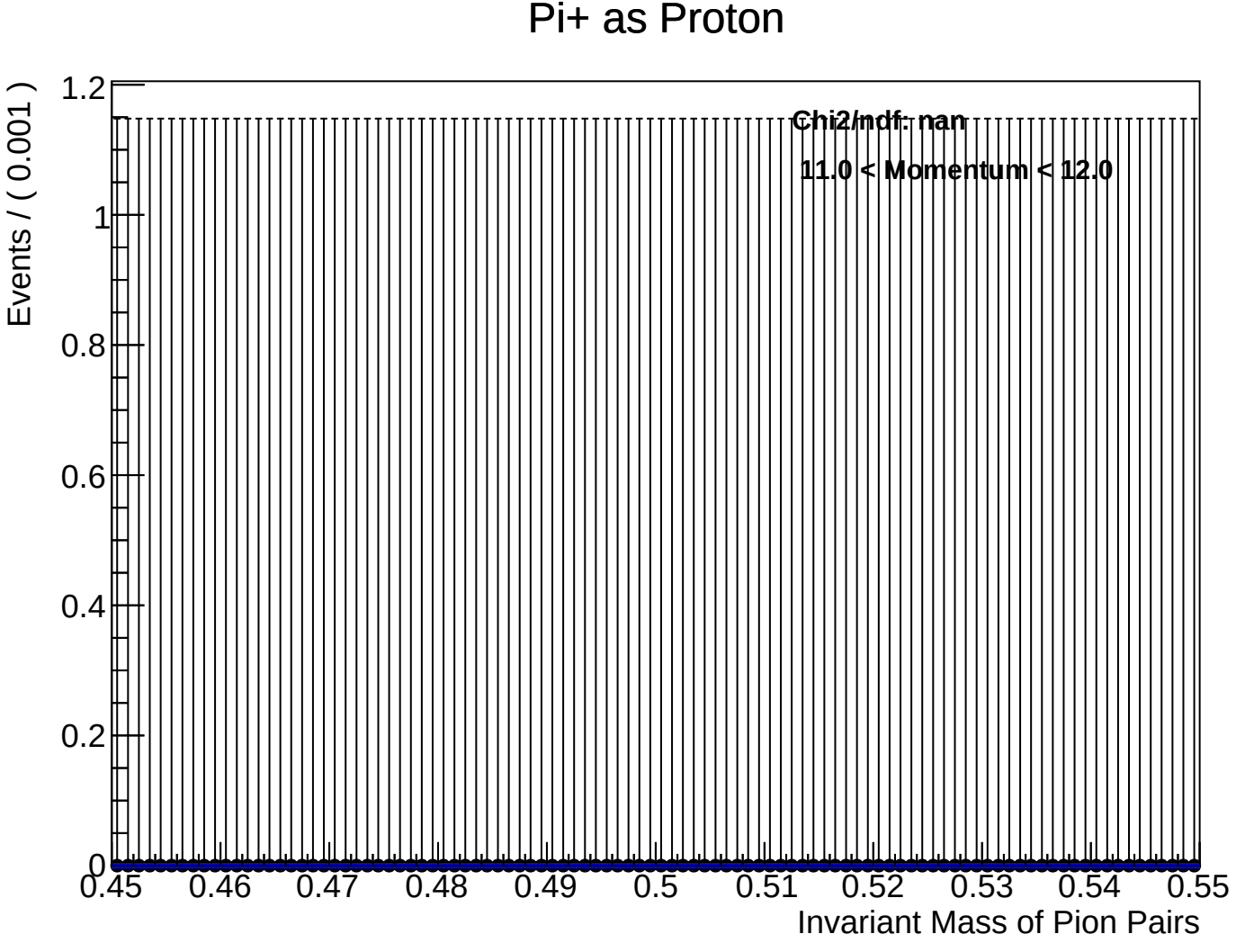

Pi+ as Proton
Chi2/ndf: nan
10.0 < Momentum < 11.0
Events / (0.001)
1.2
1
0.8
0.6
0.4
0.2
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

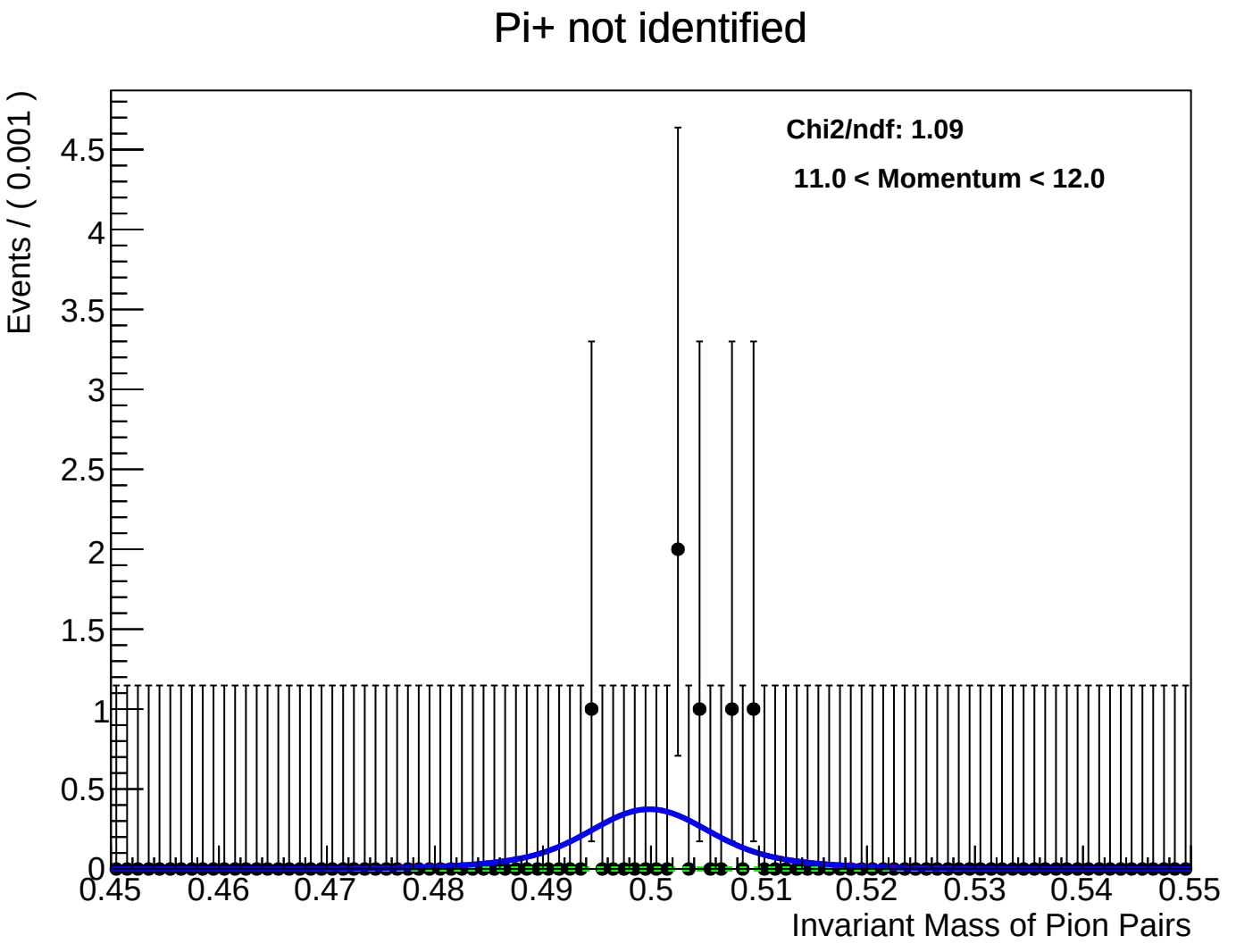

Pi+ not identified
Chi2/ndf: 0.85
10.0 < Momentum < 11.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

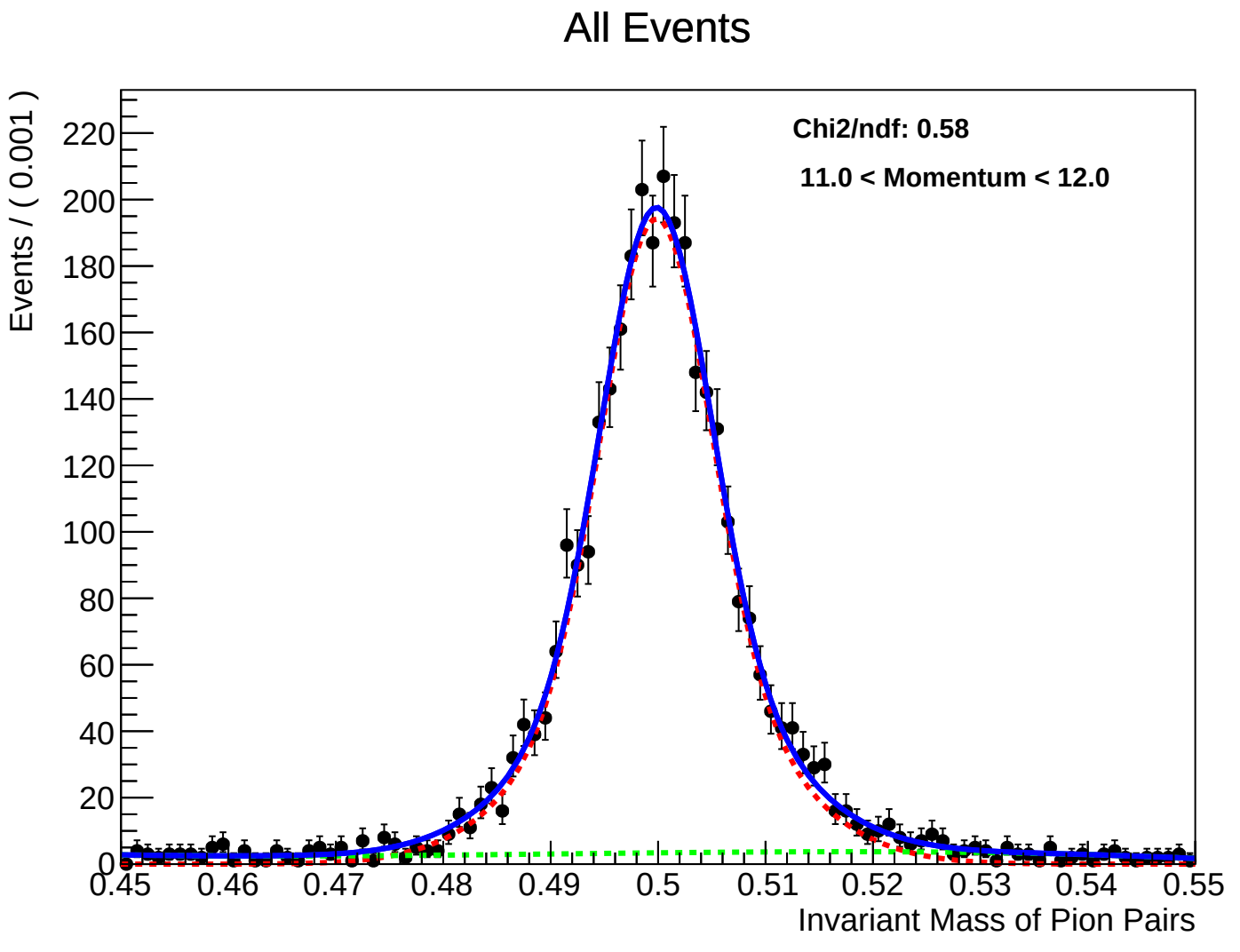

All Events
Chi2/ndf: 1.04
10.0 < Momentum < 11.0
Events / (0.001)
0
50
100
150
200
250
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

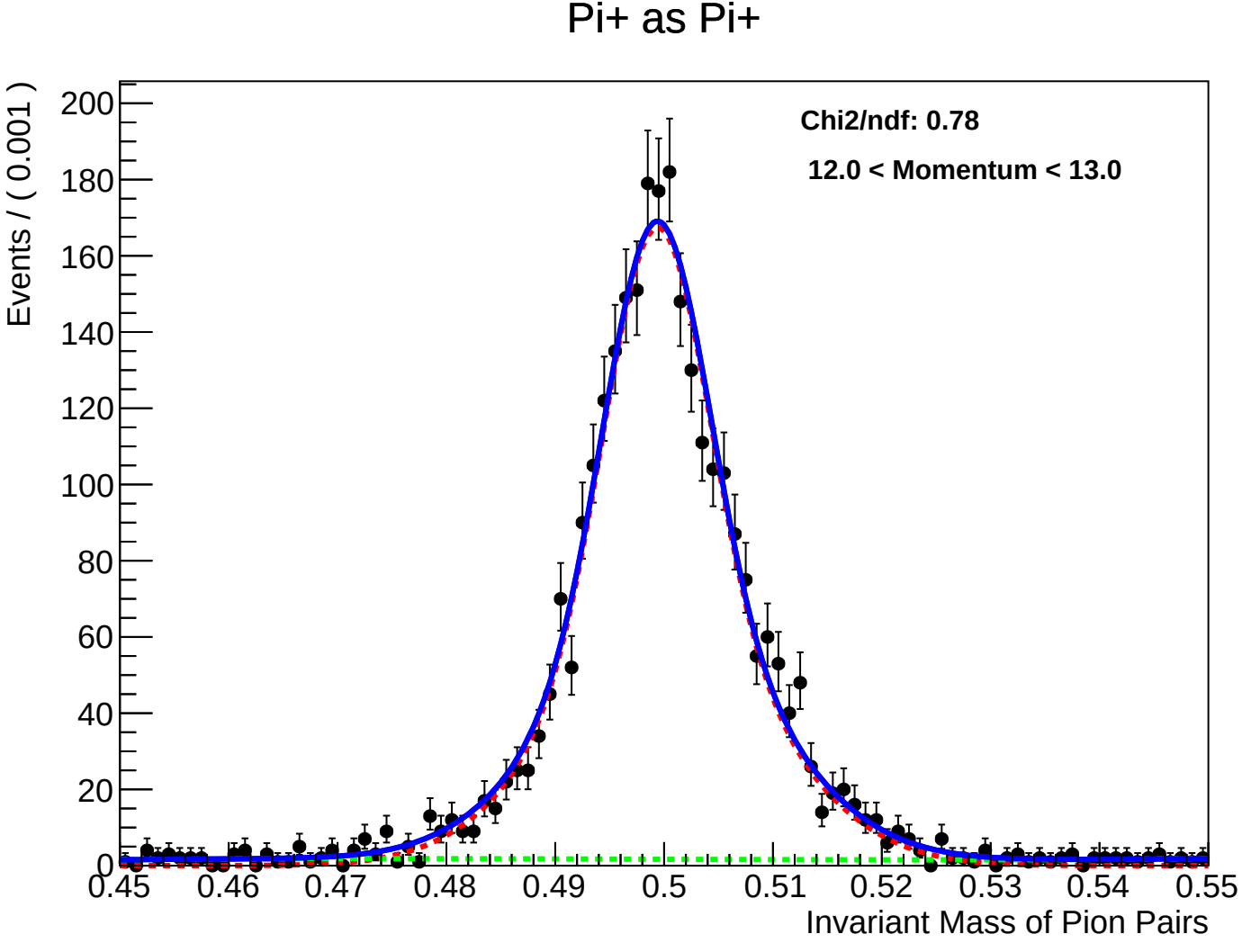

Pi+ as Pi+
Chi2/ndf: 0.55
11.0 < Momentum < 12.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
140
160
180
200
220
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

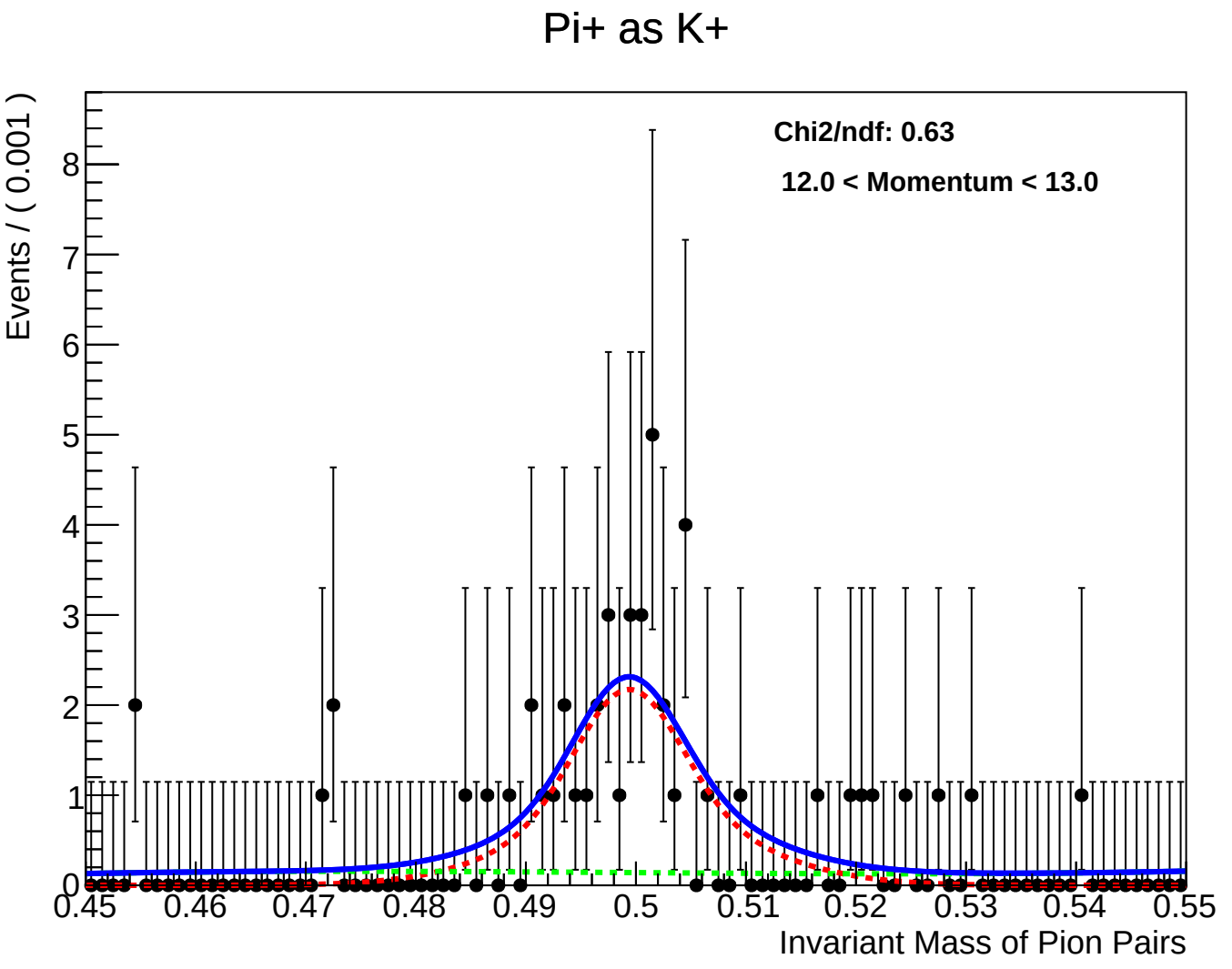

Pi+ as K+
Chi2/ndf: 0.63
11.0 < Momentum < 12.0
Events / (0.001)
0
1
2
3
4
5
6
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

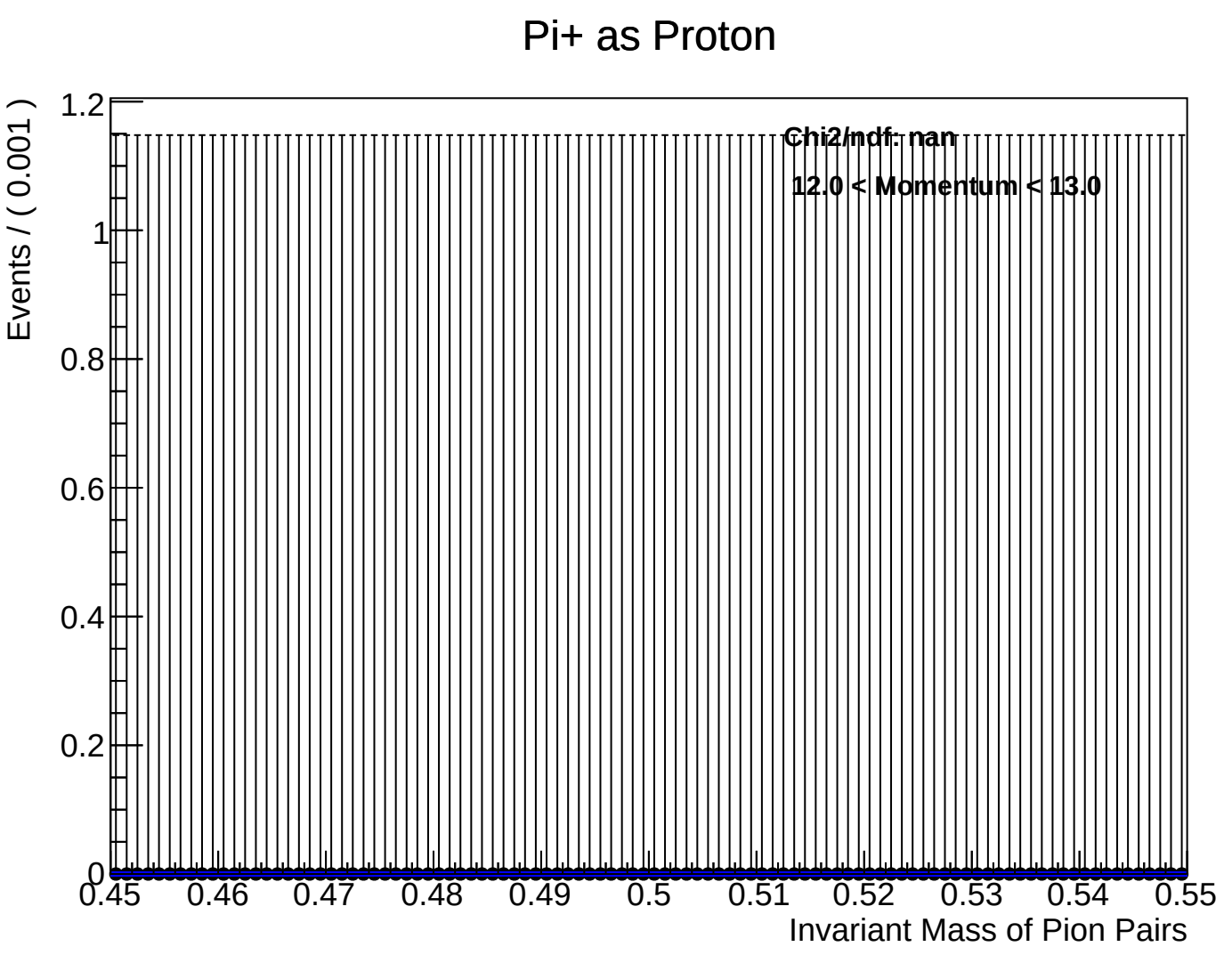

Pi+ as Proton
Chi2/ndf: nan
11.0 < Momentum < 12.0
Events / (0.001)
1.2
1
0.8
0.6
0.4
0.2
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

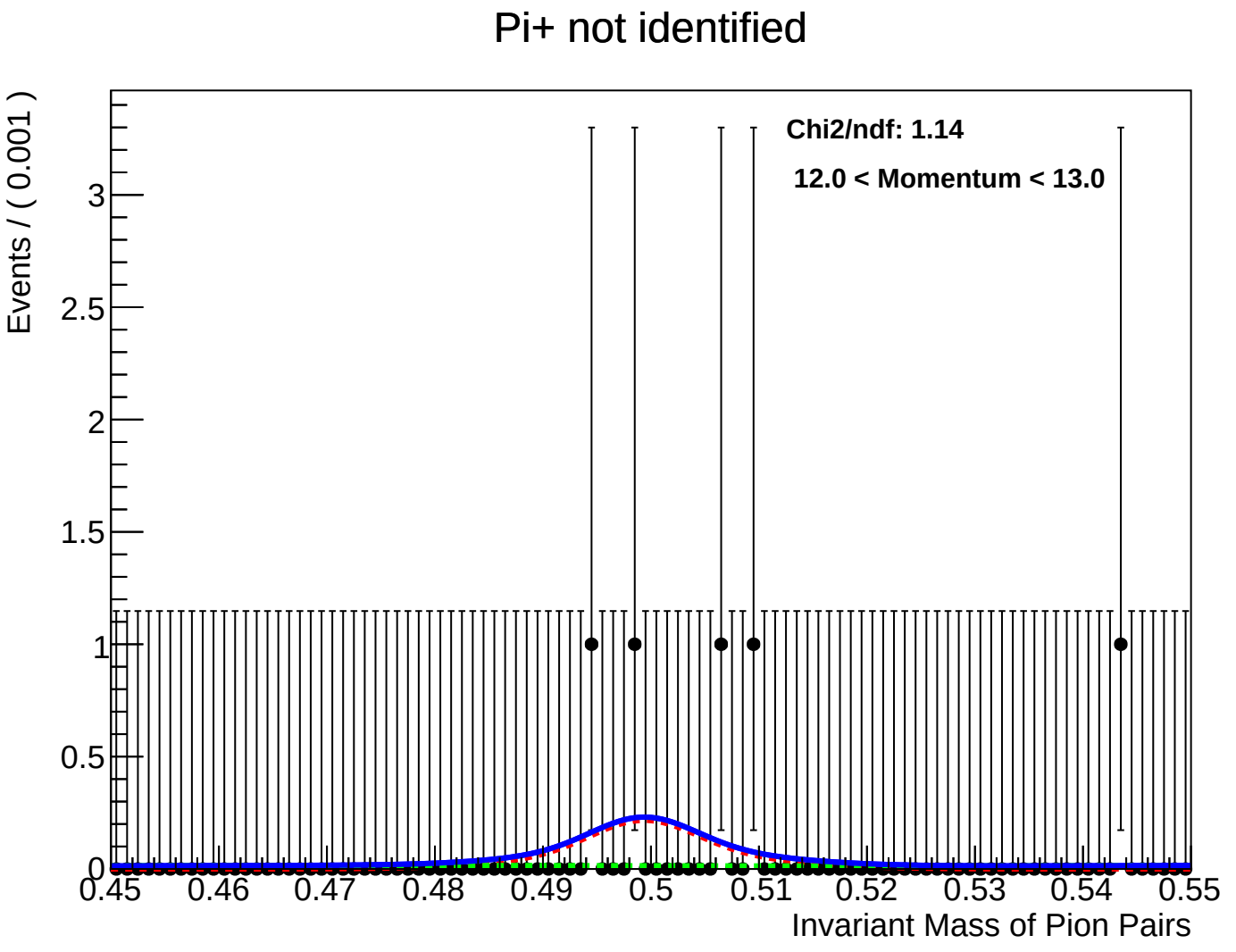

Pi+ not identified
Chi2/ndf: 1.09
11.0 < Momentum < 12.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55


All Events
Chi2/ndf: 0.58
11.0 < Momentum < 12.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
140
160
180
200
220
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

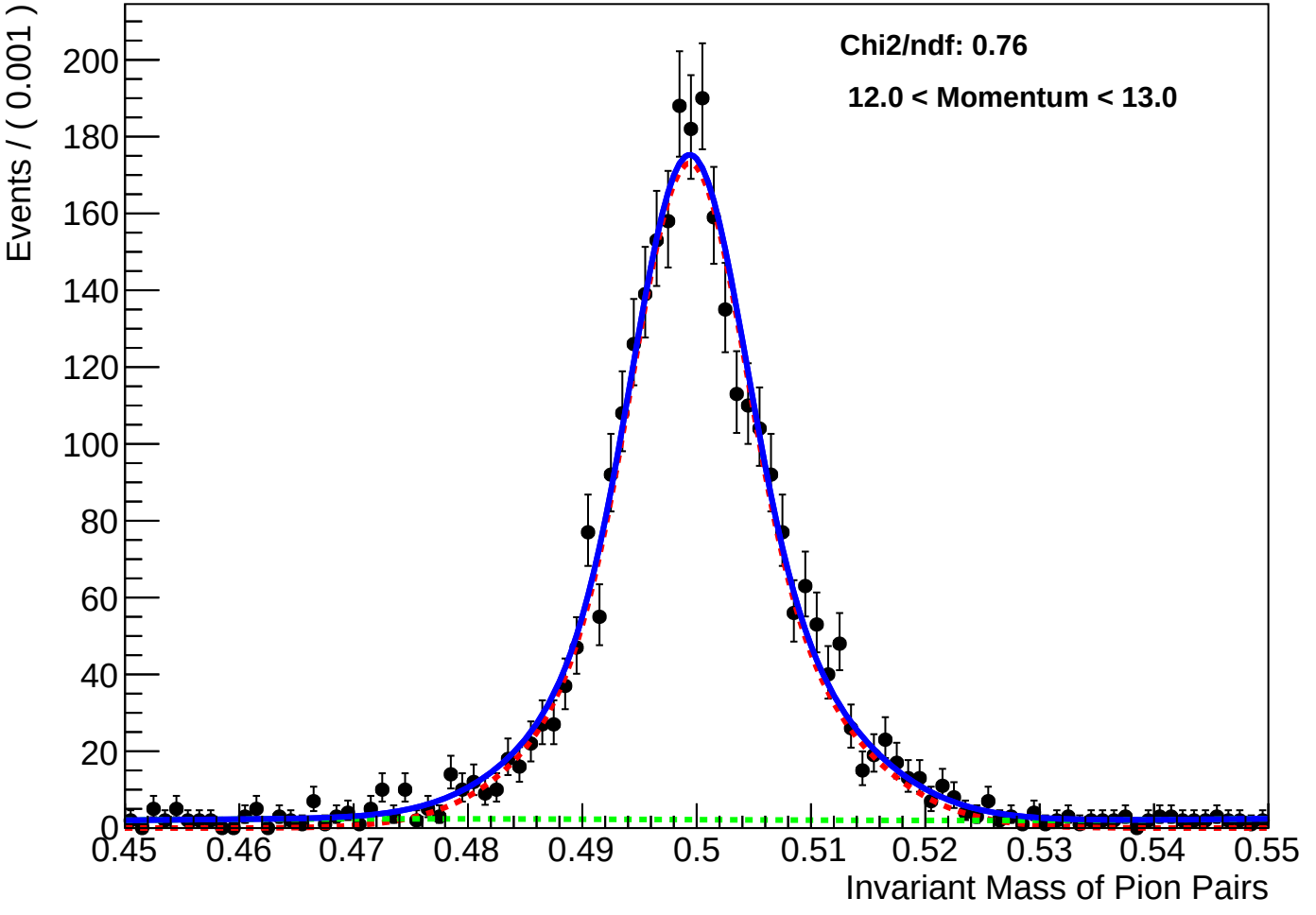

Pi+ as Pi+
Chi2/ndf: 0.78
12.0 < Momentum < 13.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
140
160
180
200
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

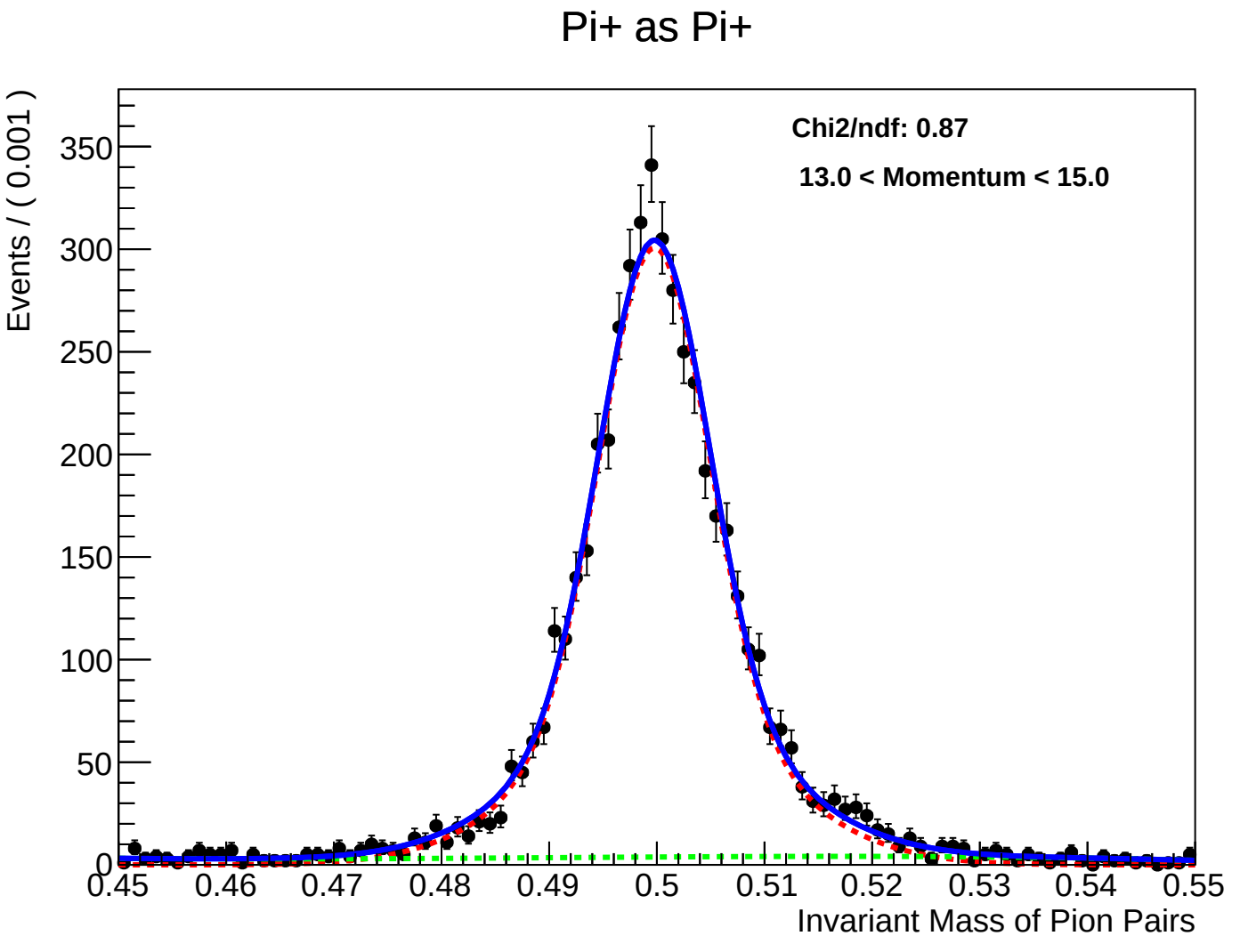

Pi+ as K+
Chi2/ndf: 0.63
12.0 < Momentum < 13.0
Events / (0.001)
0
1
2
3
4
5
6
7
8
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

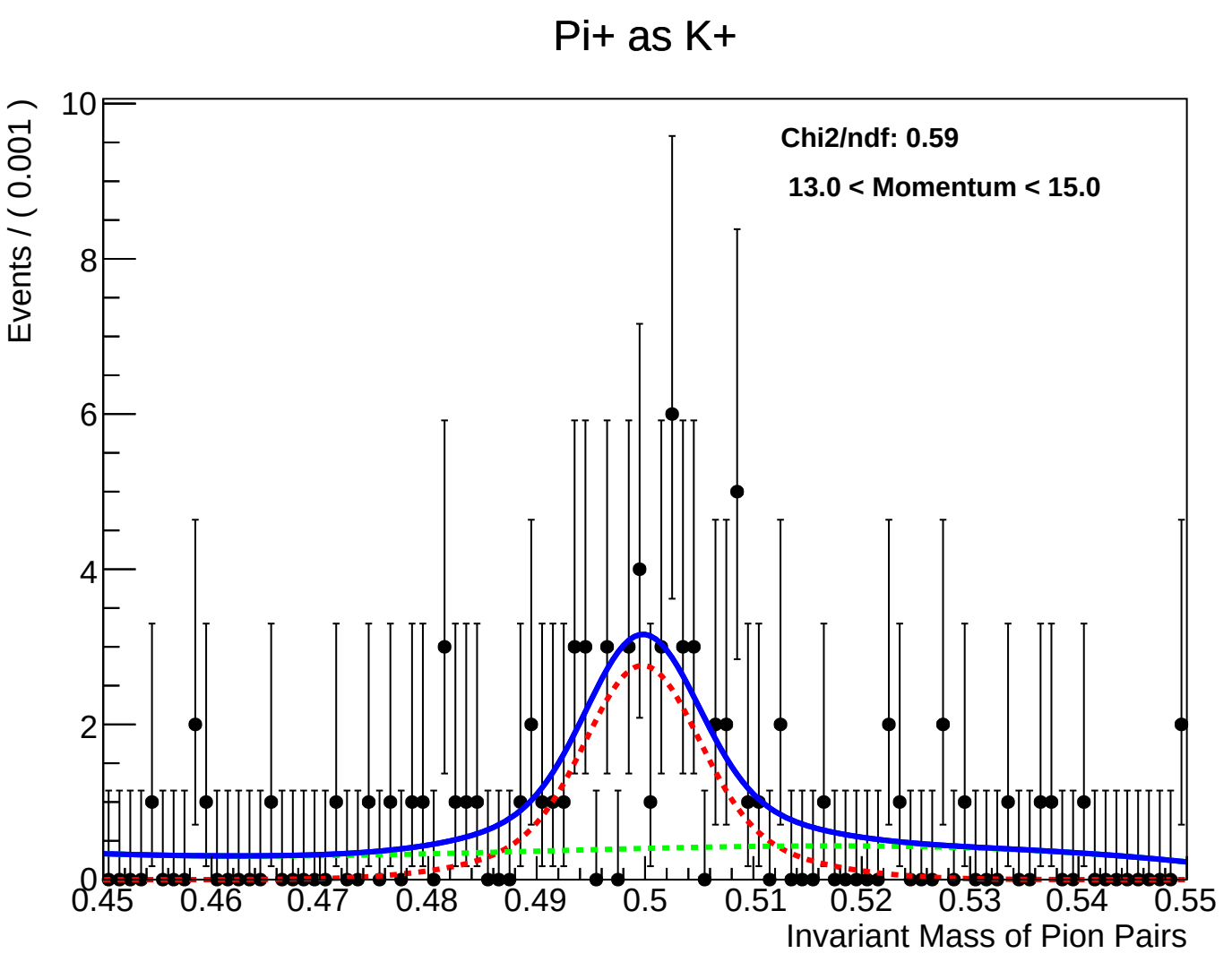

Pi+ as Proton
Chi2/ndf: nan
12.0 < Momentum < 13.0
Events / (0.001)
1.2
1
0.8
0.6
0.4
0.2
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

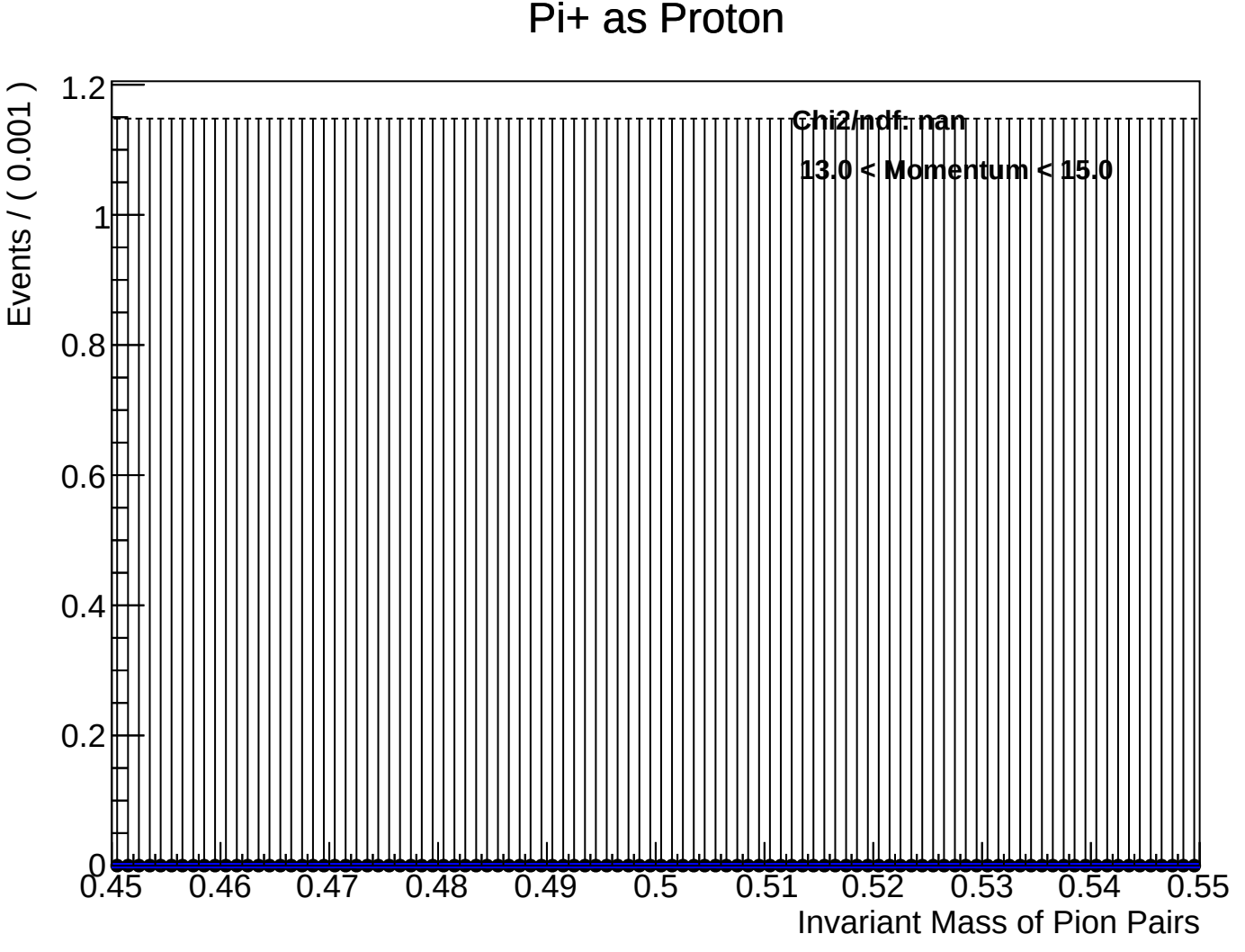

Pi+ not identified
Chi2/ndf: 1.14
12.0 < Momentum < 13.0
Events / (0.001)
0
0.5
1
1.5
2
2.5
3
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

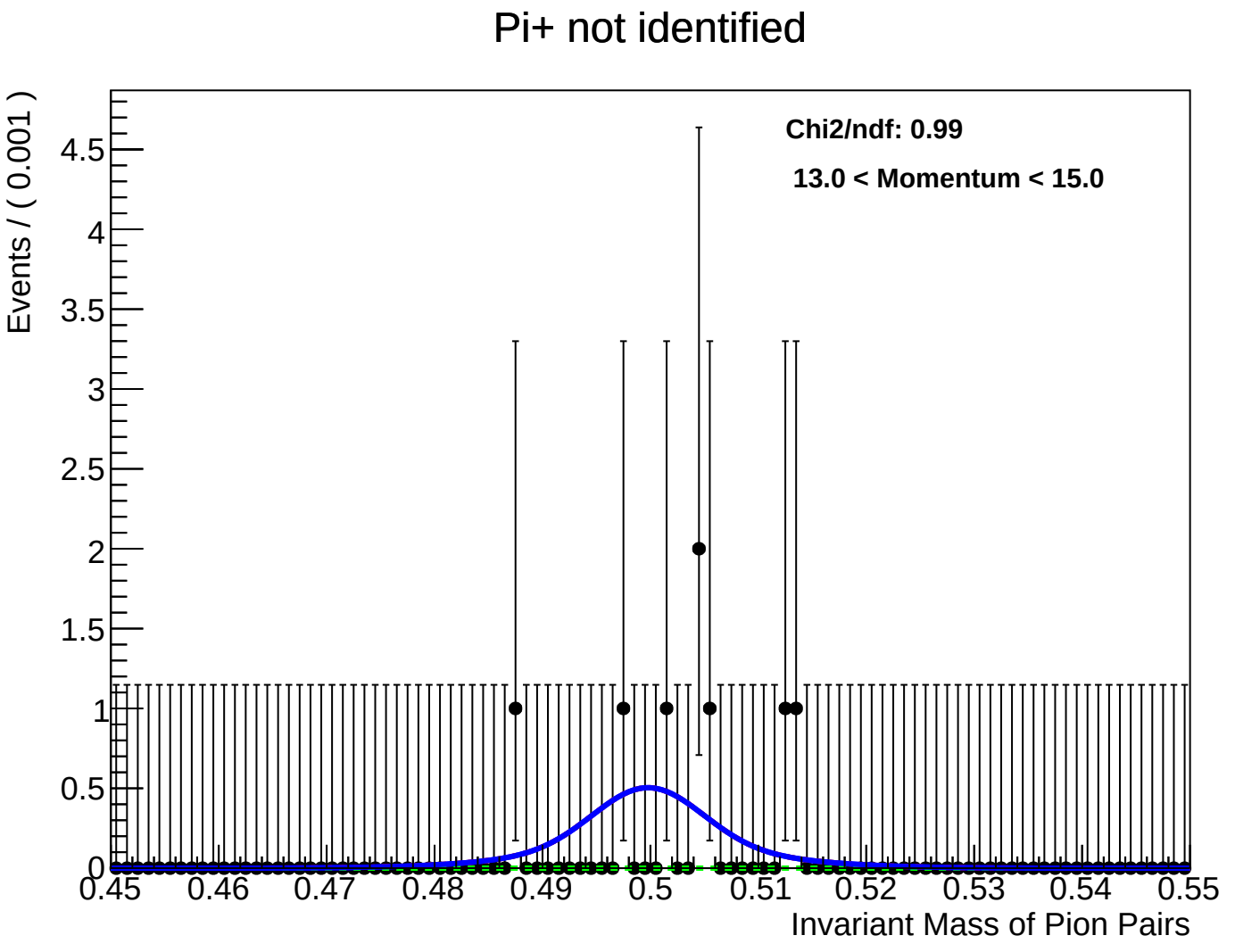
All Events

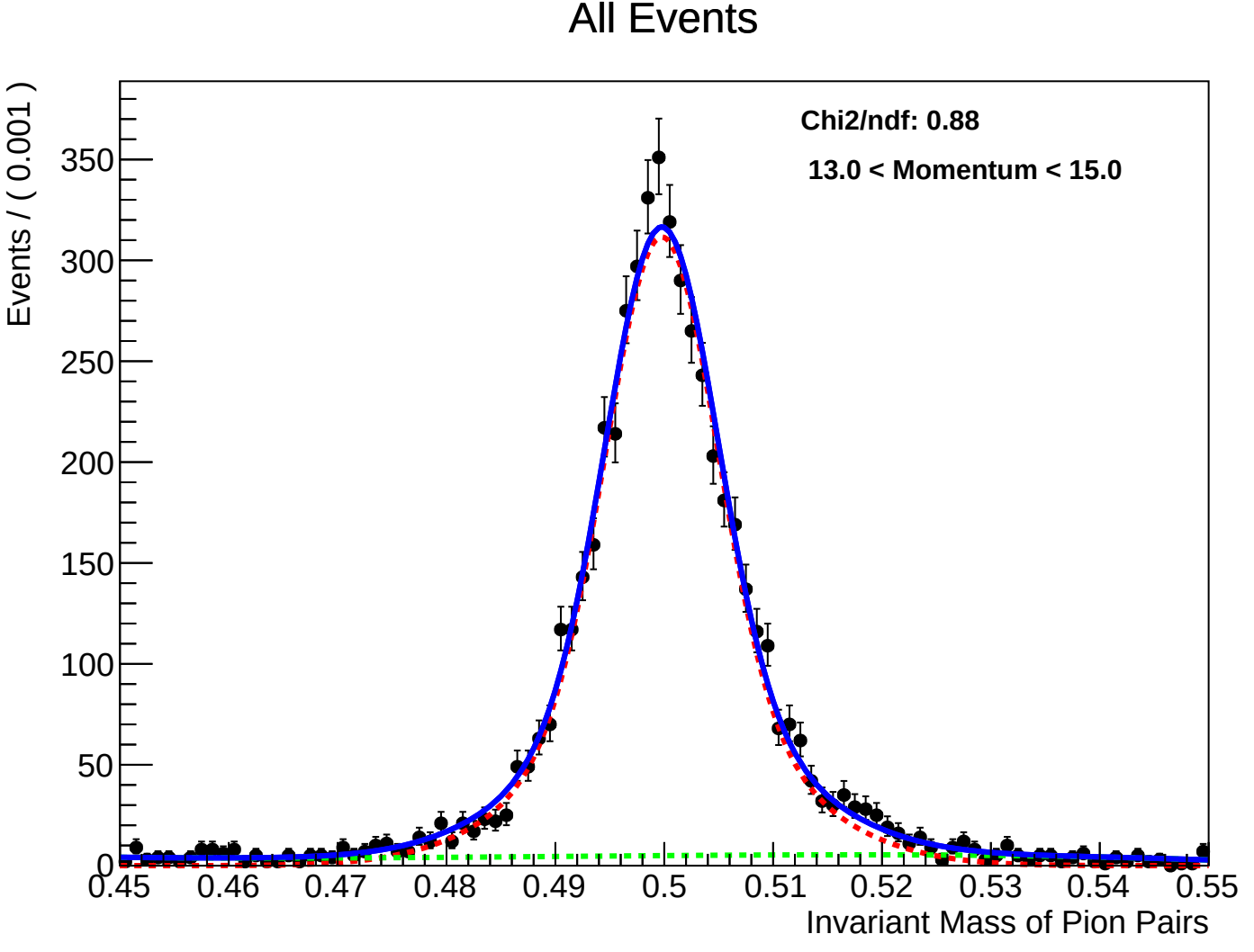

Chi2/ndf: 0.76
12.0 < Momentum < 13.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
140
160
180
200
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

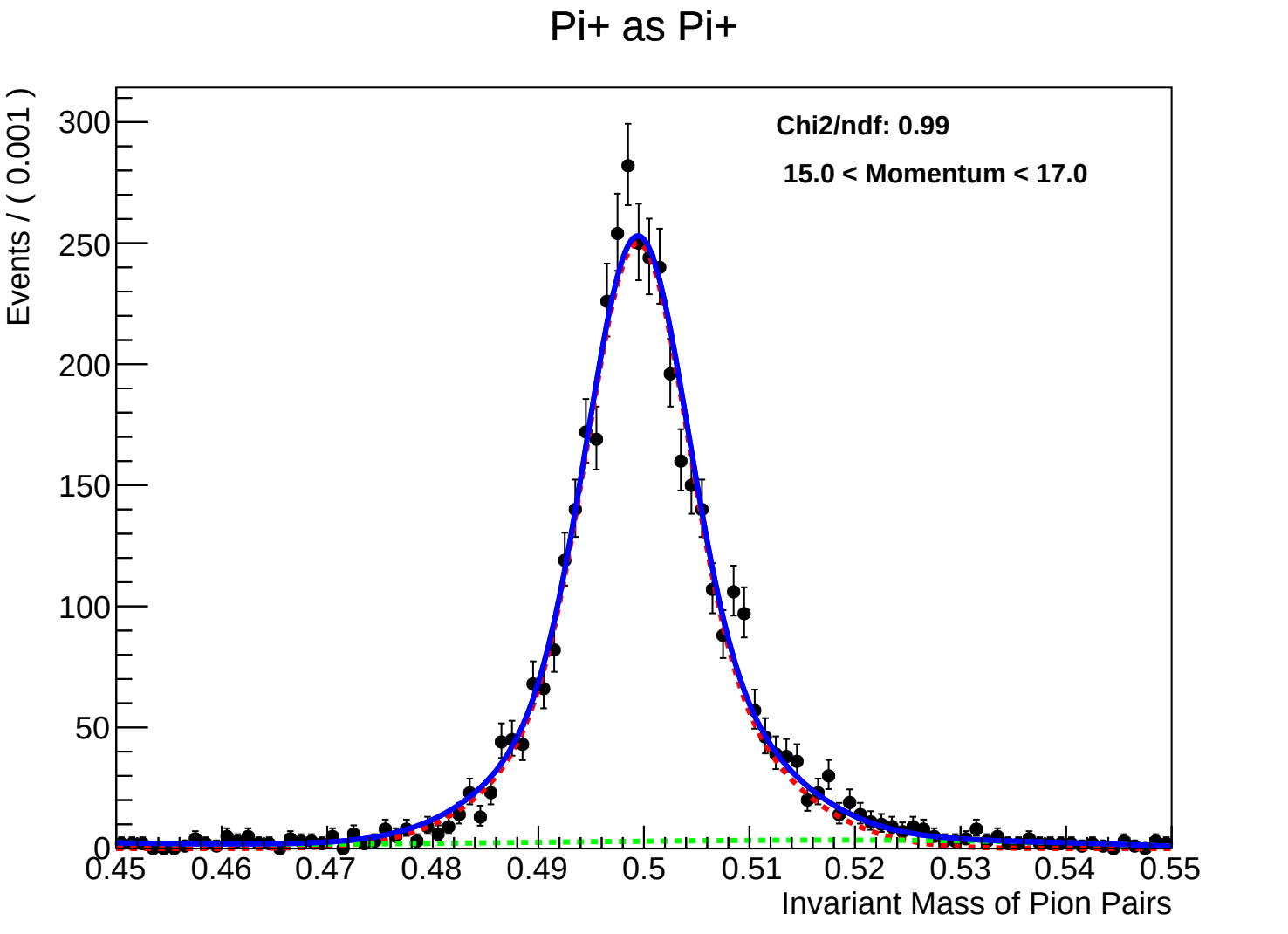

Pi+ as Pi+
Chi2/ndf: 0.87
13.0 < Momentum < 15.0
Events / (0.001)
0
50
100
150
200
250
300
350
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

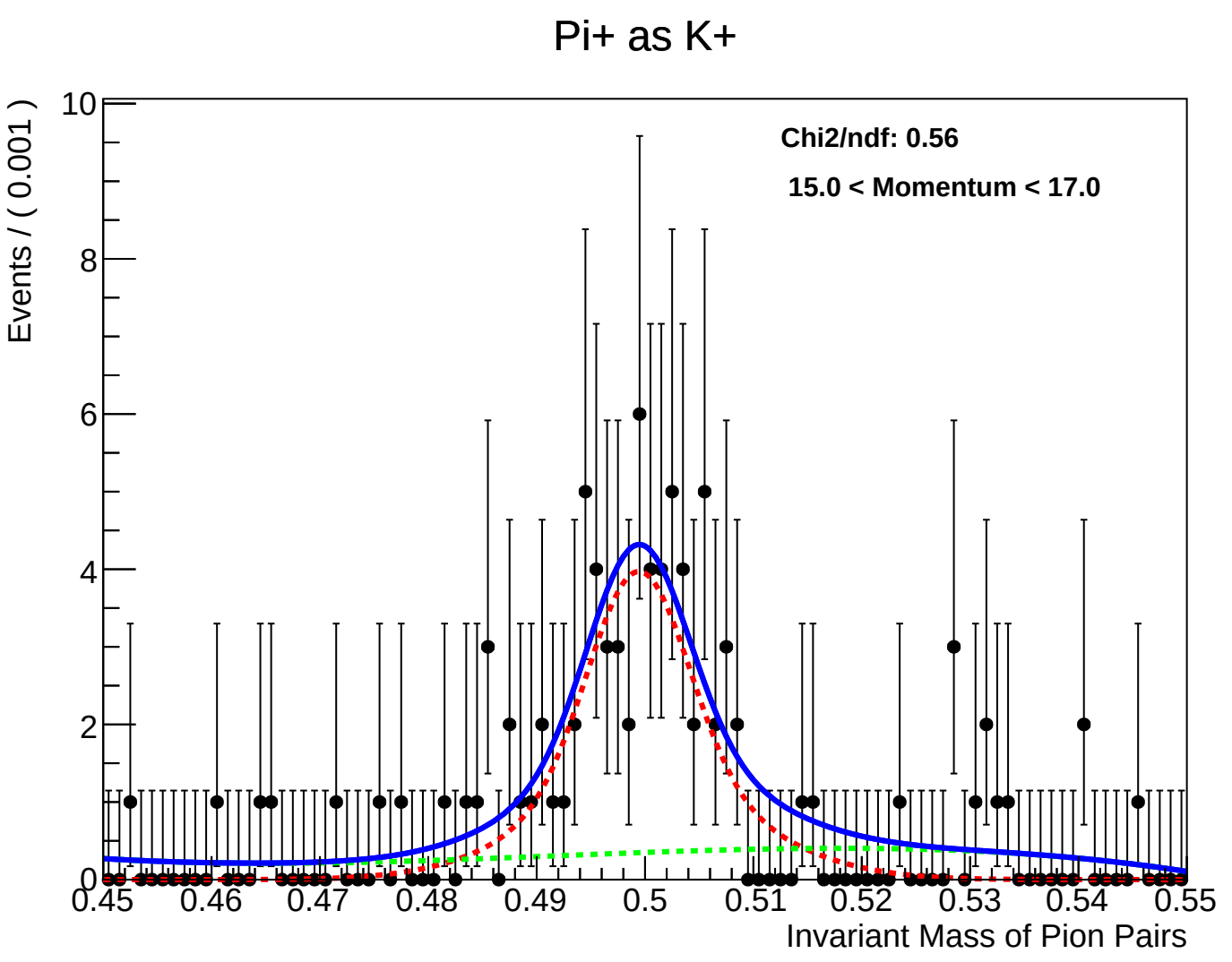

Pi+ as K+
Chi2/ndf: 0.59
13.0 < Momentum < 15.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
2
4
6
8
10
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

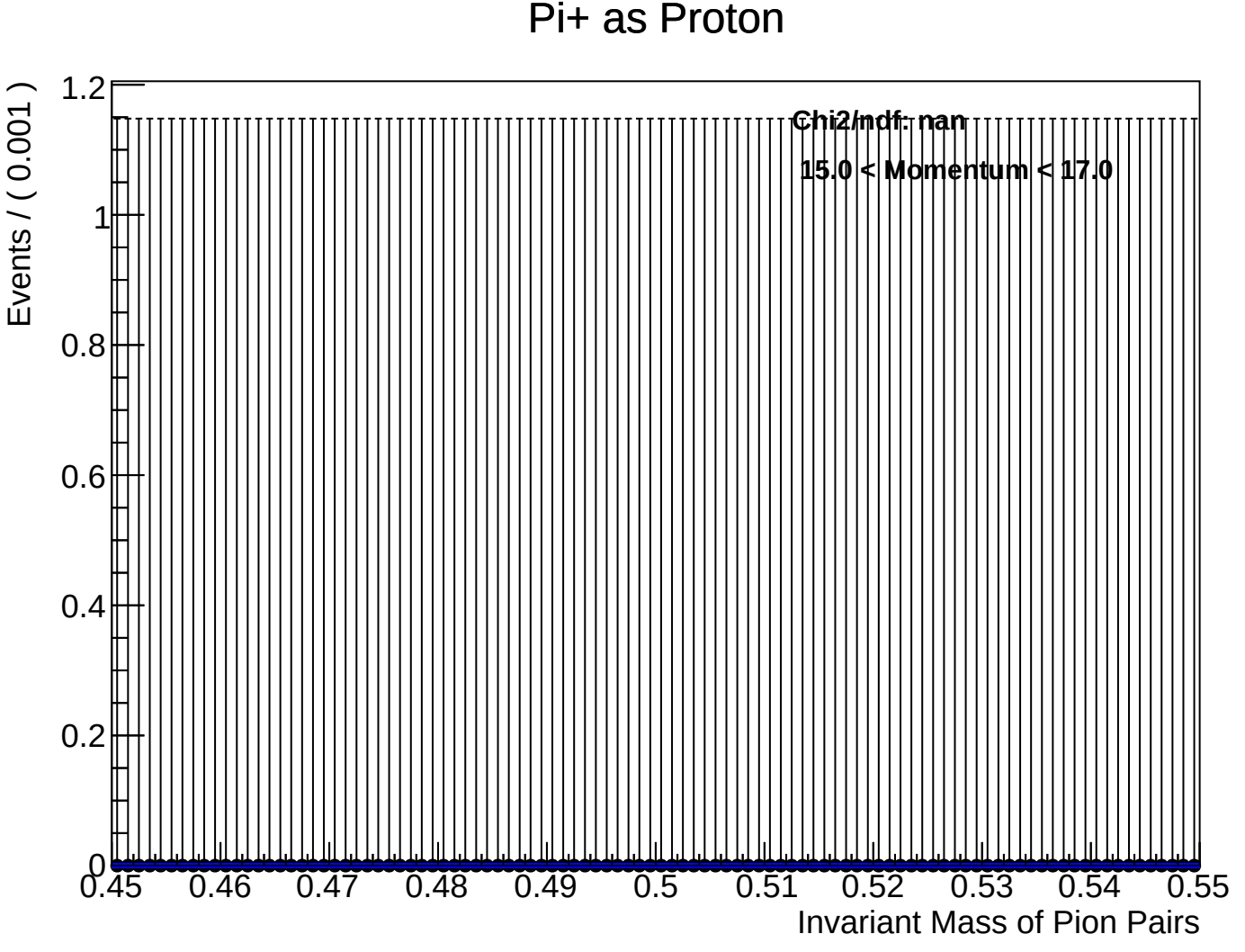

Pi+ as Proton
Chi2/ndf: nan
13.0 < Momentum < 15.0
Events / (0.001)
1.2
1
0.8
0.6
0.4
0.2
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

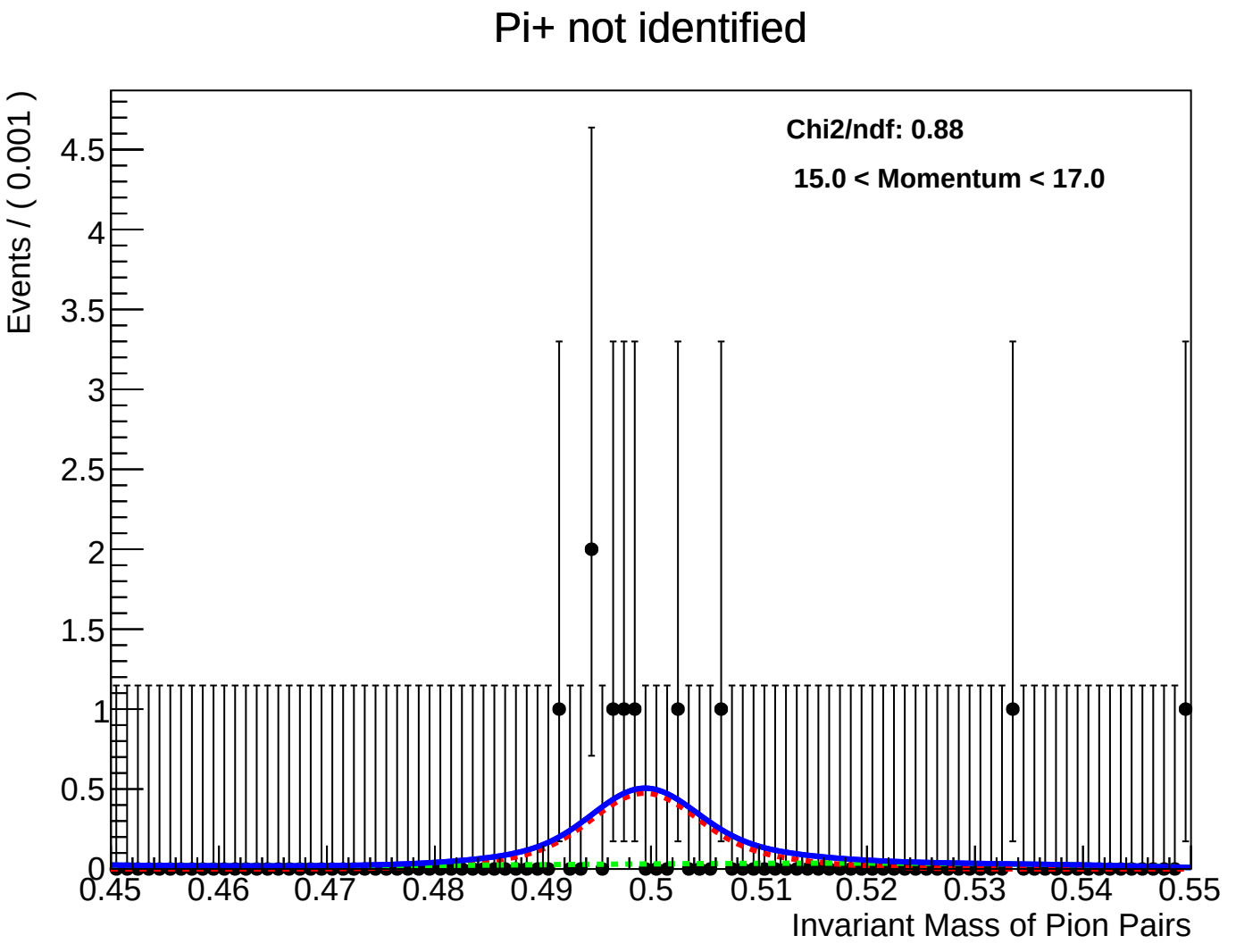

Pi+ not identified
Chi2/ndf: 0.99
13.0 < Momentum < 15.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

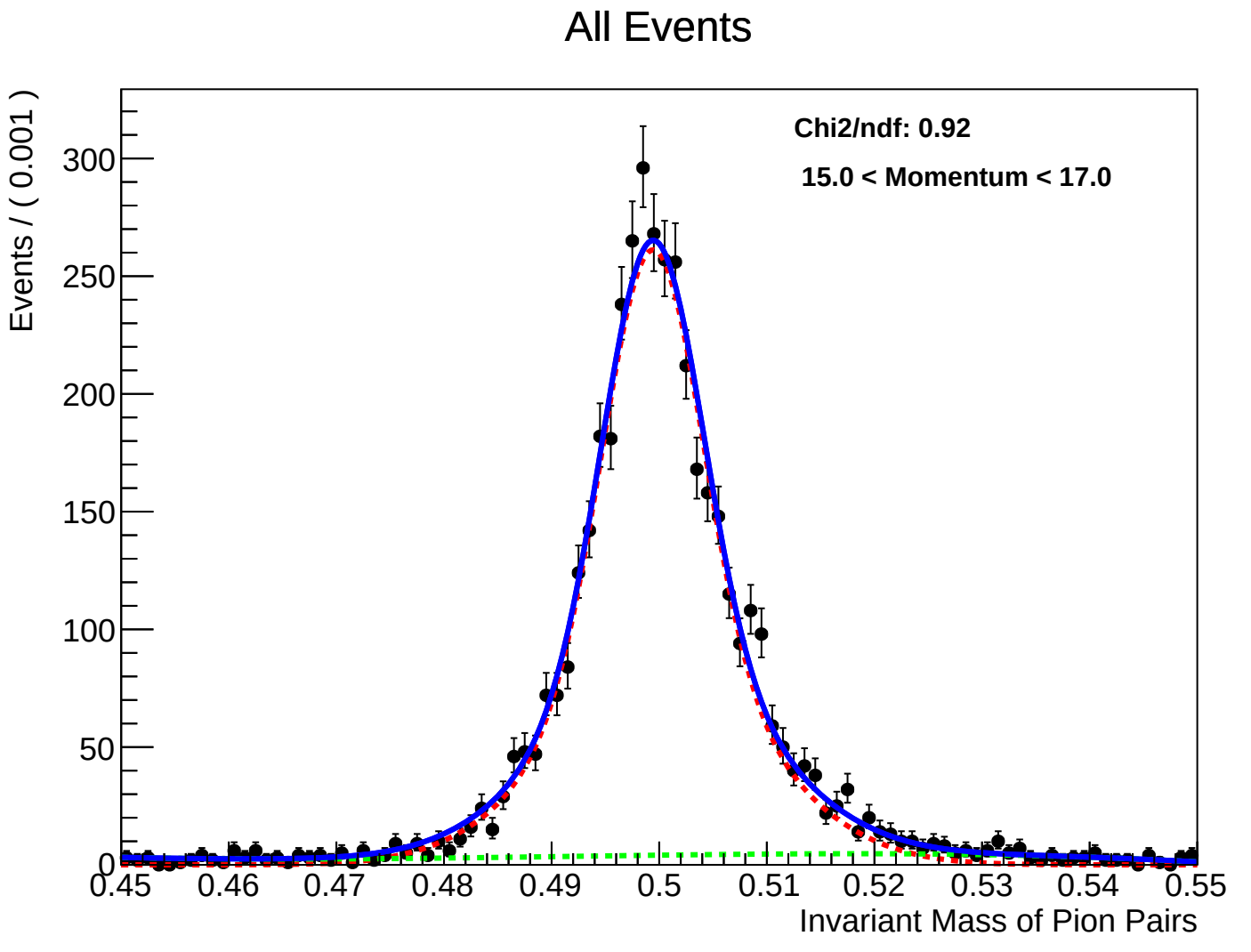

All Events
Chi2/ndf: 0.88
13.0 < Momentum < 15.0
Events / (0.001)
0
50
100
150
200
250
300
350
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

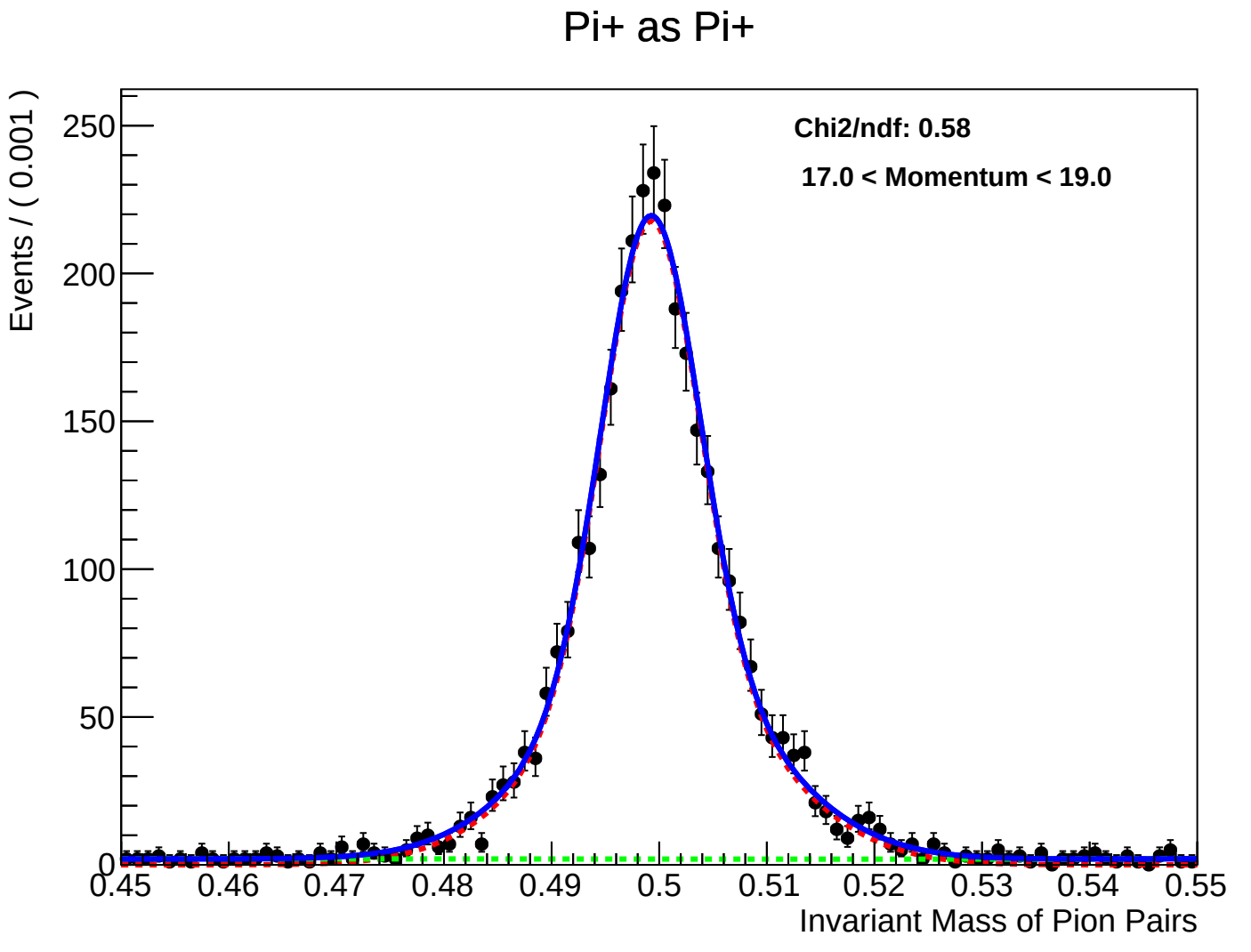

Pi+ as Pi+
Chi2/ndf: 0.99
15.0 < Momentum < 17.0
Events / (0.001)
300
250
200
150
100
50
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

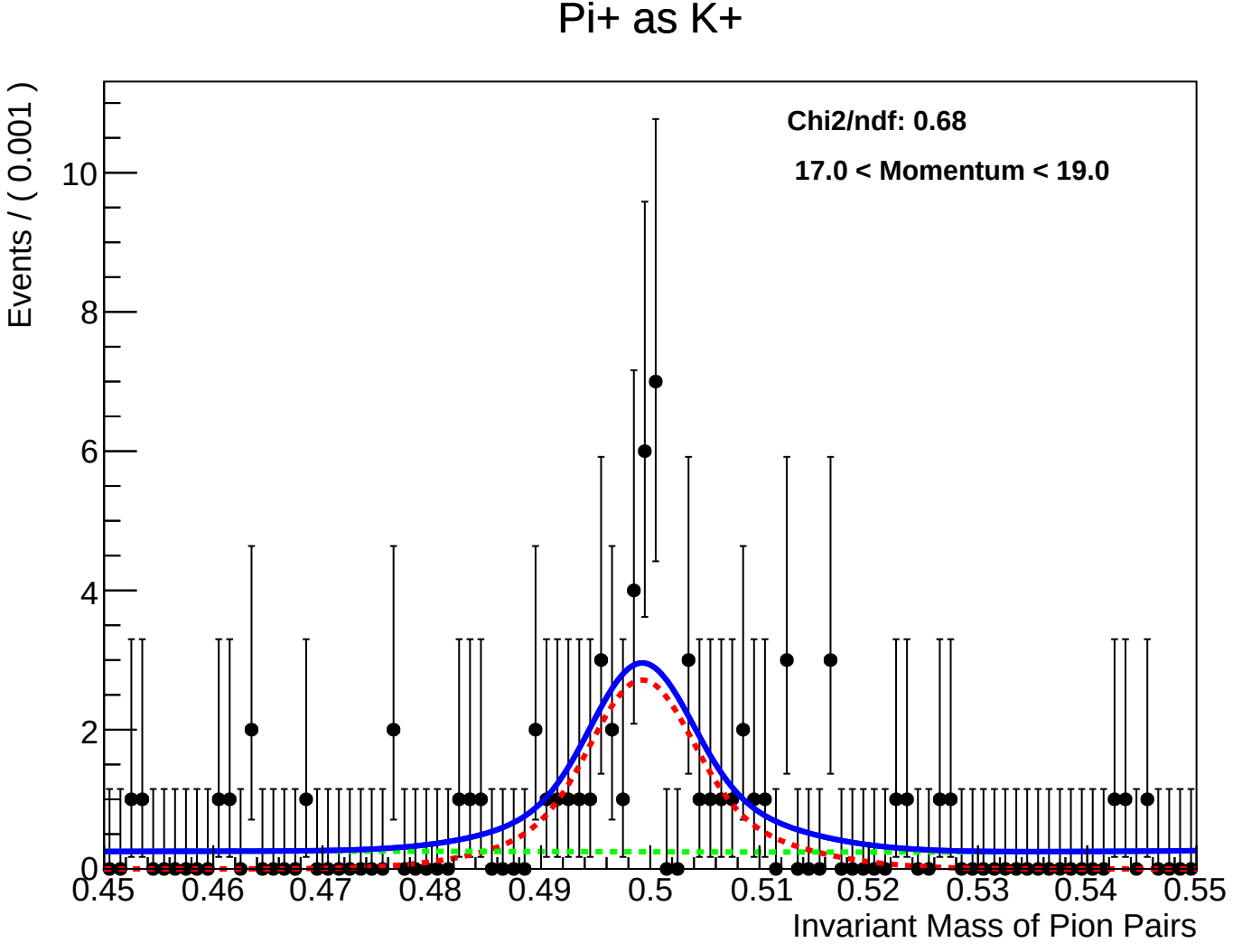

Pi+ as K+
Chi2/ndf: 0.56
15.0 < Momentum < 17.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
2
4
6
8
10
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

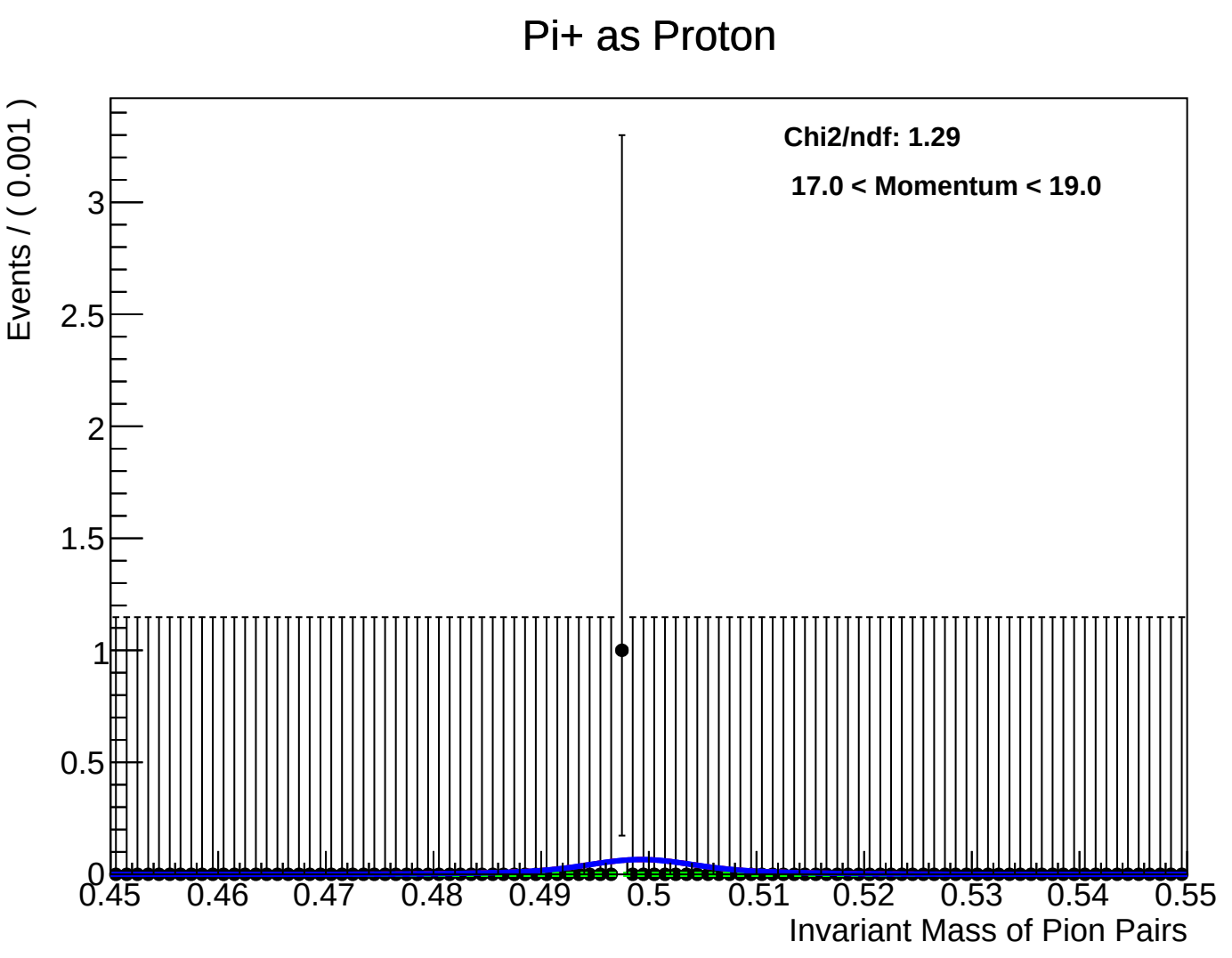

Pi+ as Proton
Chi2/ndf: nan
15.0 < Momentum < 17.0
Events / (0.001)
1.2
1
0.8
0.6
0.4
0.2
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

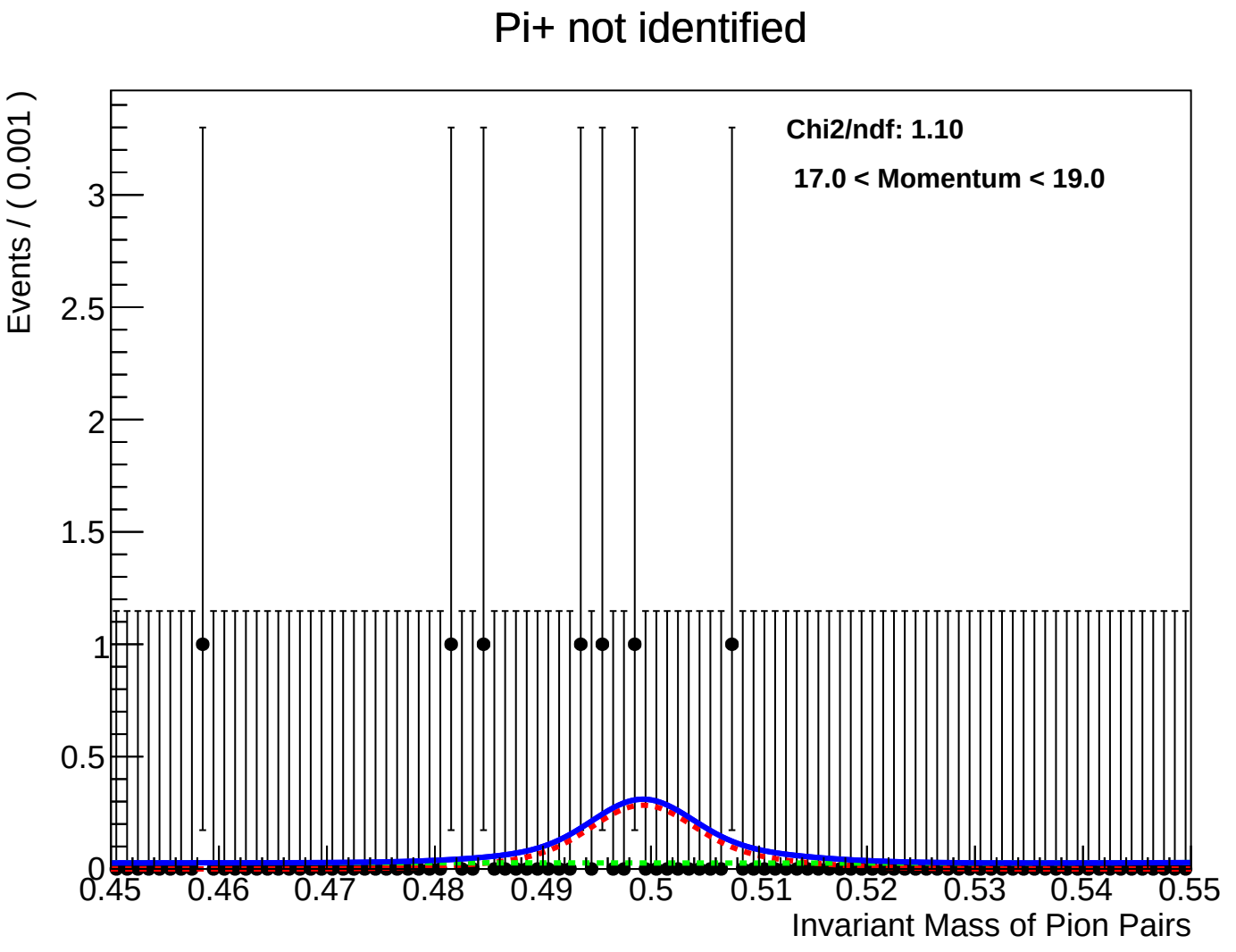

Pi+ not identified
Chi2/ndf: 0.88
15.0 < Momentum < 17.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

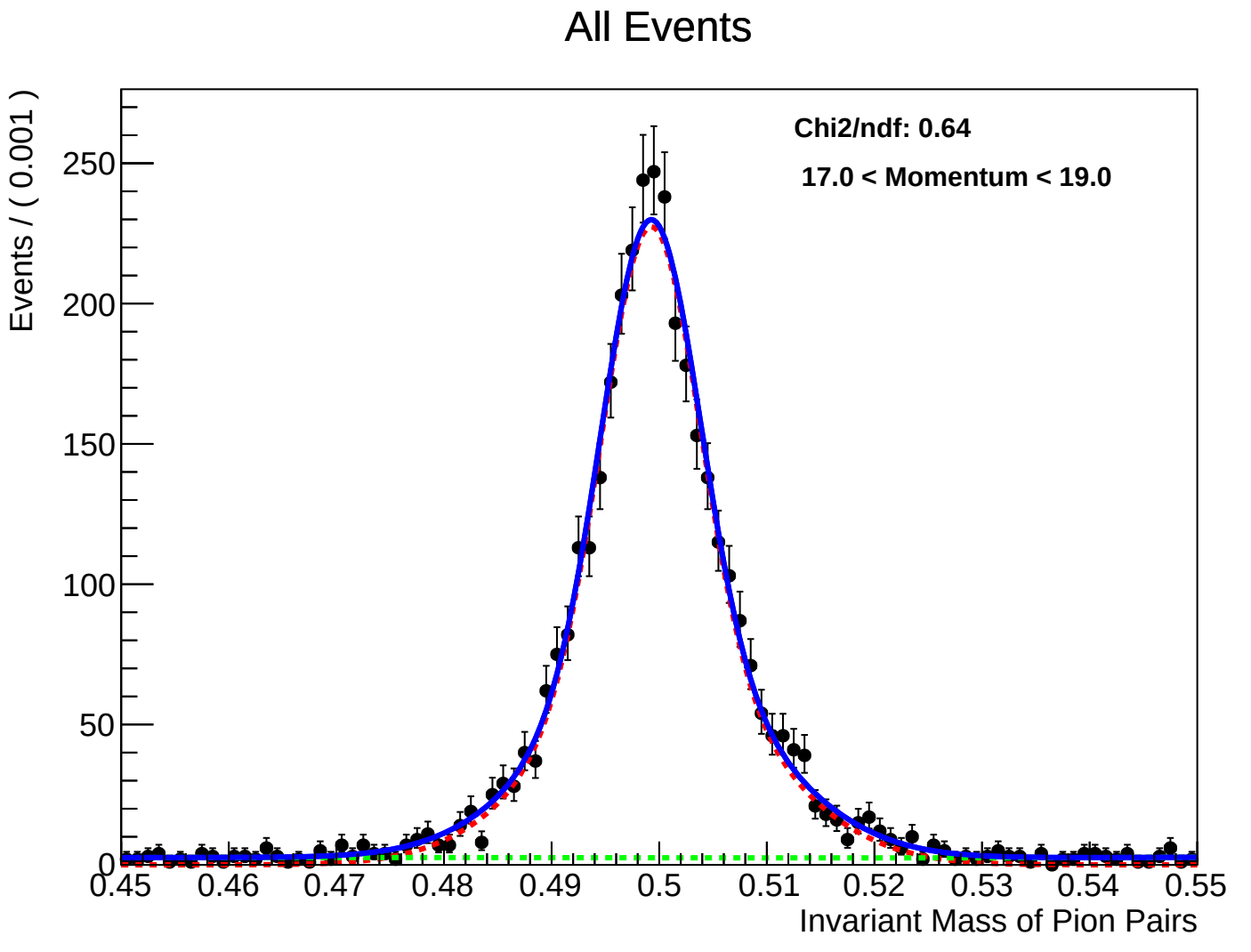

All Events
Chi2/ndf: 0.92
15.0 < Momentum < 17.0
Events / (0.001)
0
50
100
150
200
250
300
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

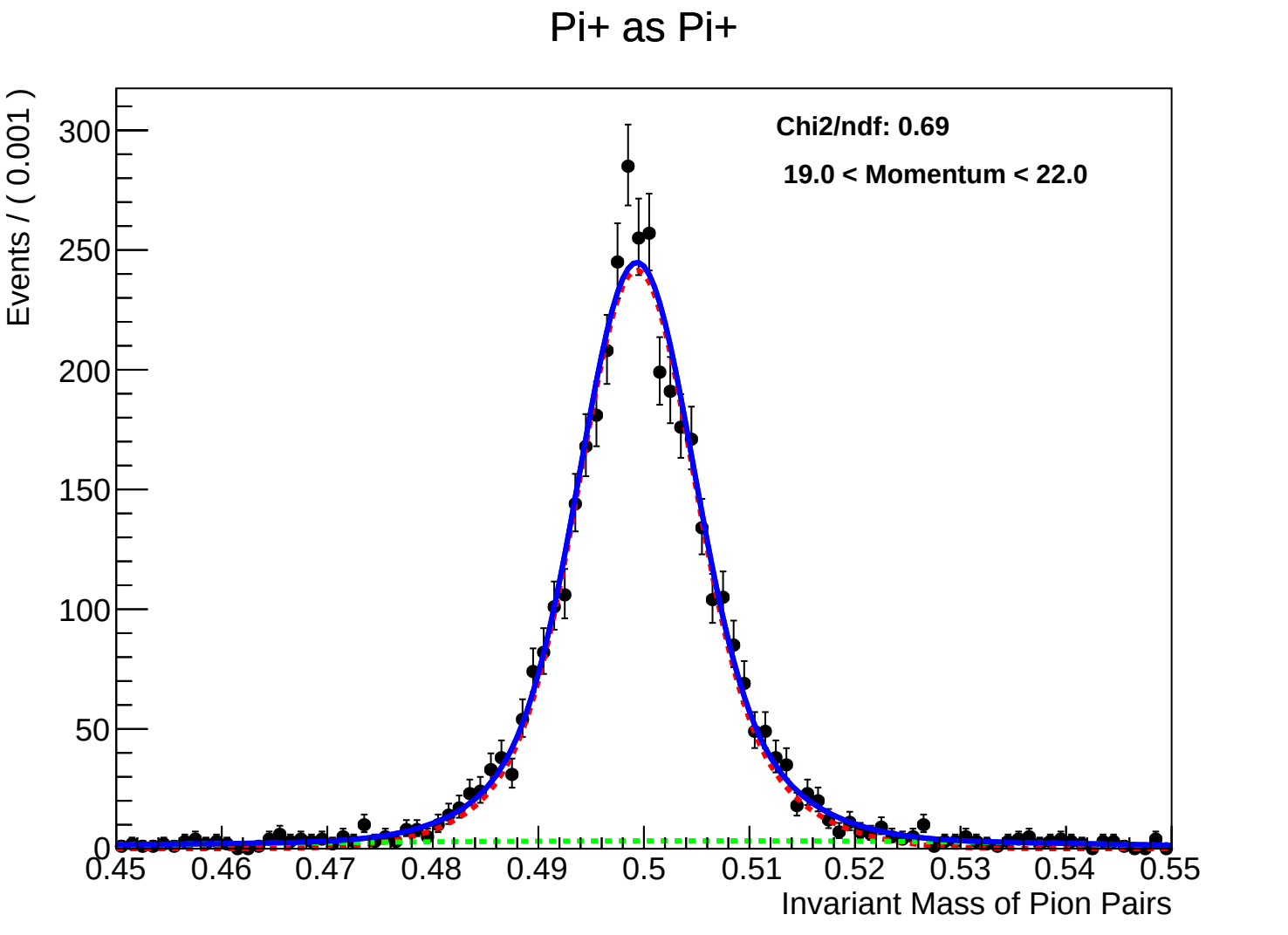

Pi+ as Pi+
Chi2/ndf: 0.58
17.0 < Momentum < 19.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
50
100
150
200
250
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

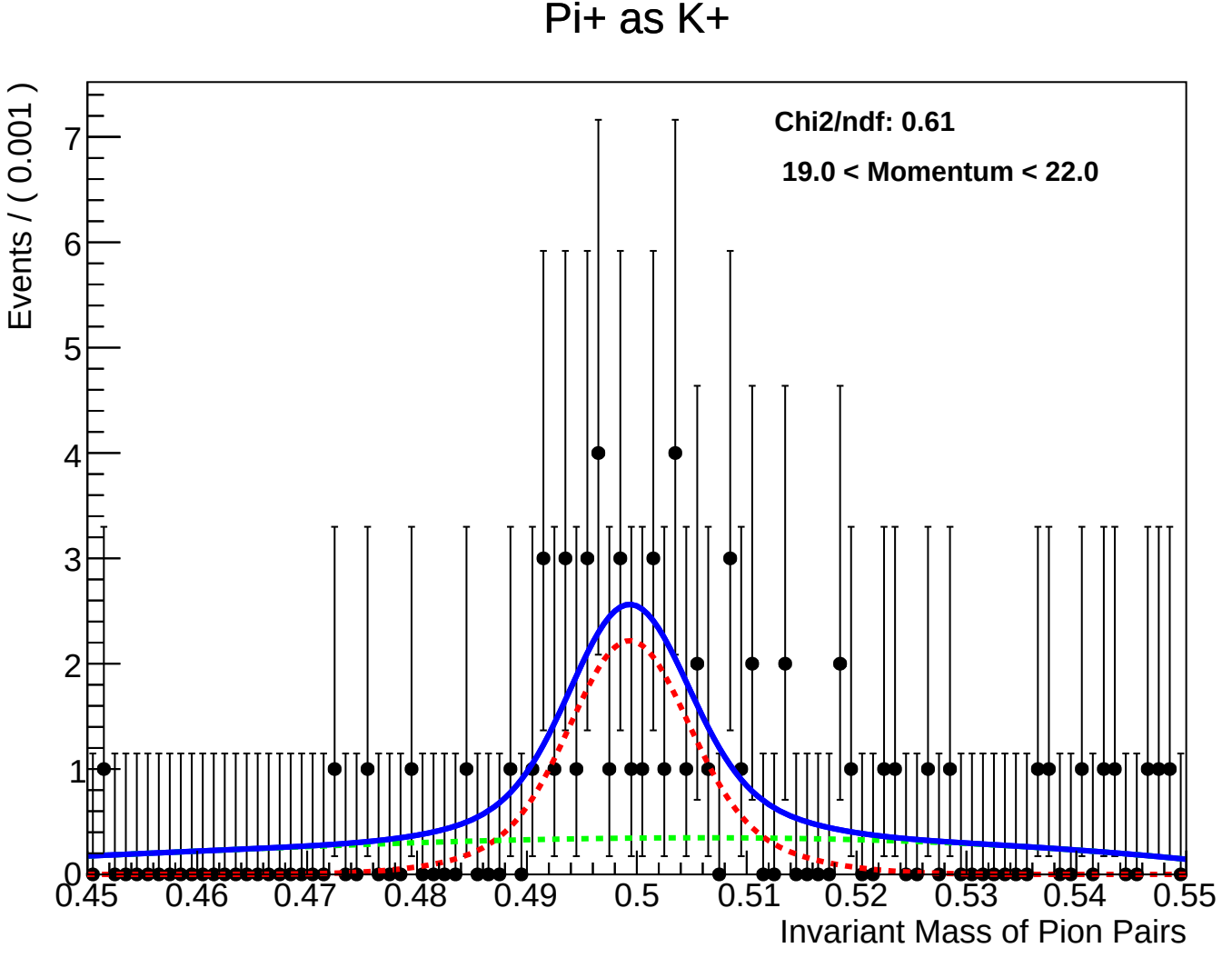

Pi+ as K+
Chi2/ndf: 0.68
17.0 < Momentum < 19.0
Events / (0.001)
0
2
4
6
8
10
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

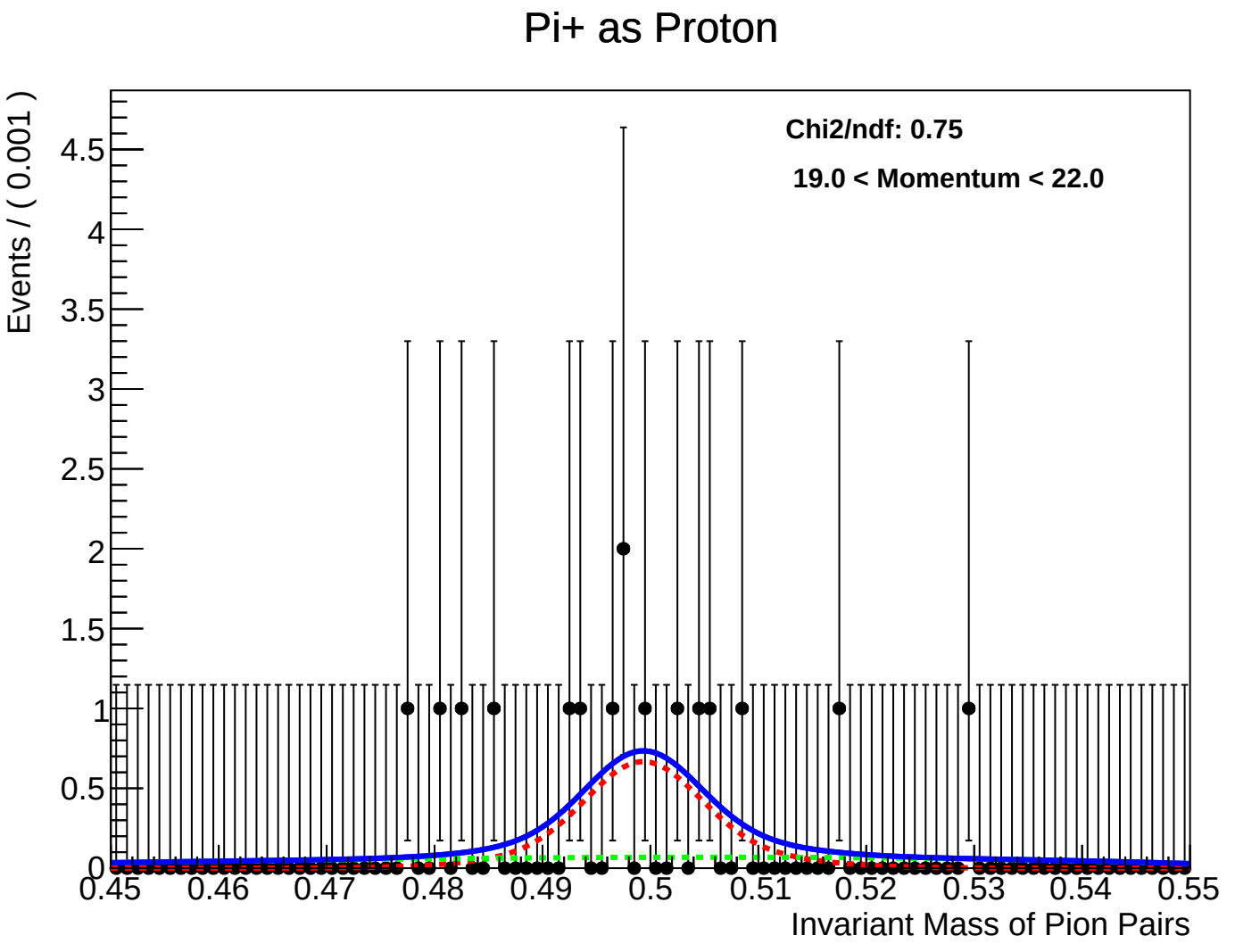

Pi+ as Proton
Chi2/ndf: 1.29
17.0 < Momentum < 19.0
Events / (0.001)
0
0.5
1
1.5
2
2.5
3
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

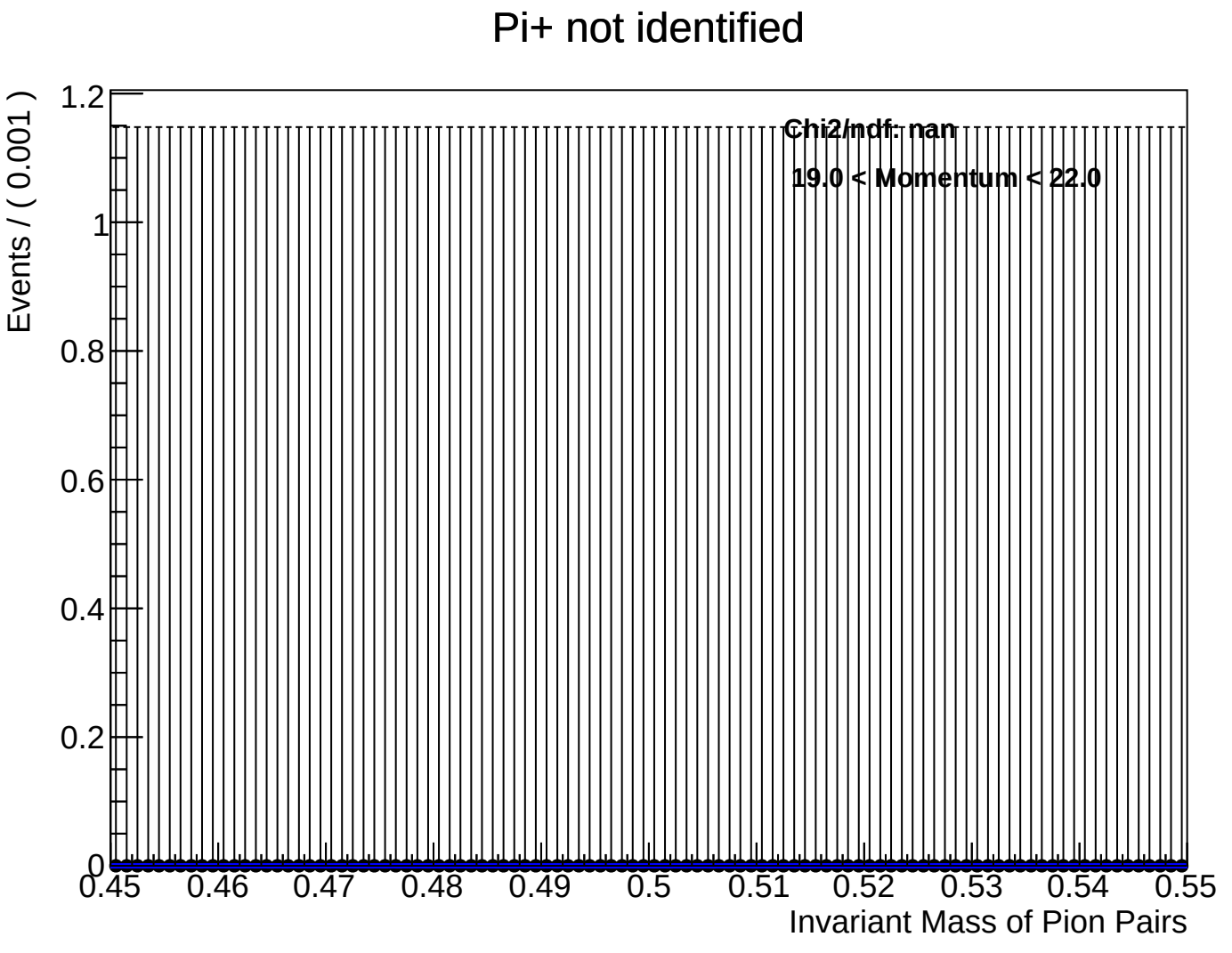

Pi+ not identified
Chi2/ndf: 1.10
17.0 < Momentum < 19.0
Events / (0.001)
0
0.5
1
1.5
2
2.5
3
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

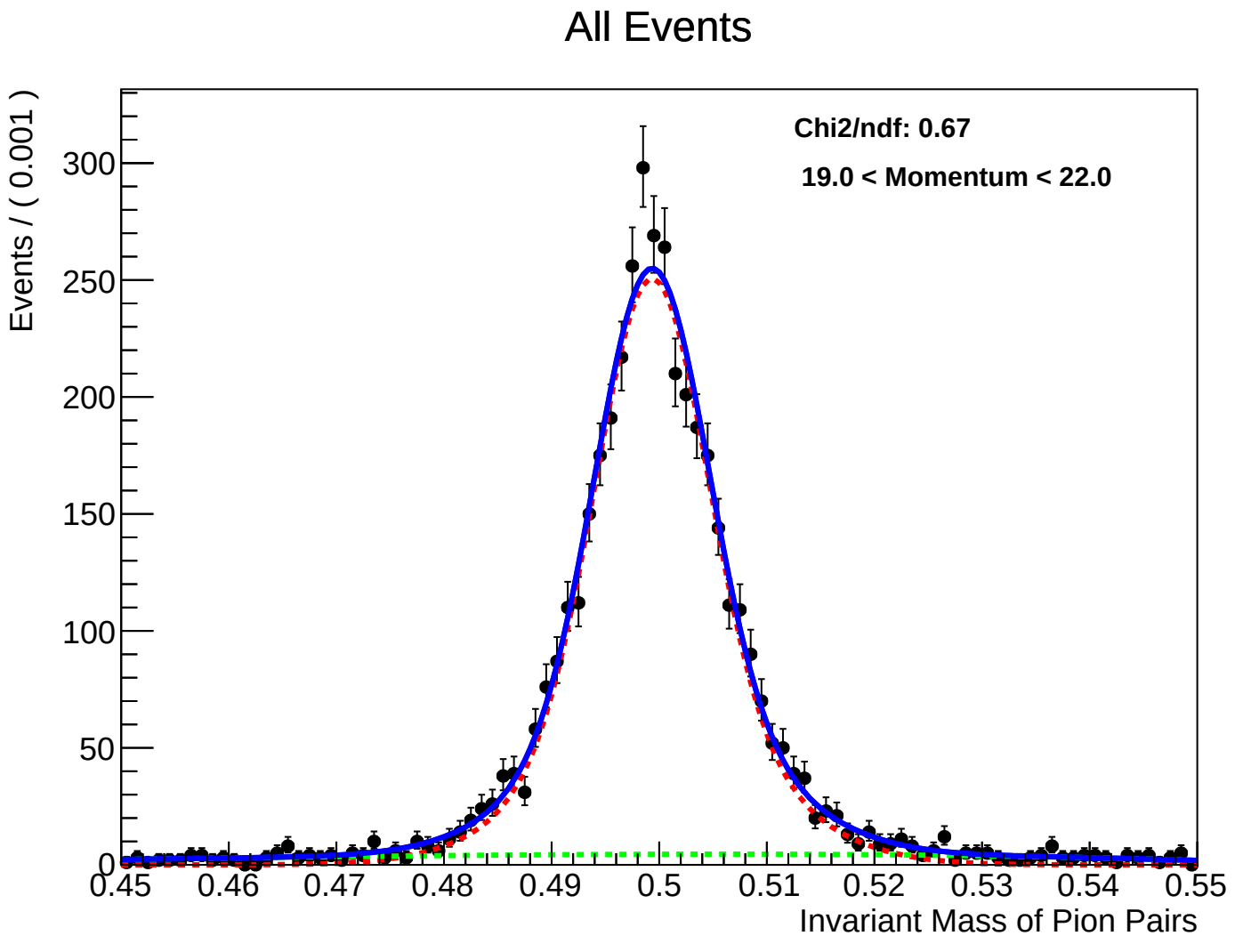

All Events
Chi2/ndf: 0.64
17.0 < Momentum < 19.0
Events / (0.001)
0
50
100
150
200
250
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

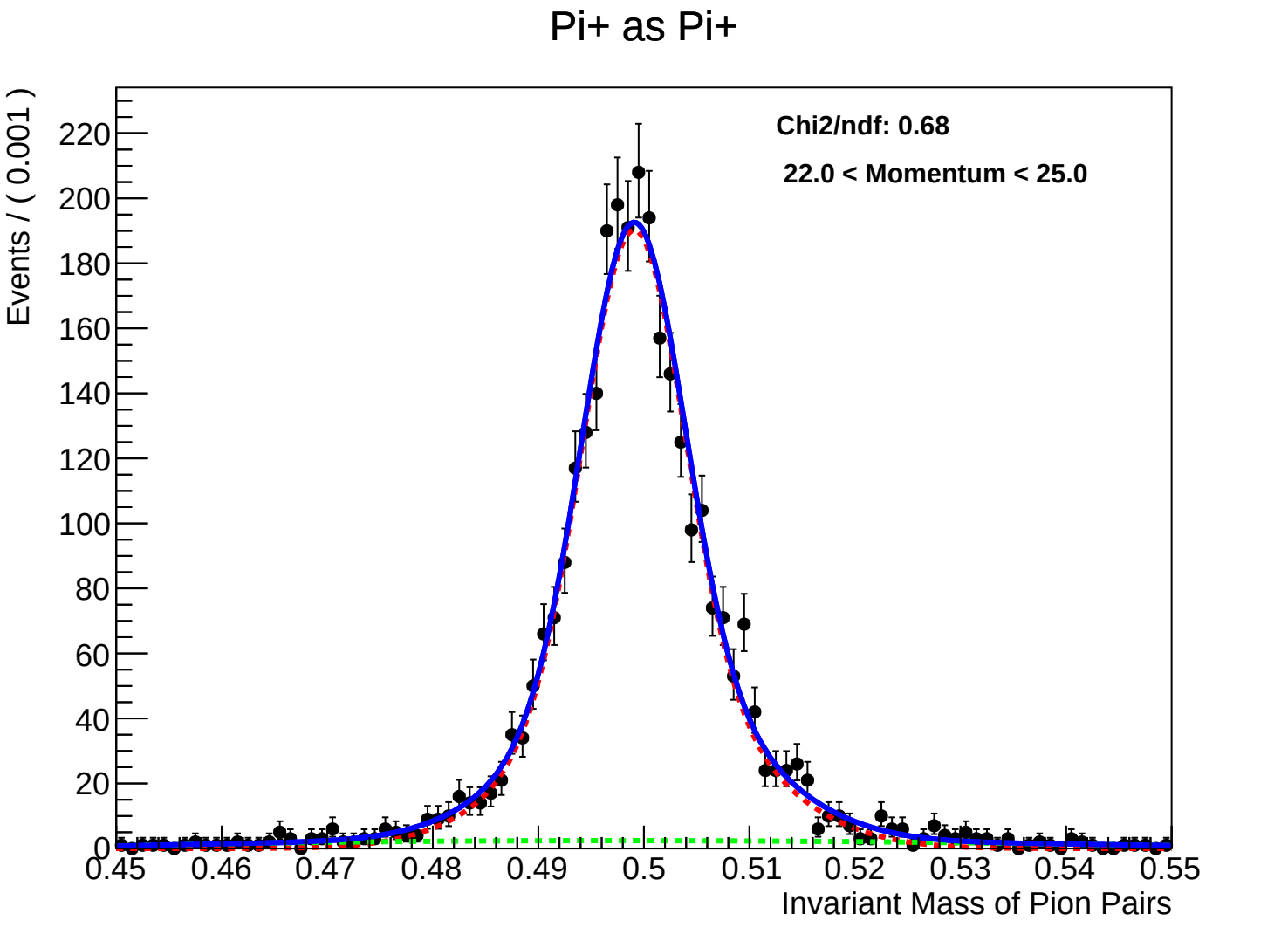

Pi+ as Pi+
Chi2/ndf: 0.69
19.0 < Momentum < 22.0
Events / (0.001)
300
250
200
150
100
50
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

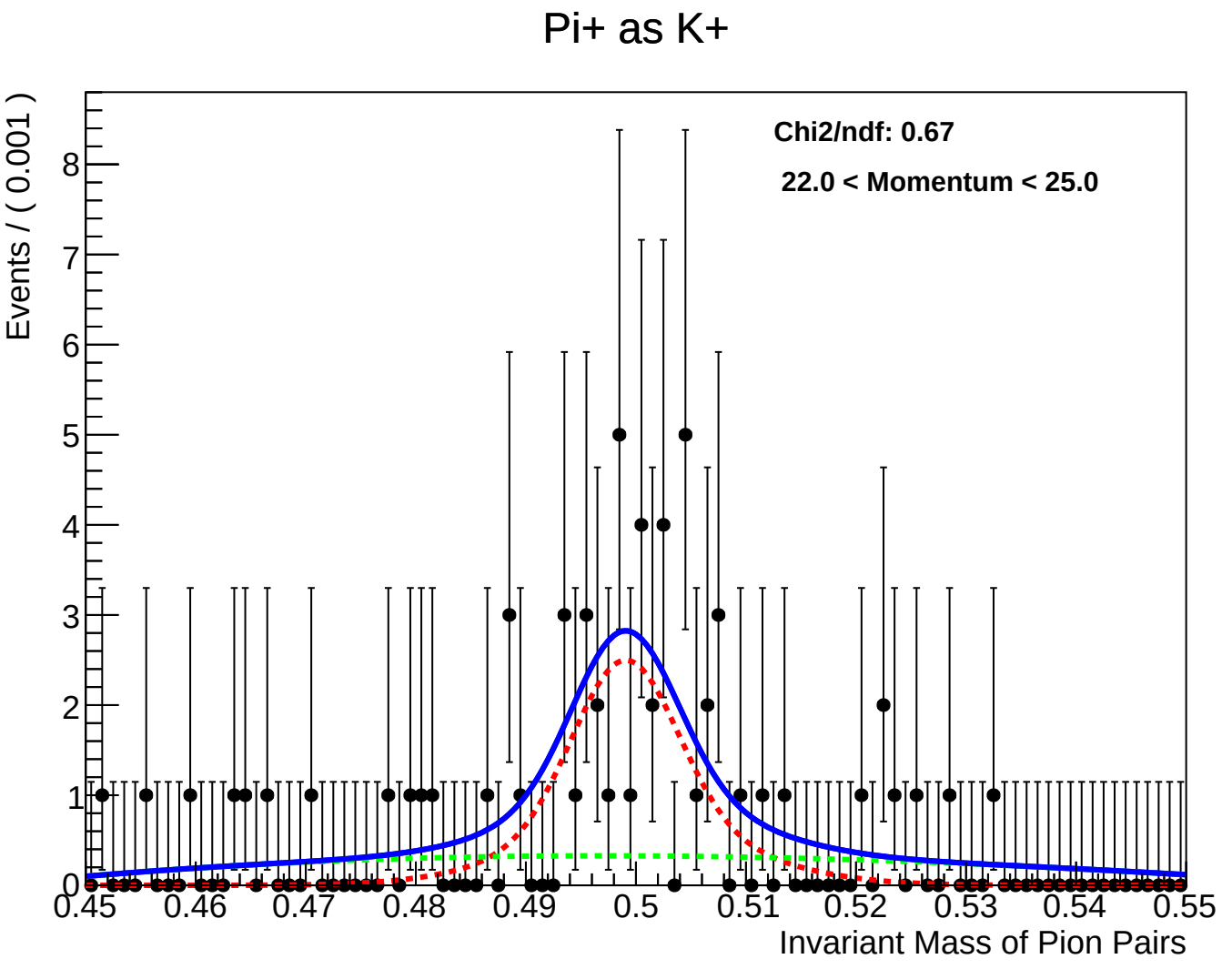

Pi+ as K+
Chi2/ndf: 0.61
19.0 < Momentum < 22.0
Events / (0.001)
0
1
2
3
4
5
6
7
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

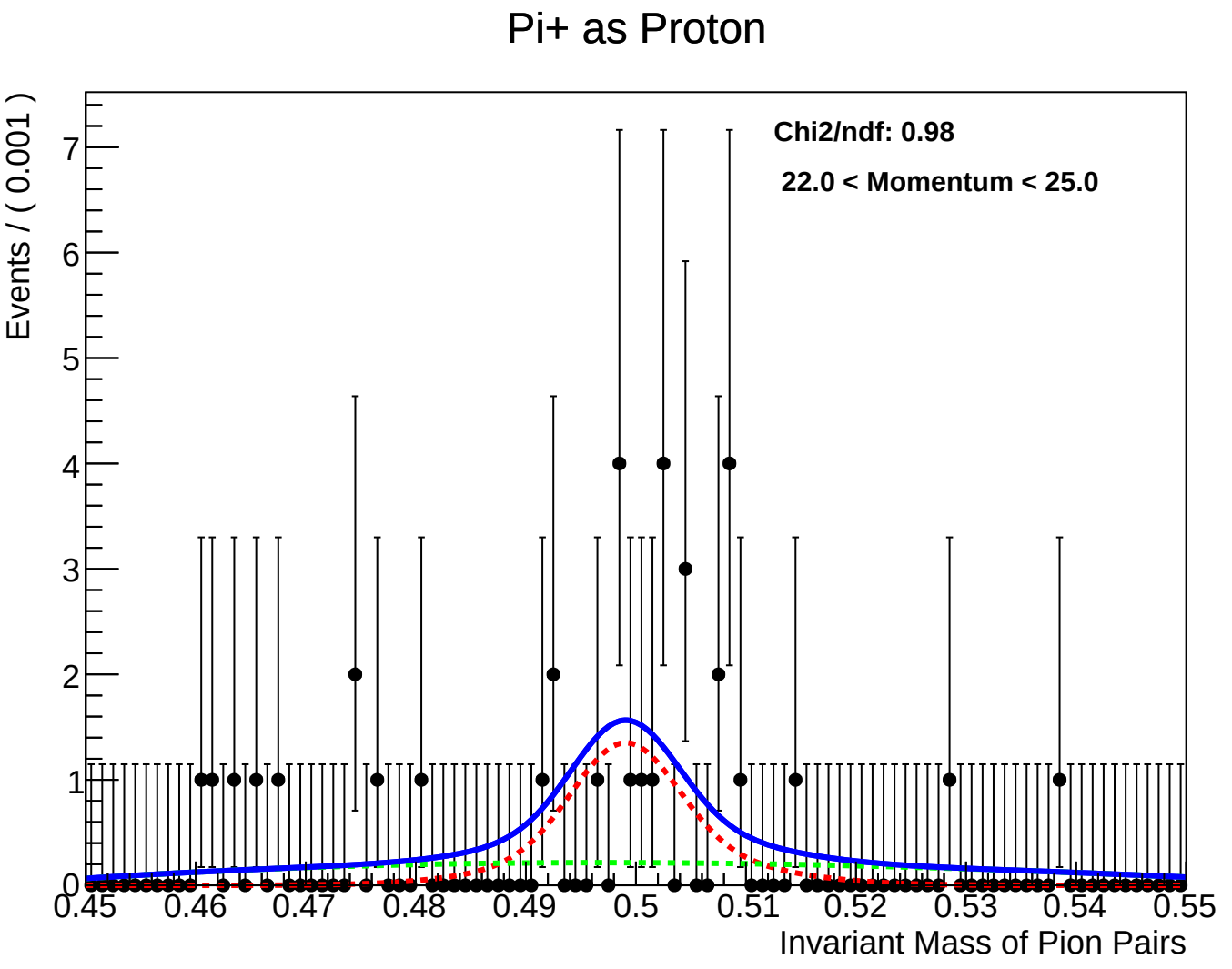

Pi+ as Proton
Chi2/ndf: 0.75
19.0 < Momentum < 22.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

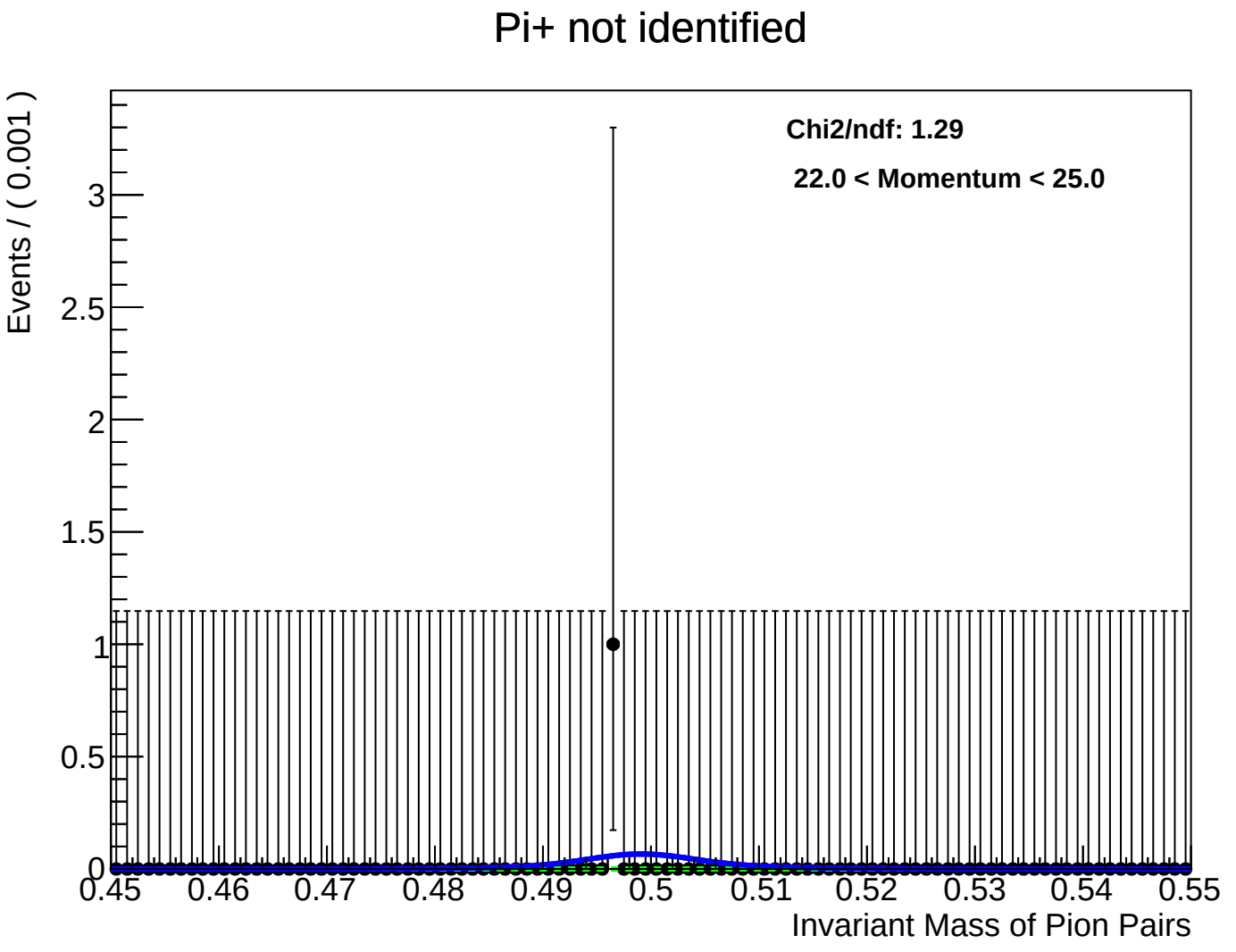

Pi+ not identified
Chi2/ndf: nan
19.0 < Momentum < 22.0
Events / (0.001)
1.2
1
0.8
0.6
0.4
0.2
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

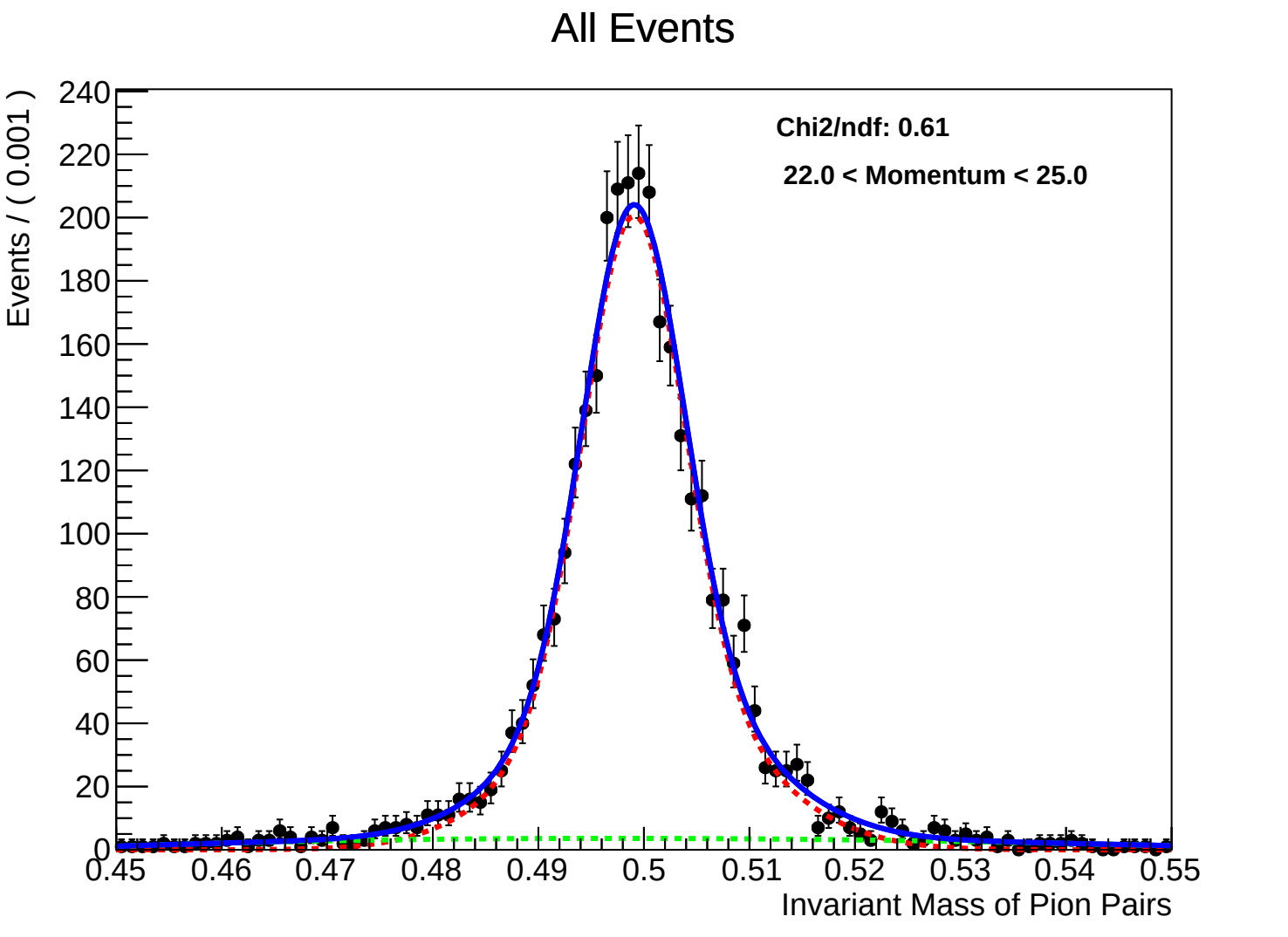

All Events
Chi2/ndf: 0.67
19.0 < Momentum < 22.0
Events / (0.001)
0
50
100
150
200
250
300
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

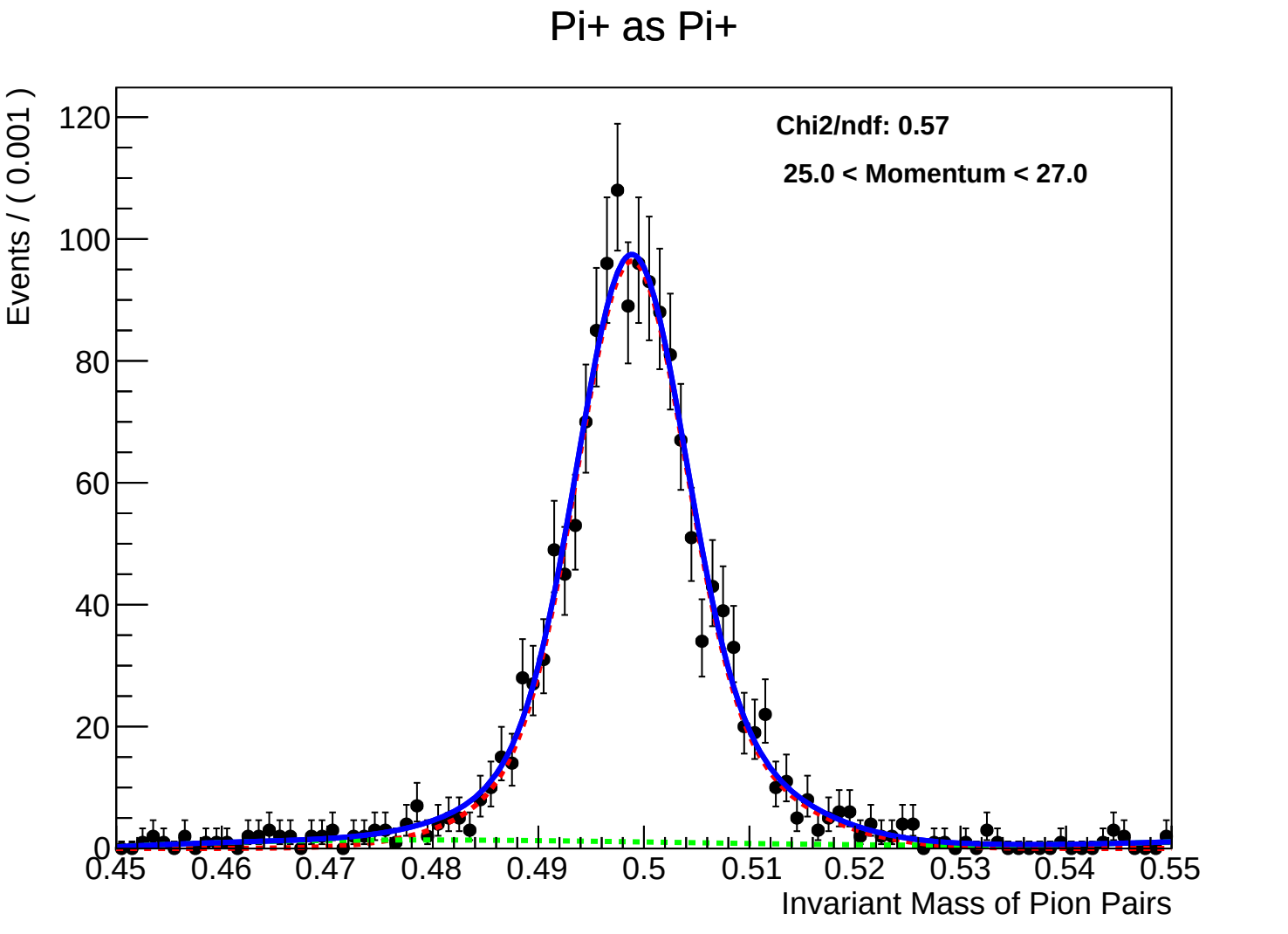

Pi+ as Pi+
Chi2/ndf: 0.68
22.0 < Momentum < 25.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
140
160
180
200
220
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

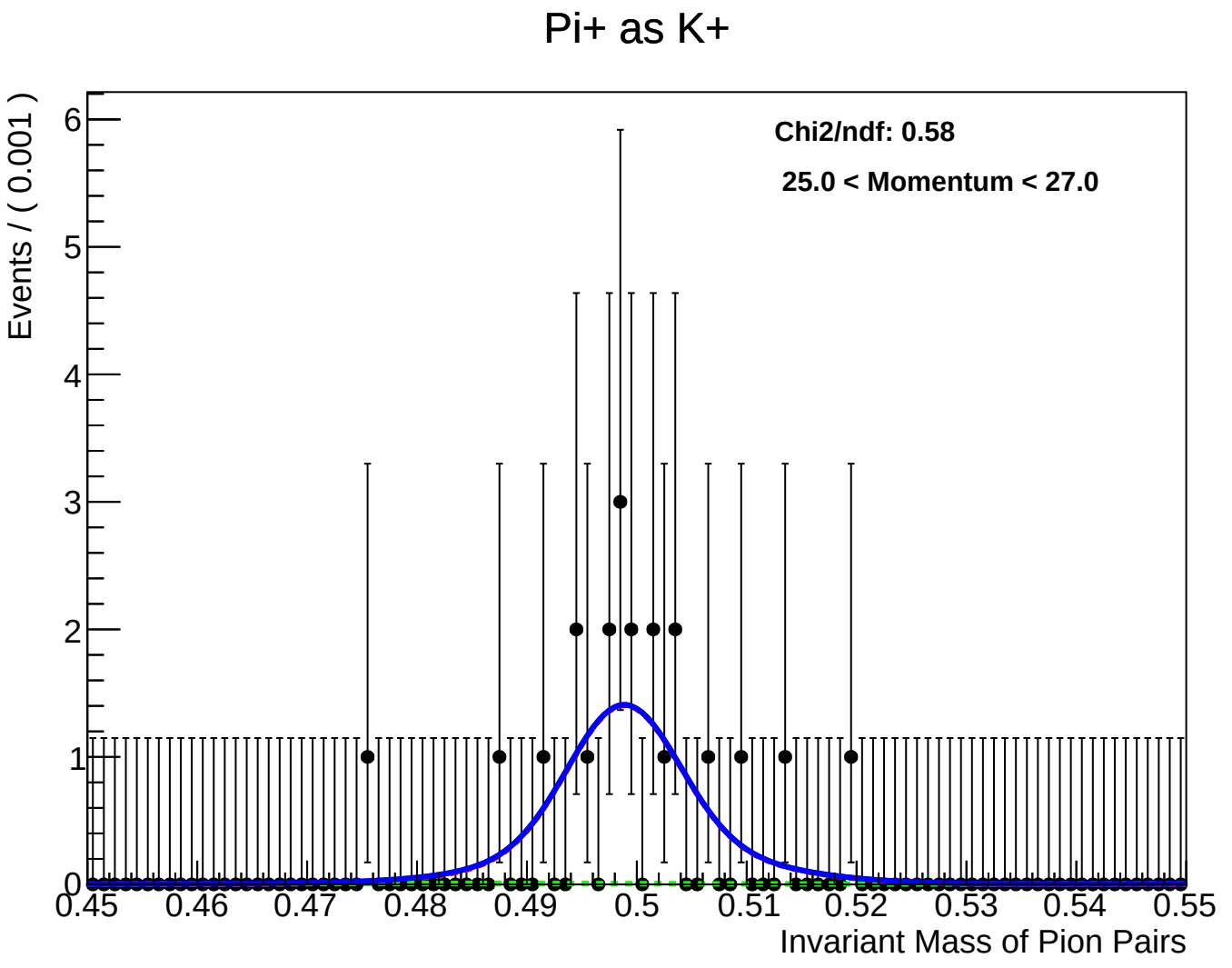

Pi+ as K+
Chi2/ndf: 0.67
22.0 < Momentum < 25.0
Events / (0.001)
0
1
2
3
4
5
6
7
8
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

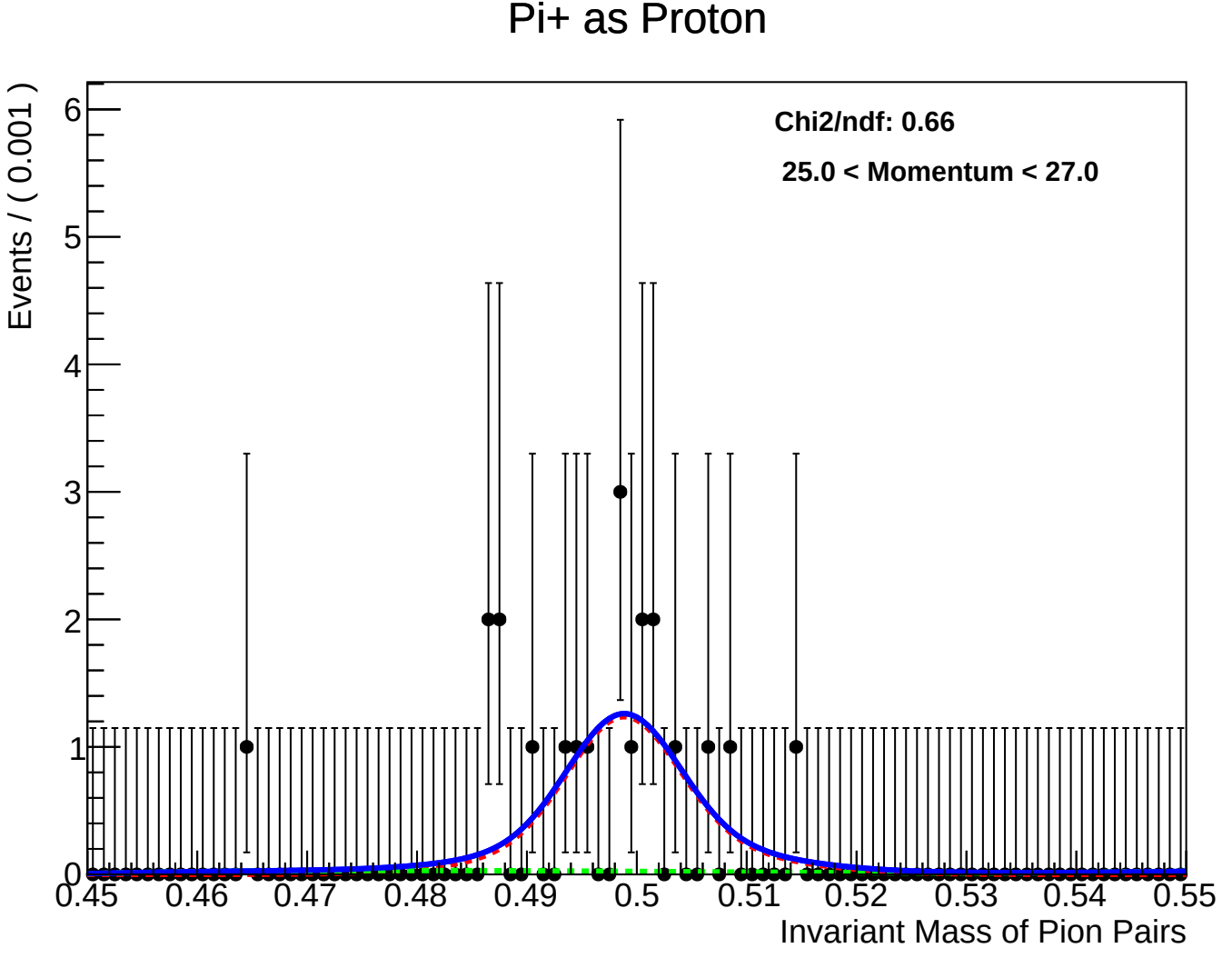

Pi+ as Proton
Chi2/ndf: 0.98
22.0 < Momentum < 25.0
Events / (0.001)
0
1
2
3
4
5
6
7
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

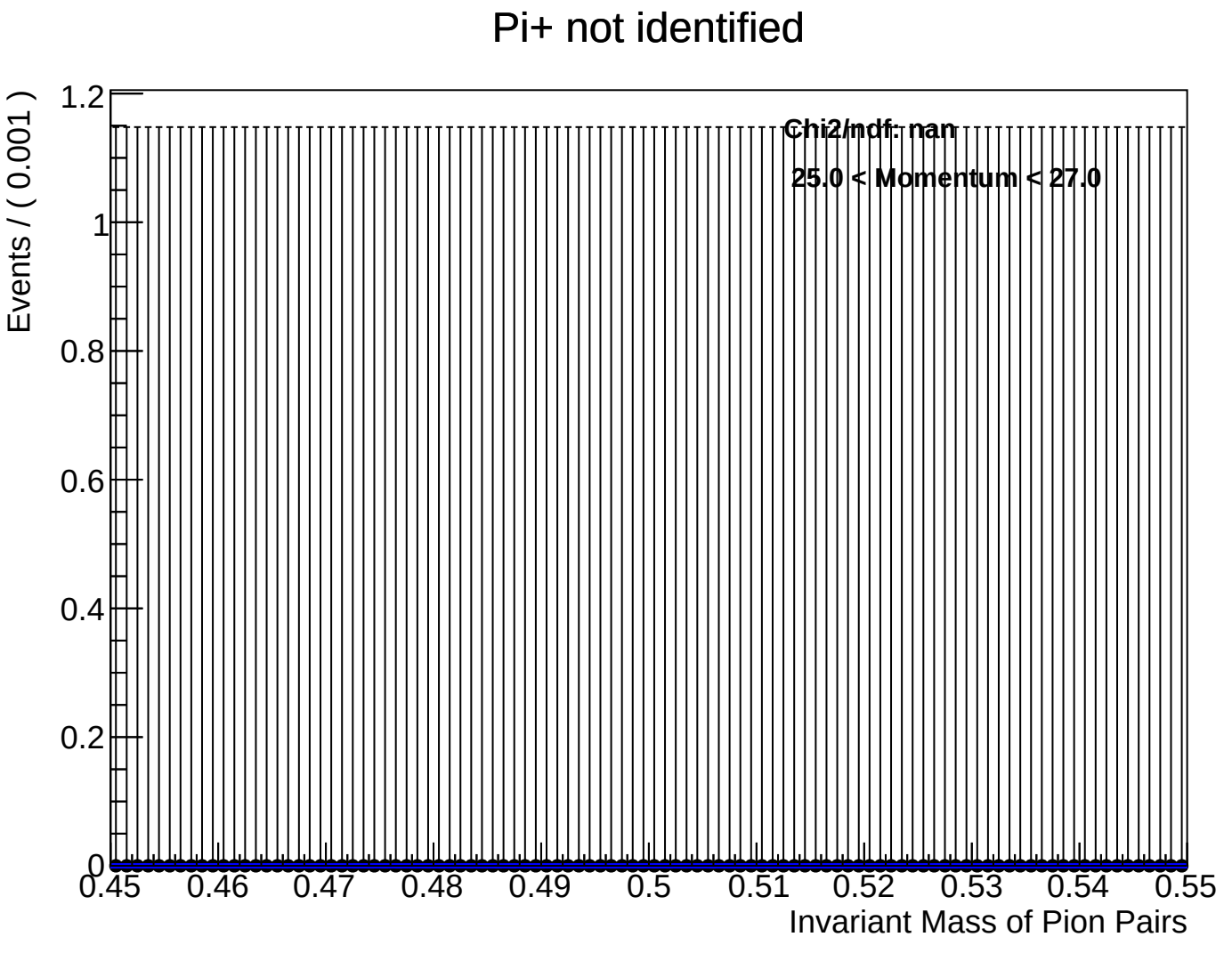

Pi+ not identified
Chi2/ndf: 1.29
22.0 < Momentum < 25.0
Events / (0.001)
0
0.5
1
1.5
2
2.5
3
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs


All Events
Chi2/ndf: 0.61
22.0 < Momentum < 25.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
140
160
180
200
220
240
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

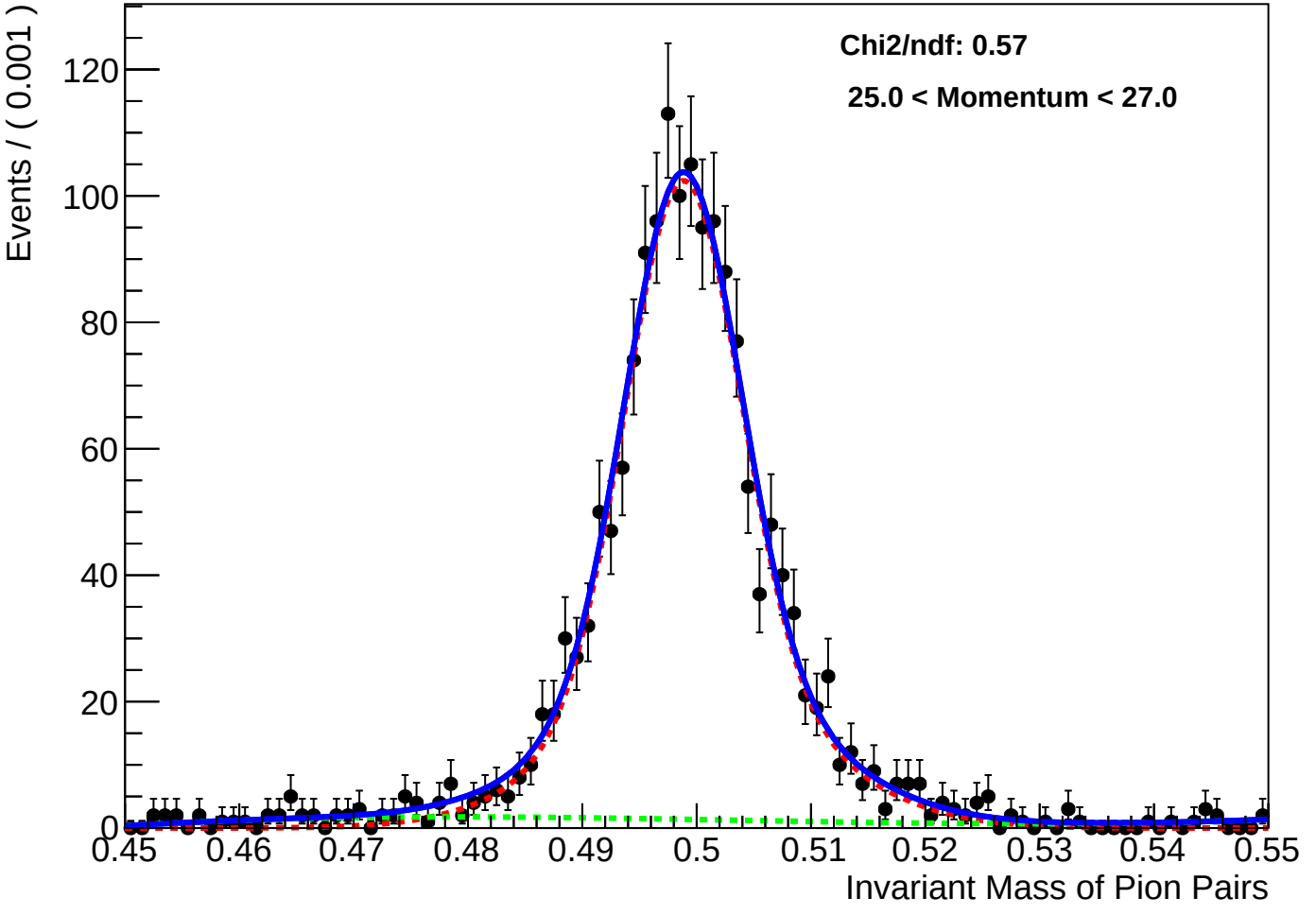

Pi+ as Pi+
Chi2/ndf: 0.57
25.0 < Momentum < 27.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

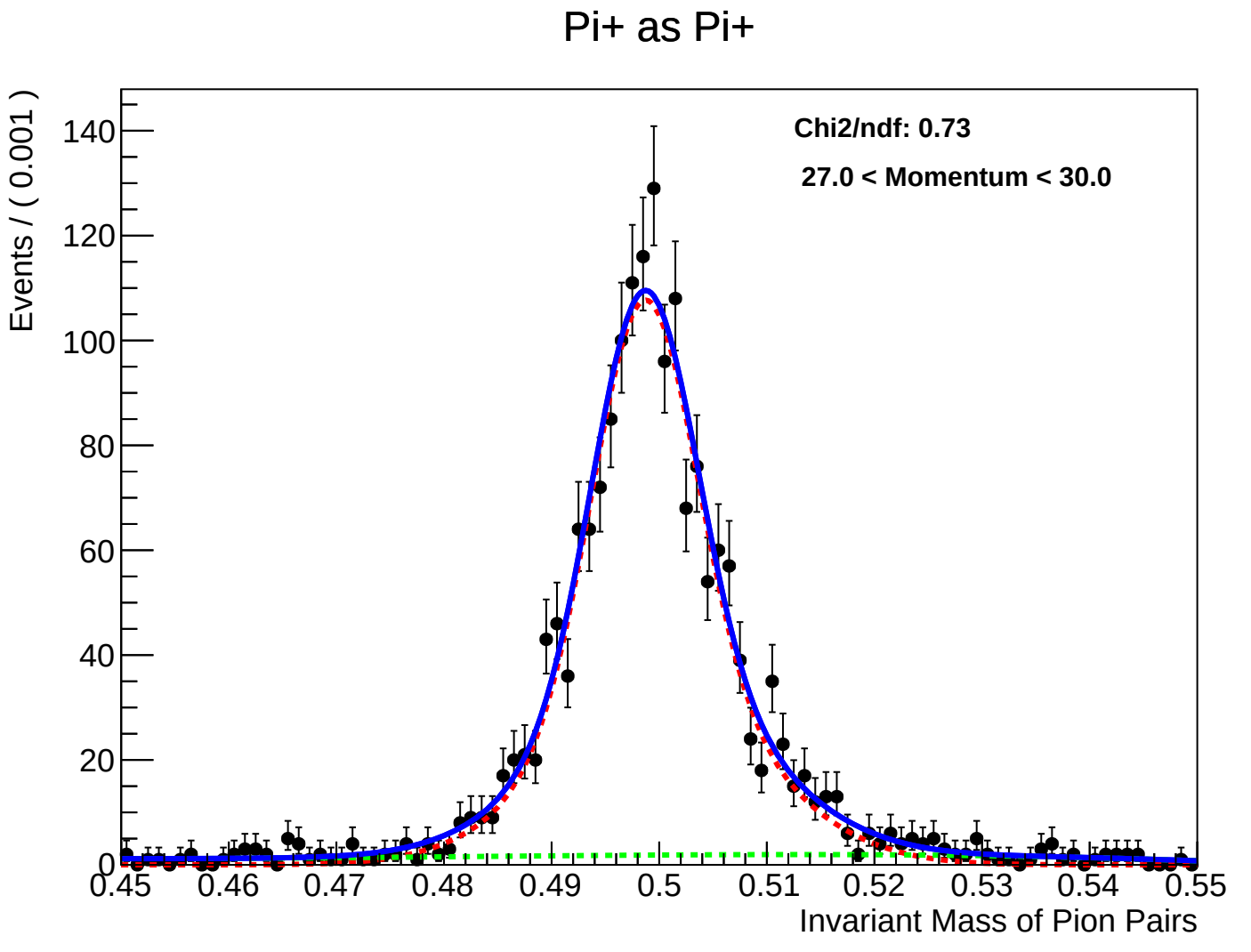

Pi+ as K+
Chi2/ndf: 0.58
25.0 < Momentum < 27.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
1
2
3
4
5
6
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

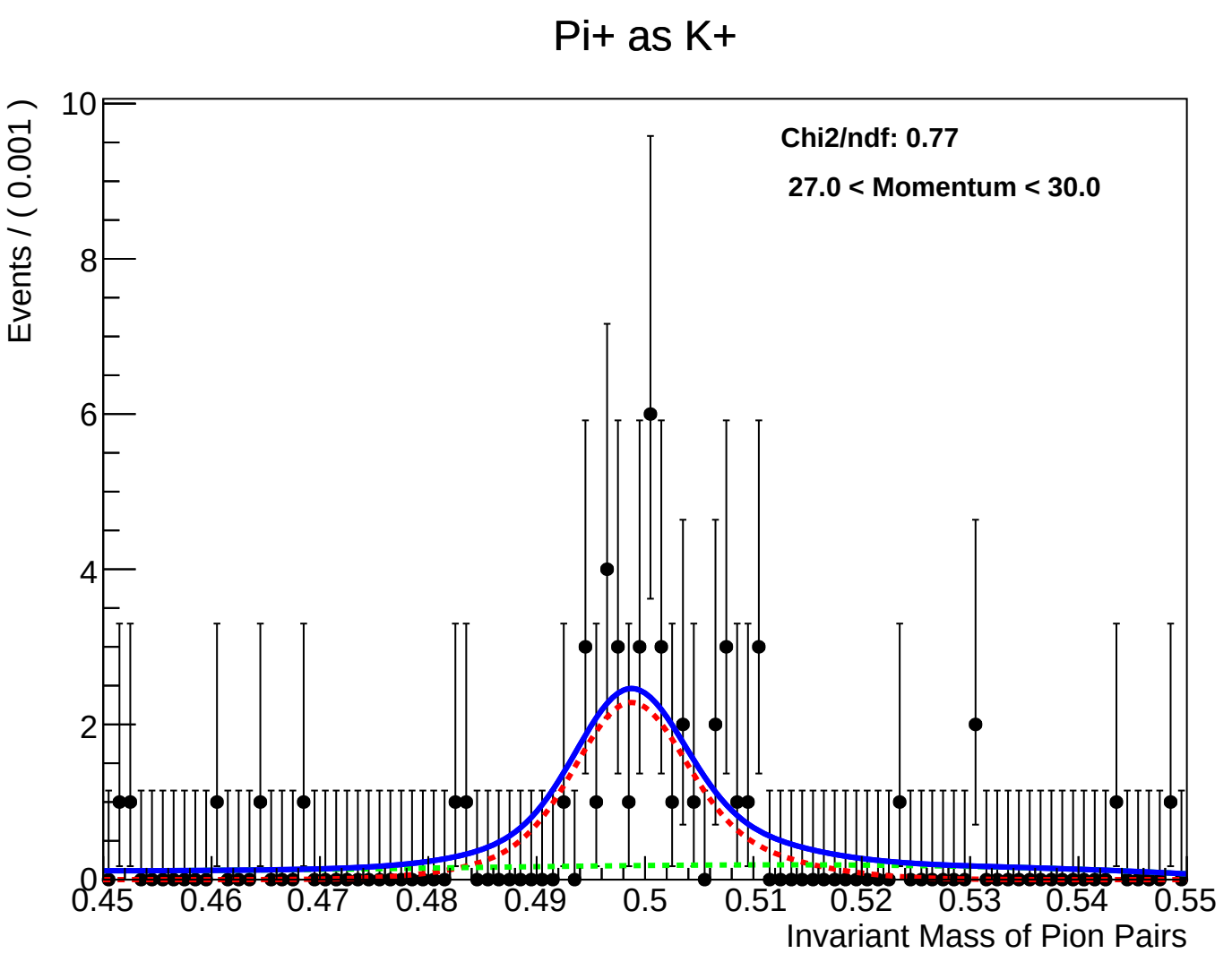

Pi+ as Proton
Chi2/ndf: 0.66
25.0 < Momentum < 27.0
Events / (0.001)
0
1
2
3
4
5
6
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

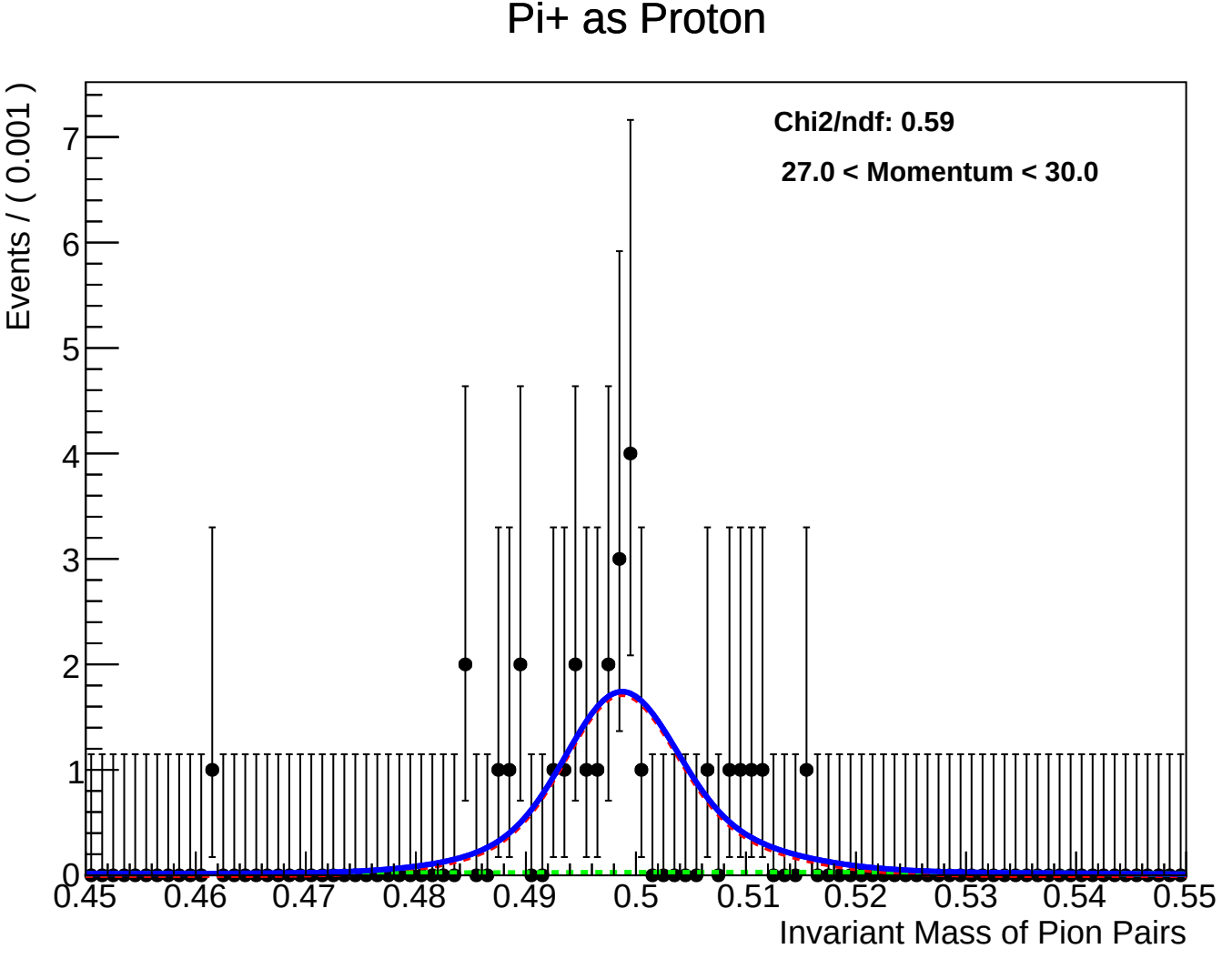

Pi+ not identified
Chi2/ndf: nan
25.0 < Momentum < 27.0
Events / (0.001)
1.2
1
0.8
0.6
0.4
0.2
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

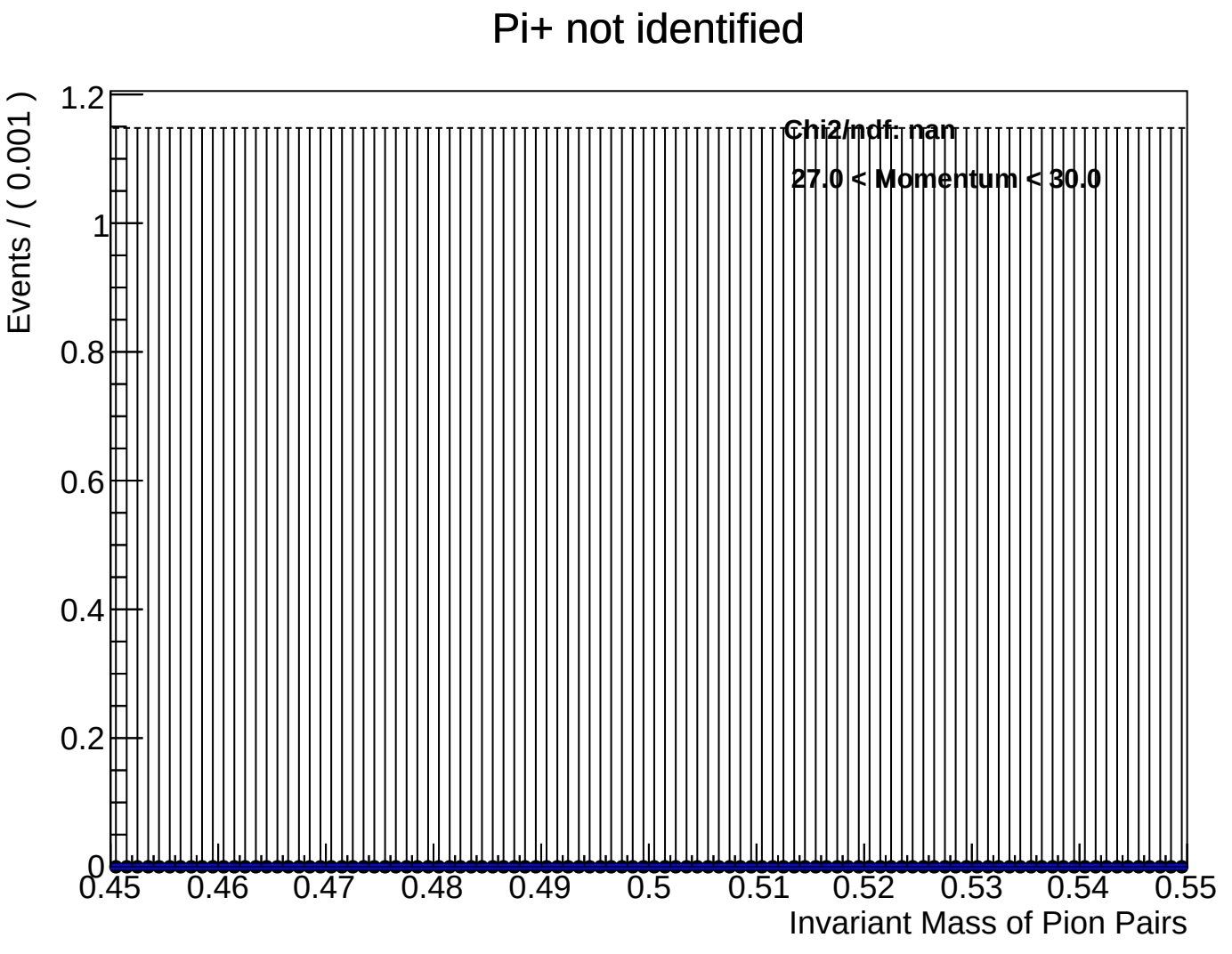
All Events

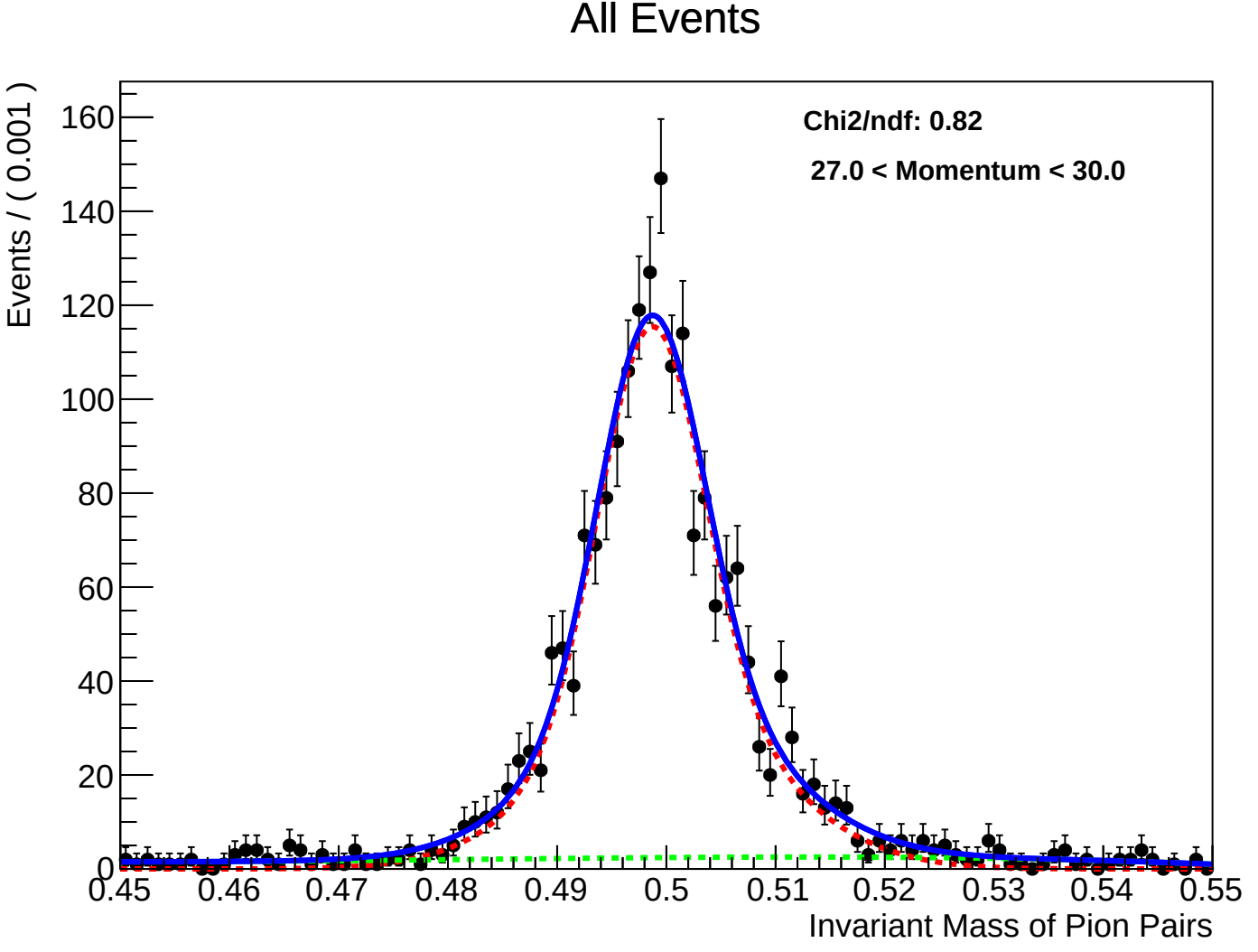

Chi2/ndf: 0.57
25.0 < Momentum < 27.0
Events / (0.001)
120
100
80
60
40
20
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

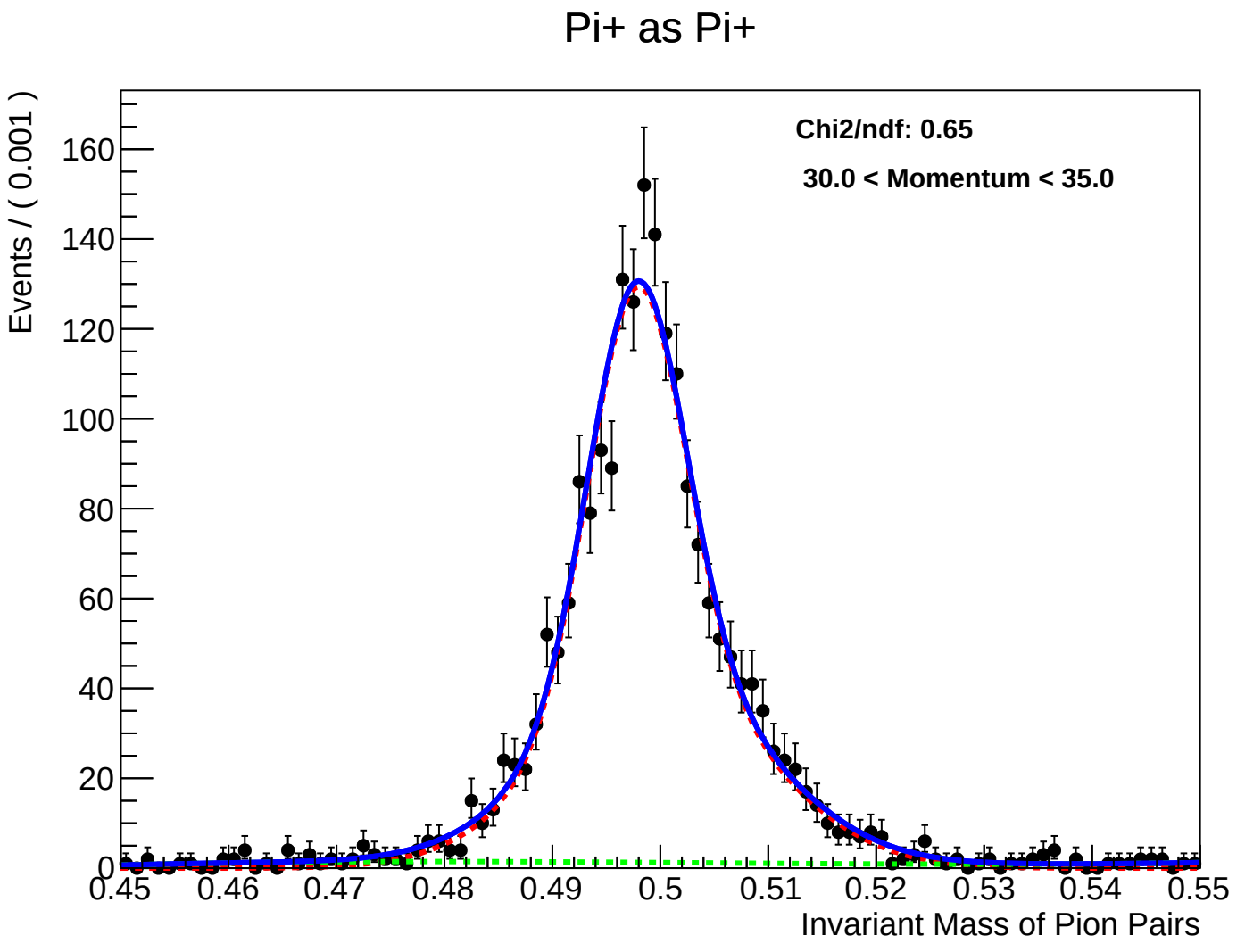

Pi+ as Pi+
Chi2/ndf: 0.73
27.0 < Momentum < 30.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
140
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

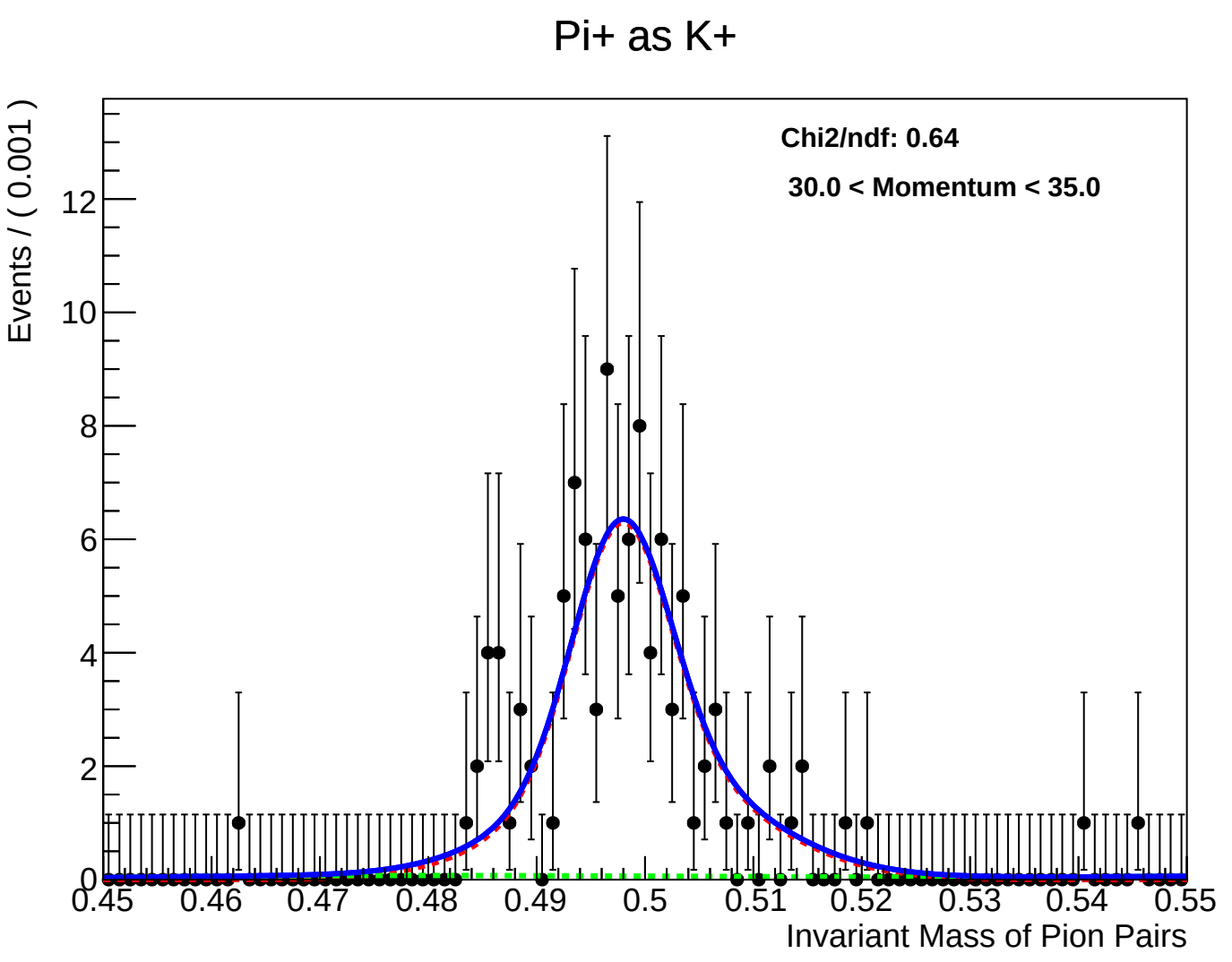

Pi+ as K+
Chi2/ndf: 0.77
27.0 < Momentum < 30.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
2
4
6
8
10
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

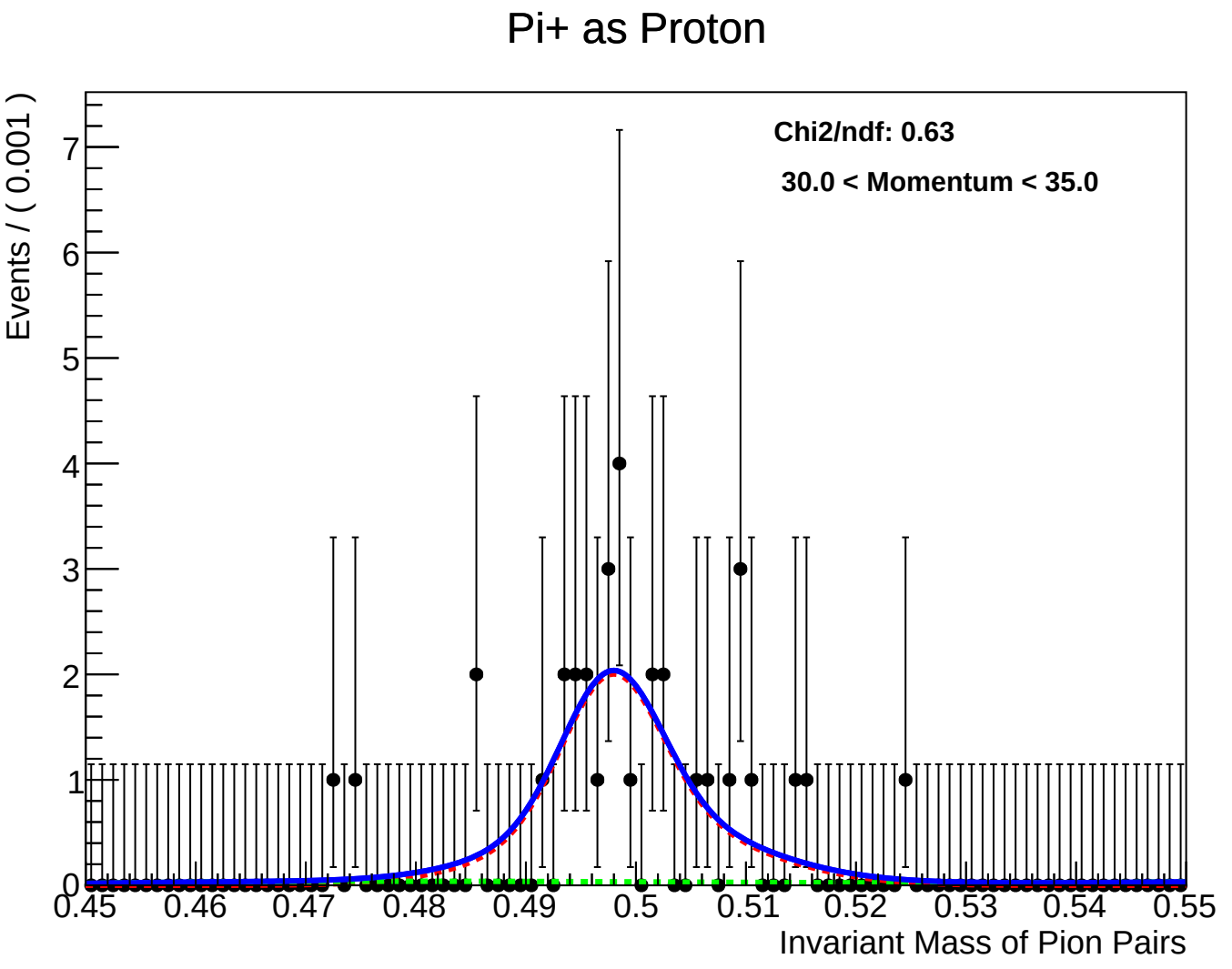

Pi+ as Proton
Chi2/ndf: 0.59
27.0 < Momentum < 30.0
Events / (0.001)
0
1
2
3
4
5
6
7
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

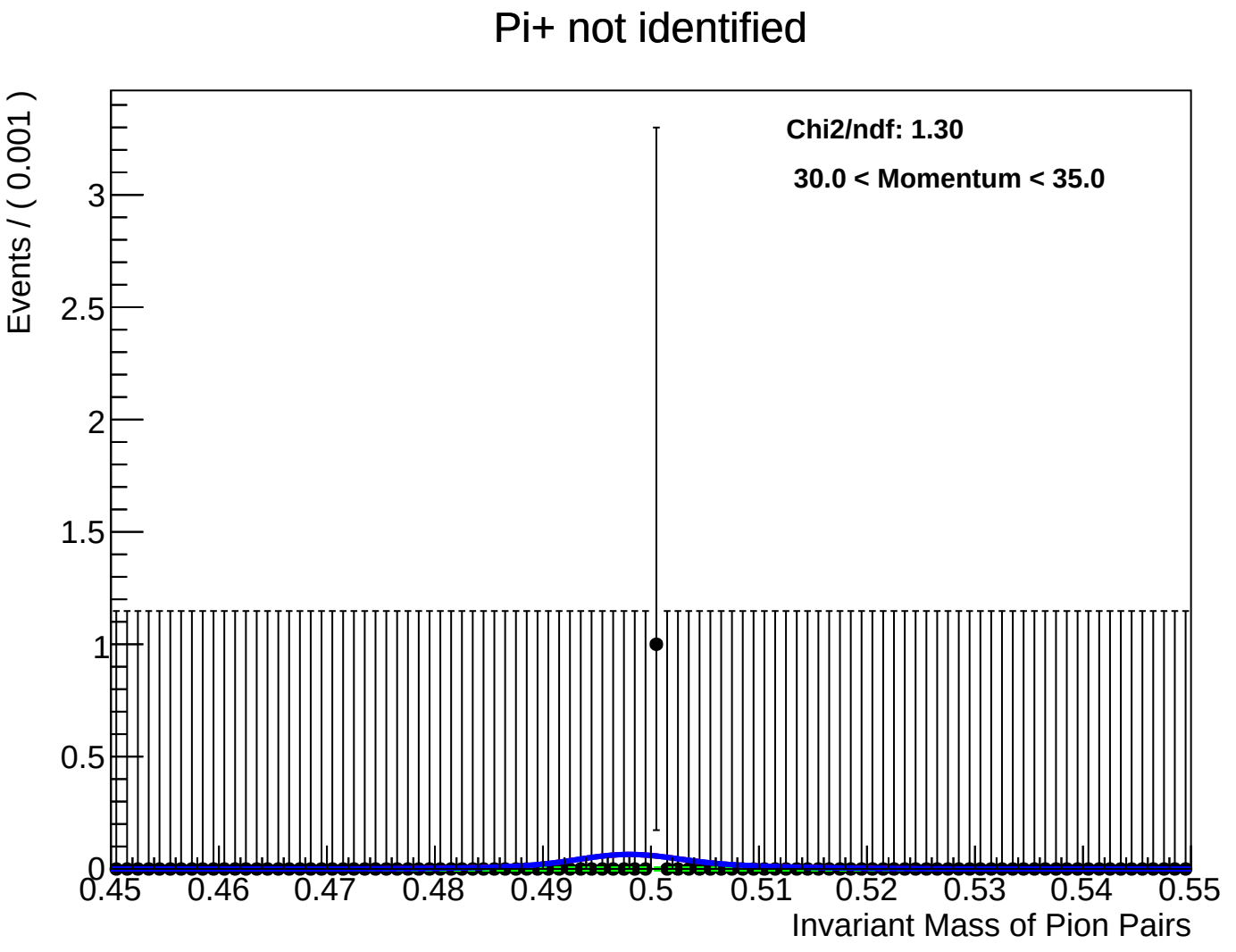

Pi+ not identified
Chi2/ndf: nan
27.0 < Momentum < 30.0
Events / (0.001)
1.2
1
0.8
0.6
0.4
0.2
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

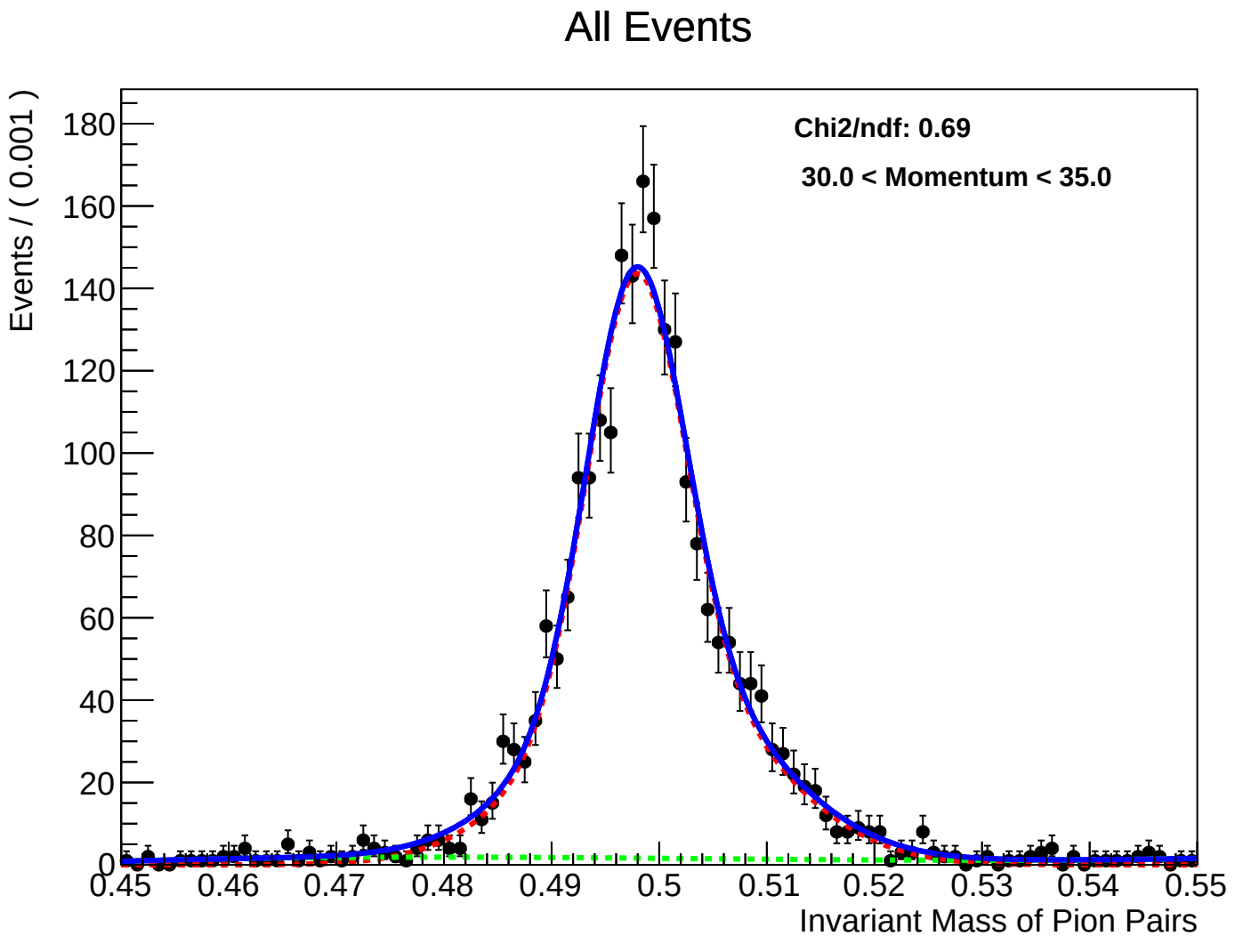

All Events
Chi2/ndf: 0.82
27.0 < Momentum < 30.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
140
160
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

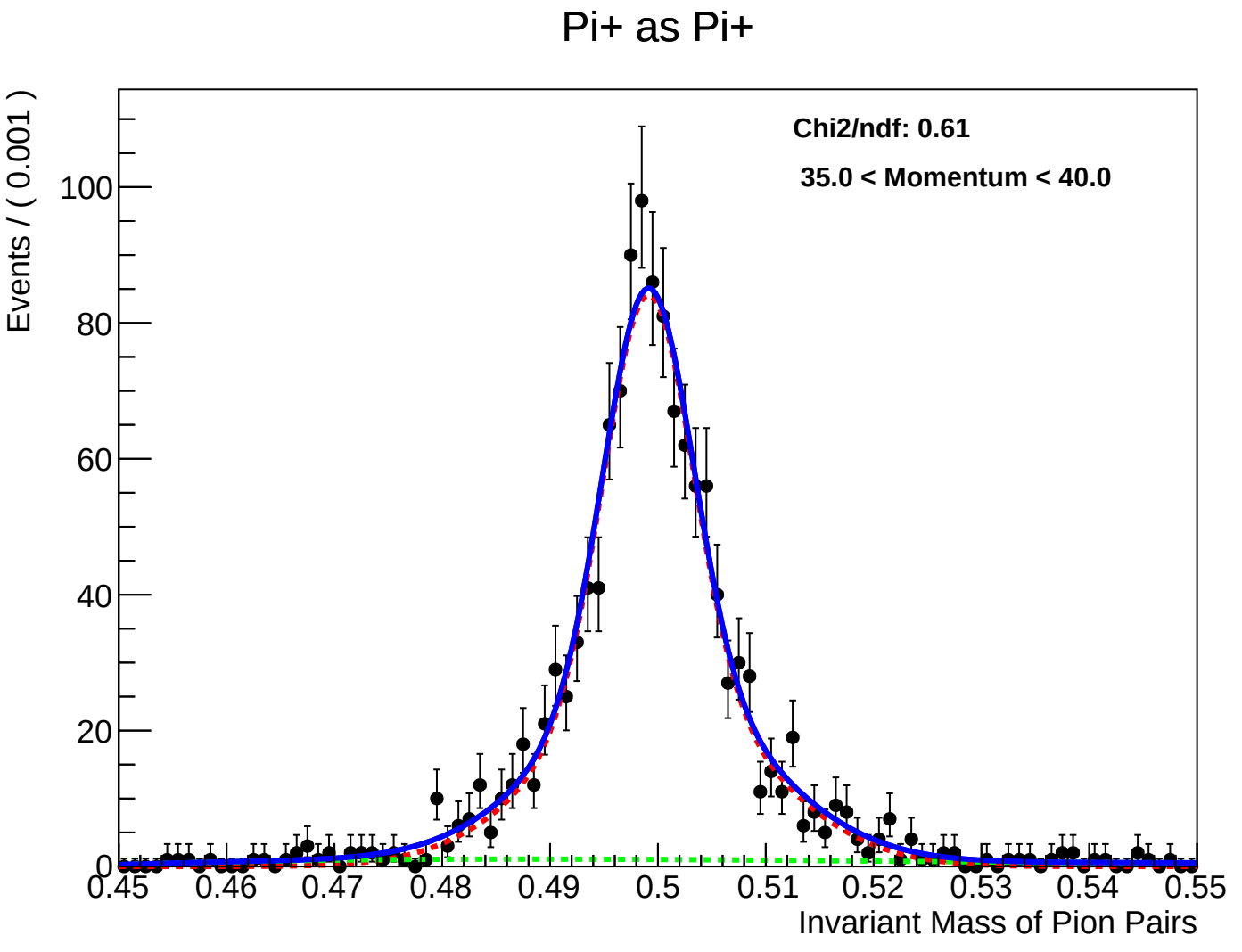

Pi+ as Pi+
Chi2/ndf: 0.65
30.0 < Momentum < 35.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
140
160
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

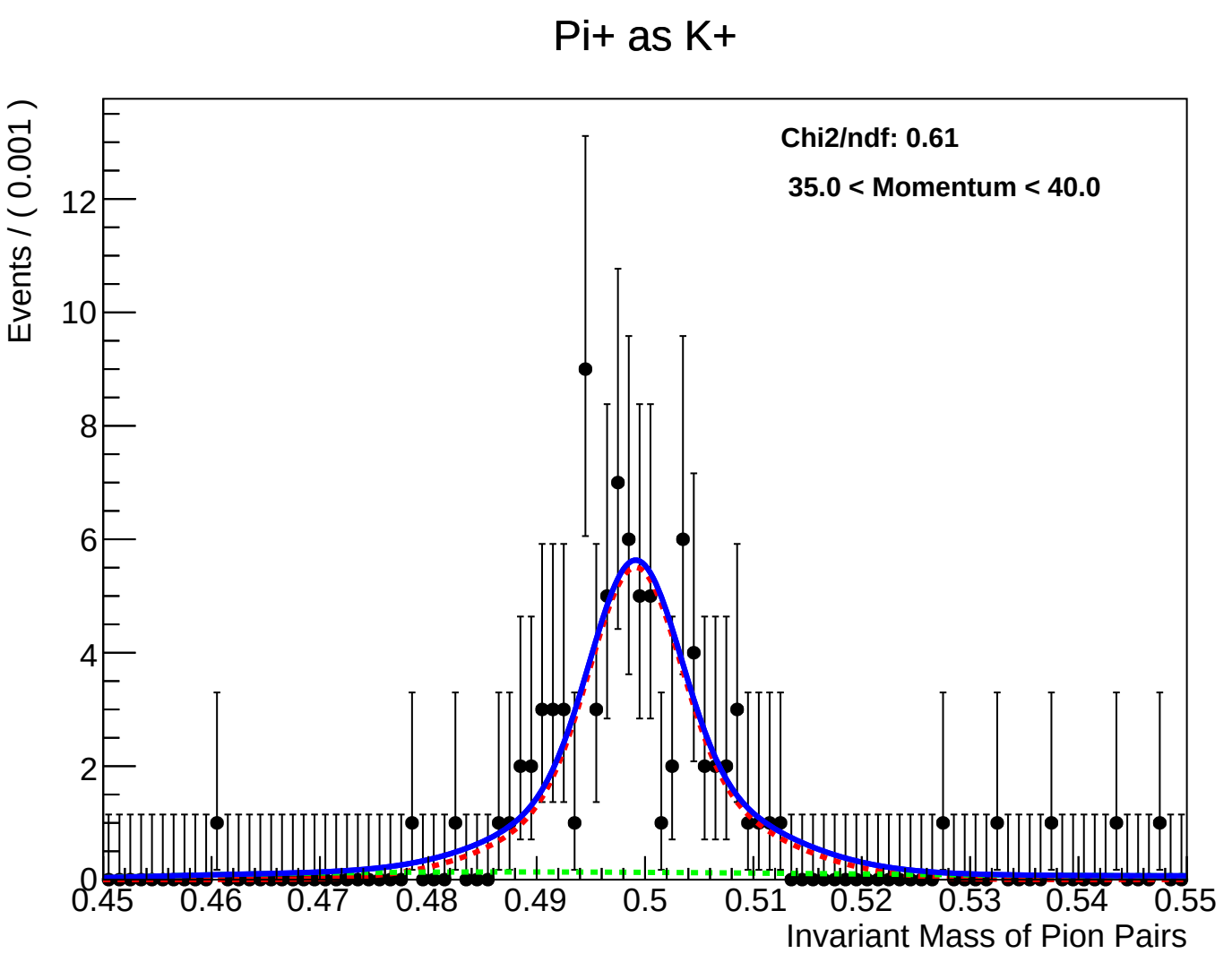

Pi+ as K+
Chi2/ndf: 0.64
30.0 < Momentum < 35.0
Events / (0.001)
0
2
4
6
8
10
12
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

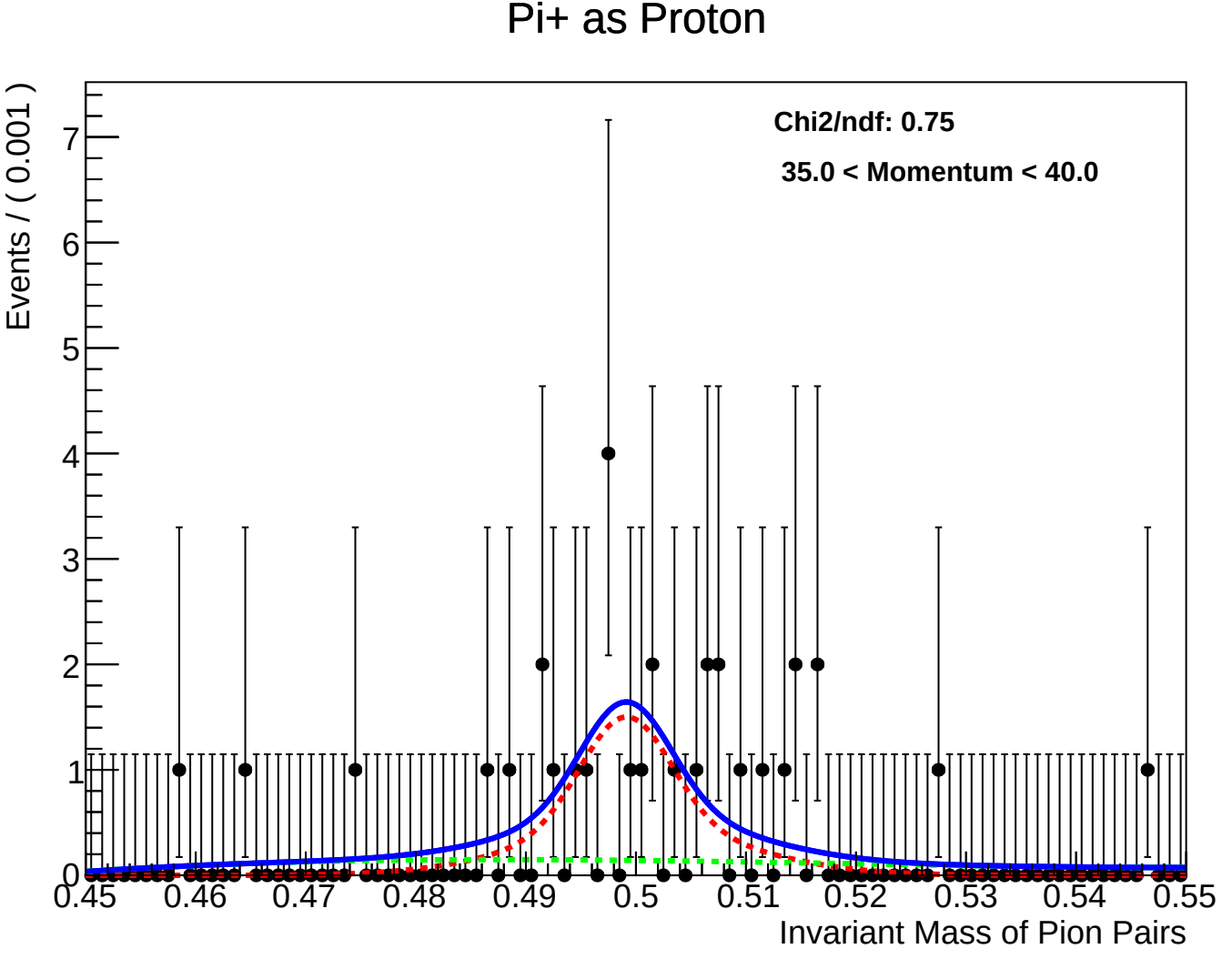

Pi+ as Proton
Chi2/ndf: 0.63
30.0 < Momentum < 35.0
Events / (0.001)
0
1
2
3
4
5
6
7
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

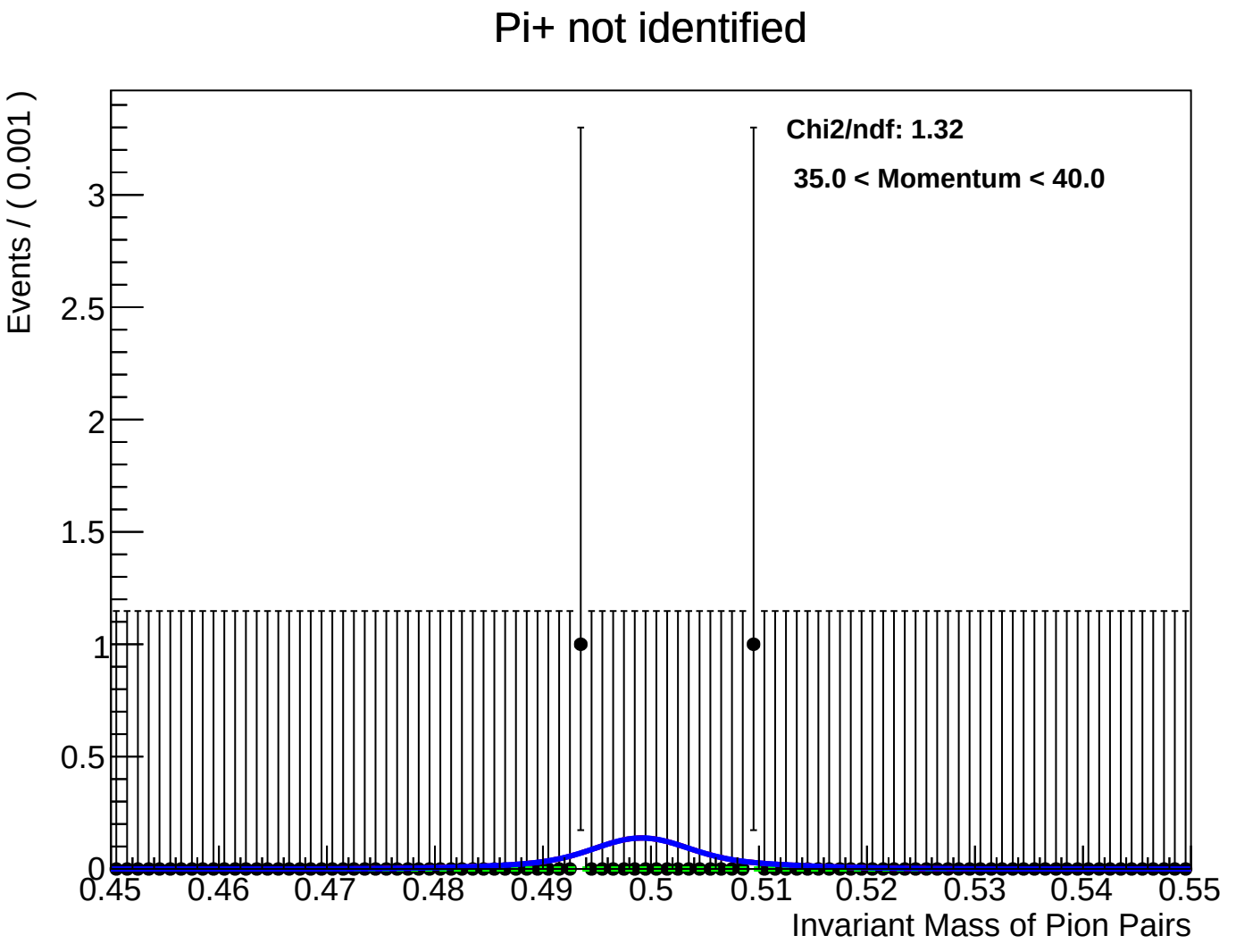

Pi+ not identified
Chi2/ndf: 1.30
30.0 < Momentum < 35.0
Events / (0.001)
0
0.5
1
1.5
2
2.5
3
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

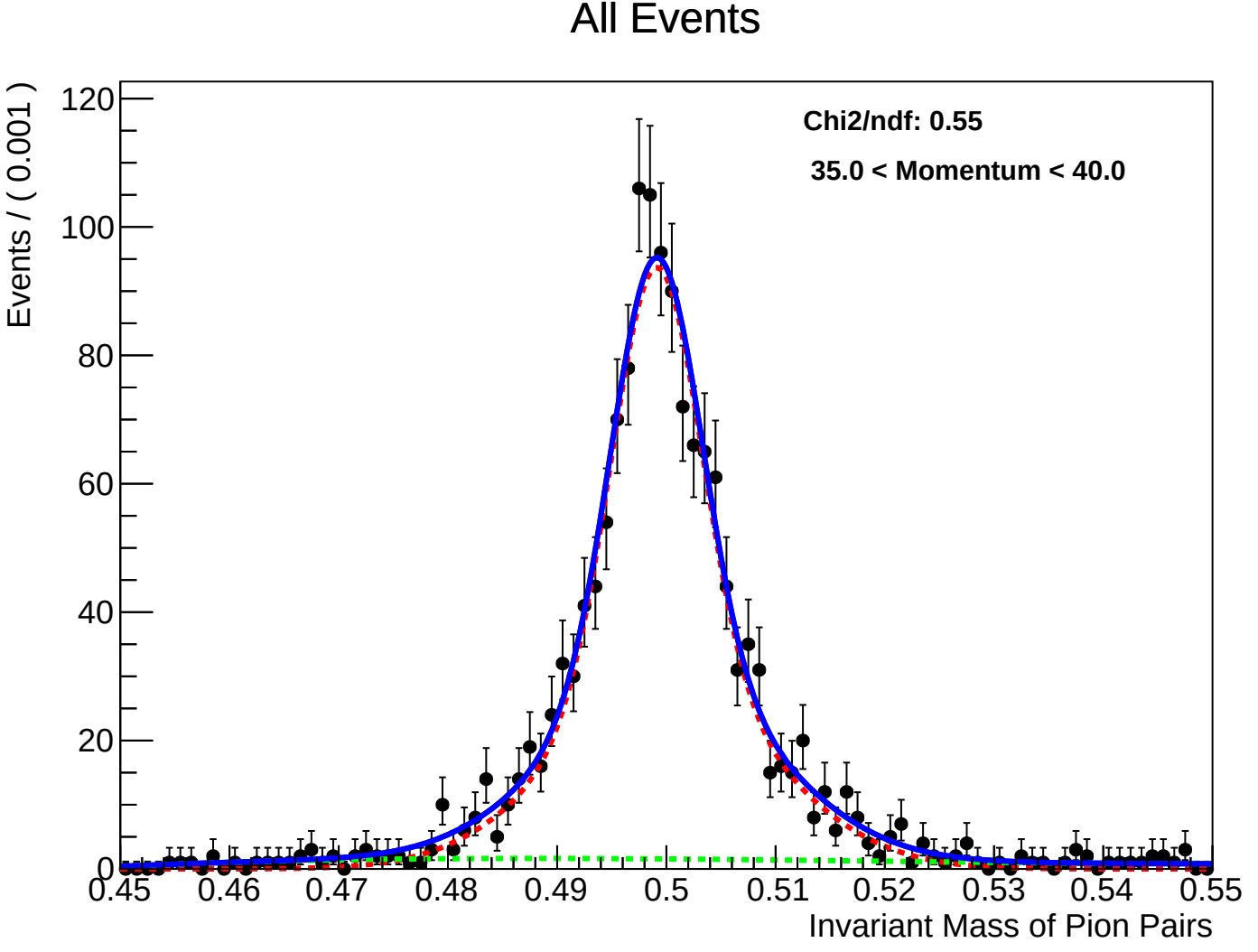

All Events
Chi2/ndf: 0.69
30.0 < Momentum < 35.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
140
160
180
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

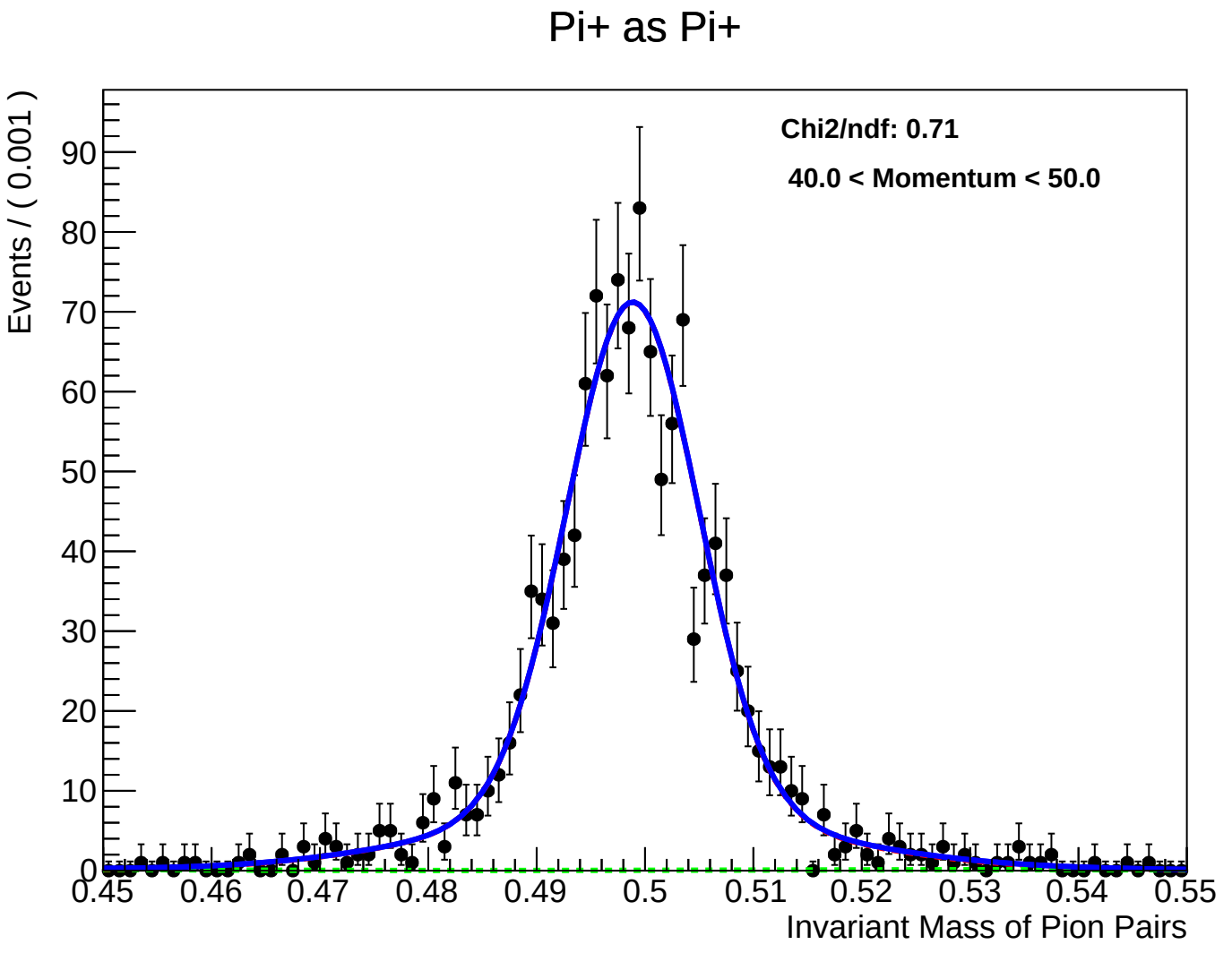

Pi+ as Pi+
Chi2/ndf: 0.61
35.0 < Momentum < 40.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

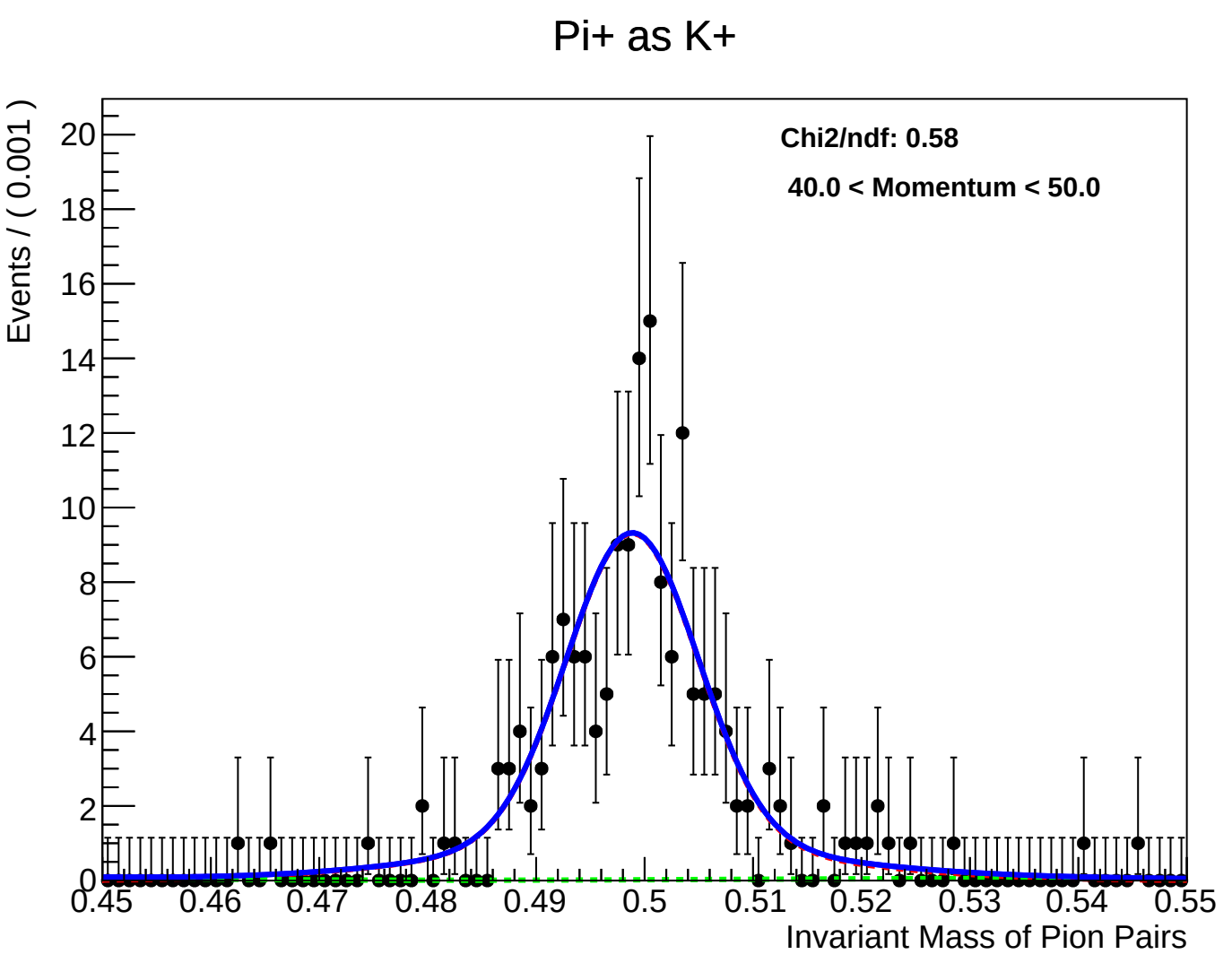

Pi+ as K+
Chi2/ndf: 0.61
35.0 < Momentum < 40.0
Events / (0.001)
0
2
4
6
8
10
12
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

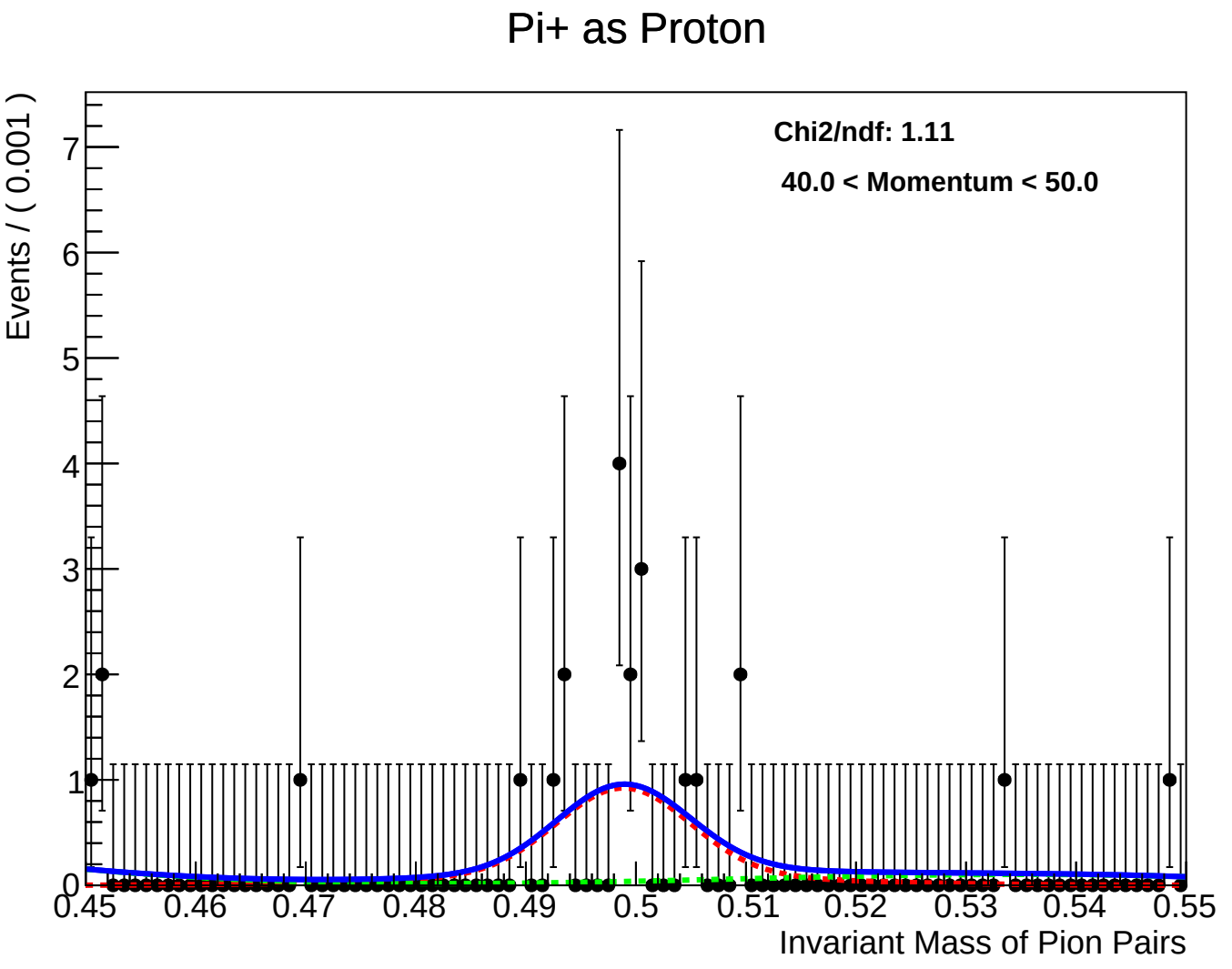

Pi+ as Proton
Chi2/ndf: 0.75
35.0 < Momentum < 40.0
Events / (0.001)
0
1
2
3
4
5
6
7
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

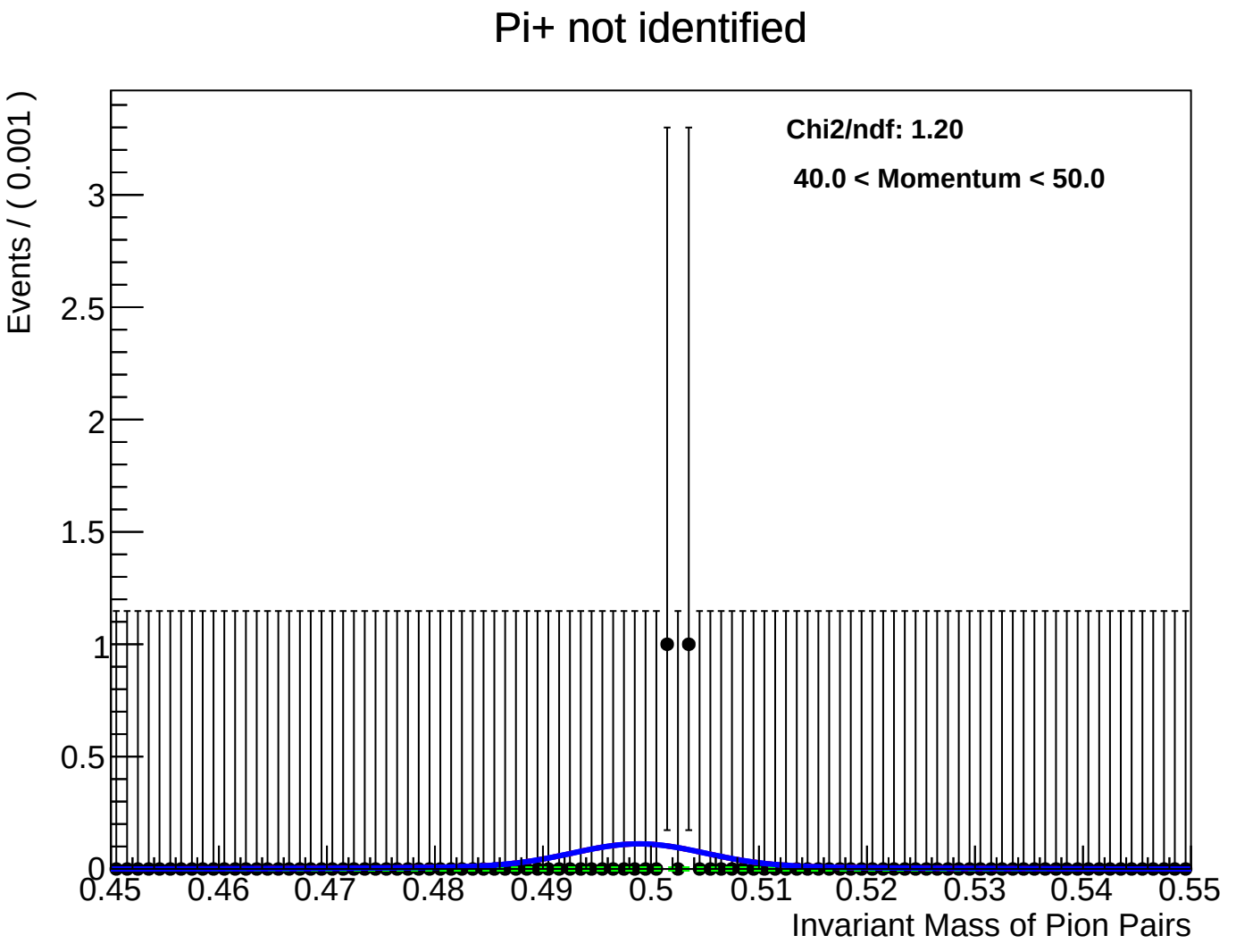

Pi+ not identified
Chi2/ndf: 1.32
35.0 < Momentum < 40.0
Events / (0.001)
0
0.5
1
1.5
2
2.5
3
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

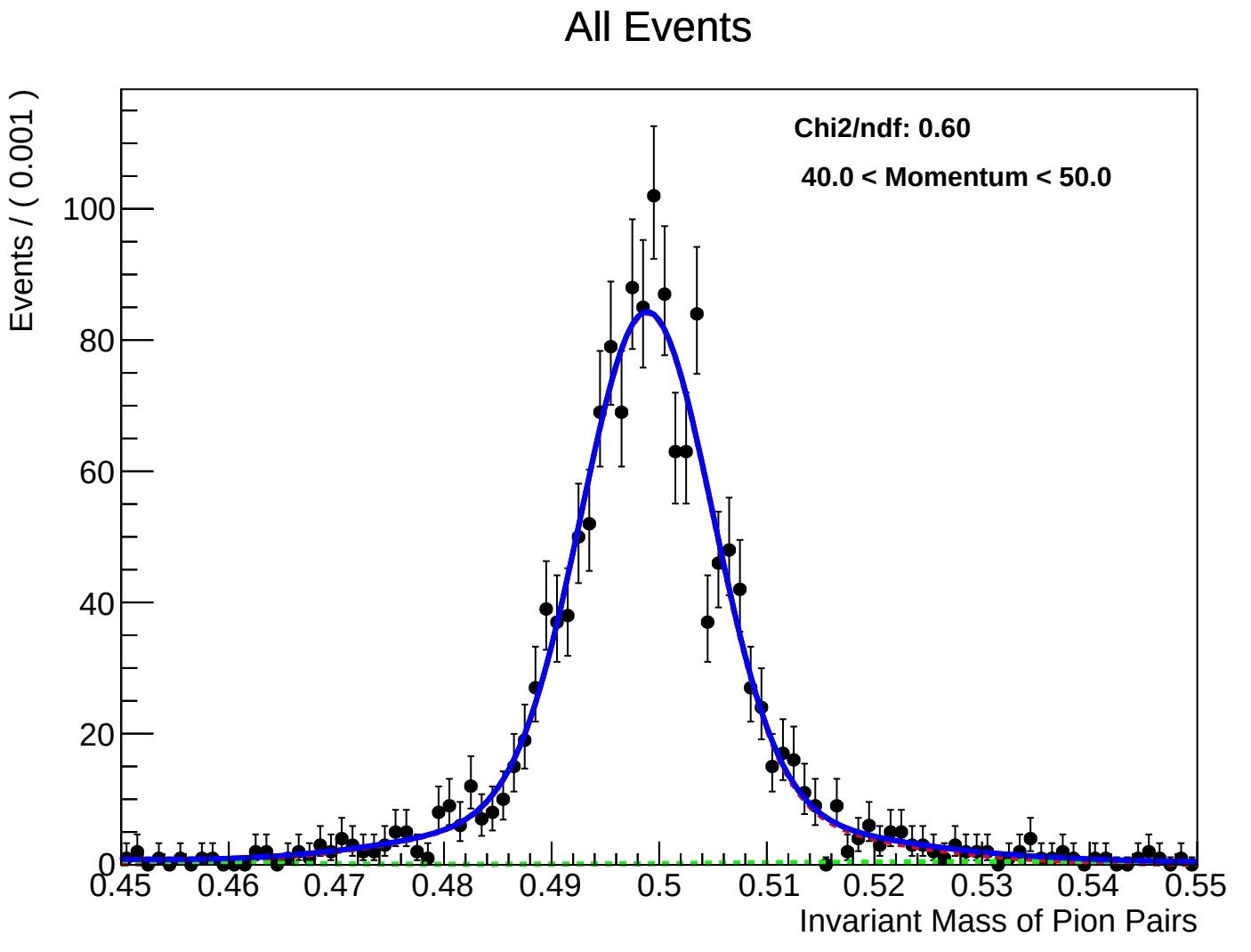

All Events
Chi2/ndf: 0.55
35.0 < Momentum < 40.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

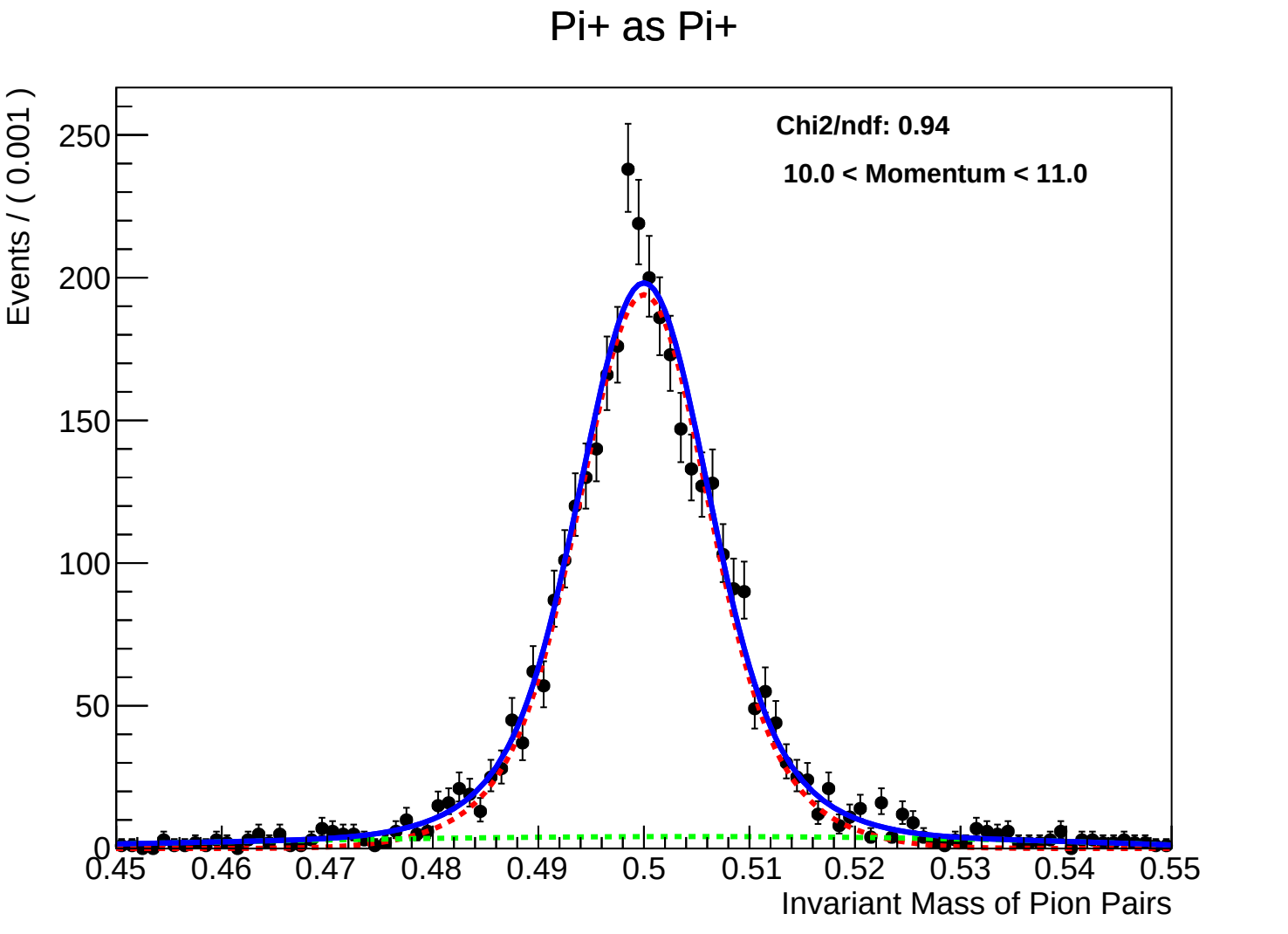

Pi+ as Pi+
Chi2/ndf: 0.71
40.0 < Momentum < 50.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
10
20
30
40
50
60
70
80
90
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

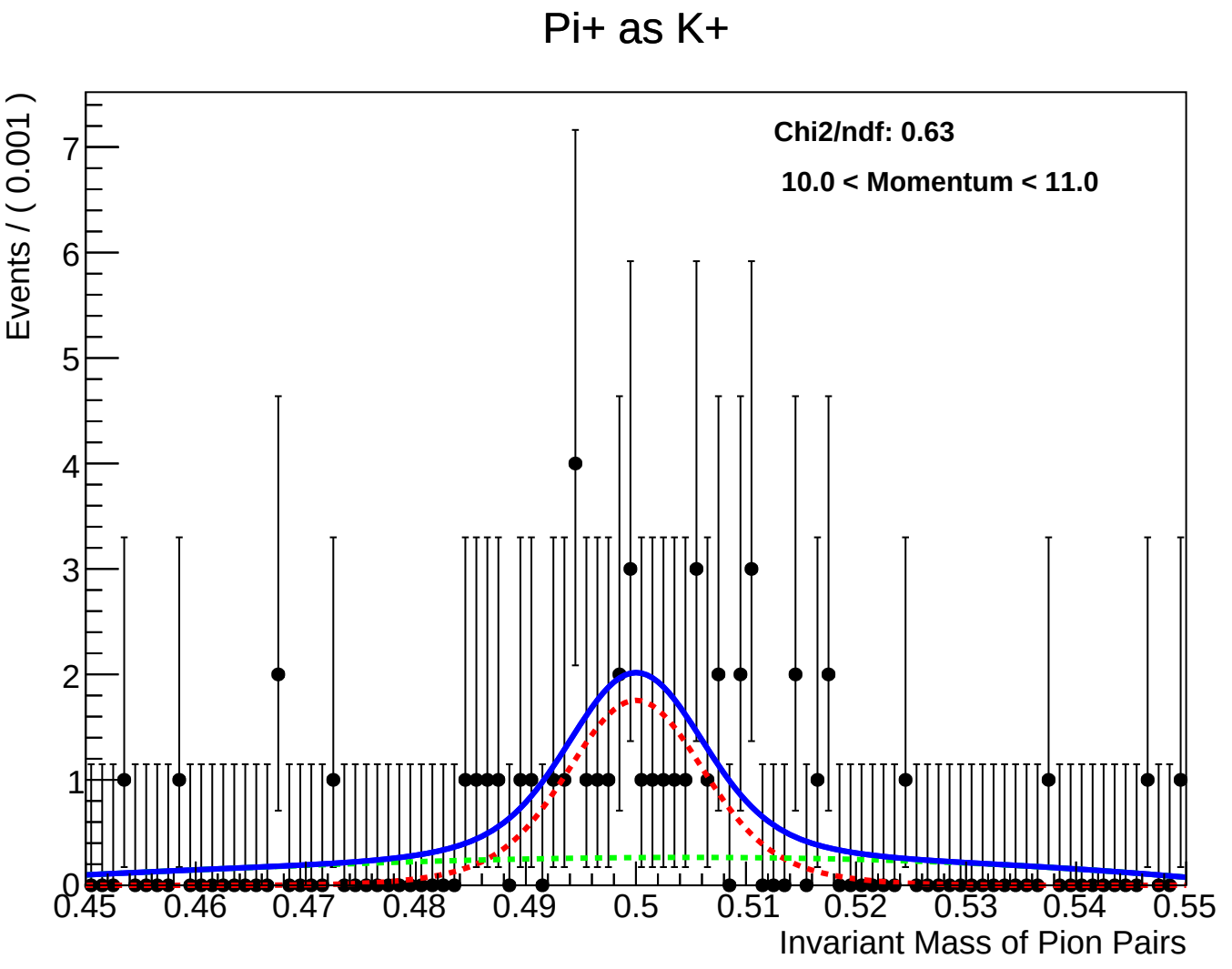

Pi+ as K+
Chi2/ndf: 0.58
40.0 < Momentum < 50.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
2
4
6
8
10
12
14
16
18
20
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

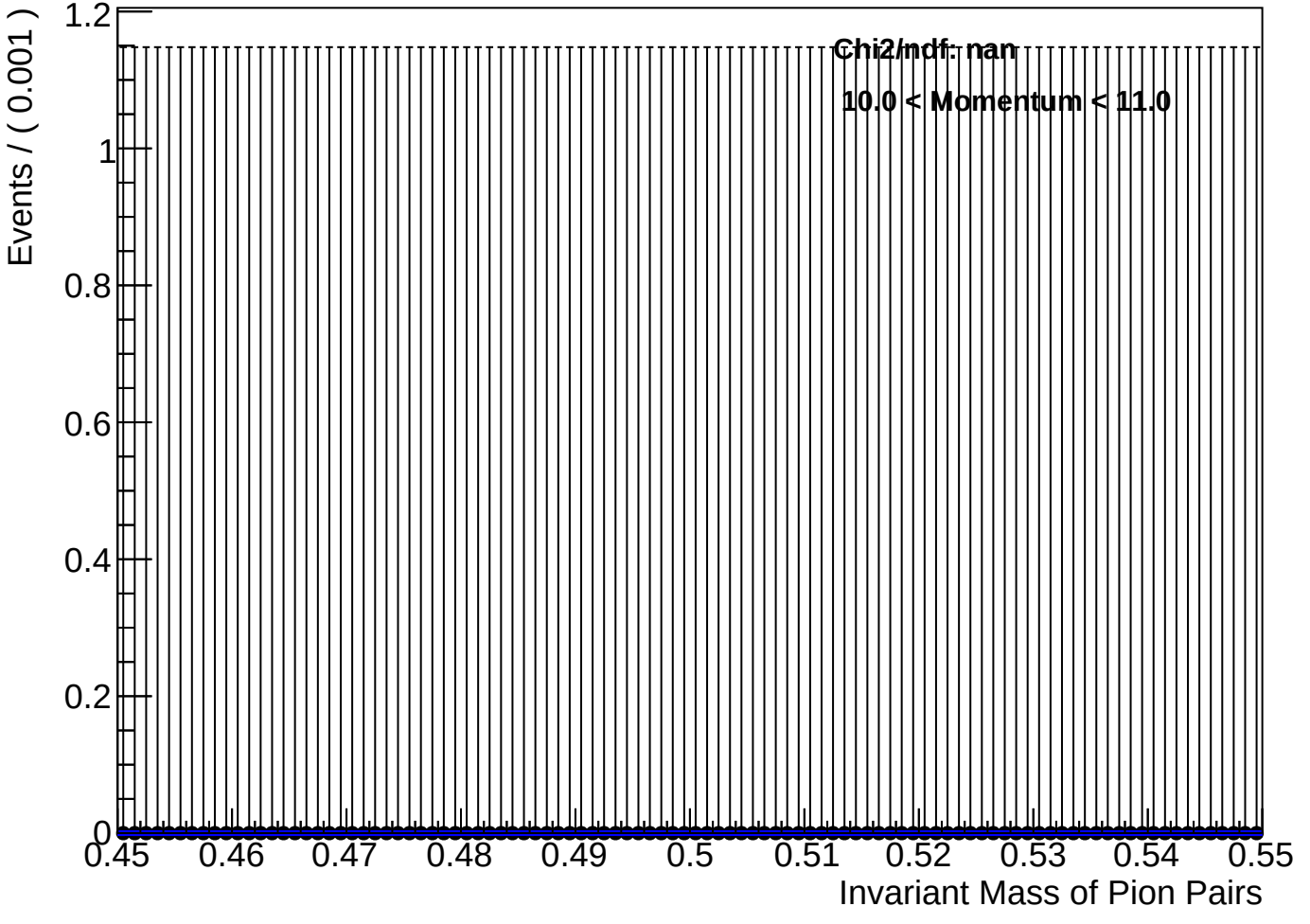

Pi+ as Proton
Chi2/ndf: 1.11
40.0 < Momentum < 50.0
Events / (0.001)
0
1
2
3
4
5
6
7
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

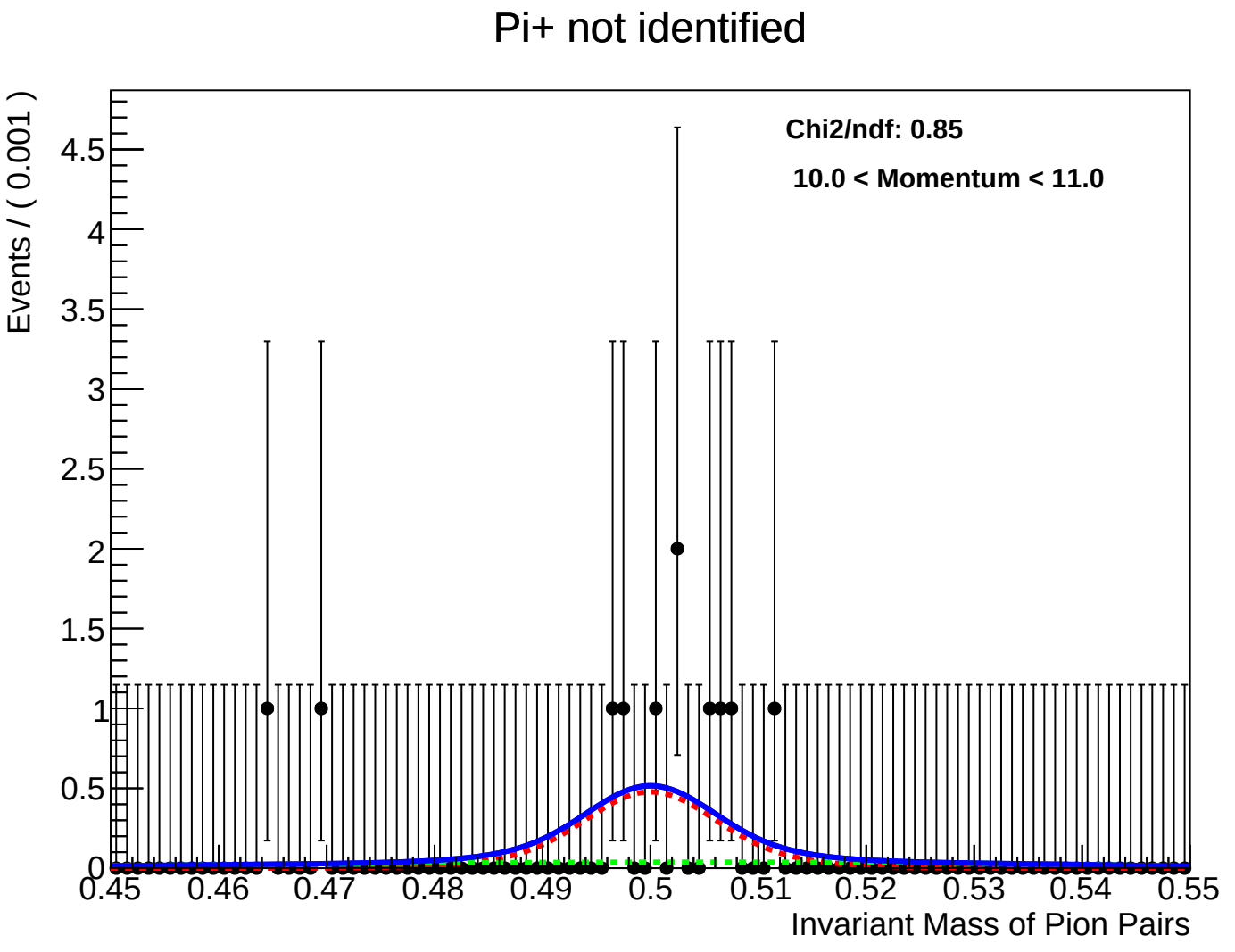

Pi+ not identified
Chi2/ndf: 1.20
40.0 < Momentum < 50.0
Events / (0.001)
0
0.5
1
1.5
2
2.5
3
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

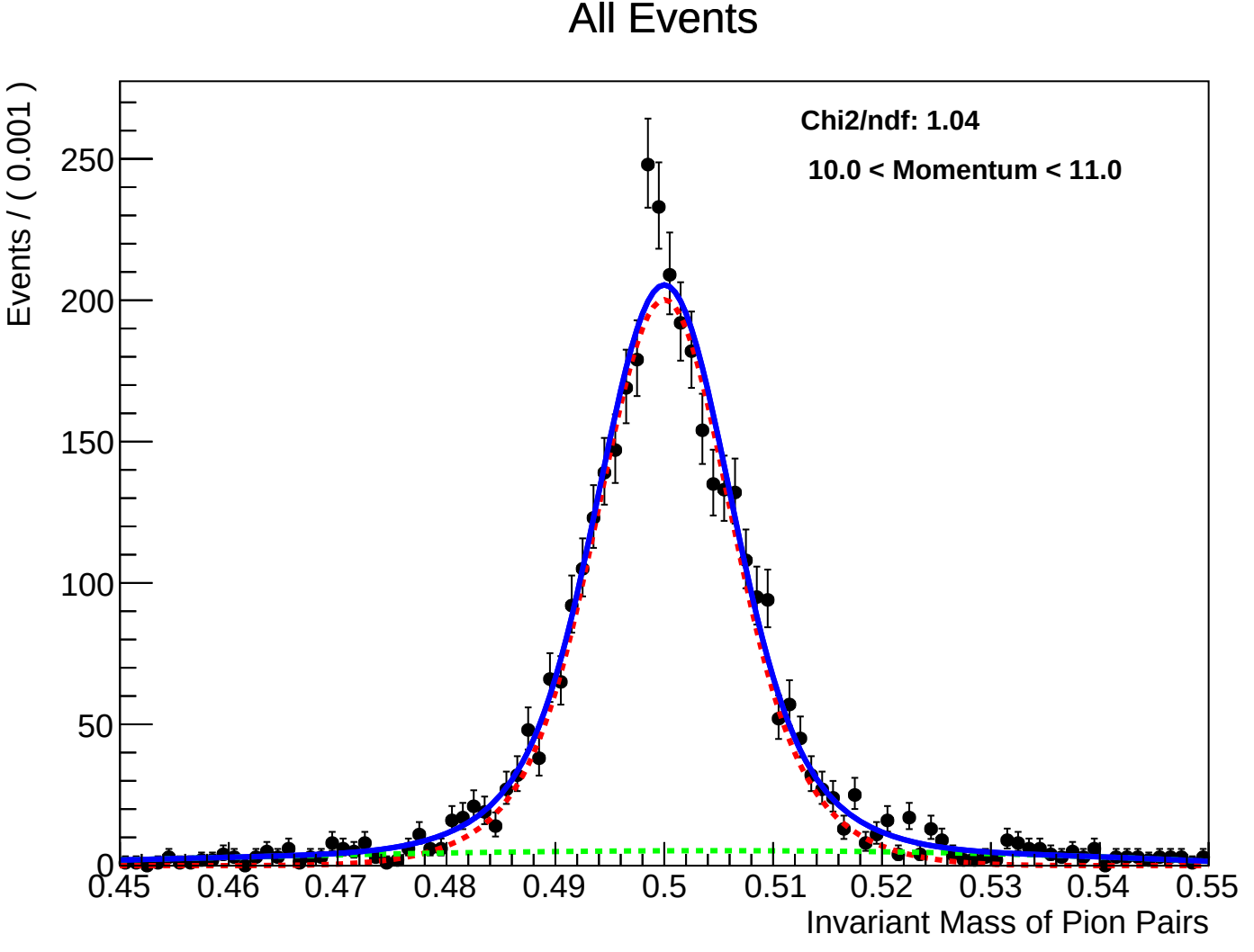

All Events
Chi2/ndf: 0.60
40.0 < Momentum < 50.0
Events / (0.001)
0
20
40
60
80
100
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

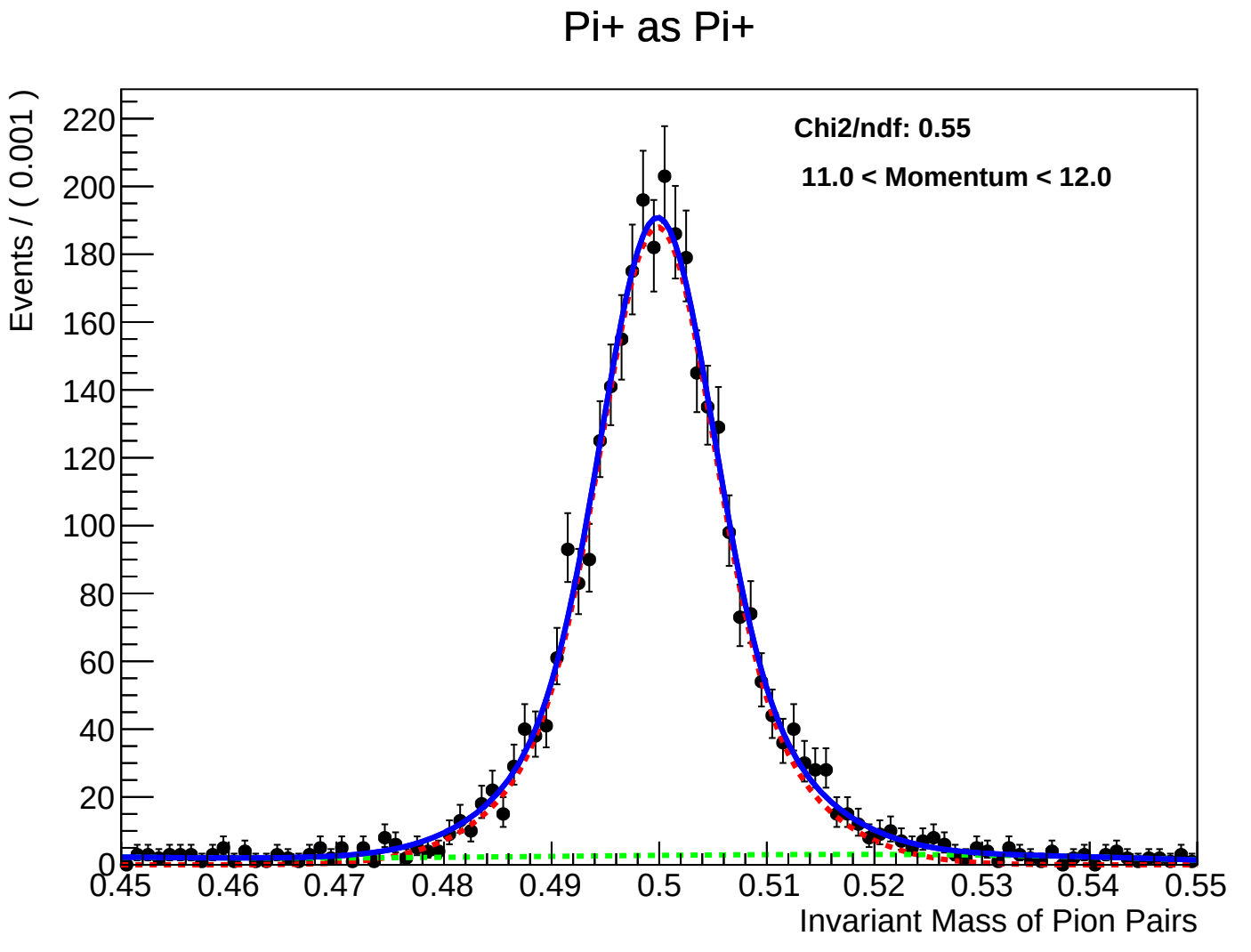

Pi+ as Pi+
Chi2/ndf: 0.94
10.0 < Momentum < 11.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
50
100
150
200
250
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

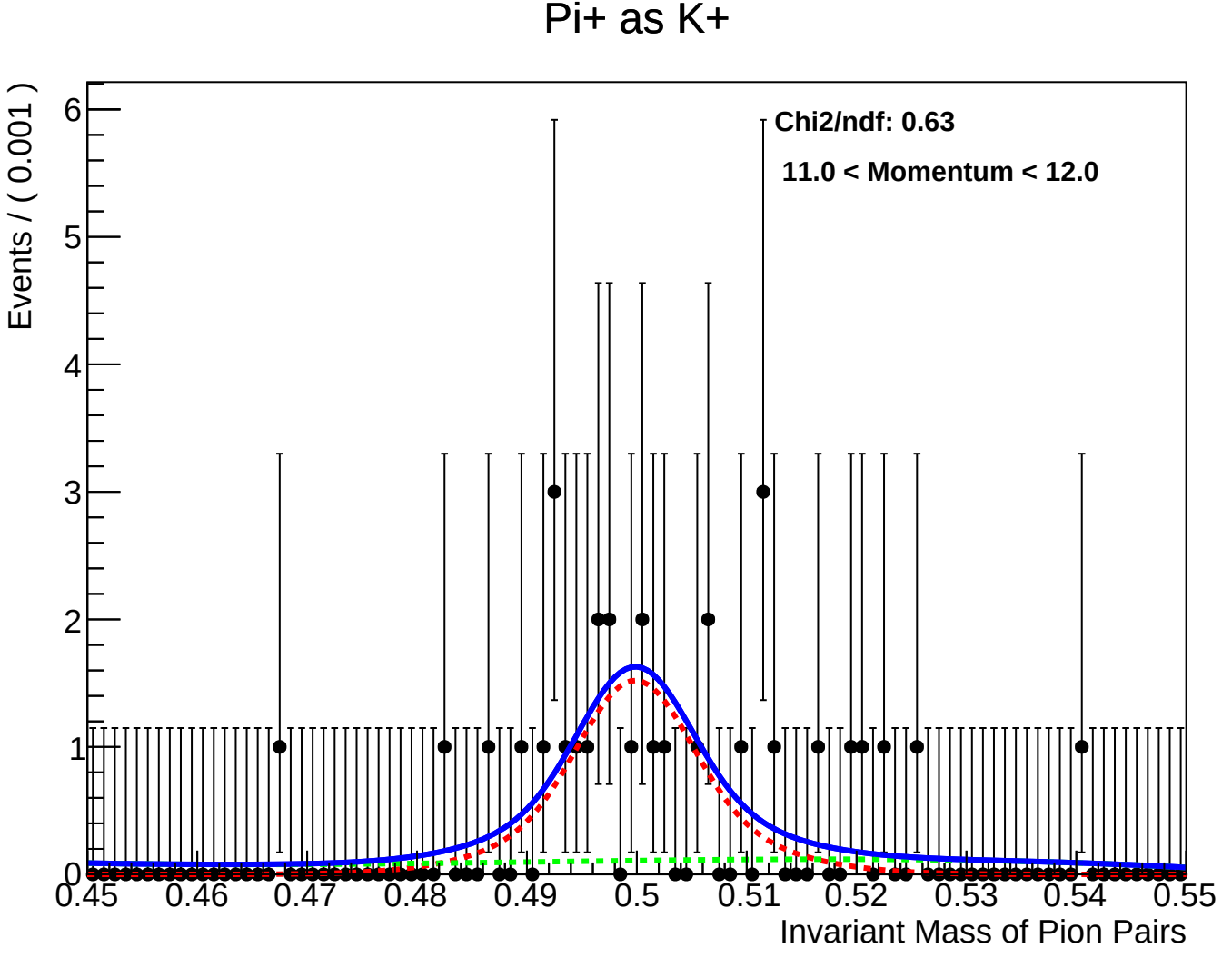

Pi+ as K+
Chi2/ndf: 0.63
10.0 < Momentum < 11.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
1
2
3
4
5
6
7
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

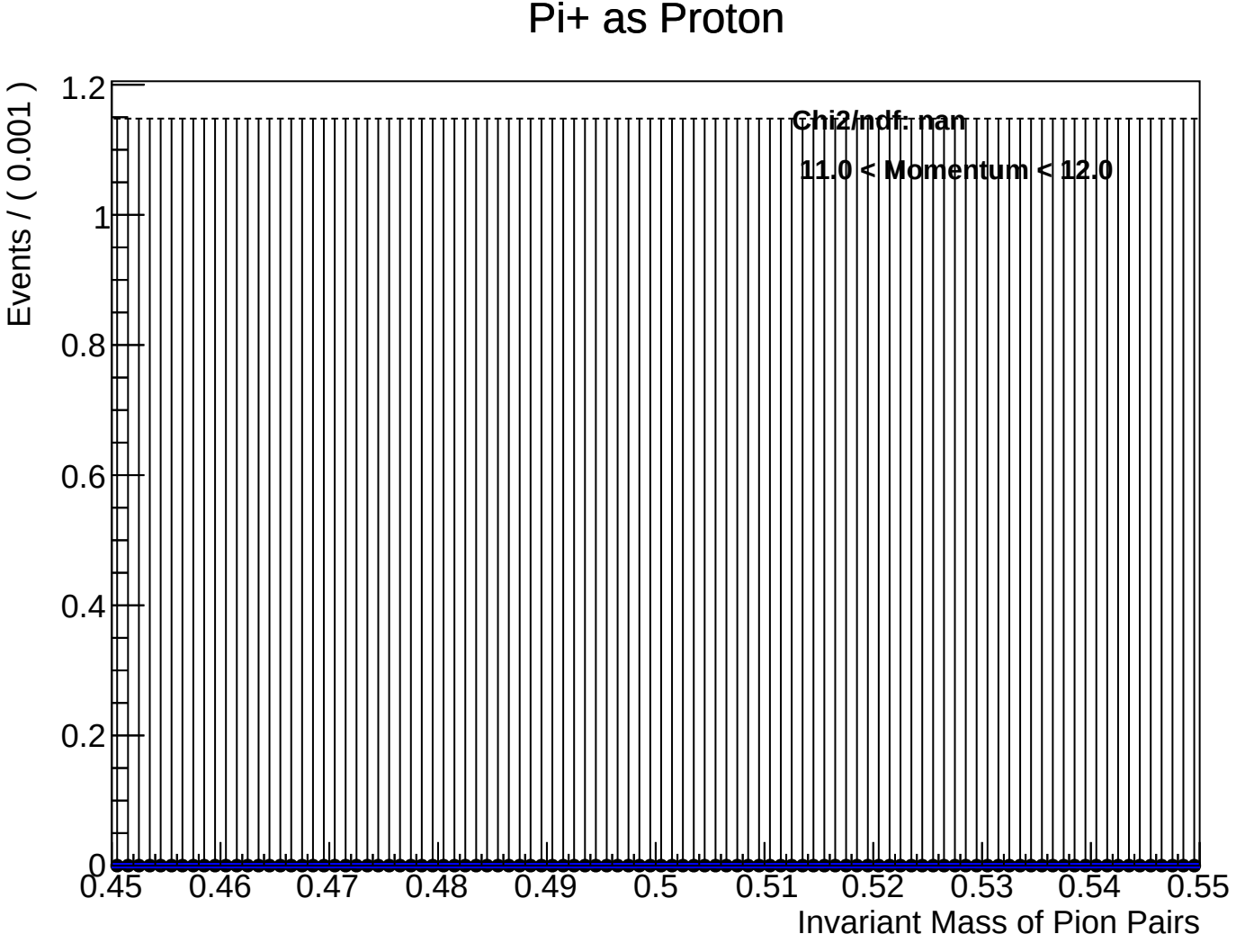

Pi+ as Proton
Chi2/ndf: nan
10.0 < Momentum < 11.0
Events / (0.001)
1.2
1
0.8
0.6
0.4
0.2
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

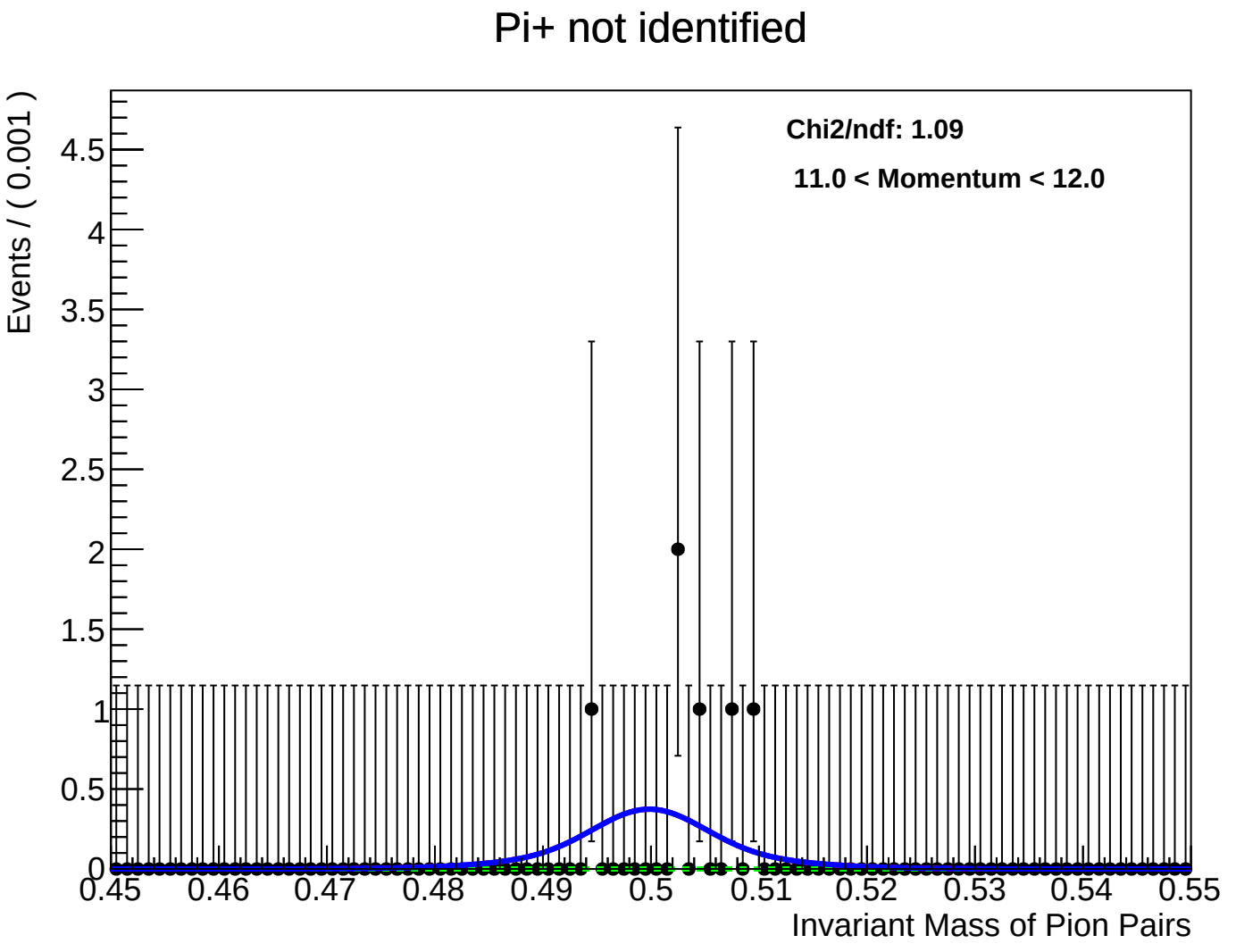

Pi+ not identified
Chi2/ndf: 0.85
10.0 < Momentum < 11.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

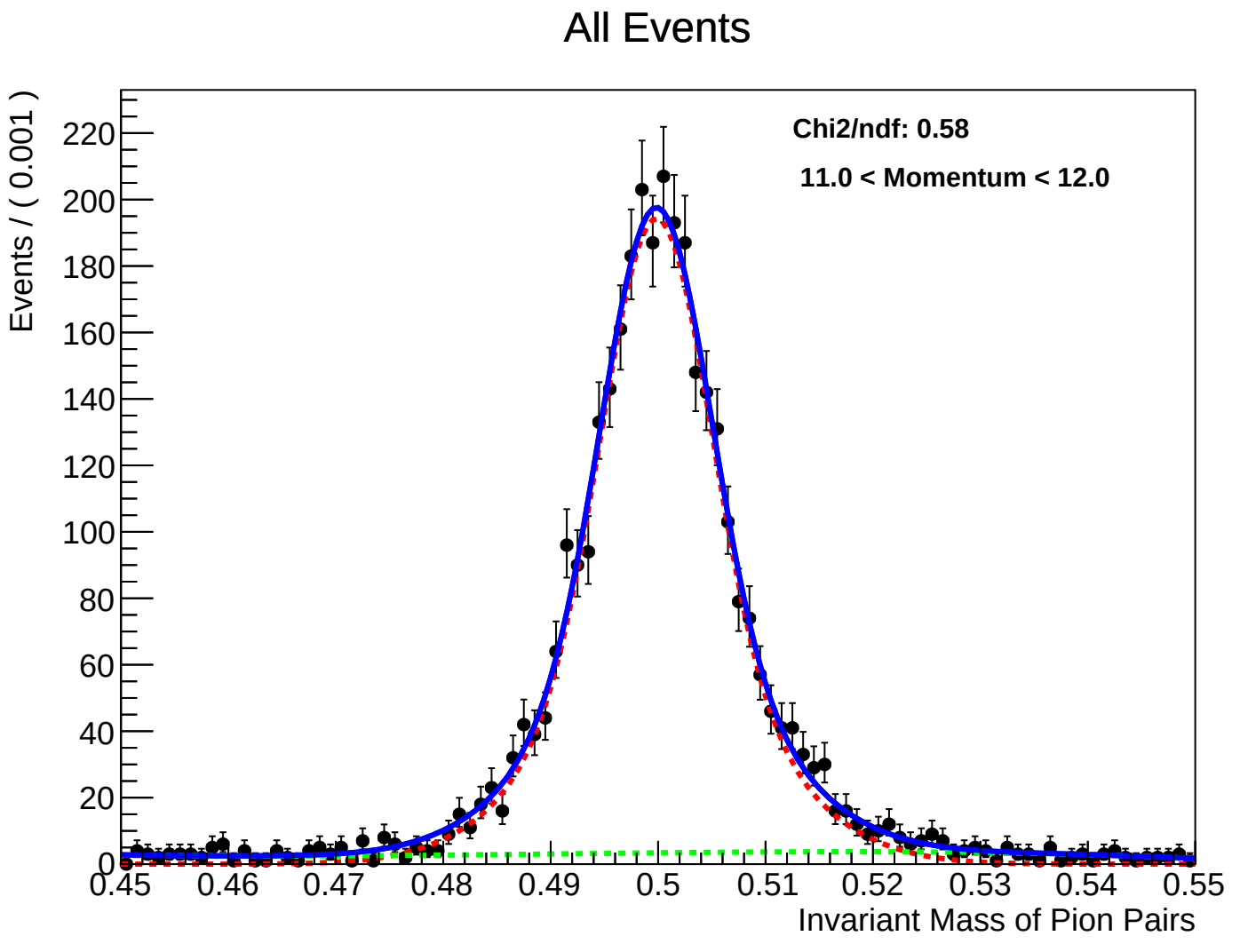

All Events
Chi2/ndf: 1.04
10.0 < Momentum < 11.0
Events / (0.001)
0
50
100
150
200
250
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

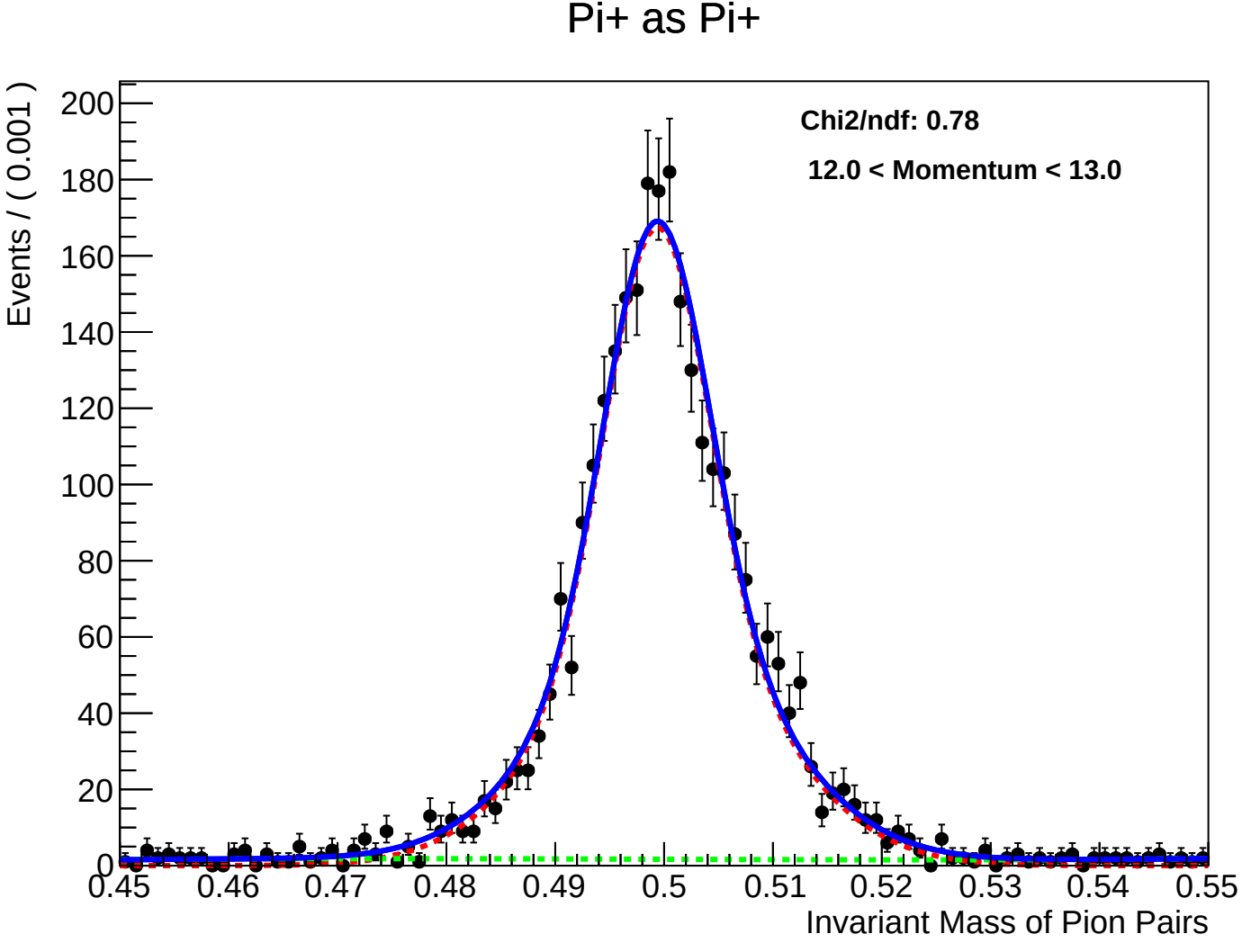

Pi+ as Pi+
Chi2/ndf: 0.55
11.0 < Momentum < 12.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
140
160
180
200
220
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

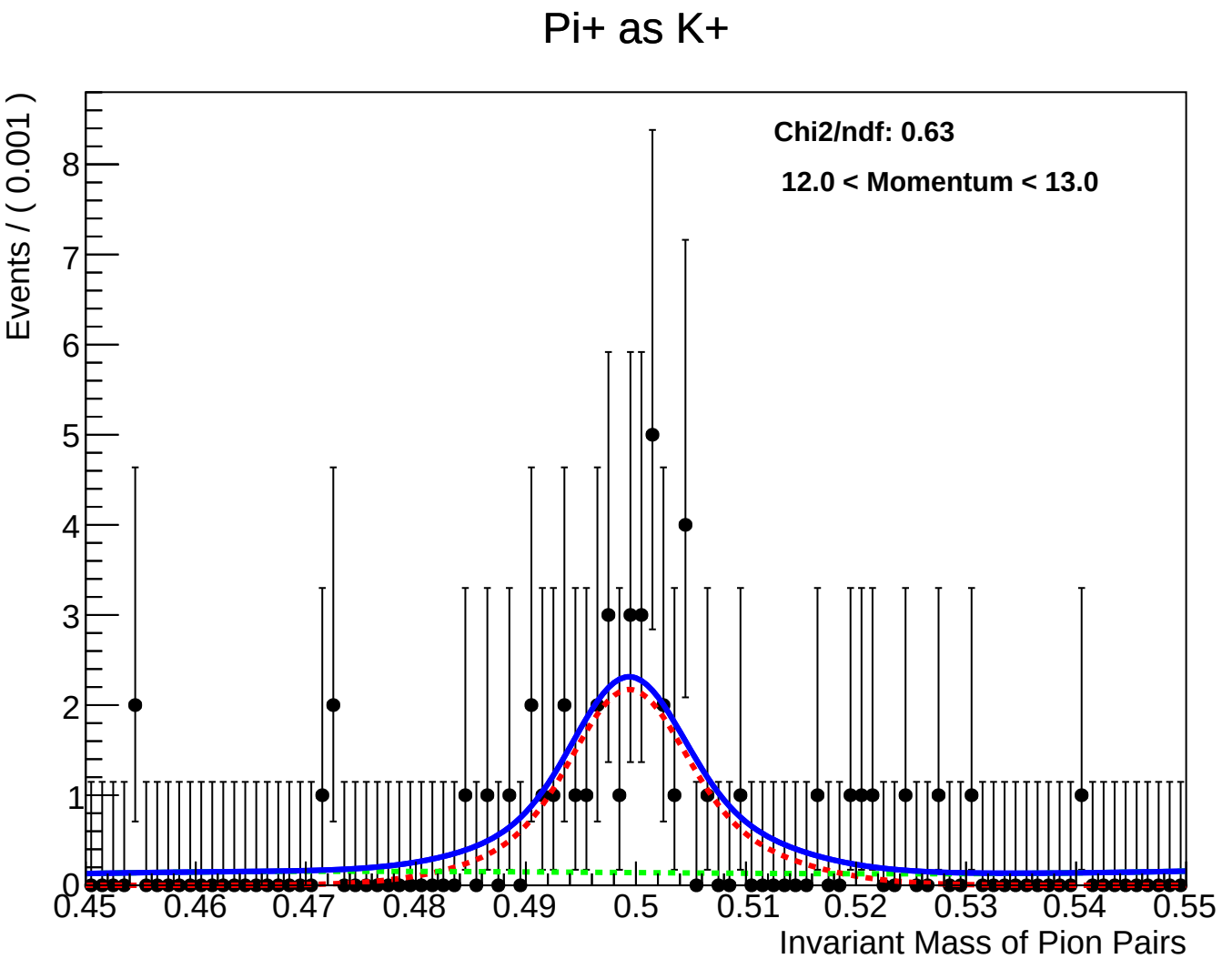

Pi+ as K+
Chi2/ndf: 0.63
11.0 < Momentum < 12.0
Events / (0.001)
0
1
2
3
4
5
6
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

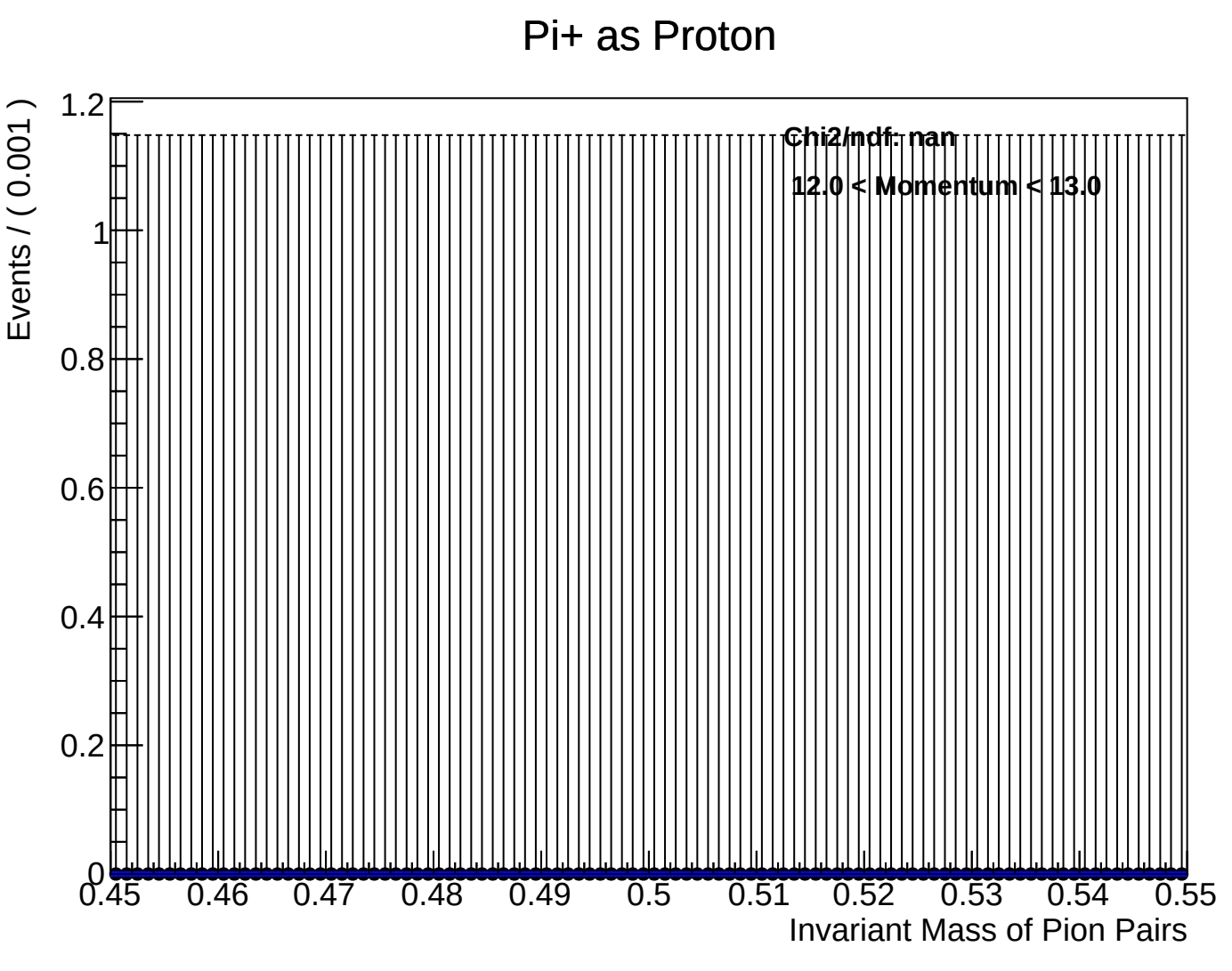

Pi+ as Proton
Chi2/ndf: nan
11.0 < Momentum < 12.0
Events / (0.001)
1.2
1
0.8
0.6
0.4
0.2
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

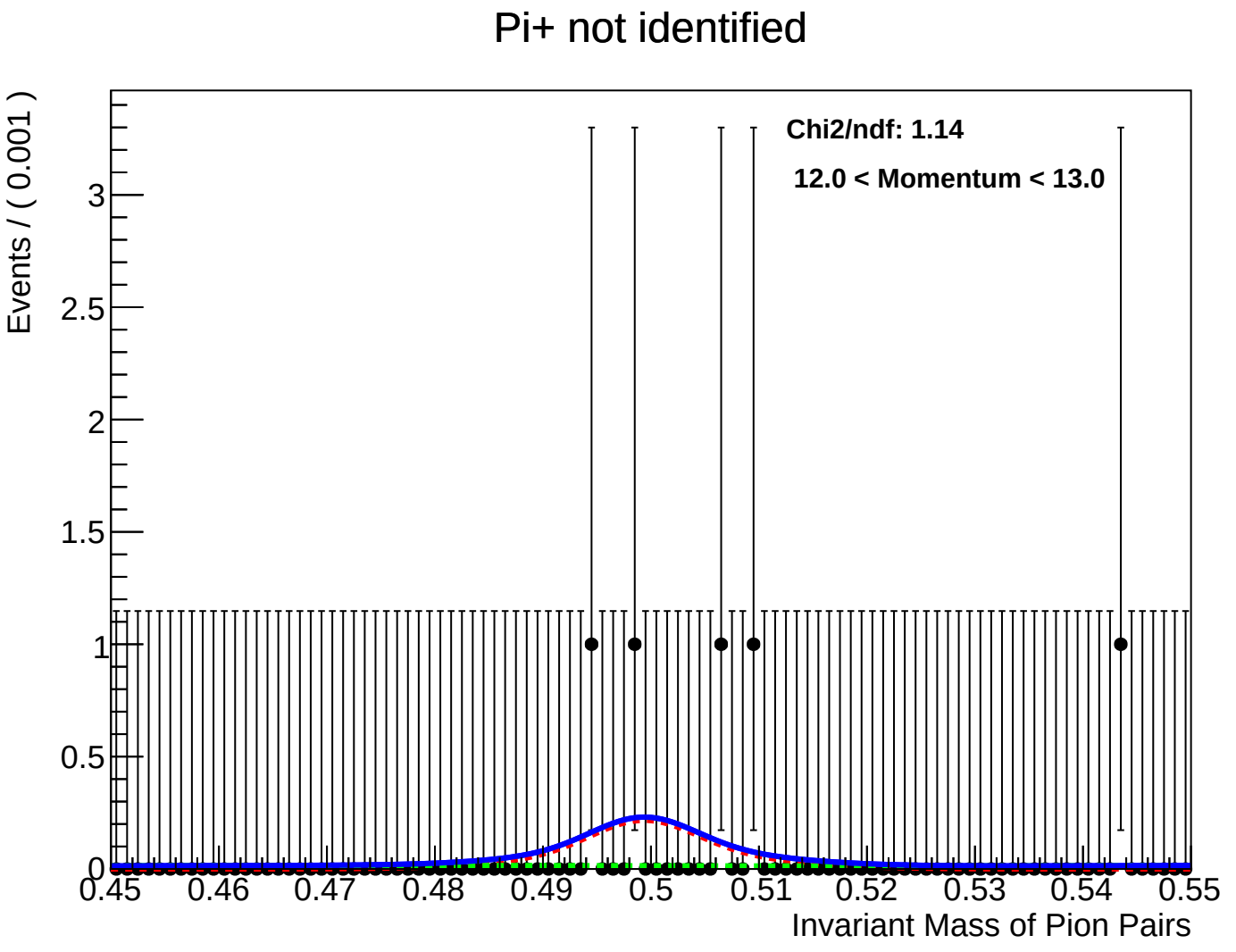

Pi+ not identified
Chi2/ndf: 1.09
11.0 < Momentum < 12.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55


All Events
Chi2/ndf: 0.58
11.0 < Momentum < 12.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
140
160
180
200
220
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

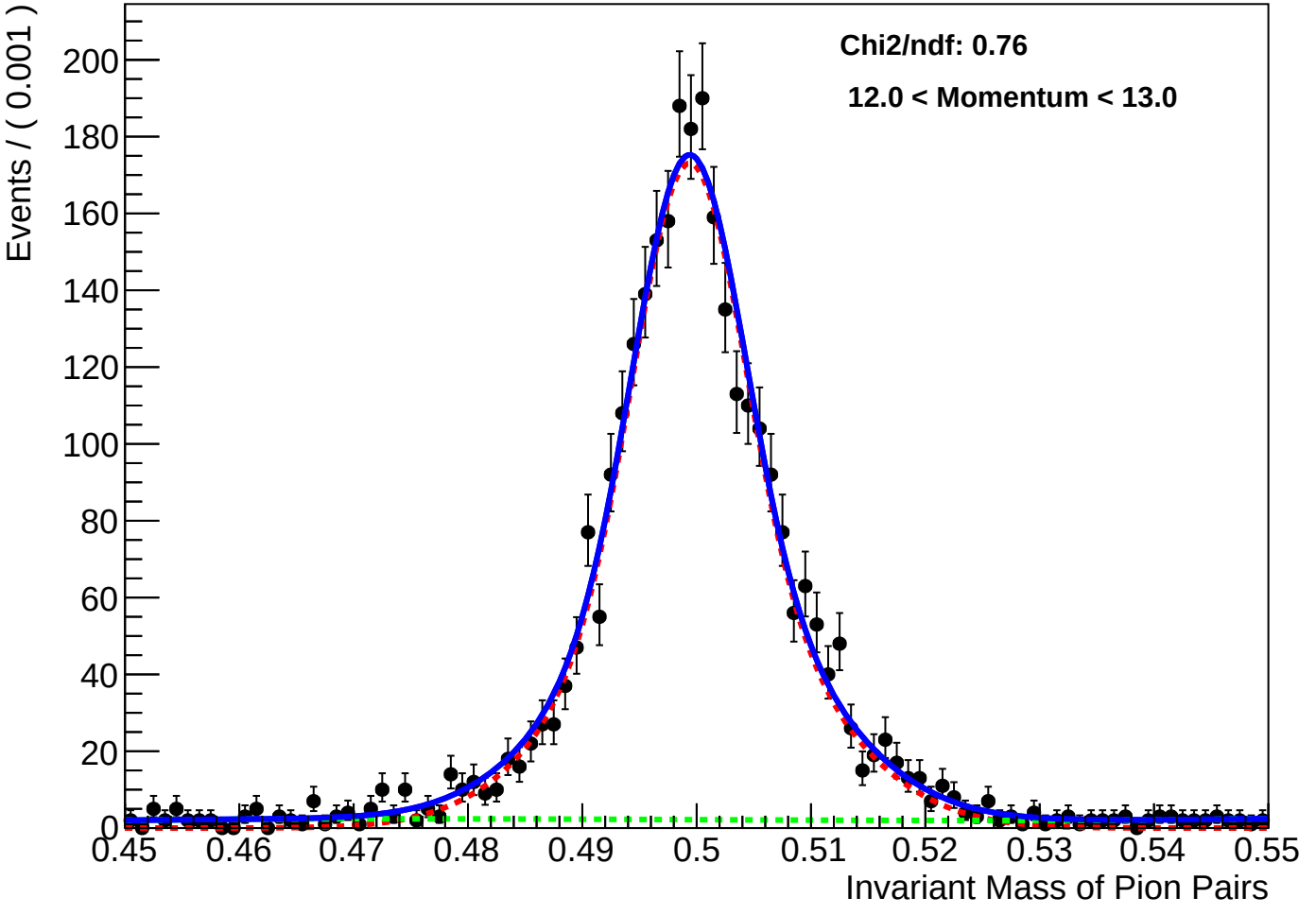

Pi+ as Pi+
Chi2/ndf: 0.78
12.0 < Momentum < 13.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
140
160
180
200
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

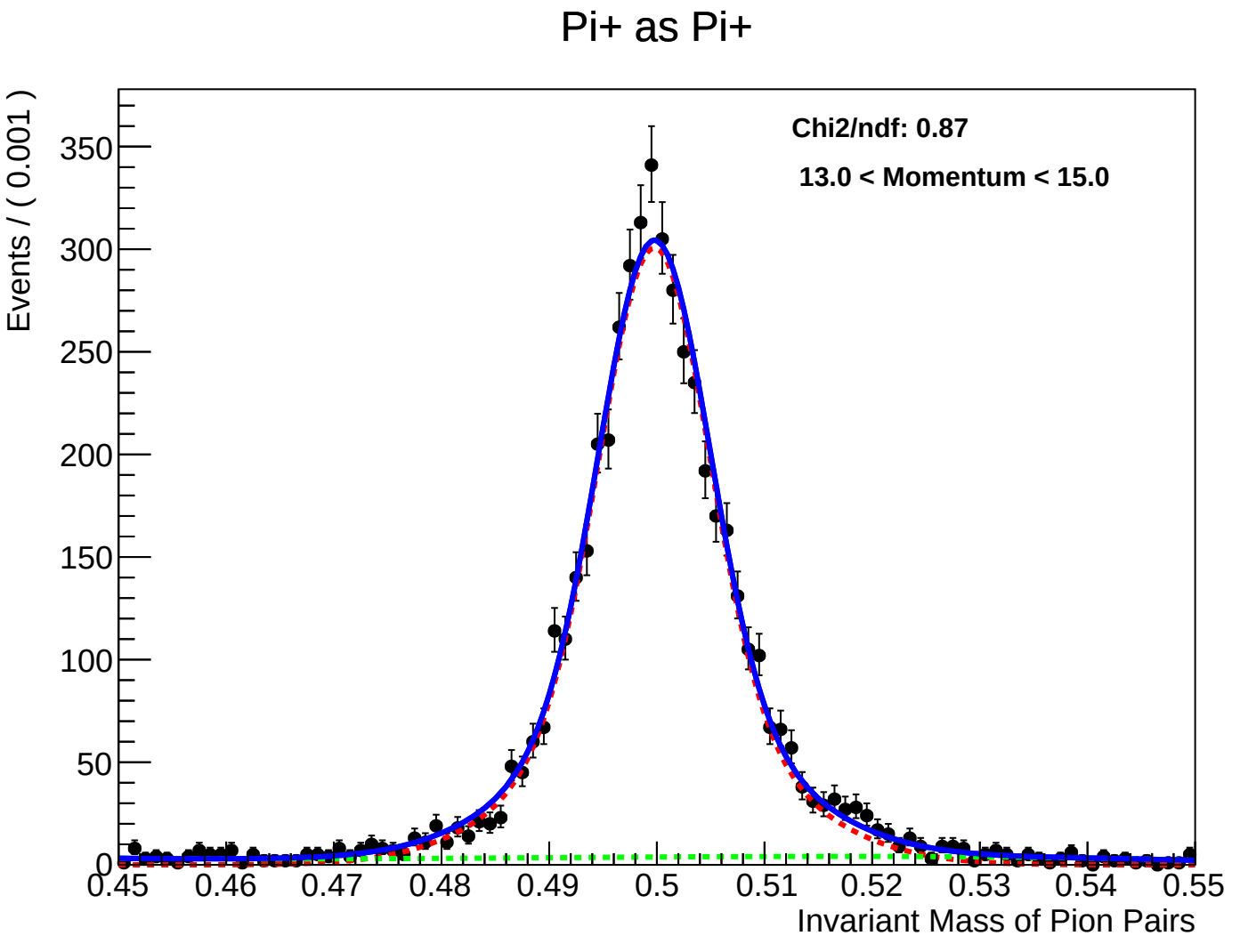

Pi+ as K+
Chi2/ndf: 0.63
12.0 < Momentum < 13.0
Events / (0.001)
0
1
2
3
4
5
6
7
8
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

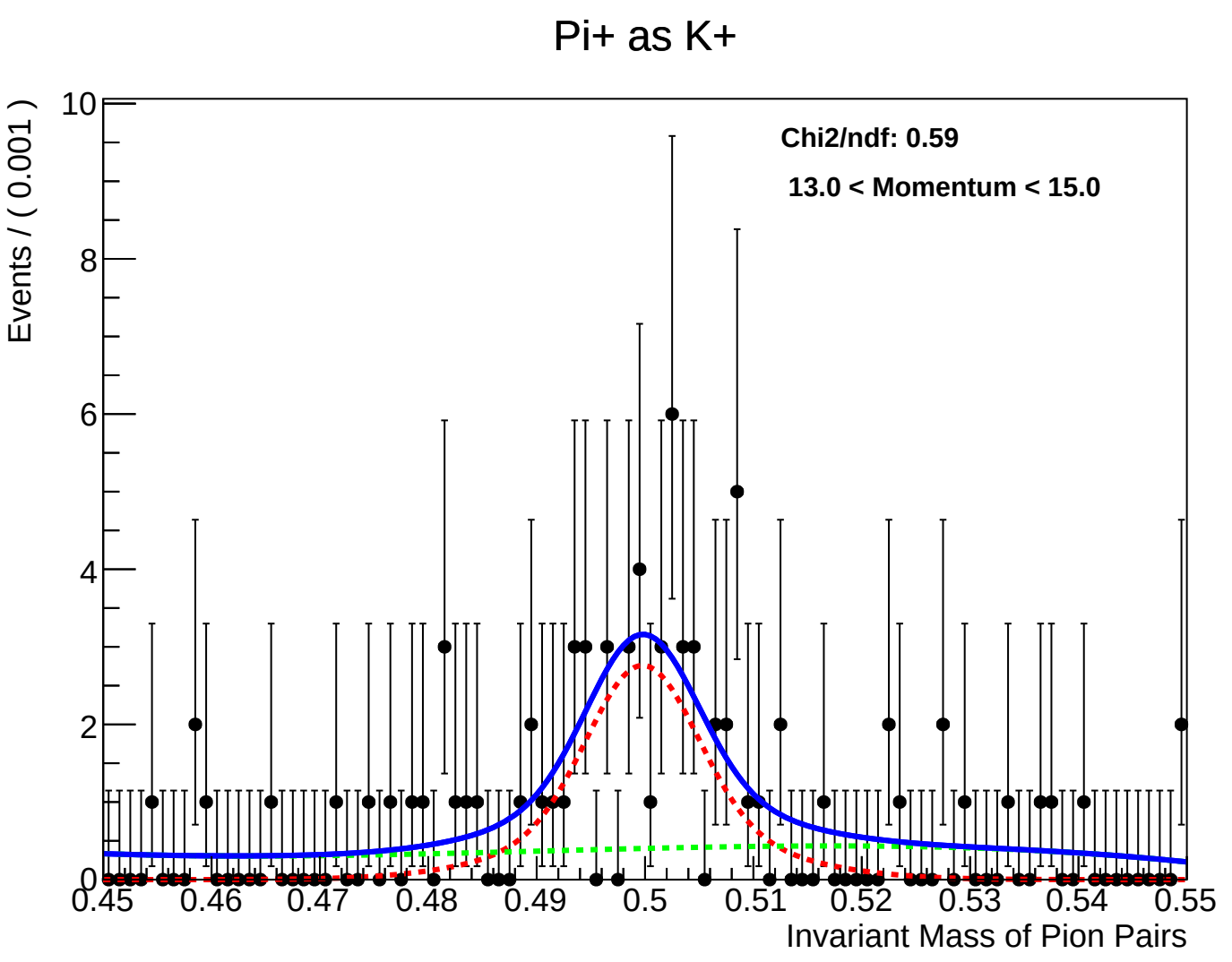

Pi+ as Proton
Chi2/ndf: nan
12.0 < Momentum < 13.0
Events / (0.001)
1.2
1
0.8
0.6
0.4
0.2
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

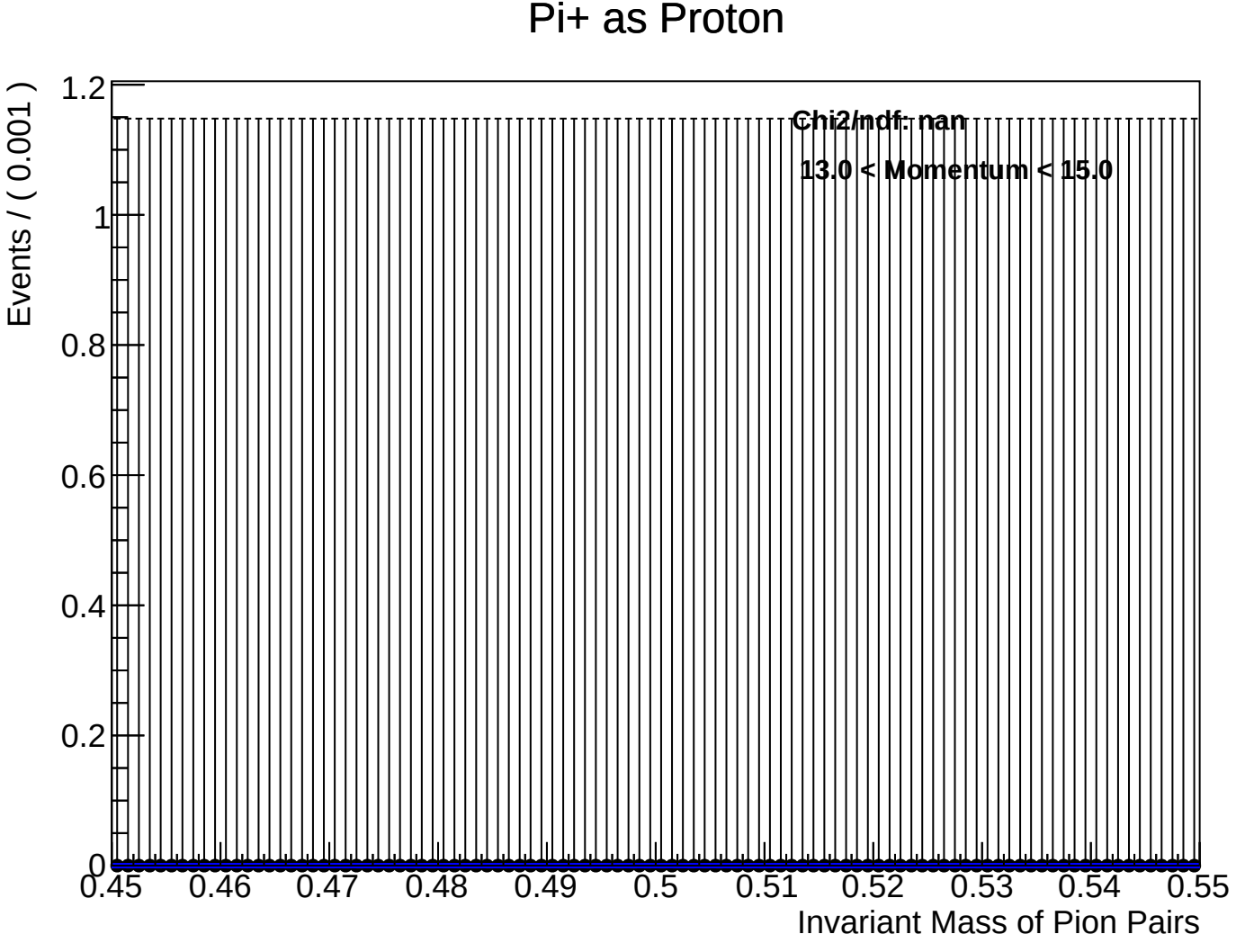

Pi+ not identified
Chi2/ndf: 1.14
12.0 < Momentum < 13.0
Events / (0.001)
0
0.5
1
1.5
2
2.5
3
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

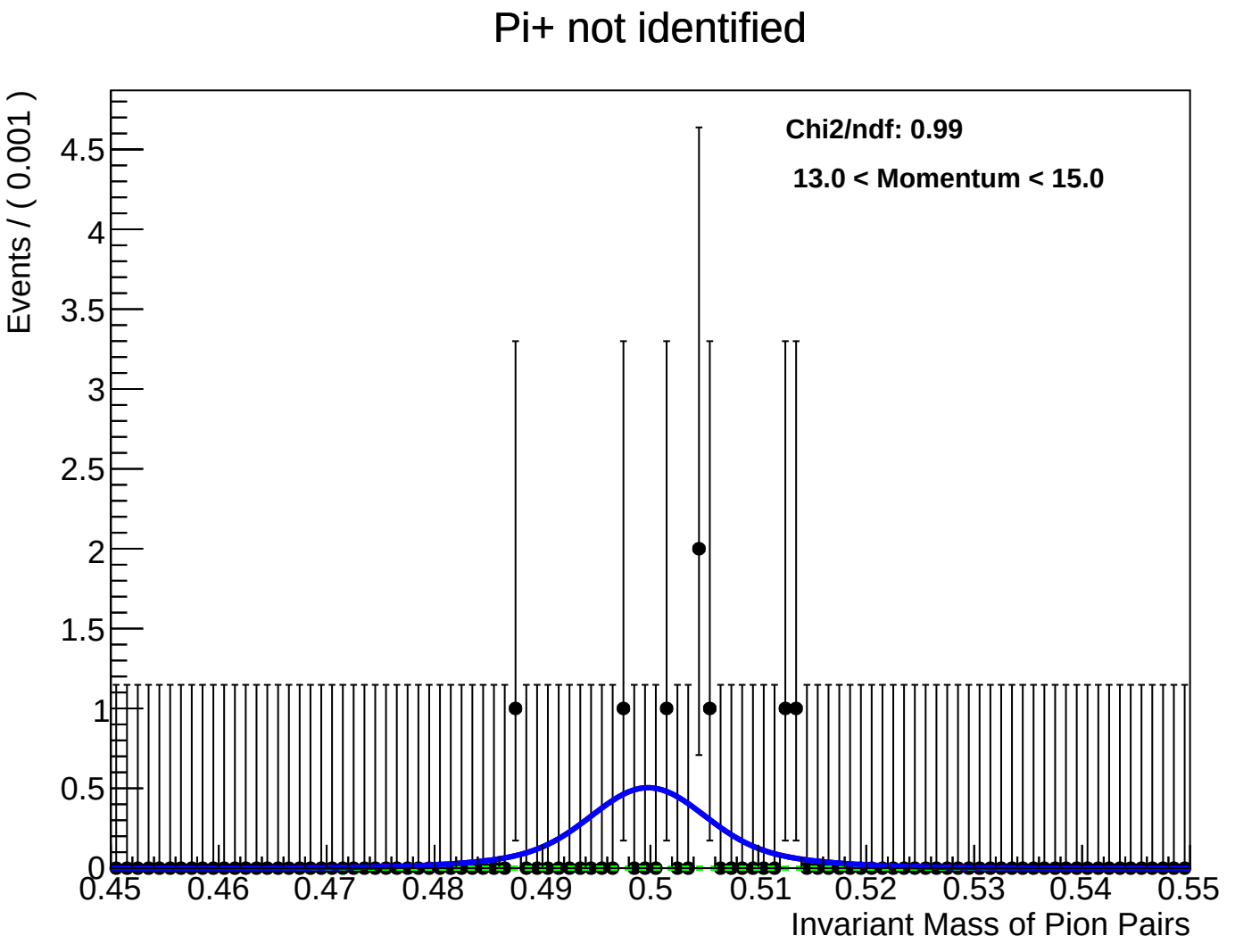
All Events

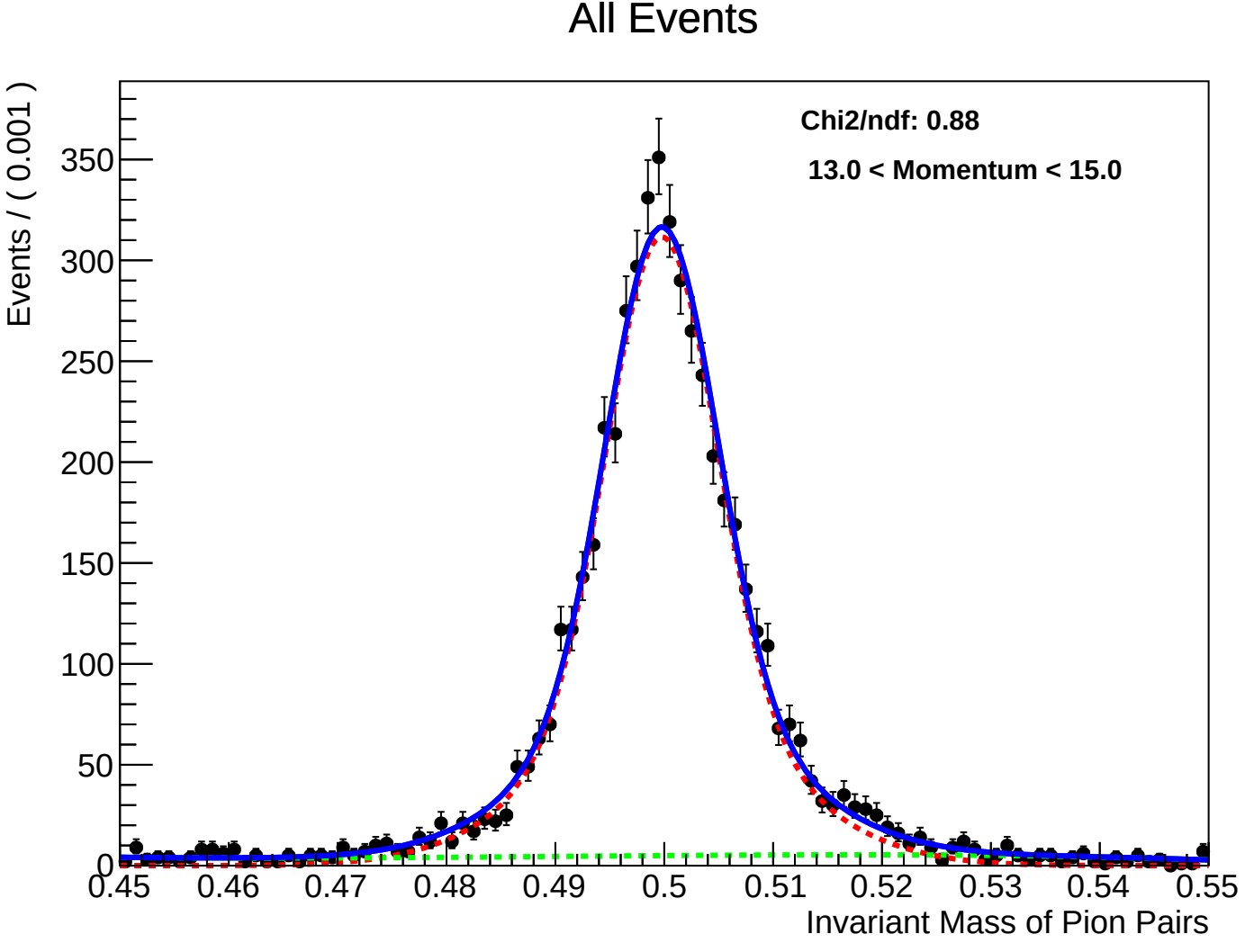

Chi2/ndf: 0.76
12.0 < Momentum < 13.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
140
160
180
200
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

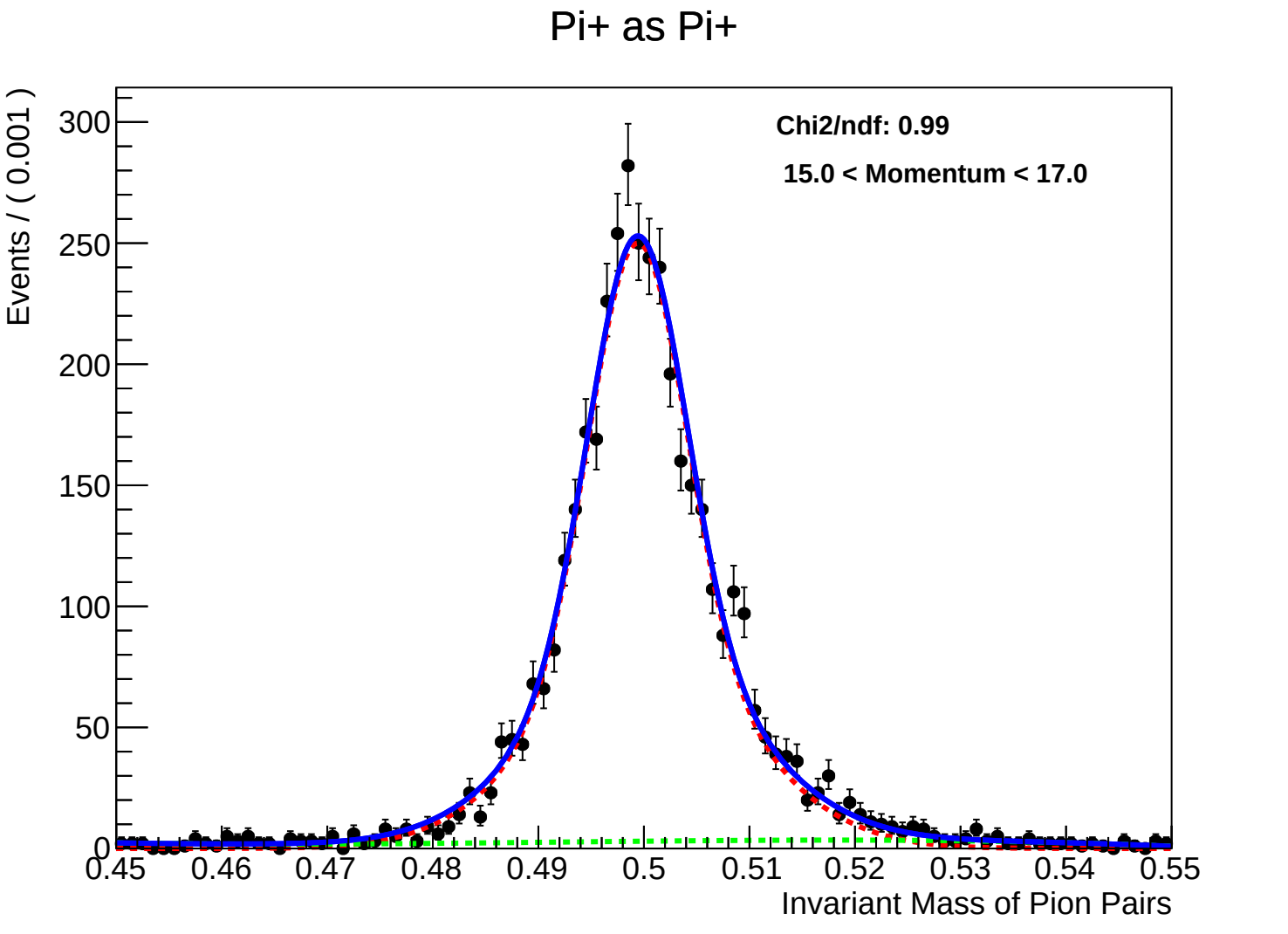

Pi+ as Pi+
Chi2/ndf: 0.87
13.0 < Momentum < 15.0
Events / (0.001)
0
50
100
150
200
250
300
350
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

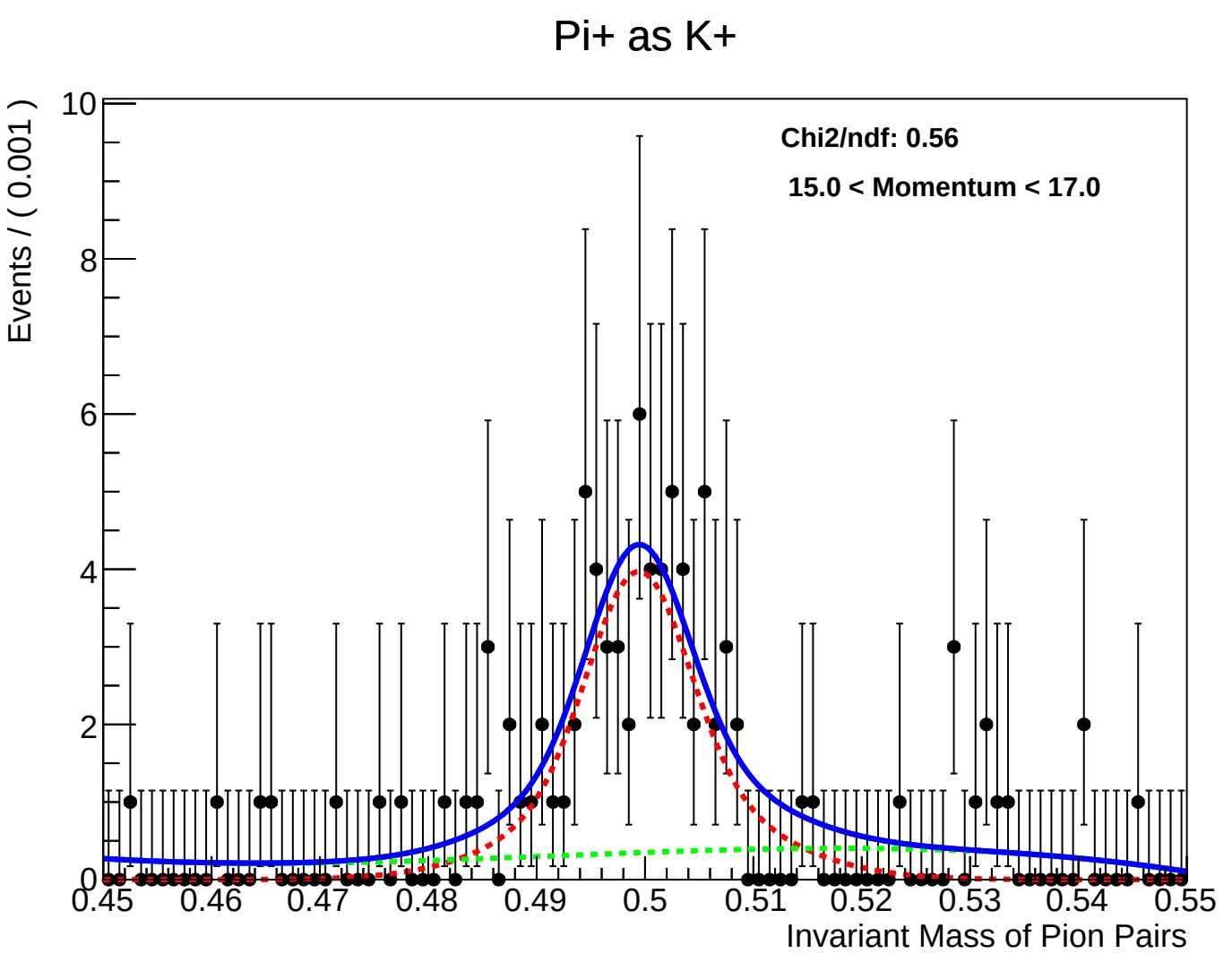

Pi+ as K+
Chi2/ndf: 0.59
13.0 < Momentum < 15.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
2
4
6
8
10
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

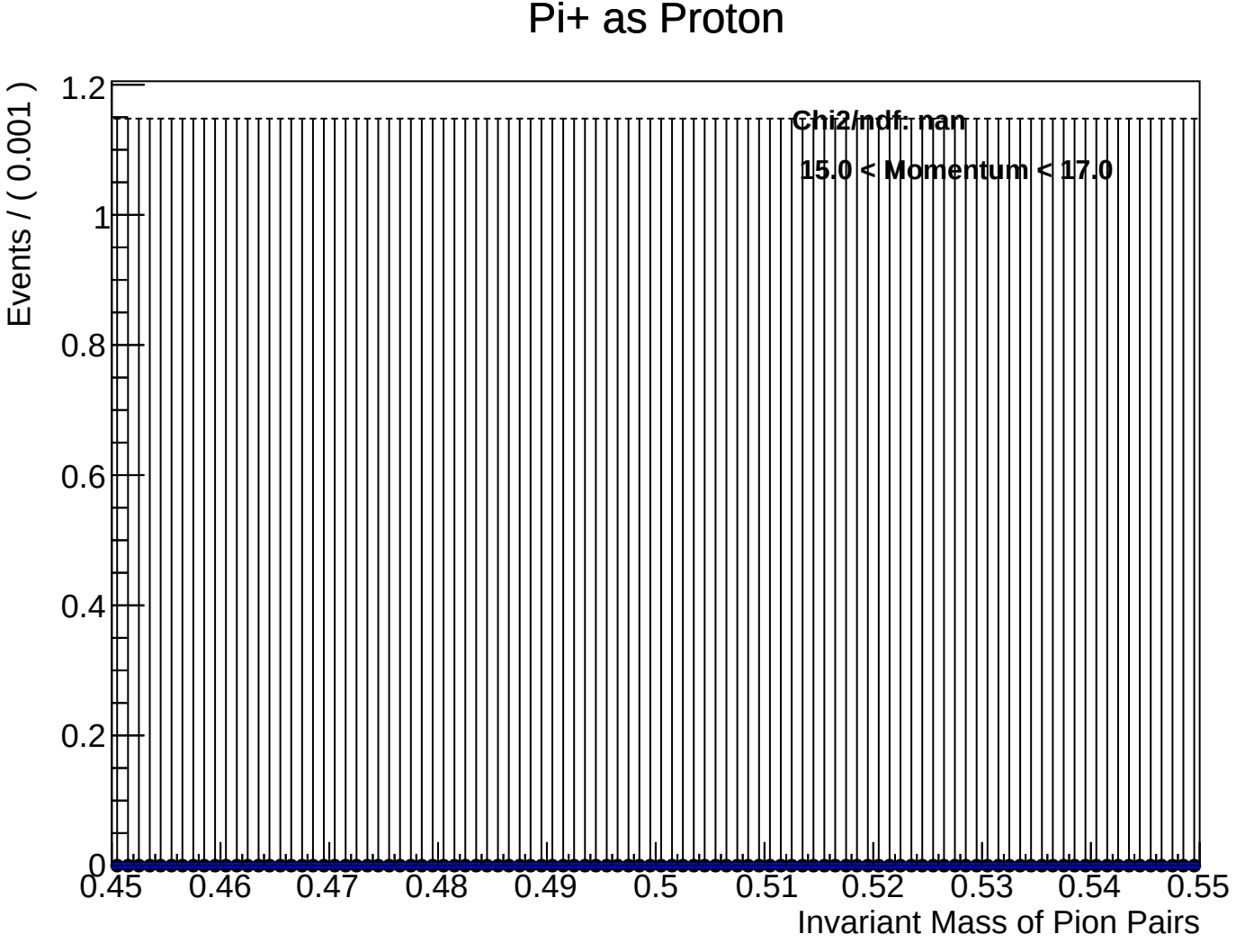

Pi+ as Proton
Chi2/ndf: nan
13.0 < Momentum < 15.0
Events / (0.001)
1.2
1
0.8
0.6
0.4
0.2
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

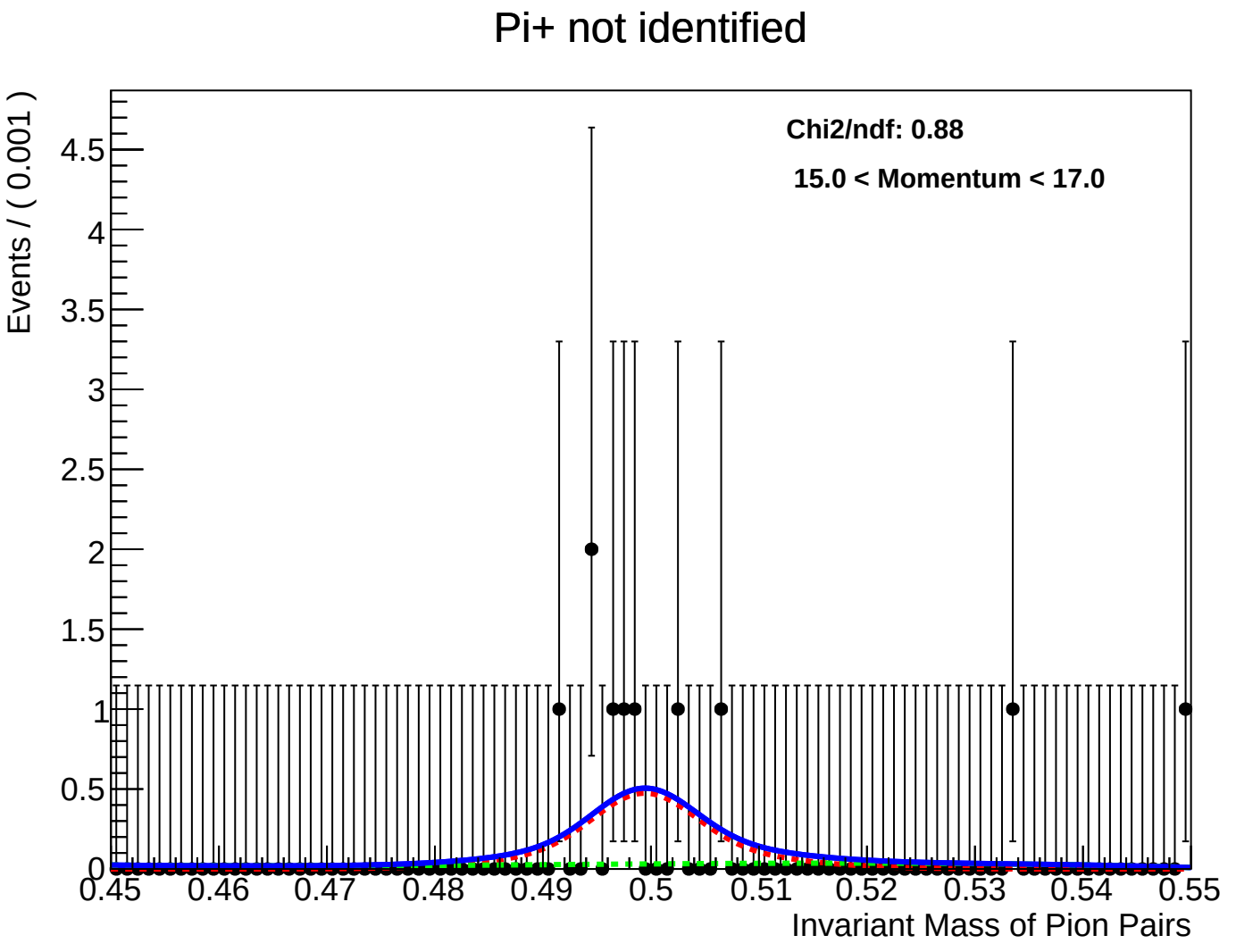

Pi+ not identified
Chi2/ndf: 0.99
13.0 < Momentum < 15.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

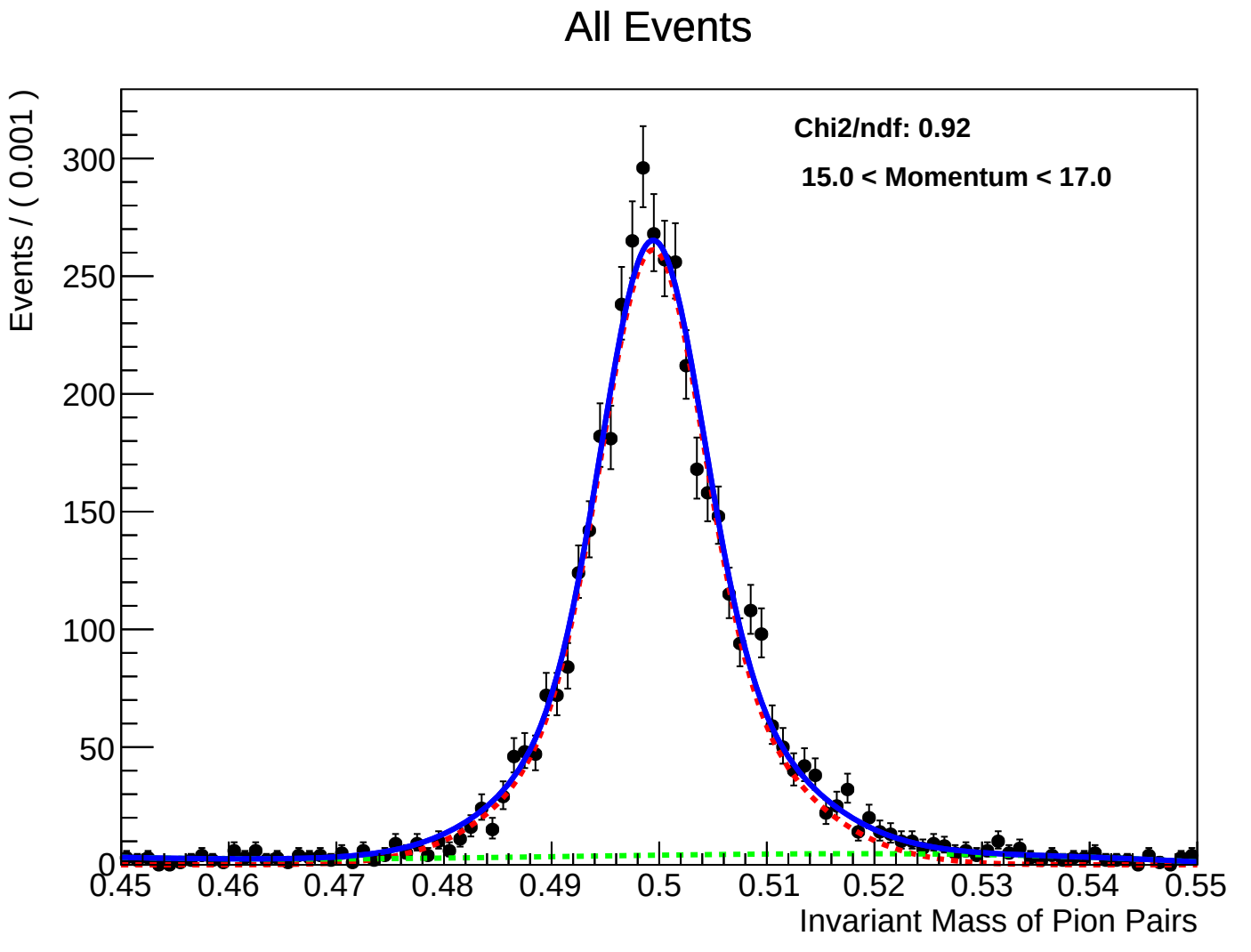

All Events
Chi2/ndf: 0.88
13.0 < Momentum < 15.0
Events / (0.001)
0
50
100
150
200
250
300
350
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

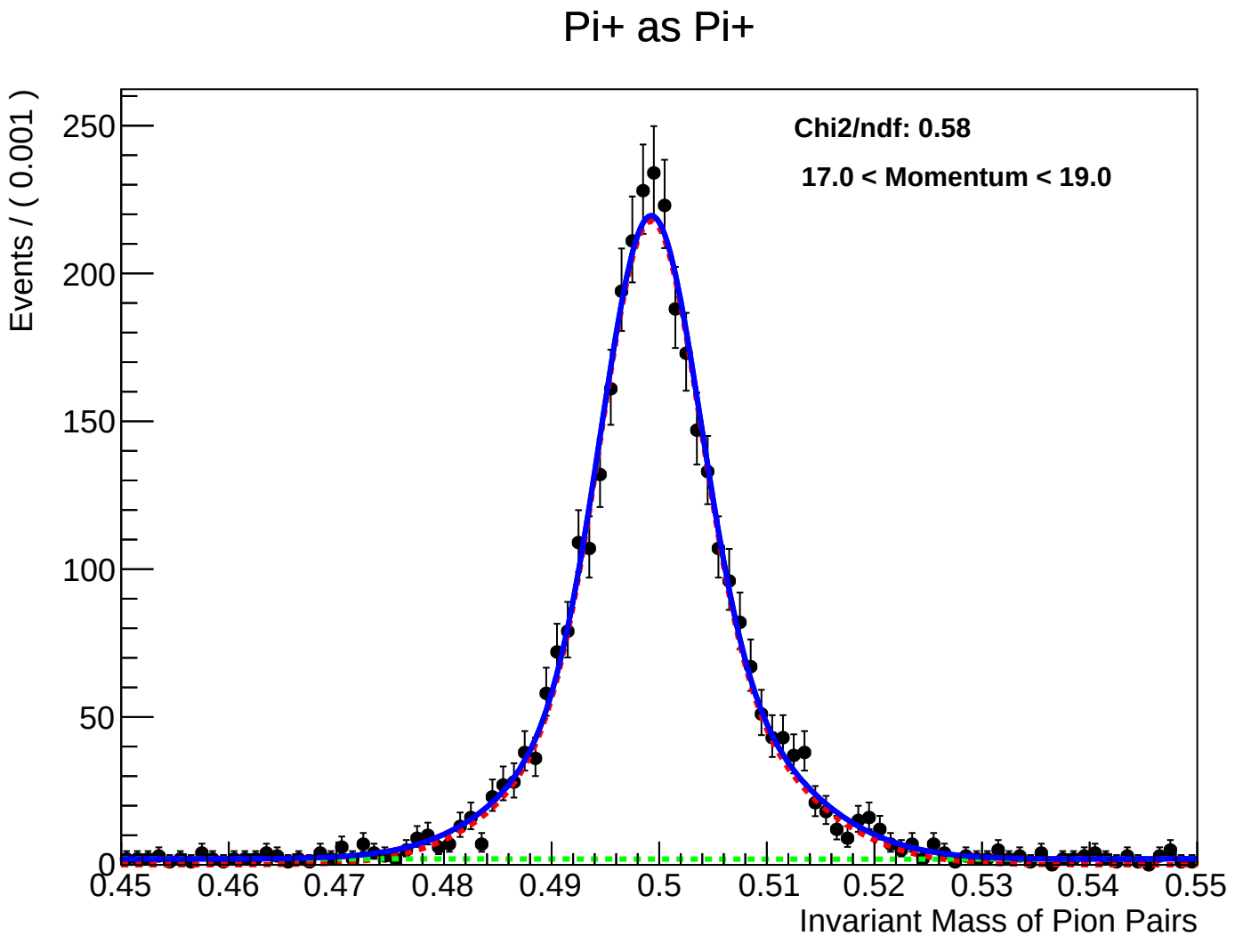

Pi+ as Pi+
Chi2/ndf: 0.99
15.0 < Momentum < 17.0
Events / (0.001)
300
250
200
150
100
50
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

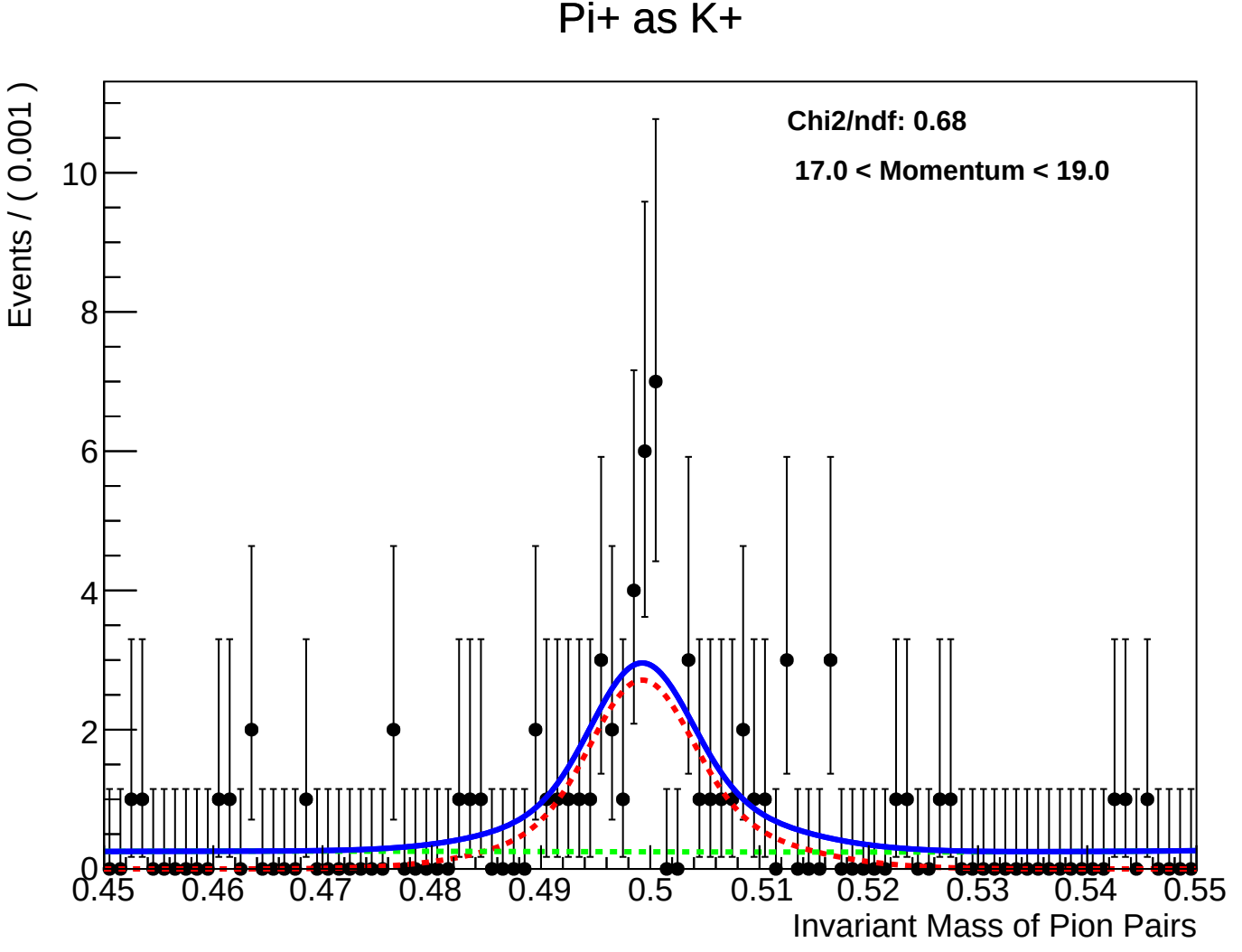

Pi+ as K+
Chi2/ndf: 0.56
15.0 < Momentum < 17.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
2
4
6
8
10
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

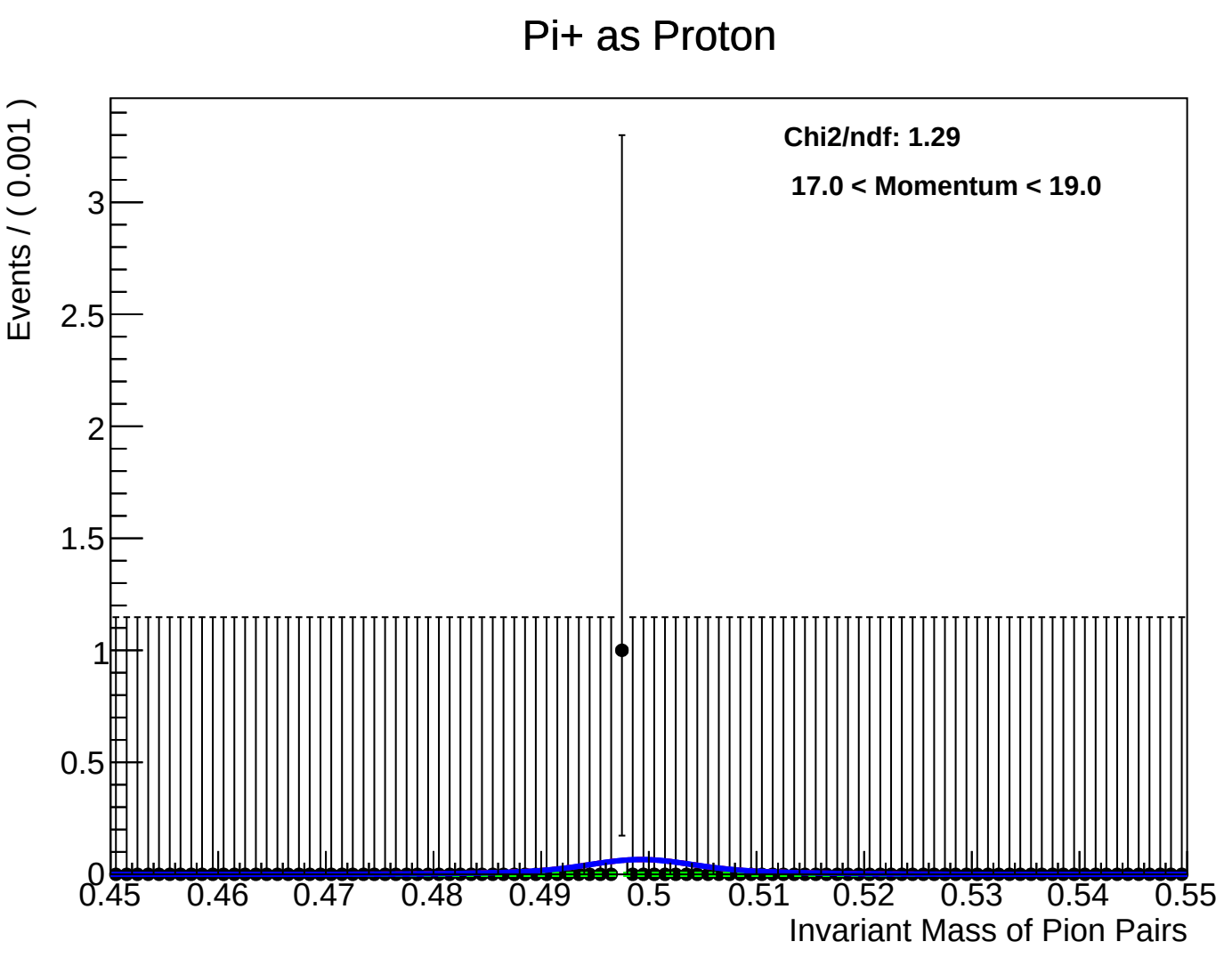

Pi+ as Proton
Chi2/ndf: nan
15.0 < Momentum < 17.0
Events / (0.001)
1.2
1
0.8
0.6
0.4
0.2
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

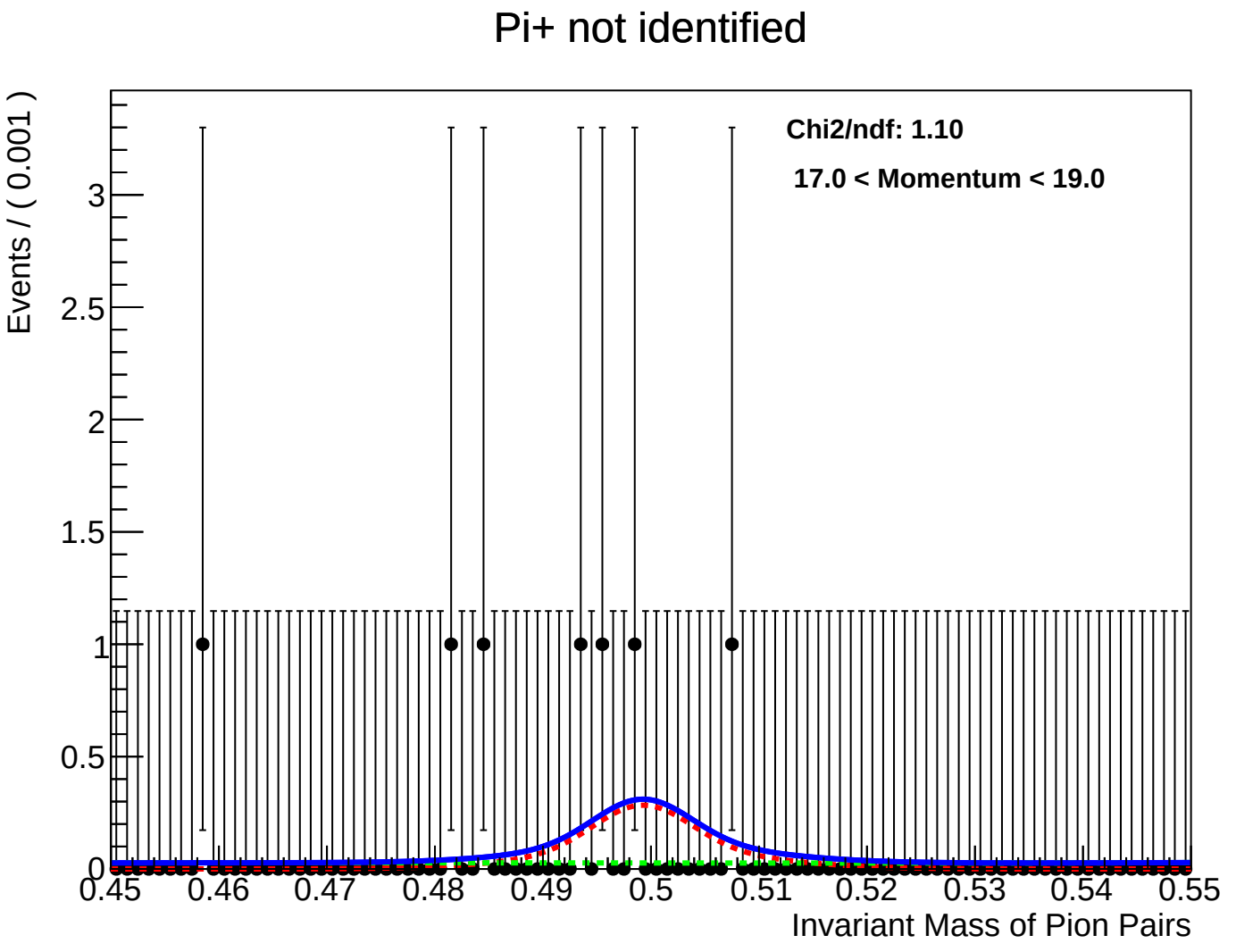

Pi+ not identified
Chi2/ndf: 0.88
15.0 < Momentum < 17.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

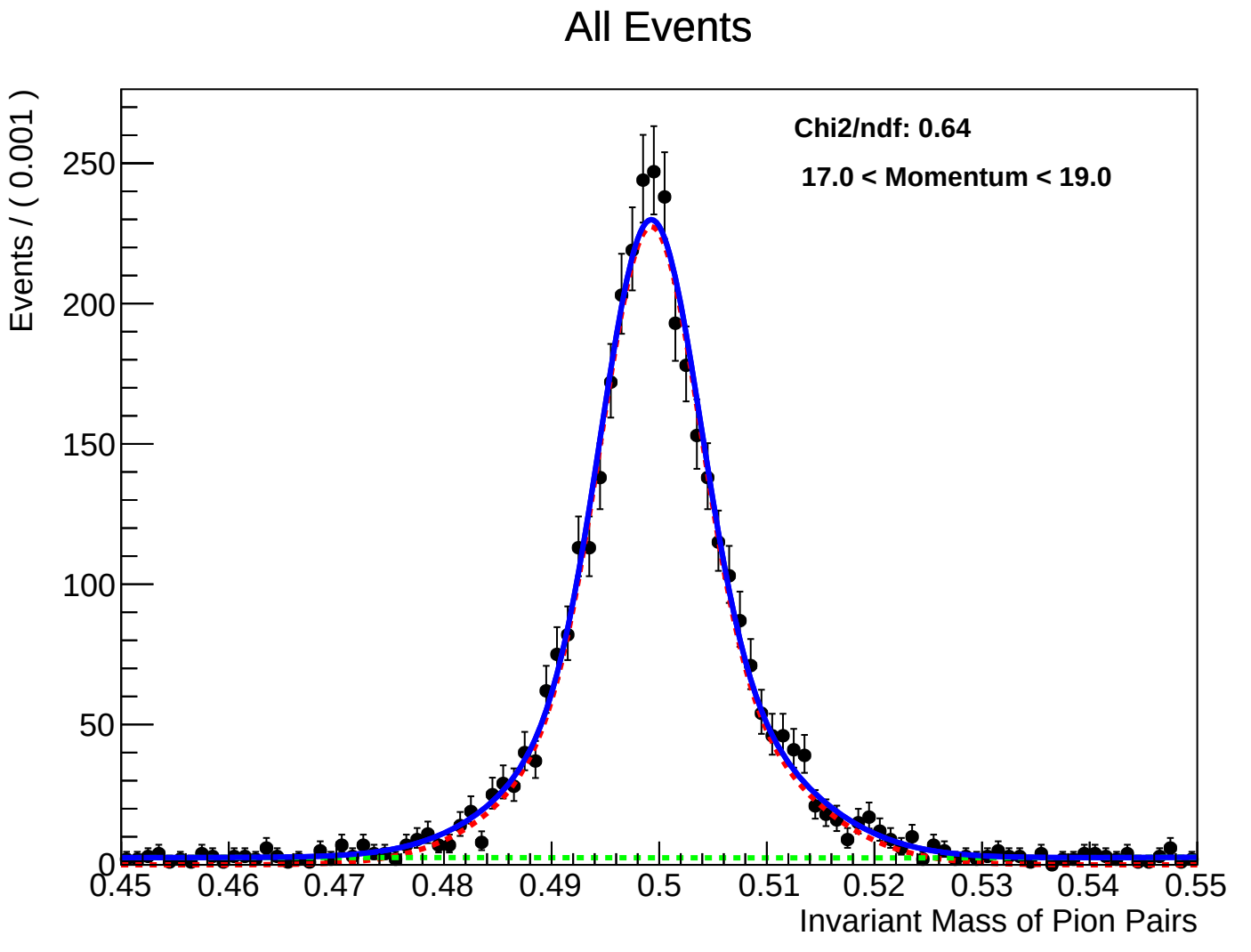

All Events
Chi2/ndf: 0.92
15.0 < Momentum < 17.0
Events / (0.001)
0
50
100
150
200
250
300
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

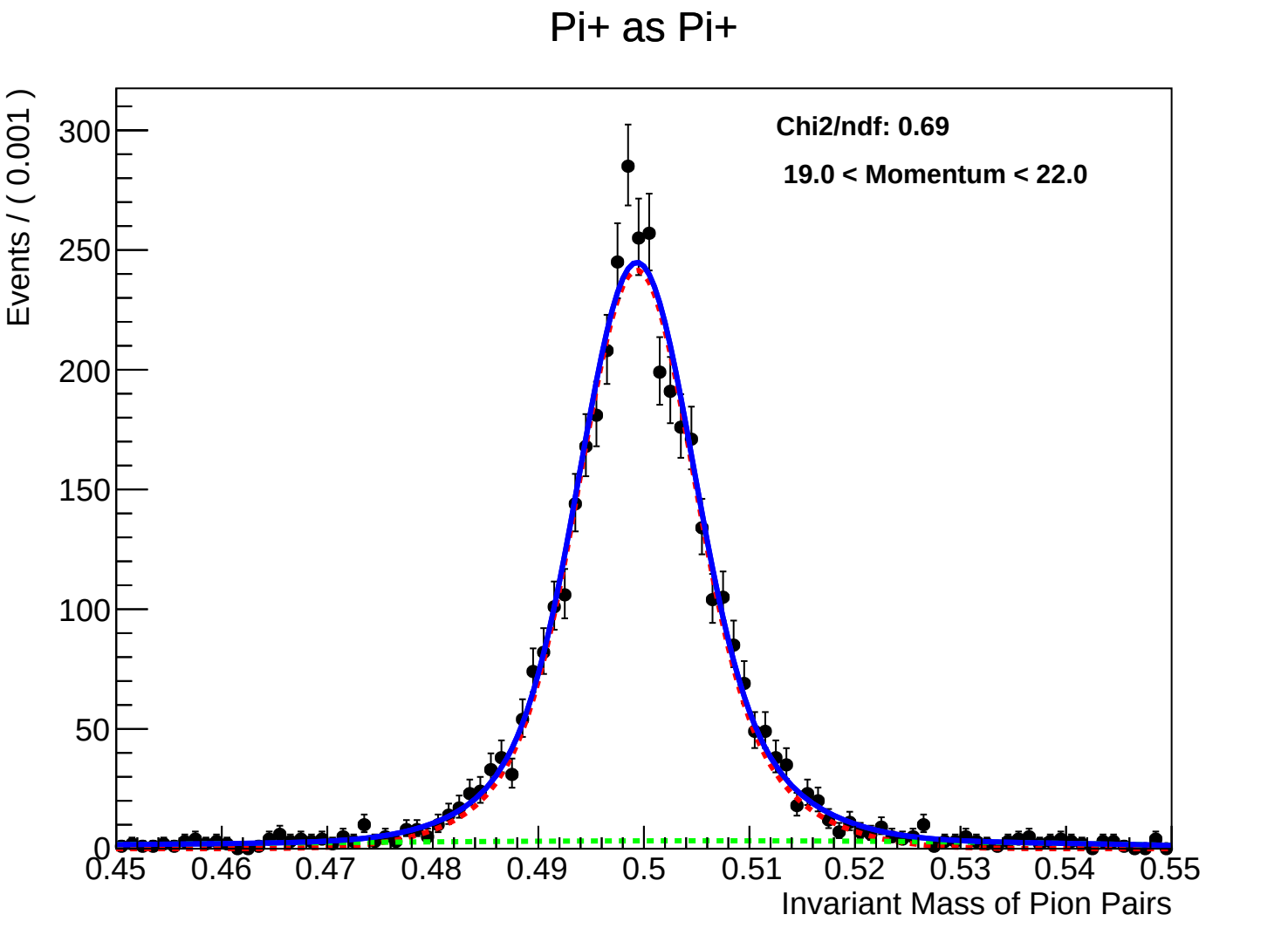

Pi+ as Pi+
Chi2/ndf: 0.58
17.0 < Momentum < 19.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
50
100
150
200
250
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

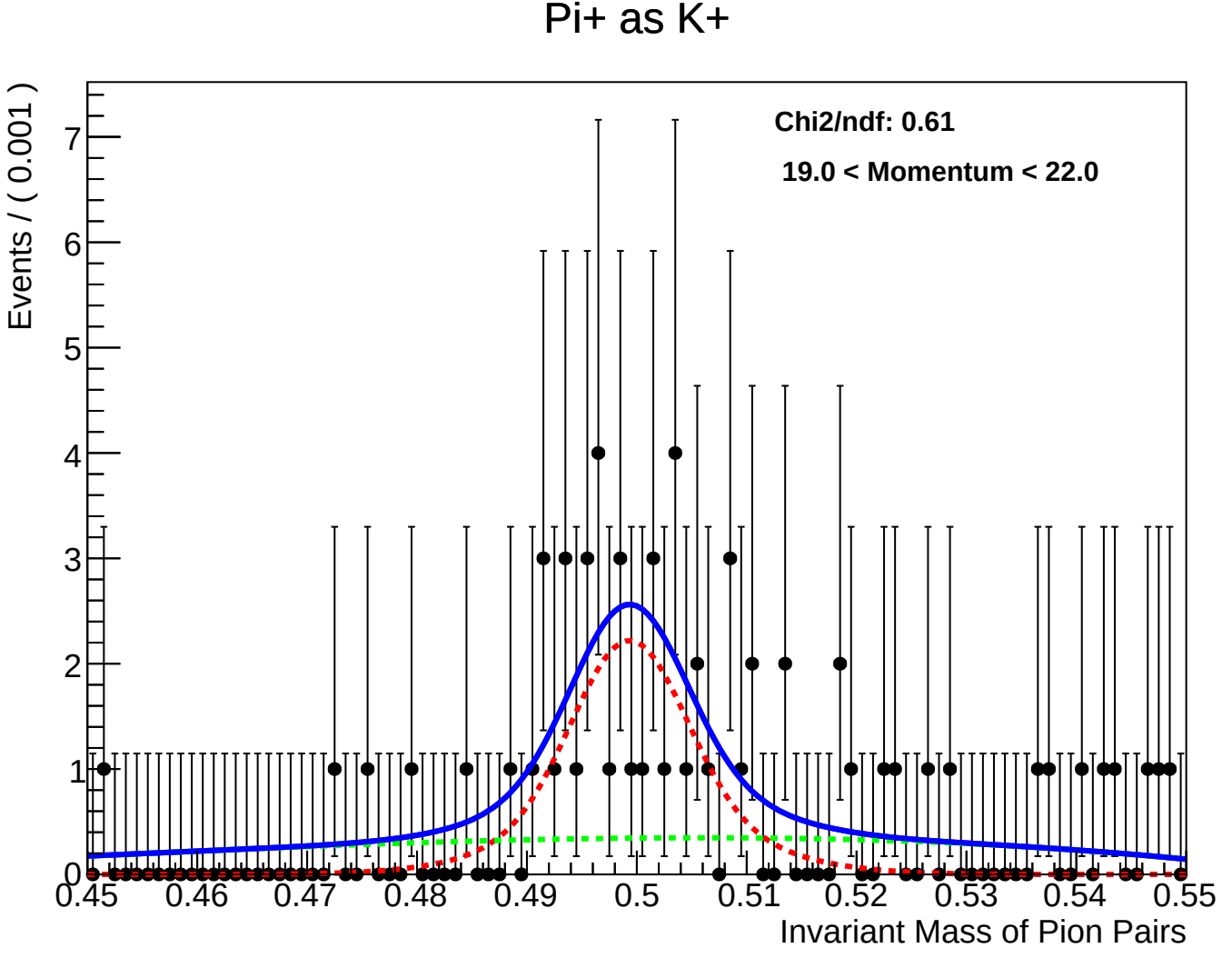

Pi+ as K+
Chi2/ndf: 0.68
17.0 < Momentum < 19.0
Events / (0.001)
0
2
4
6
8
10
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

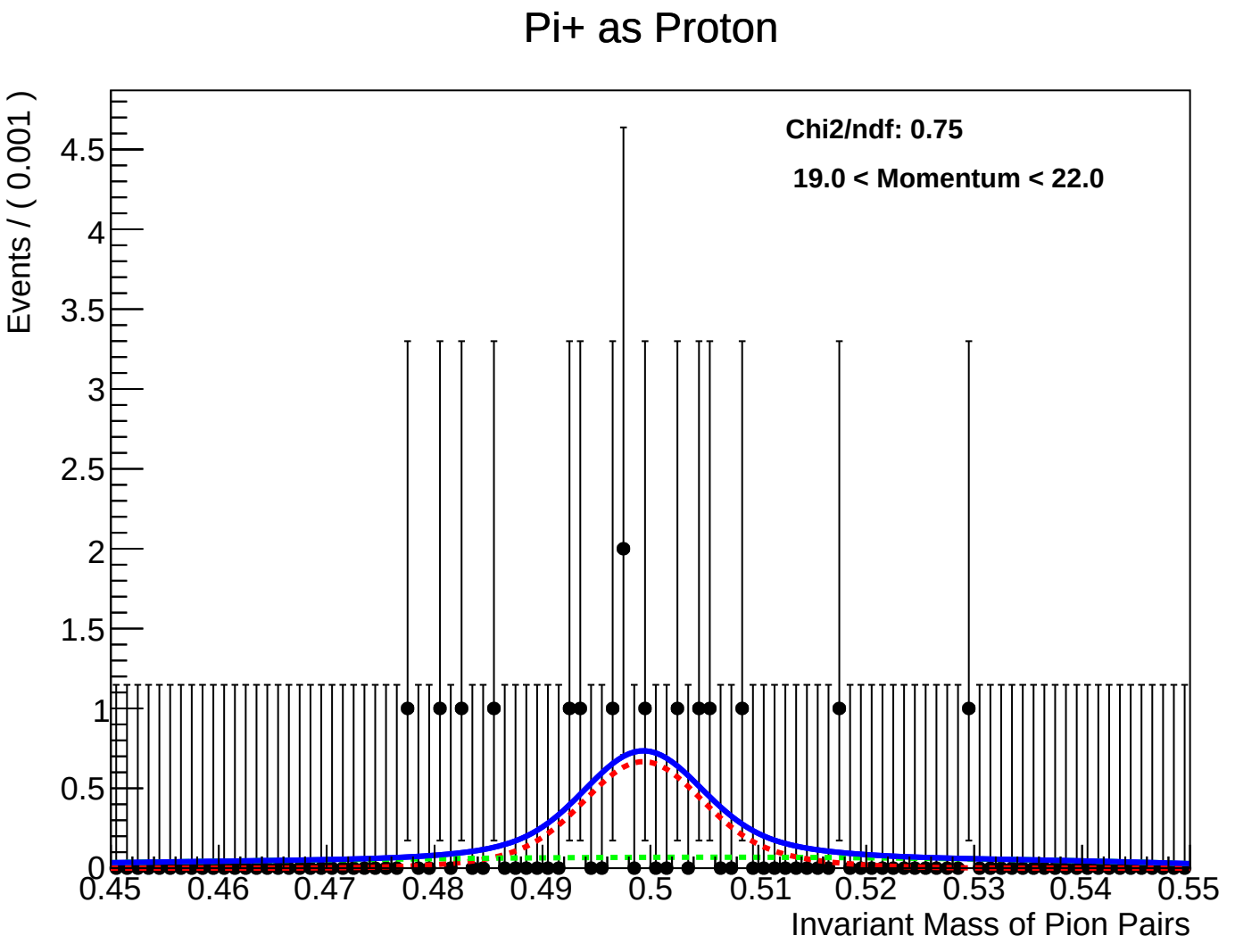

Pi+ as Proton
Chi2/ndf: 1.29
17.0 < Momentum < 19.0
Events / (0.001)
0
0.5
1
1.5
2
2.5
3
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

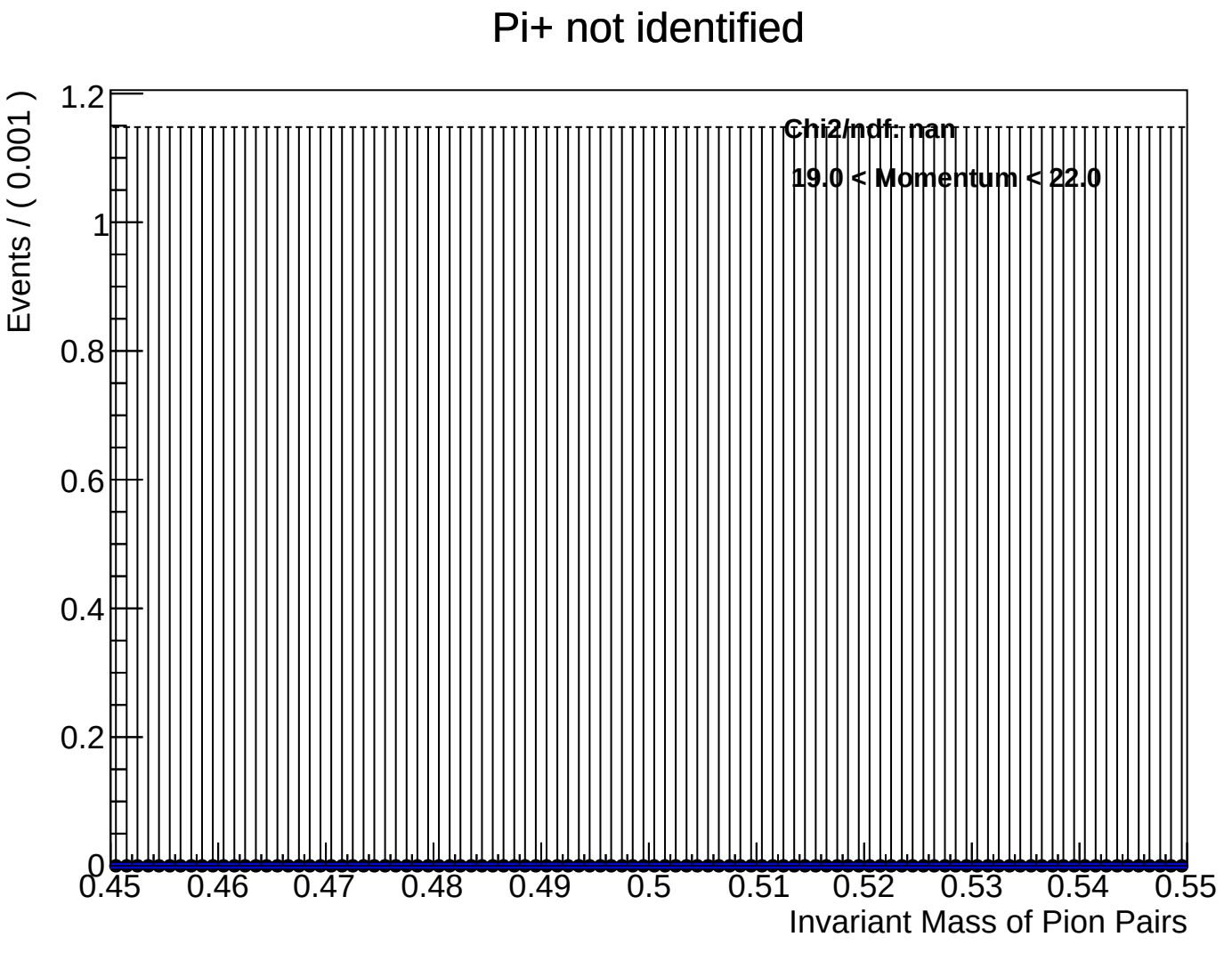

Pi+ not identified
Chi2/ndf: 1.10
17.0 < Momentum < 19.0
Events / (0.001)
0
0.5
1
1.5
2
2.5
3
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

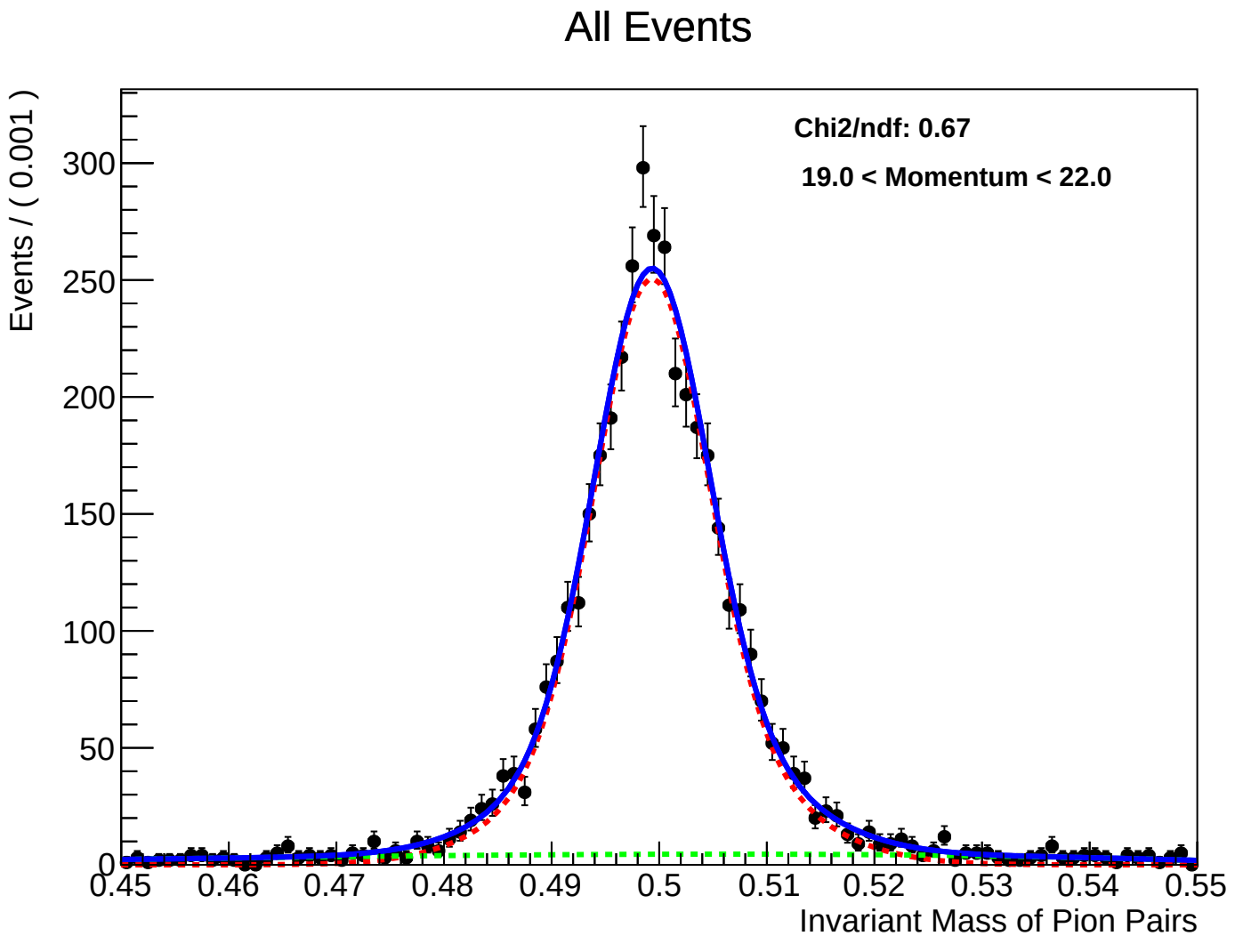

All Events
Chi2/ndf: 0.64
17.0 < Momentum < 19.0
Events / (0.001)
0
50
100
150
200
250
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

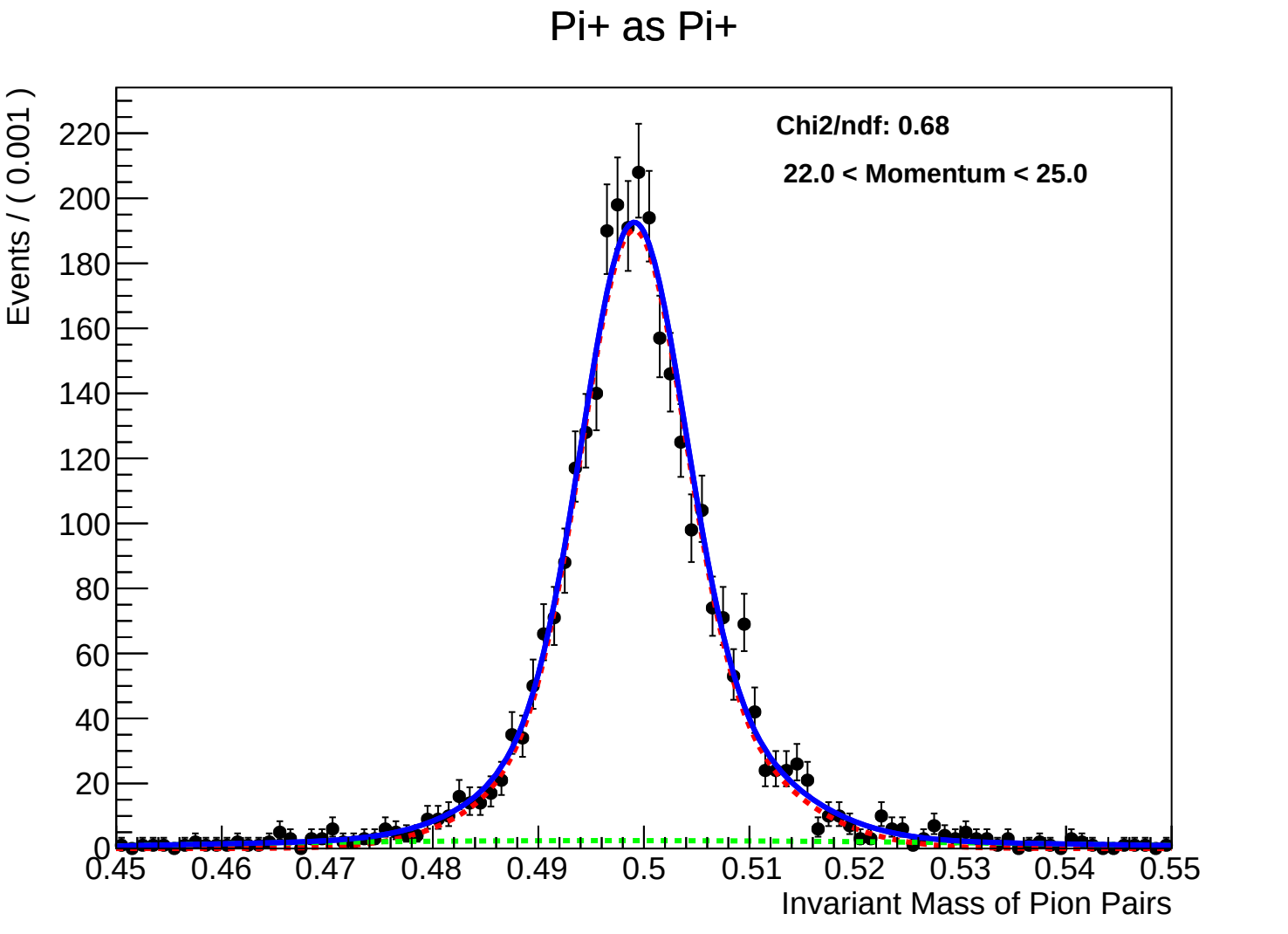

Pi+ as Pi+
Chi2/ndf: 0.69
19.0 < Momentum < 22.0
Events / (0.001)
300
250
200
150
100
50
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

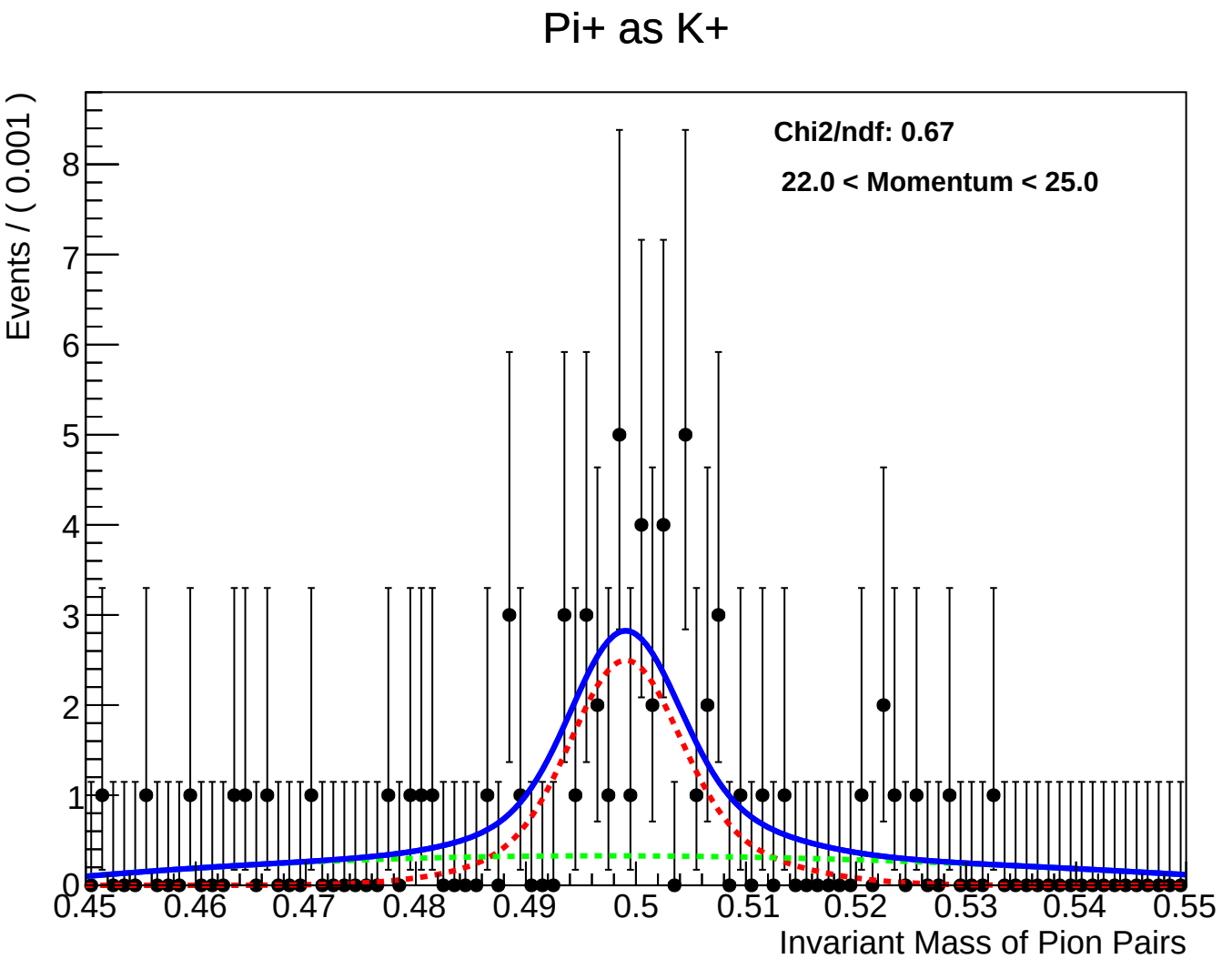

Pi+ as K+
Chi2/ndf: 0.61
19.0 < Momentum < 22.0
Events / (0.001)
0
1
2
3
4
5
6
7
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

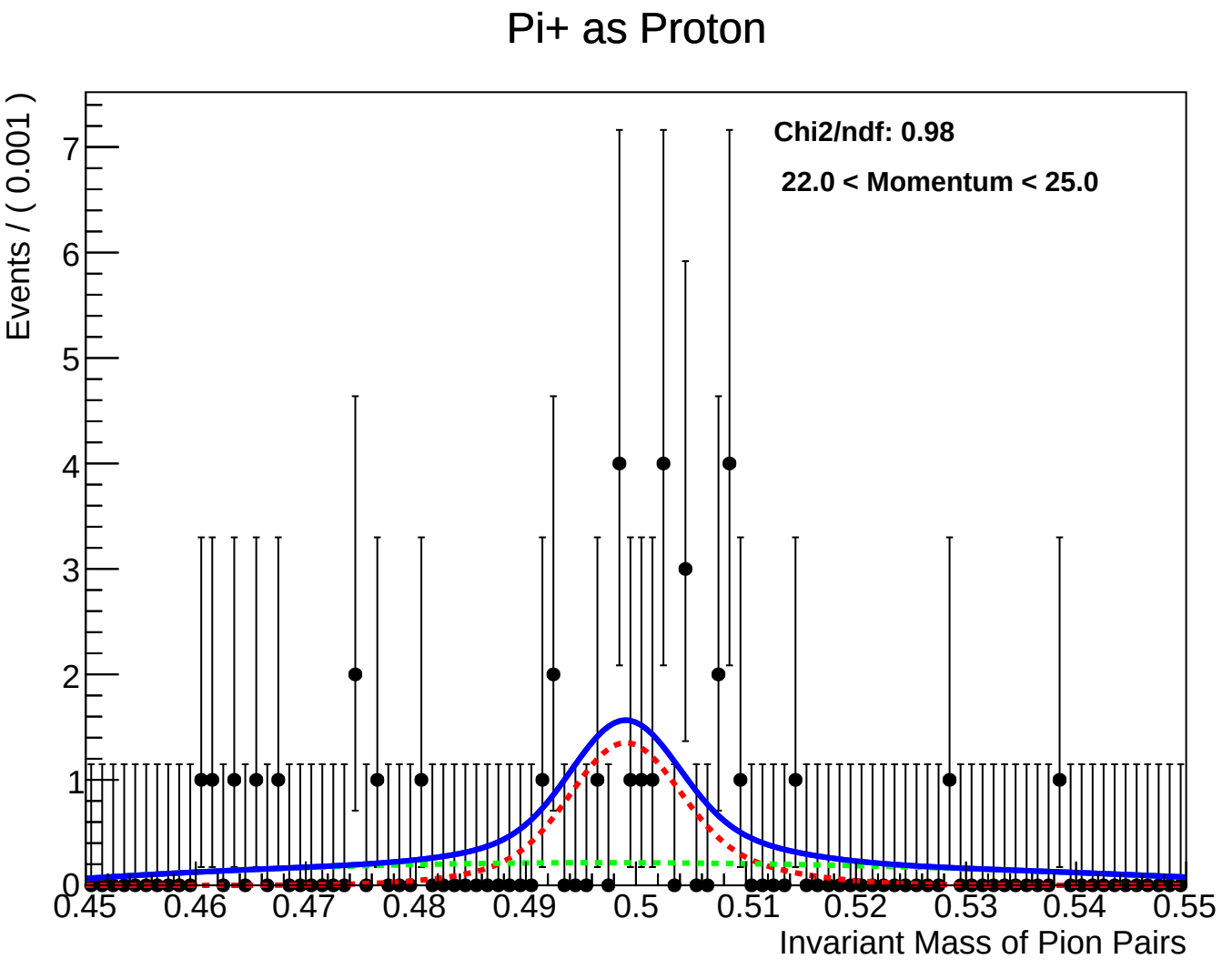

Pi+ as Proton
Chi2/ndf: 0.75
19.0 < Momentum < 22.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

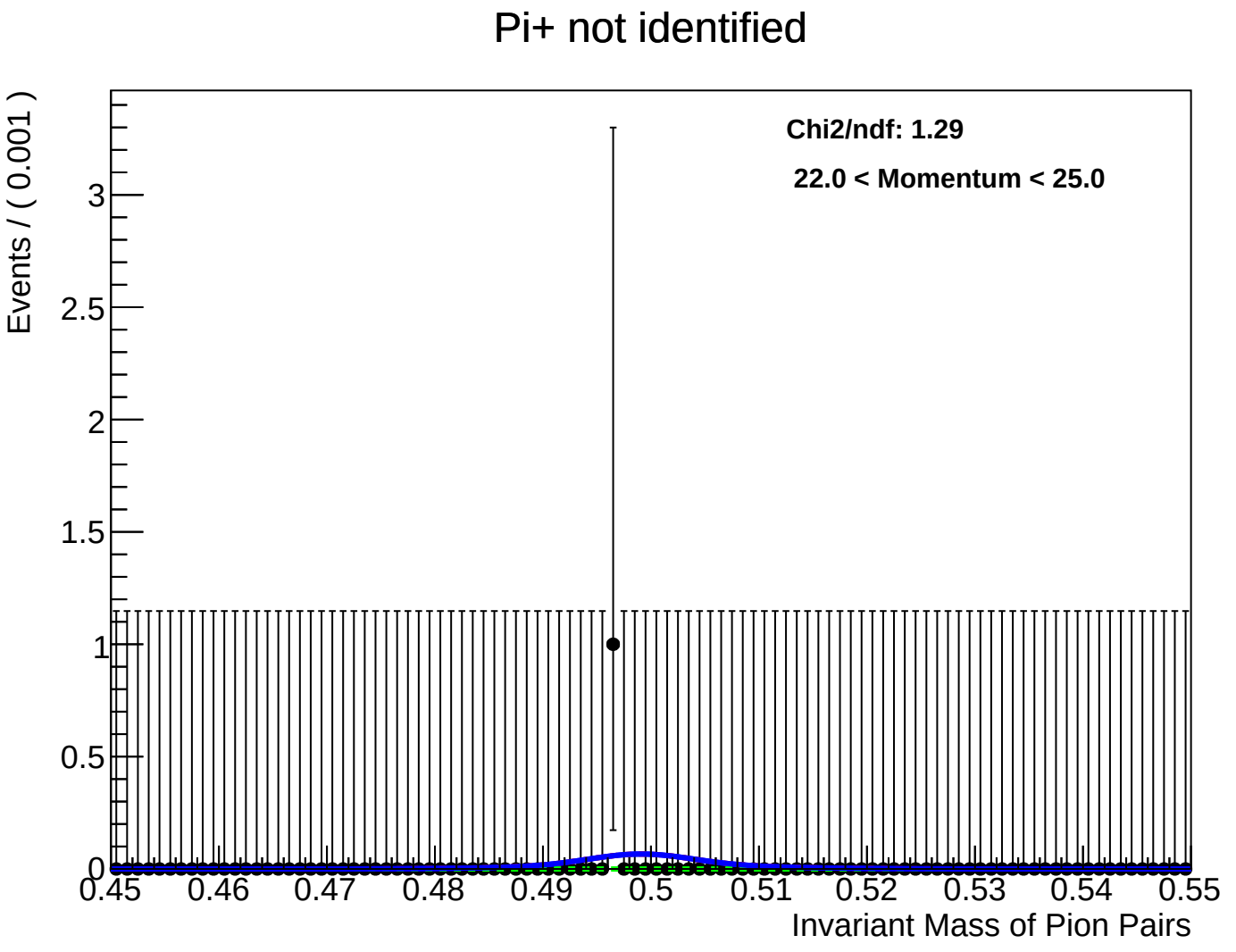

Pi+ not identified
Chi2/ndf: nan
19.0 < Momentum < 22.0
Events / (0.001)
1.2
1
0.8
0.6
0.4
0.2
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

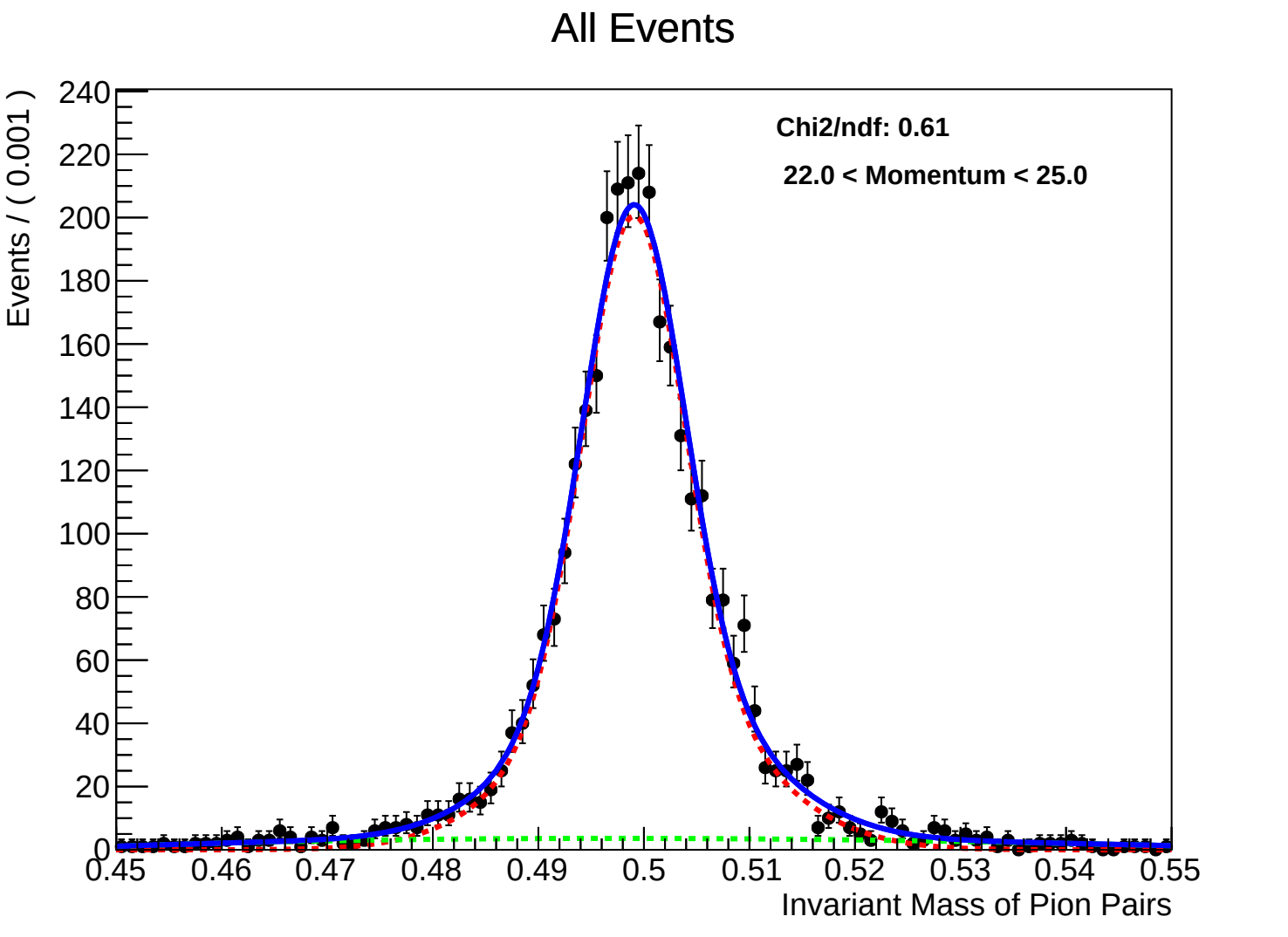

All Events
Chi2/ndf: 0.67
19.0 < Momentum < 22.0
Events / (0.001)
0
50
100
150
200
250
300
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

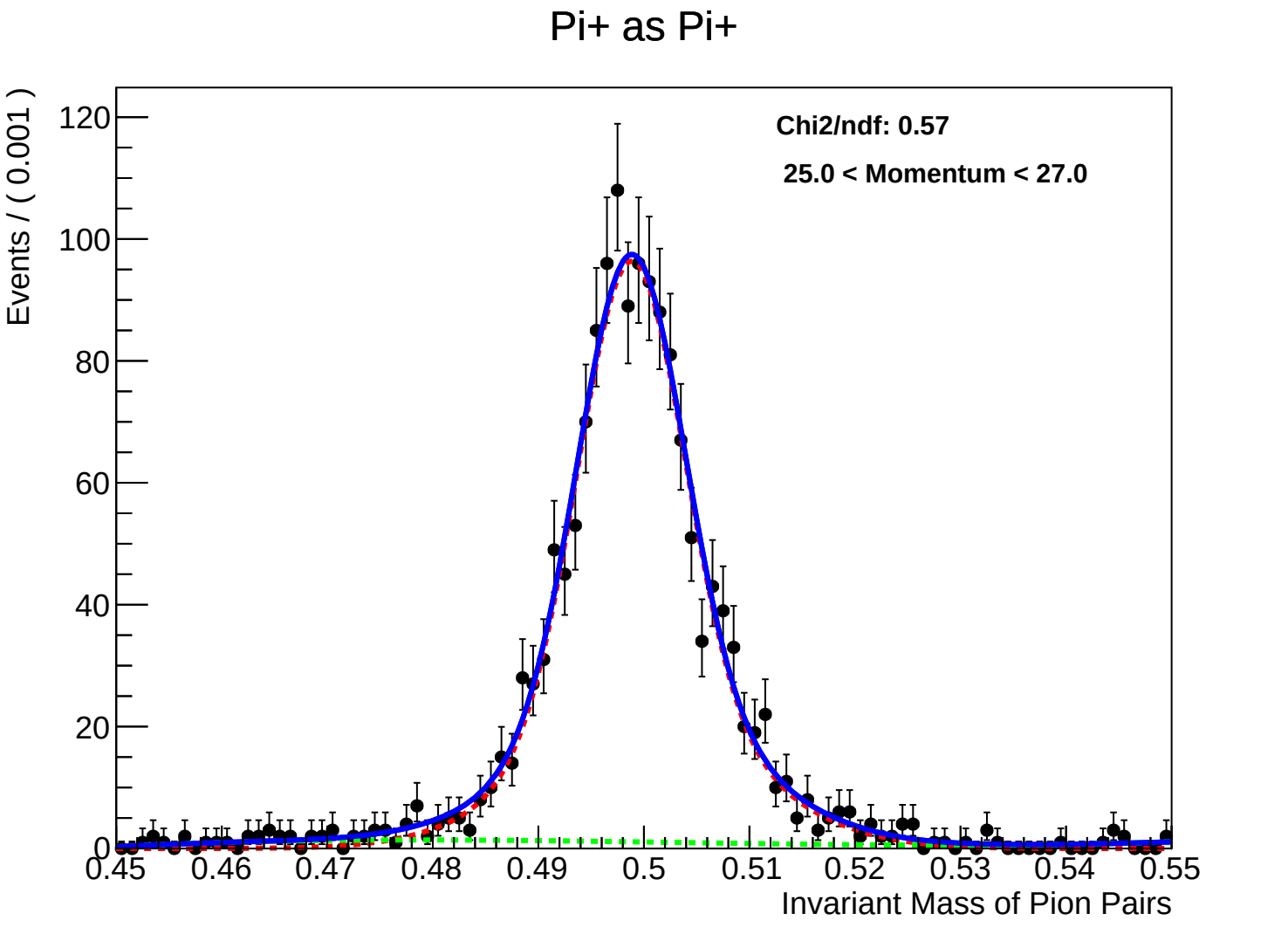

Pi+ as Pi+
Chi2/ndf: 0.68
22.0 < Momentum < 25.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
140
160
180
200
220
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

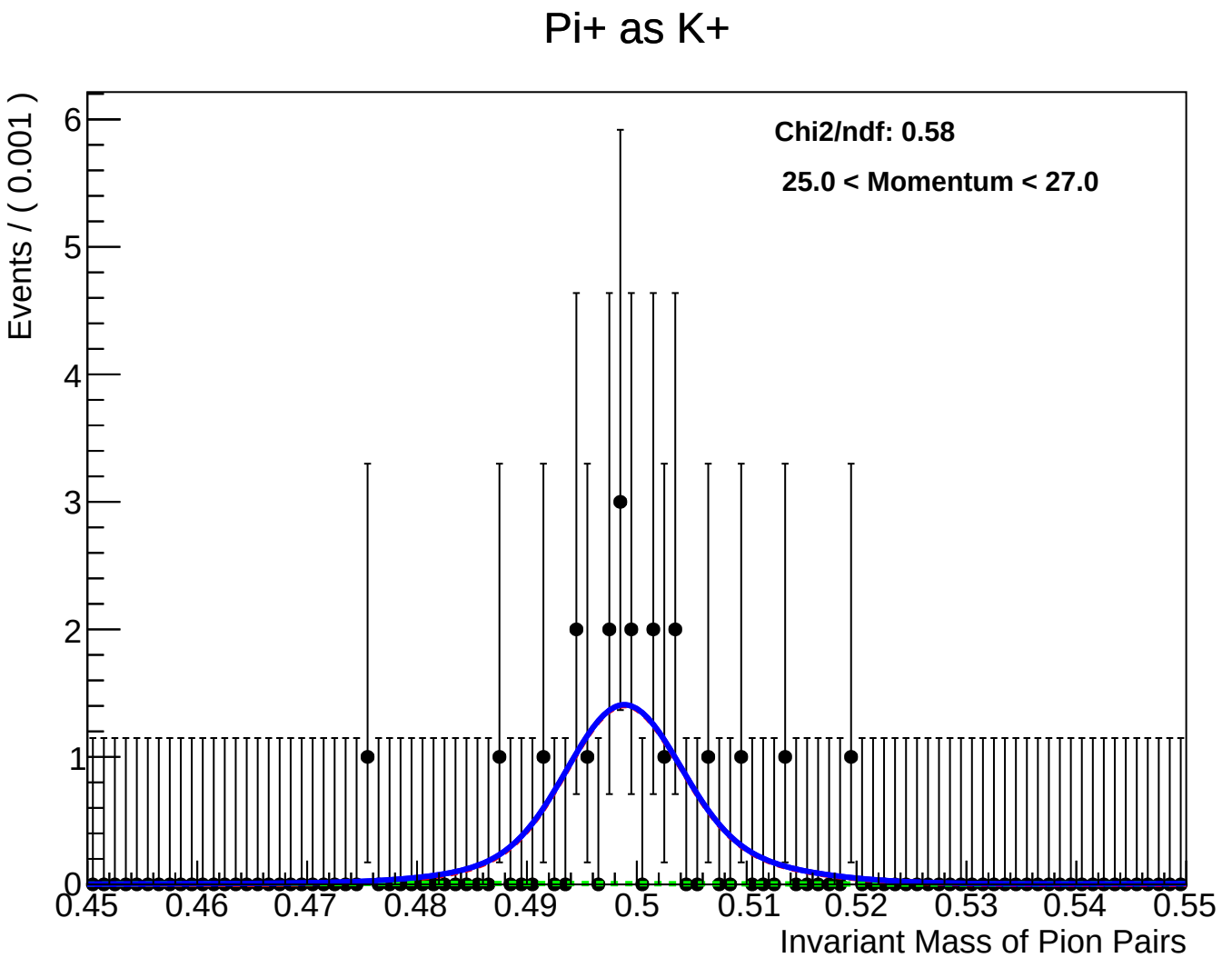

Pi+ as K+
Chi2/ndf: 0.67
22.0 < Momentum < 25.0
Events / (0.001)
0
1
2
3
4
5
6
7
8
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

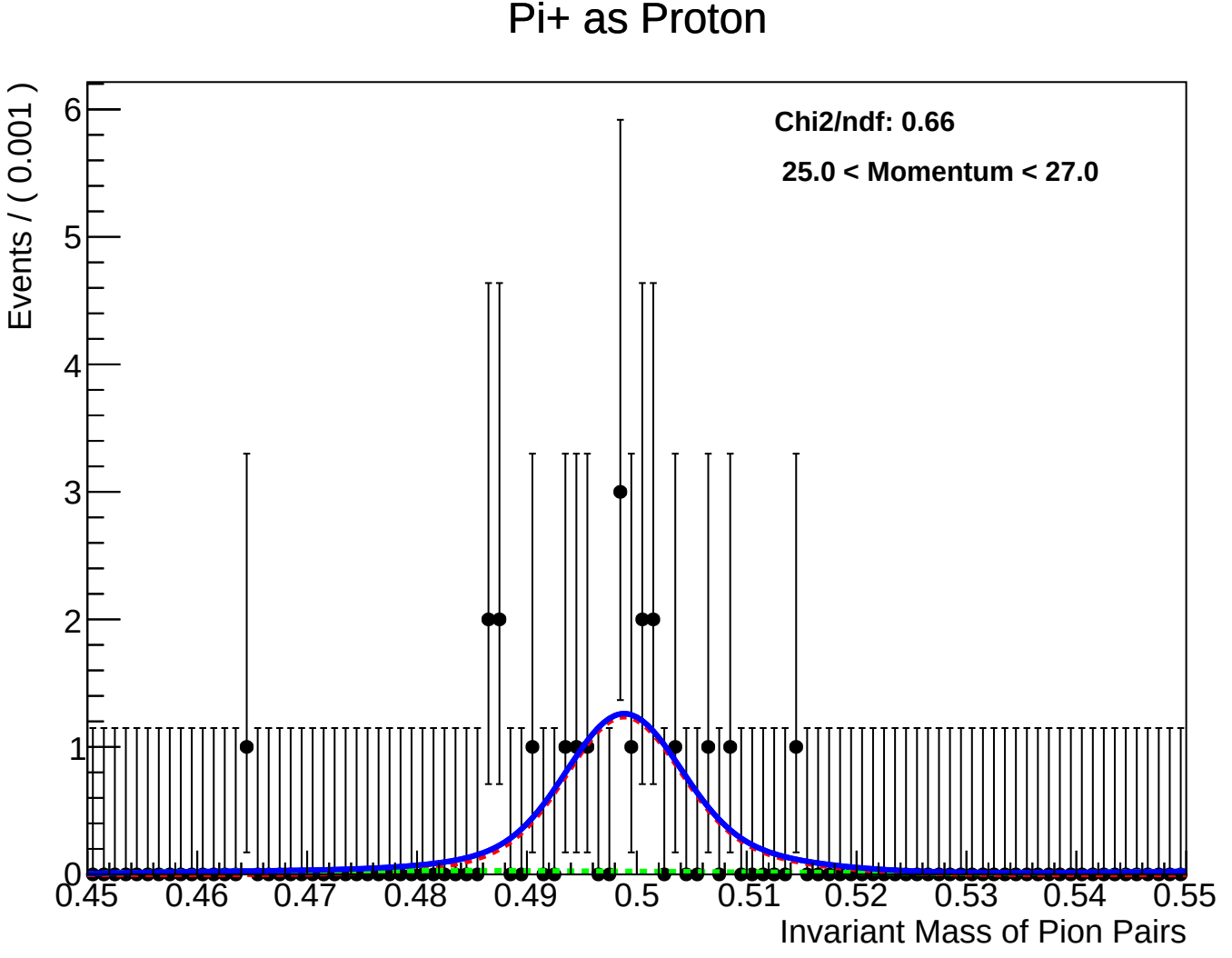

Pi+ as Proton
Chi2/ndf: 0.98
22.0 < Momentum < 25.0
Events / (0.001)
0
1
2
3
4
5
6
7
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

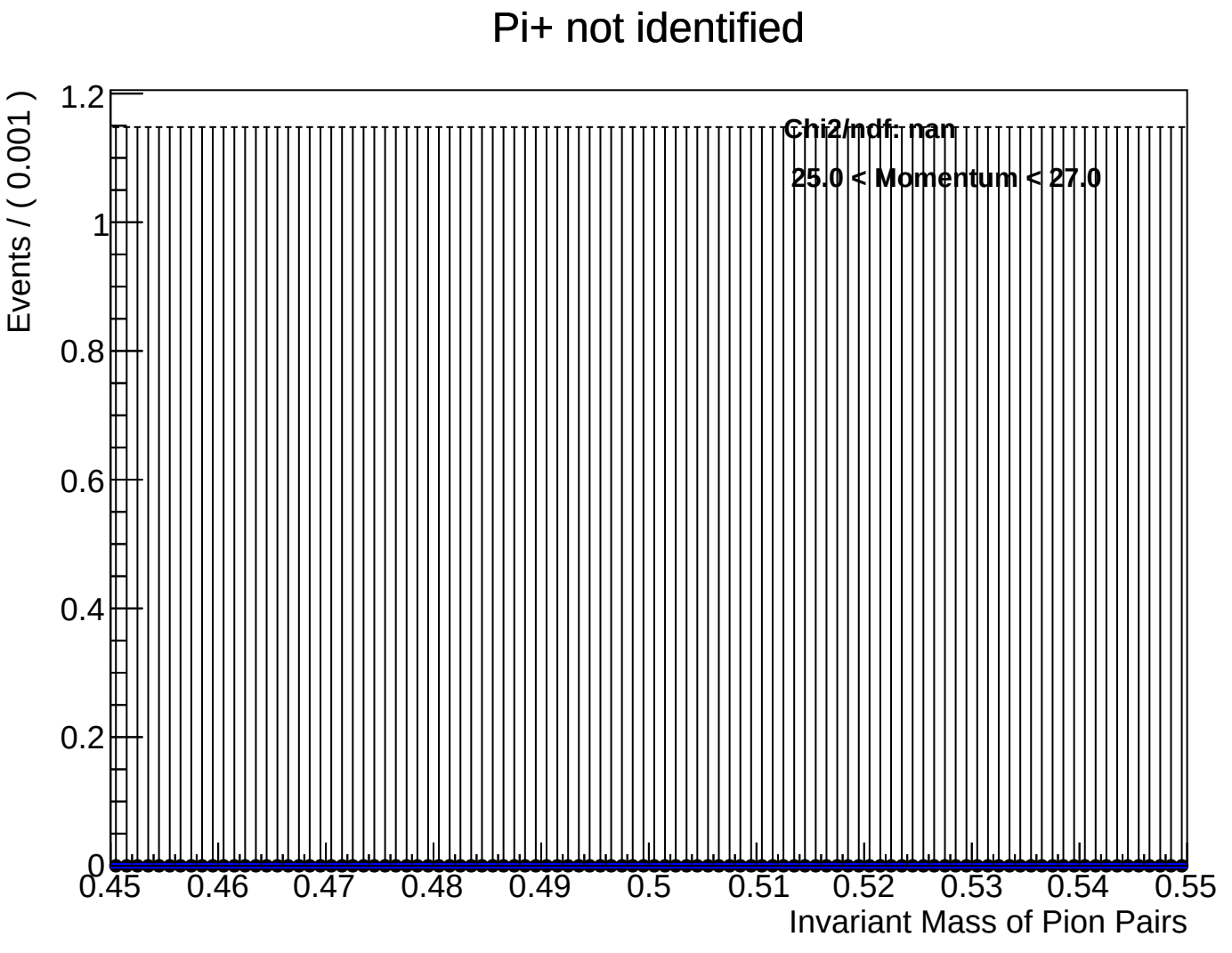

Pi+ not identified
Chi2/ndf: 1.29
22.0 < Momentum < 25.0
Events / (0.001)
0
0.5
1
1.5
2
2.5
3
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs


All Events
Chi2/ndf: 0.61
22.0 < Momentum < 25.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
140
160
180
200
220
240
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

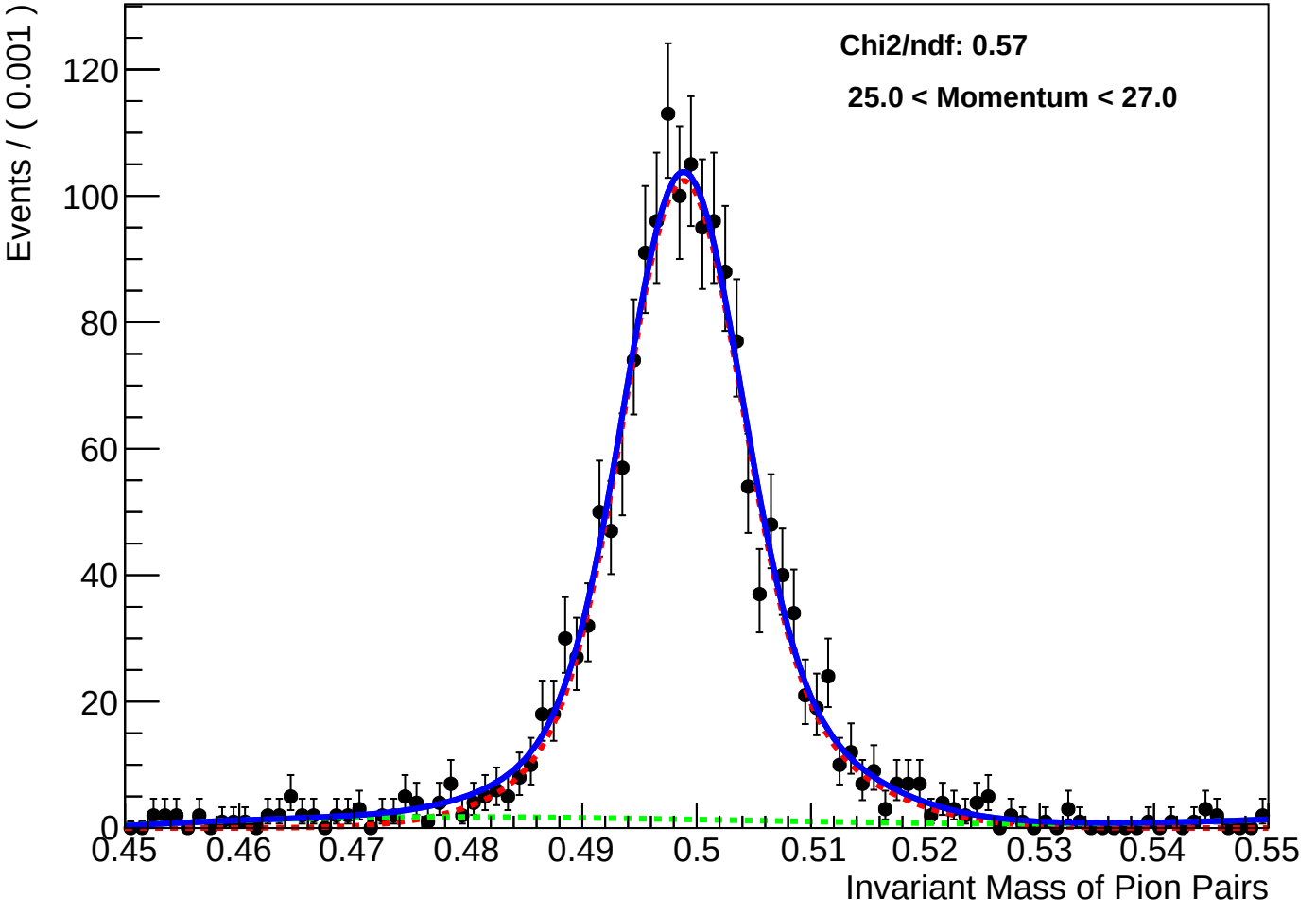

Pi+ as Pi+
Chi2/ndf: 0.57
25.0 < Momentum < 27.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

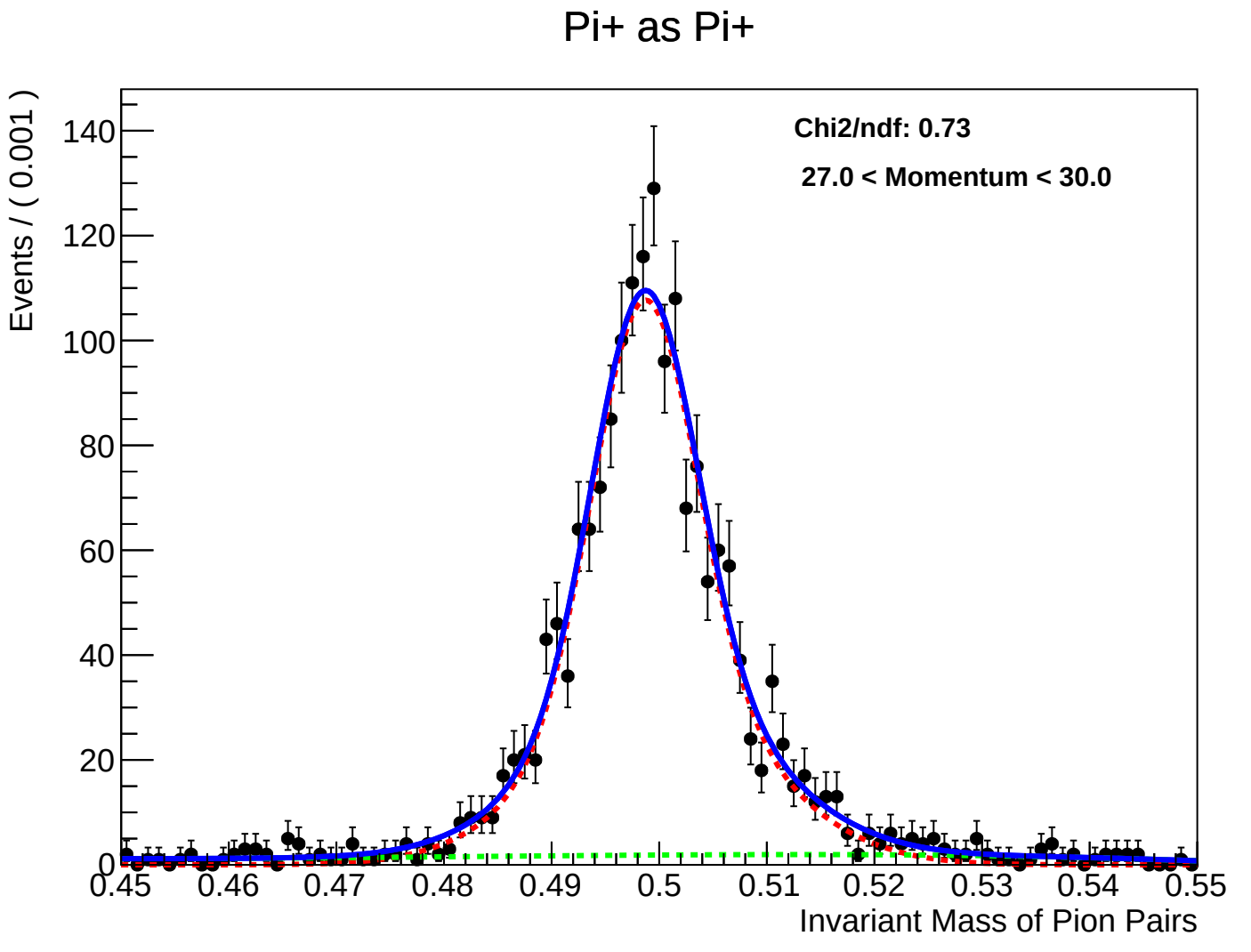

Pi+ as K+
Chi2/ndf: 0.58
25.0 < Momentum < 27.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
1
2
3
4
5
6
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

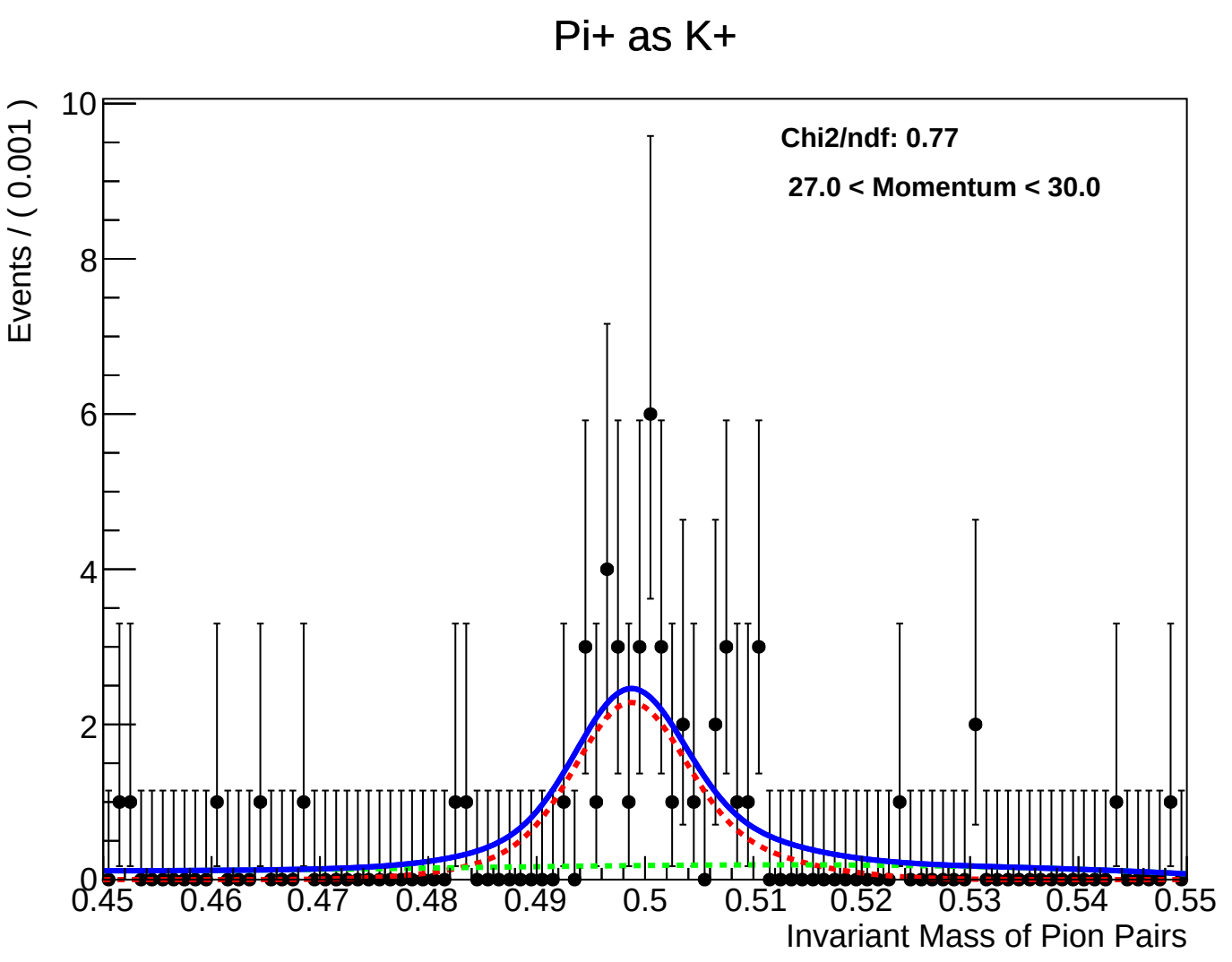

Pi+ as Proton
Chi2/ndf: 0.66
25.0 < Momentum < 27.0
Events / (0.001)
0
1
2
3
4
5
6
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

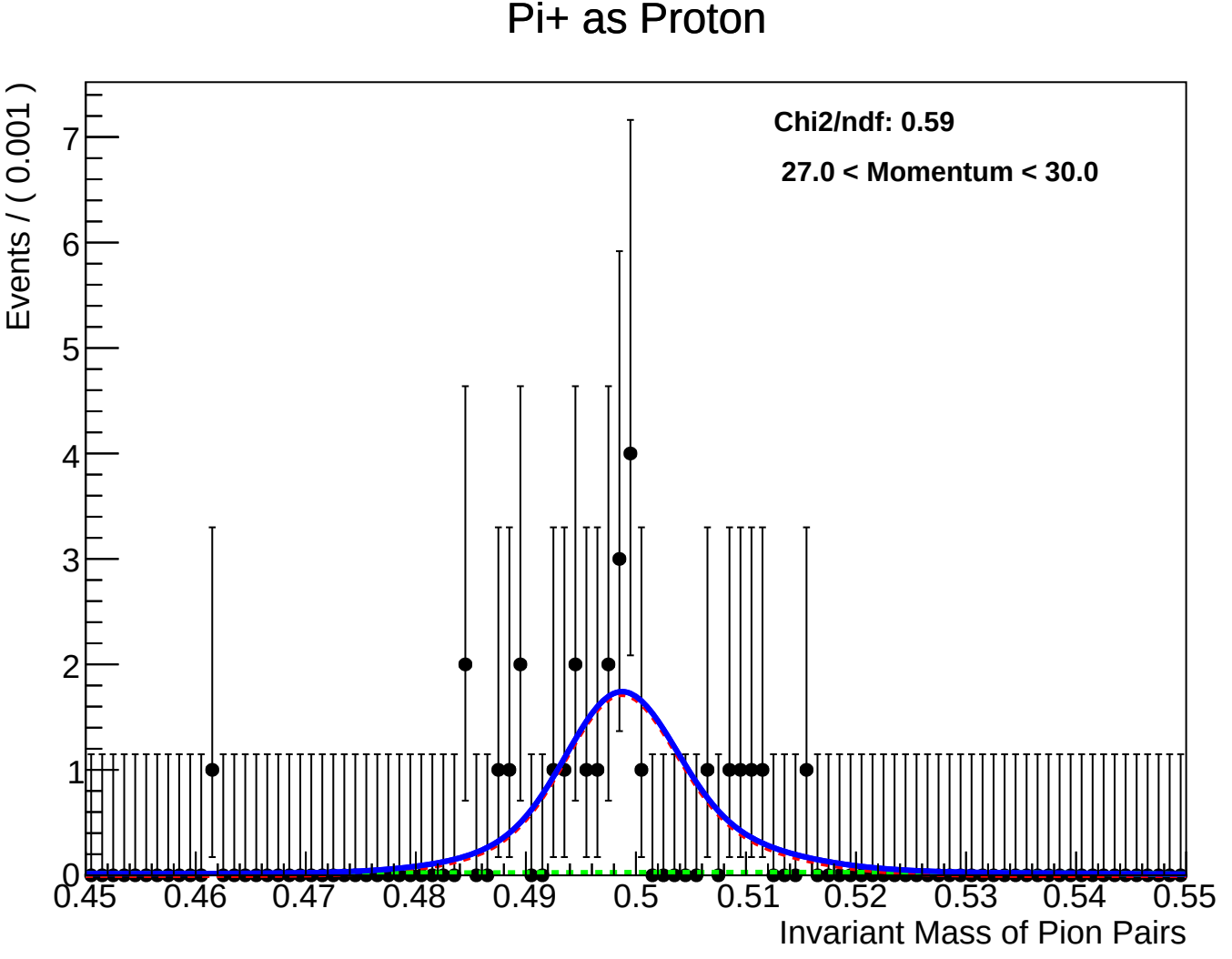

Pi+ not identified
Chi2/ndf: nan
25.0 < Momentum < 27.0
Events / (0.001)
1.2
1
0.8
0.6
0.4
0.2
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

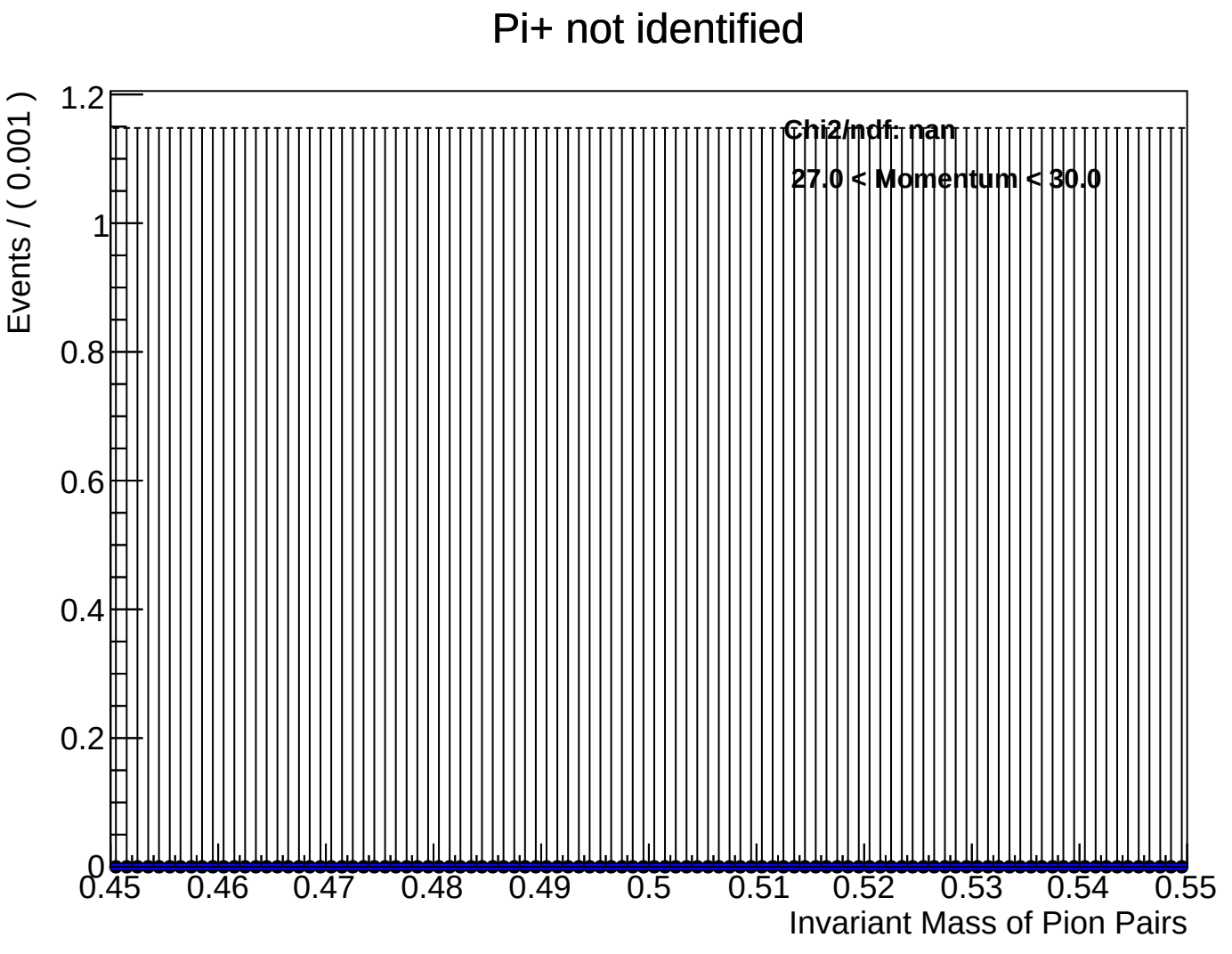
All Events

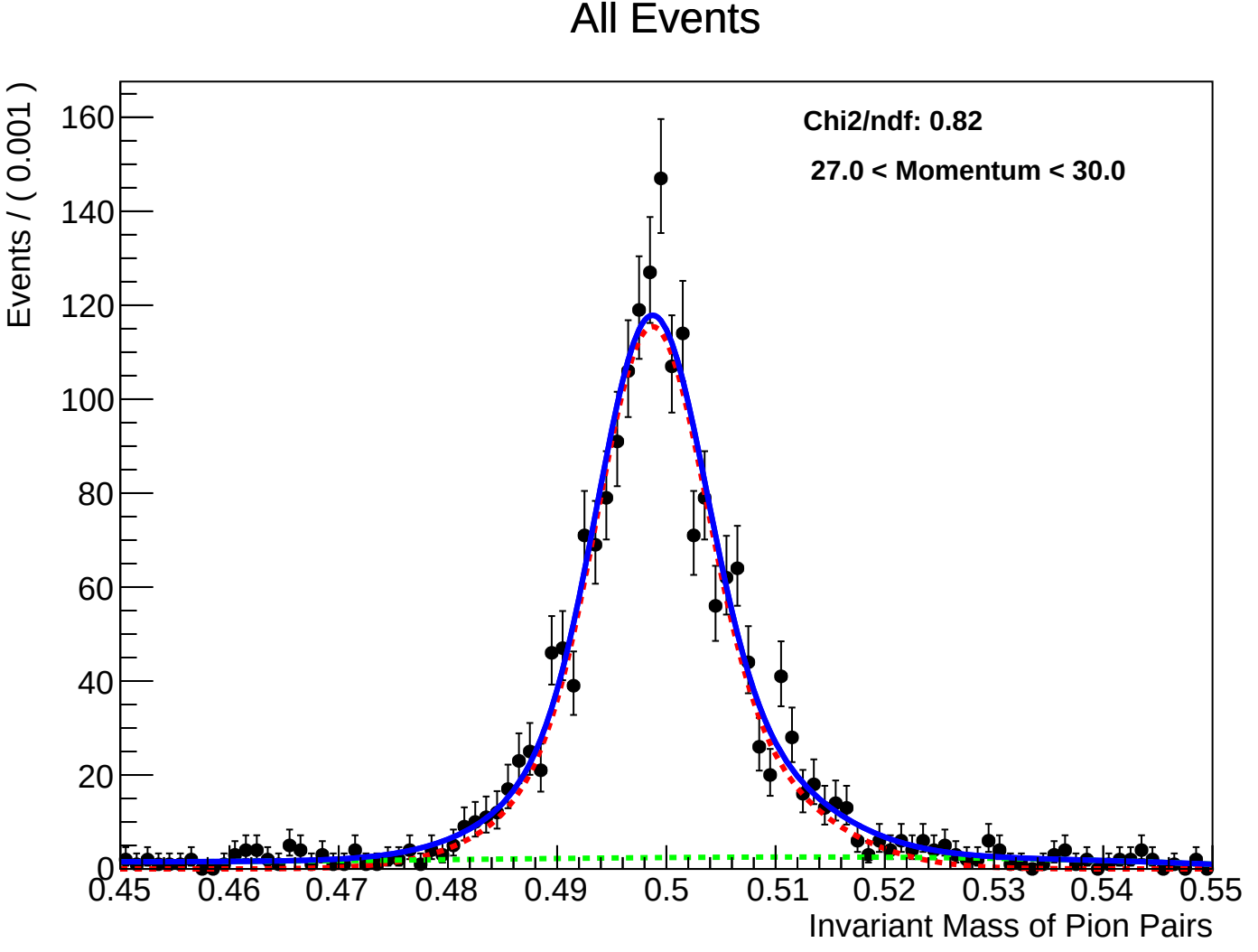

Chi2/ndf: 0.57
25.0 < Momentum < 27.0
Events / (0.001)
120
100
80
60
40
20
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

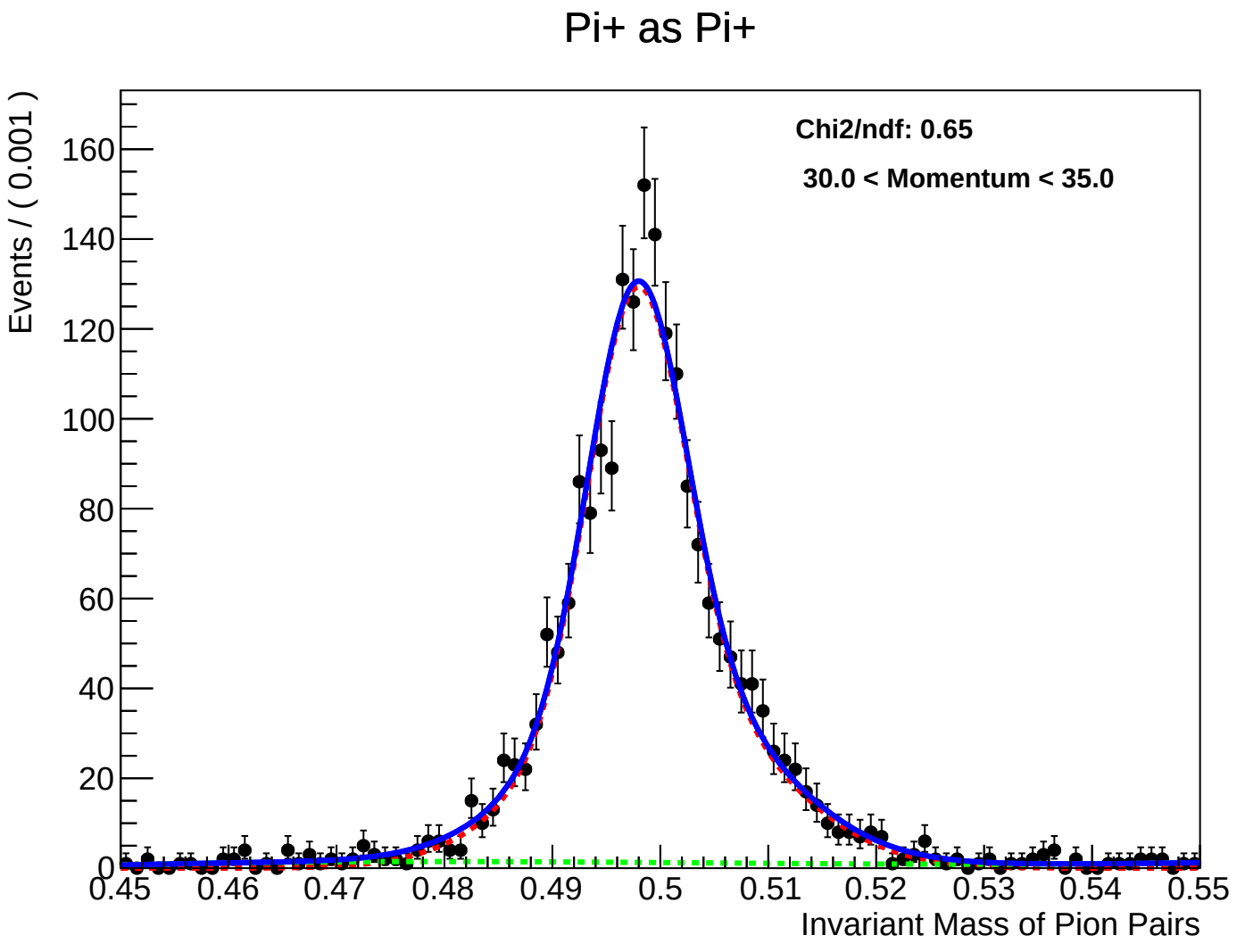

Pi+ as Pi+
Chi2/ndf: 0.73
27.0 < Momentum < 30.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
140
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

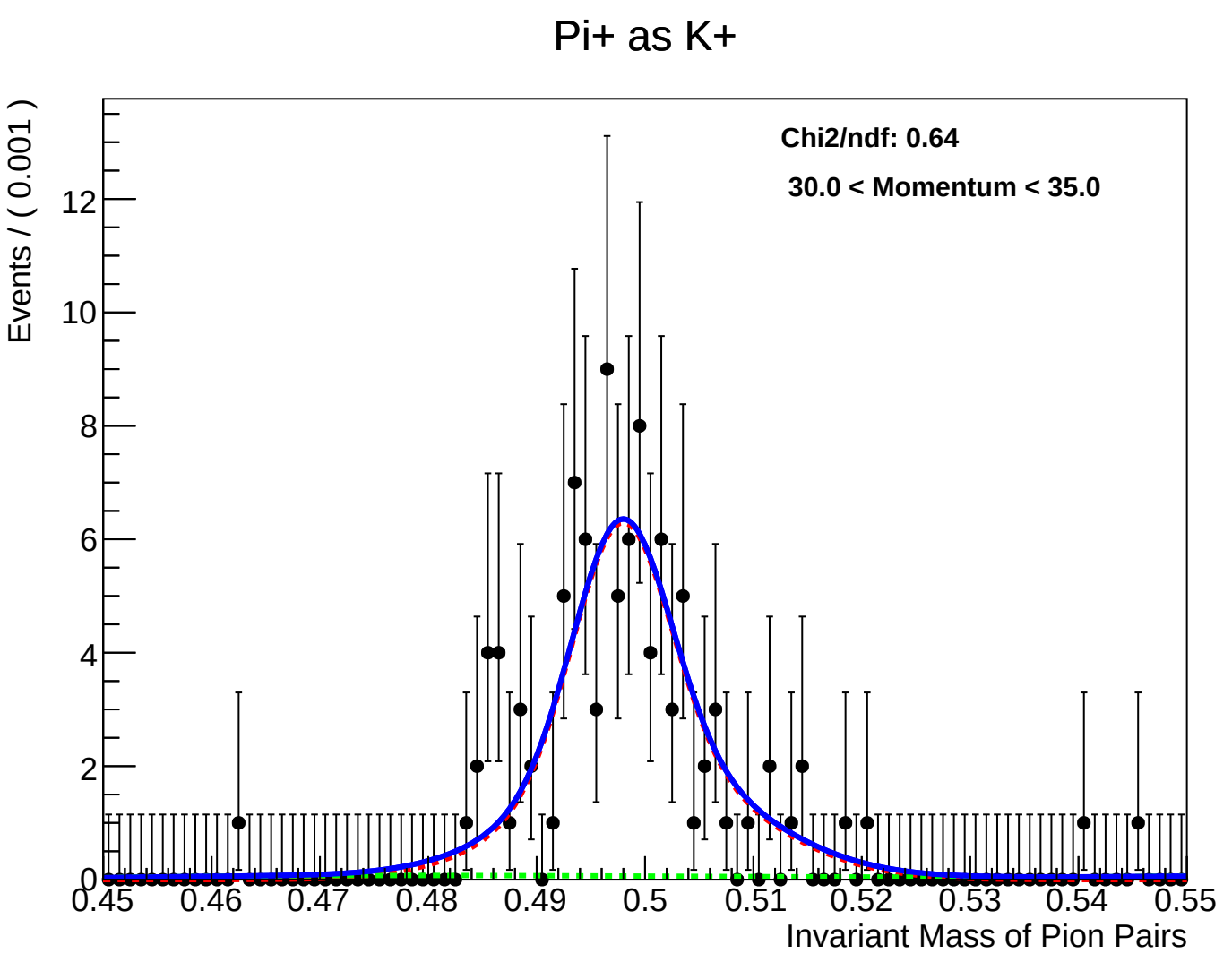

Pi+ as K+
Chi2/ndf: 0.77
27.0 < Momentum < 30.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
2
4
6
8
10
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

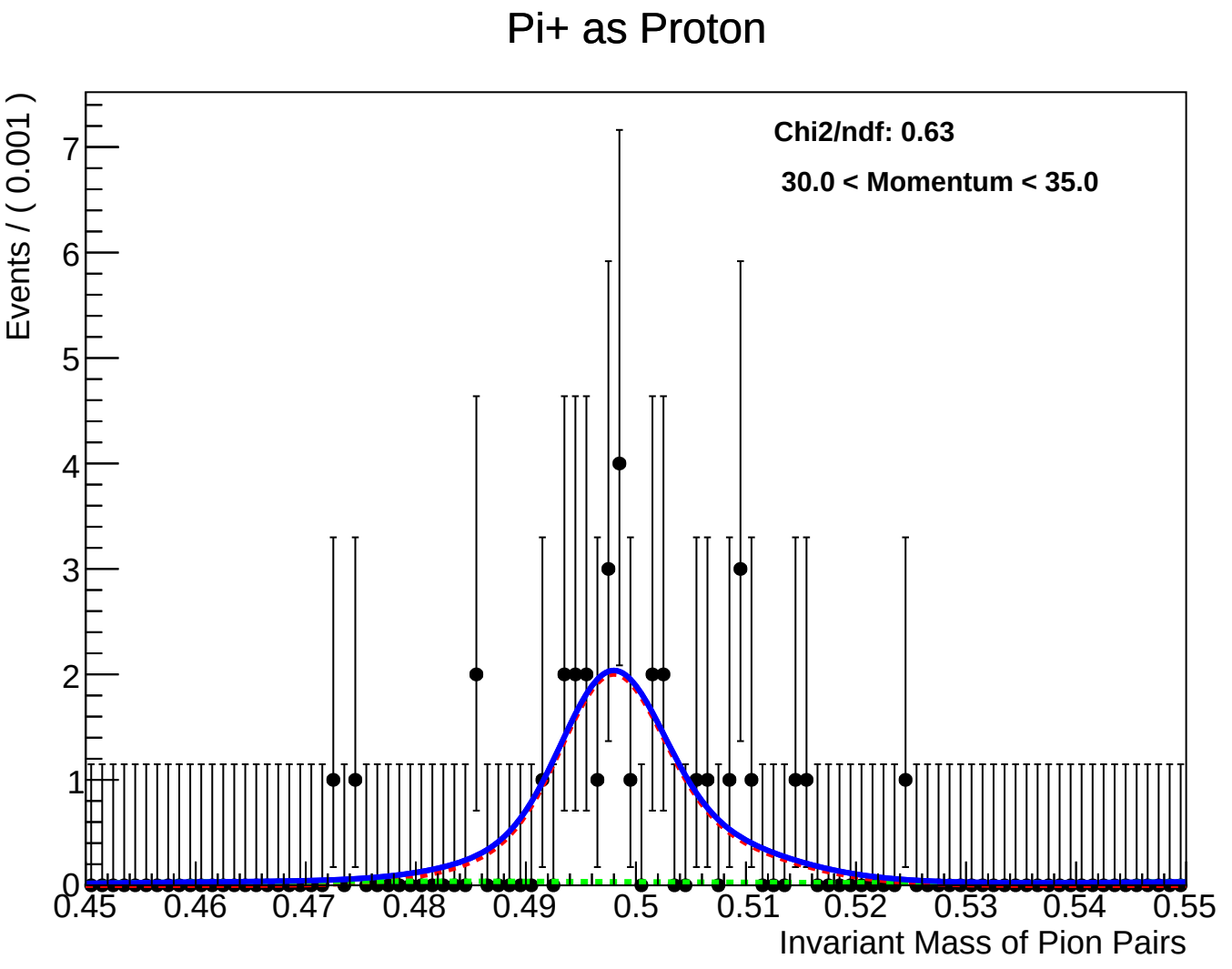

Pi+ as Proton
Chi2/ndf: 0.59
27.0 < Momentum < 30.0
Events / (0.001)
0
1
2
3
4
5
6
7
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

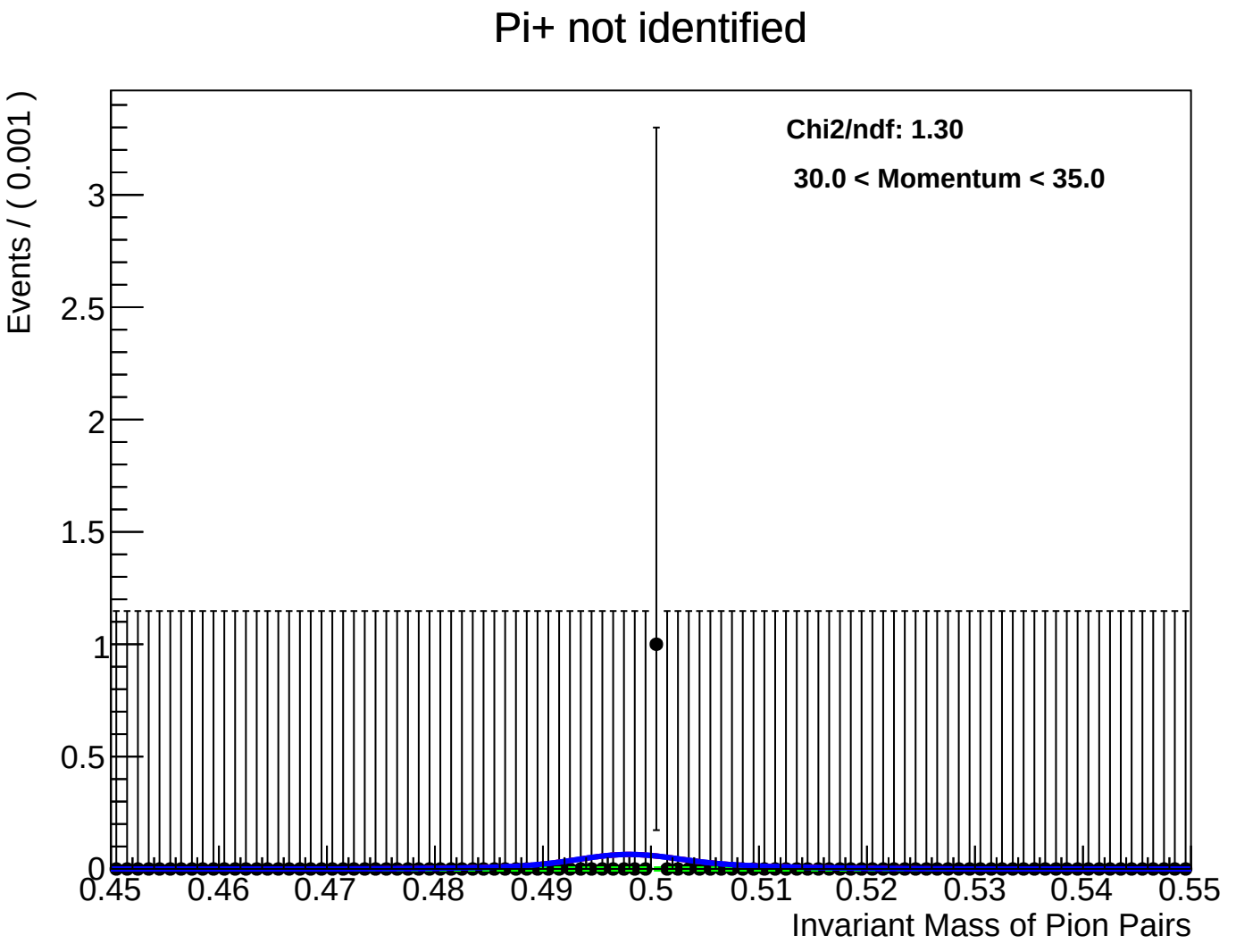

Pi+ not identified
Chi2/ndf: nan
27.0 < Momentum < 30.0
Events / (0.001)
1.2
1
0.8
0.6
0.4
0.2
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

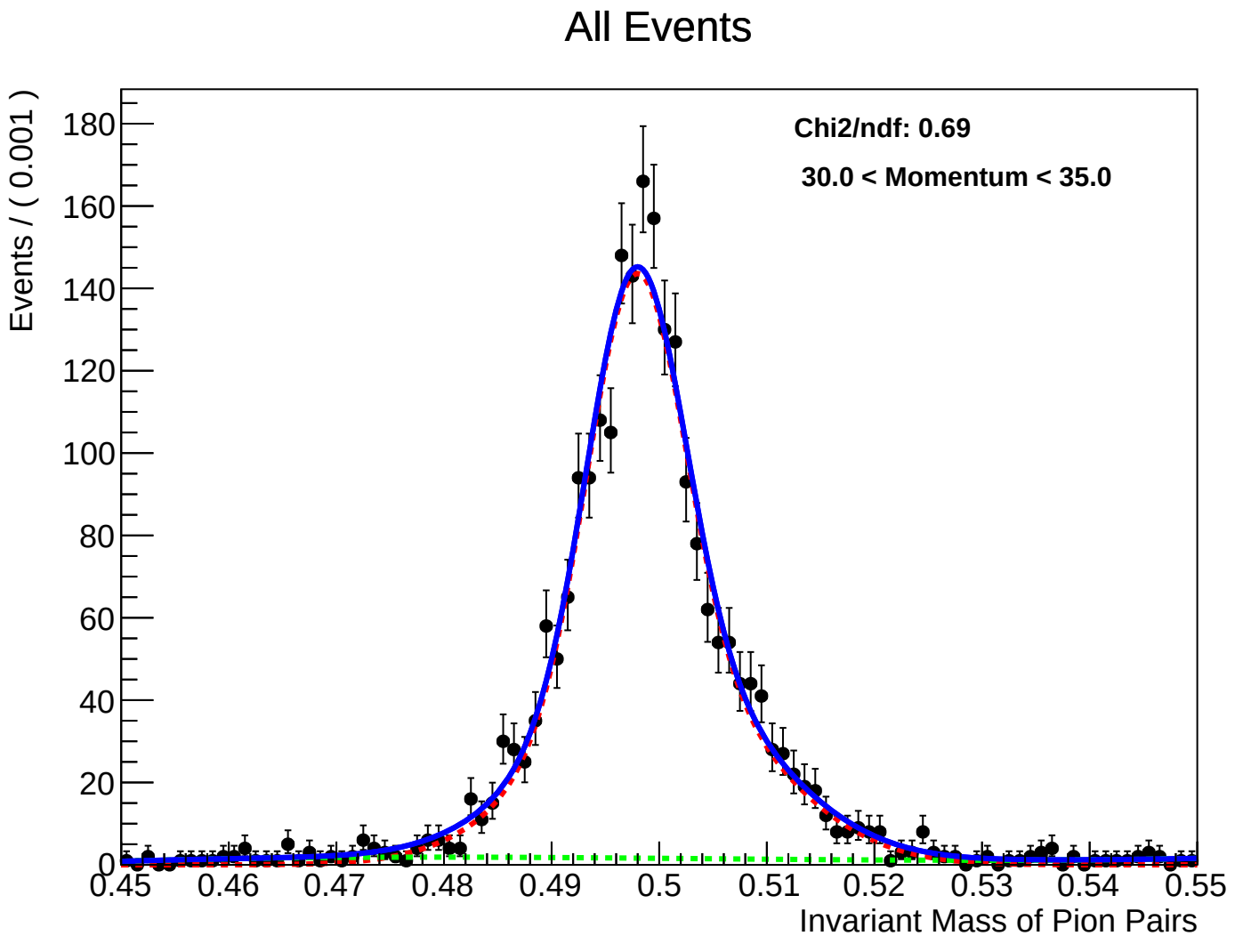

All Events
Chi2/ndf: 0.82
27.0 < Momentum < 30.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
140
160
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

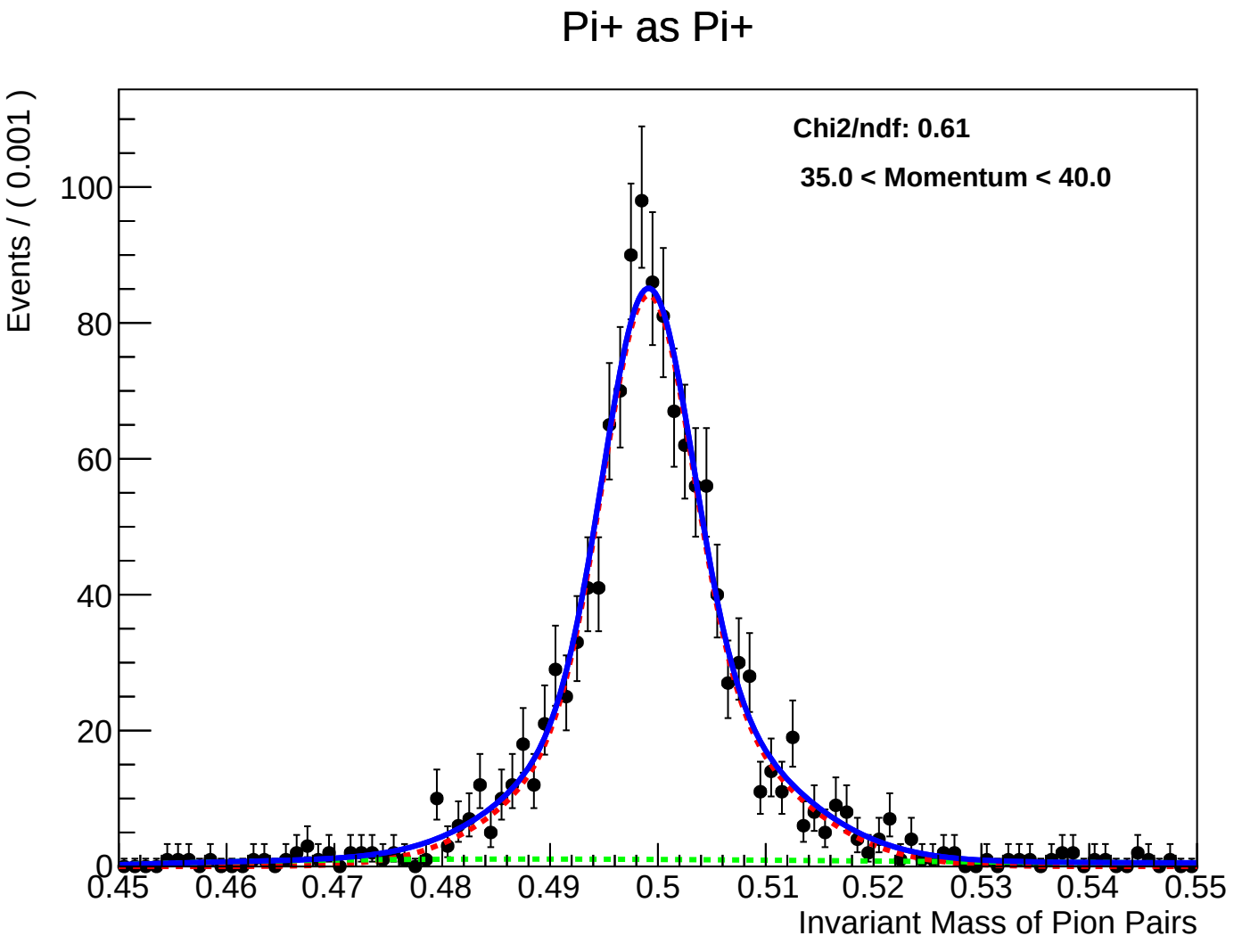

Pi+ as Pi+
Chi2/ndf: 0.65
30.0 < Momentum < 35.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
140
160
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

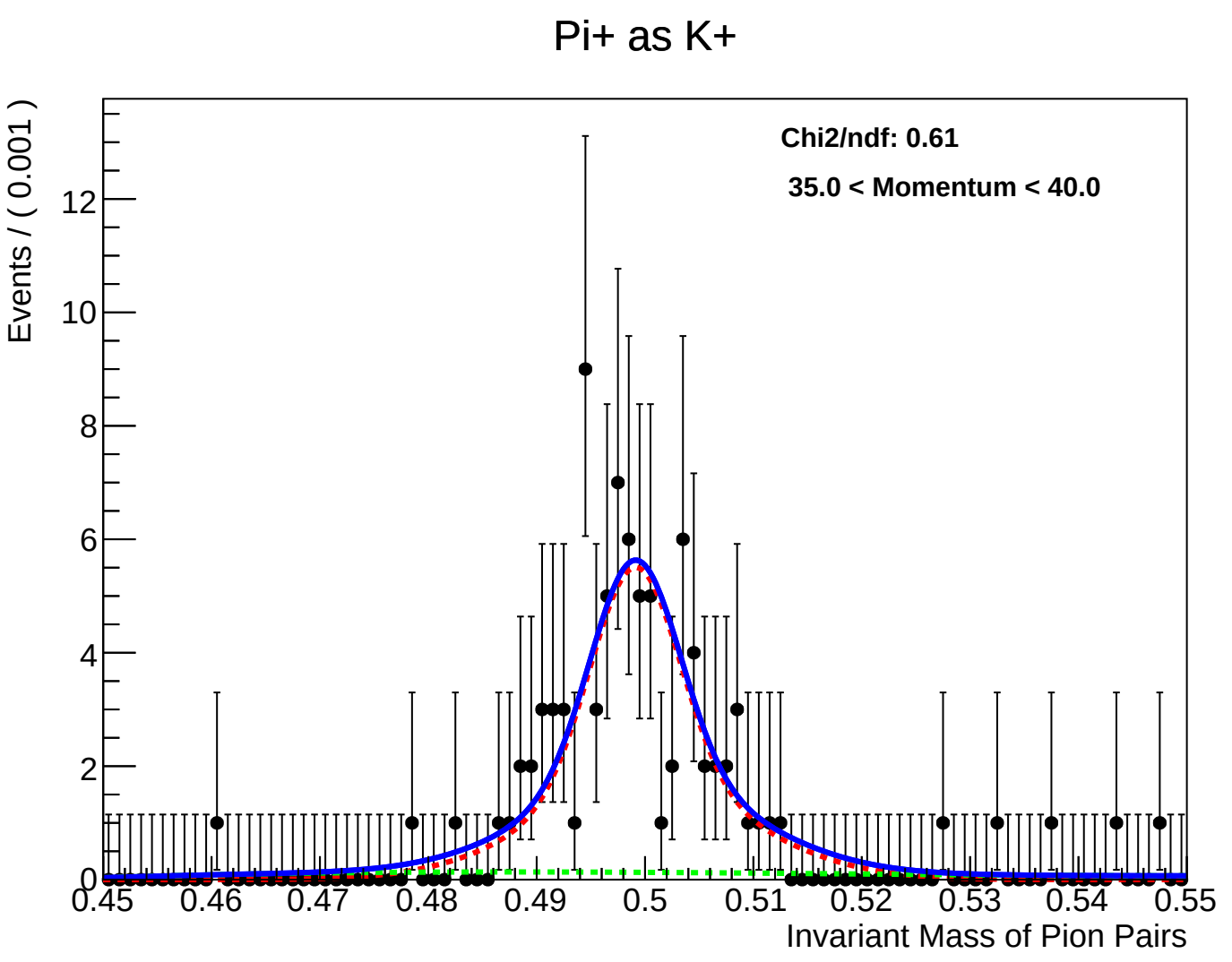

Pi+ as K+
Chi2/ndf: 0.64
30.0 < Momentum < 35.0
Events / (0.001)
0
2
4
6
8
10
12
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

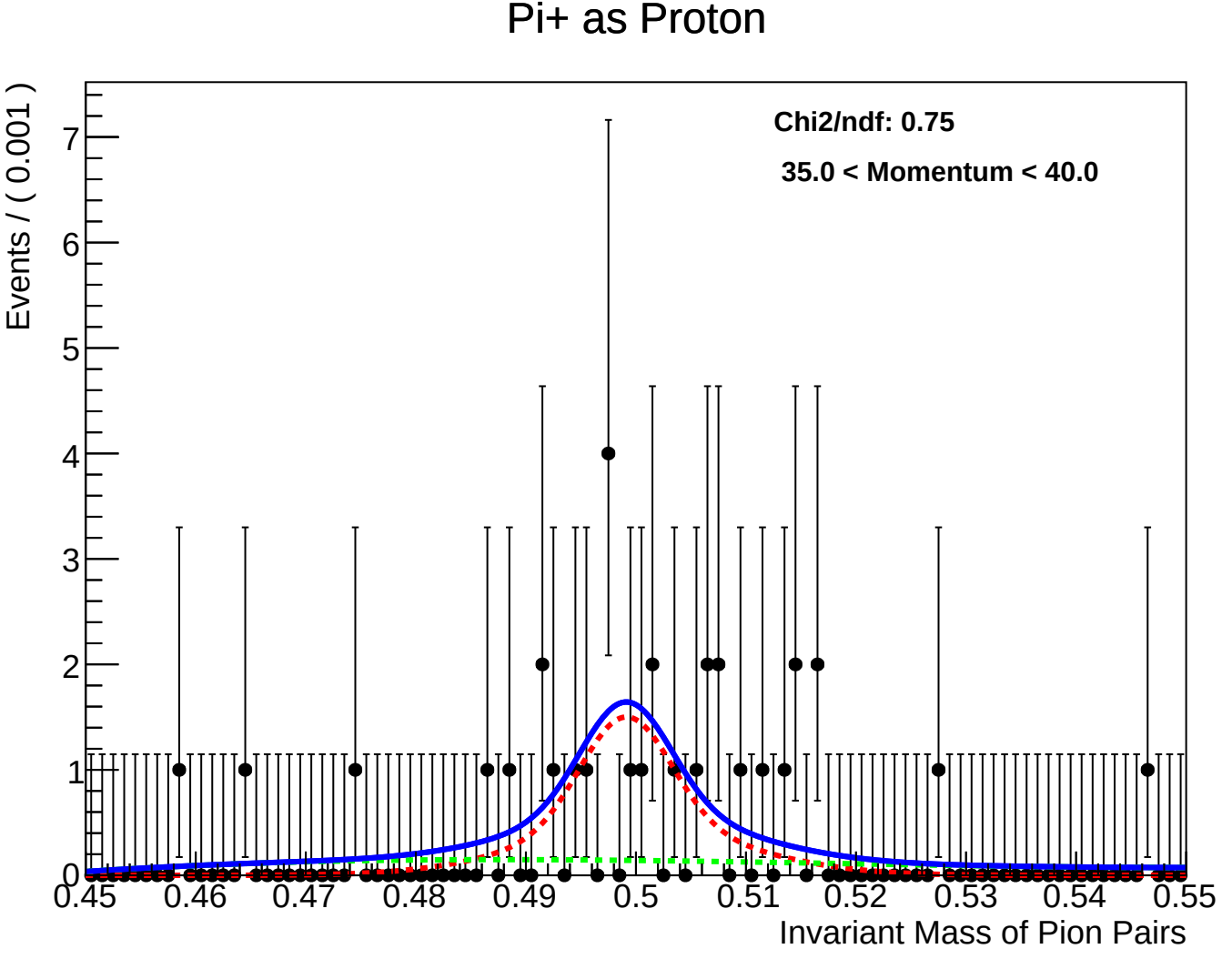

Pi+ as Proton
Chi2/ndf: 0.63
30.0 < Momentum < 35.0
Events / (0.001)
0
1
2
3
4
5
6
7
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

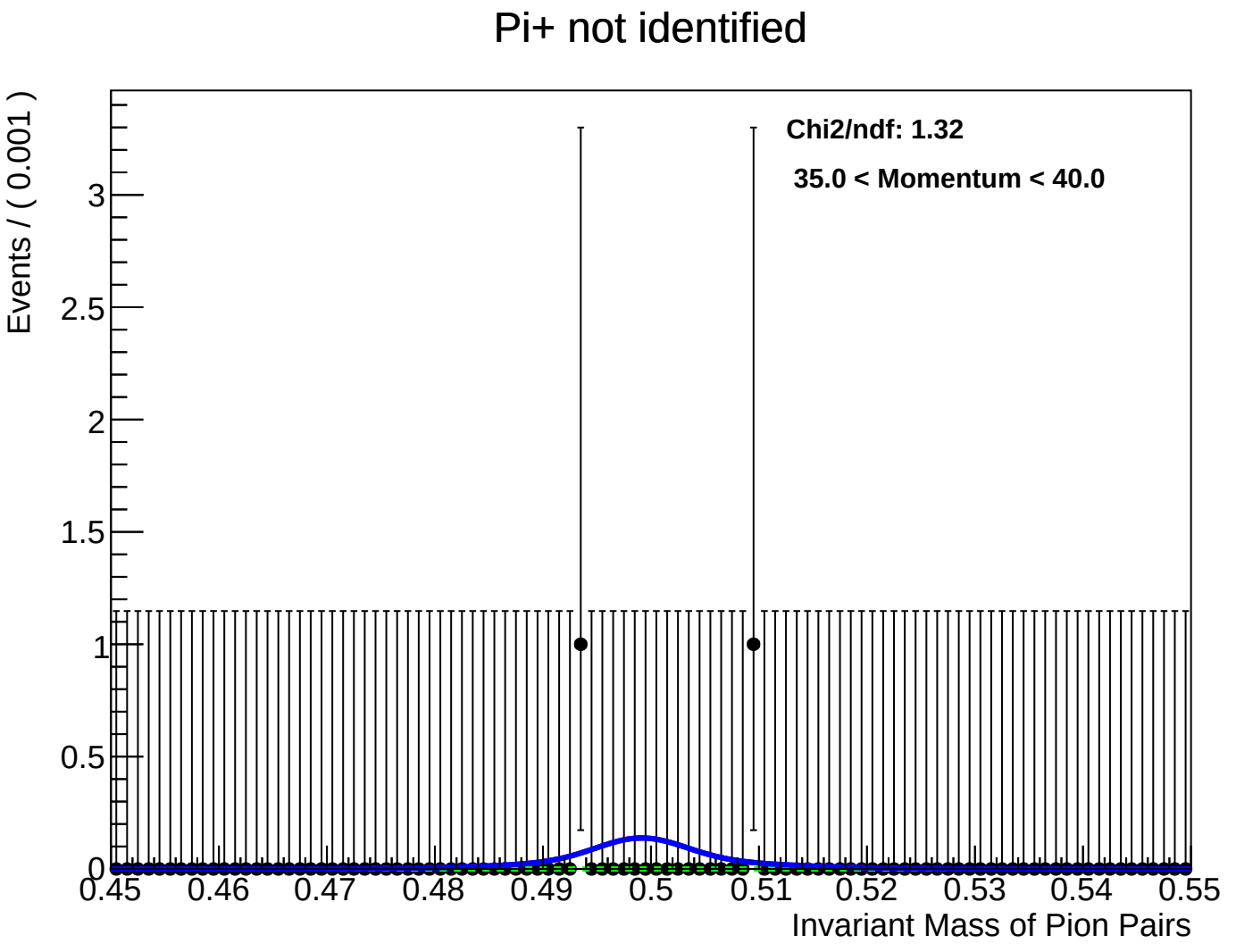

Pi+ not identified
Chi2/ndf: 1.30
30.0 < Momentum < 35.0
Events / (0.001)
0
0.5
1
1.5
2
2.5
3
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

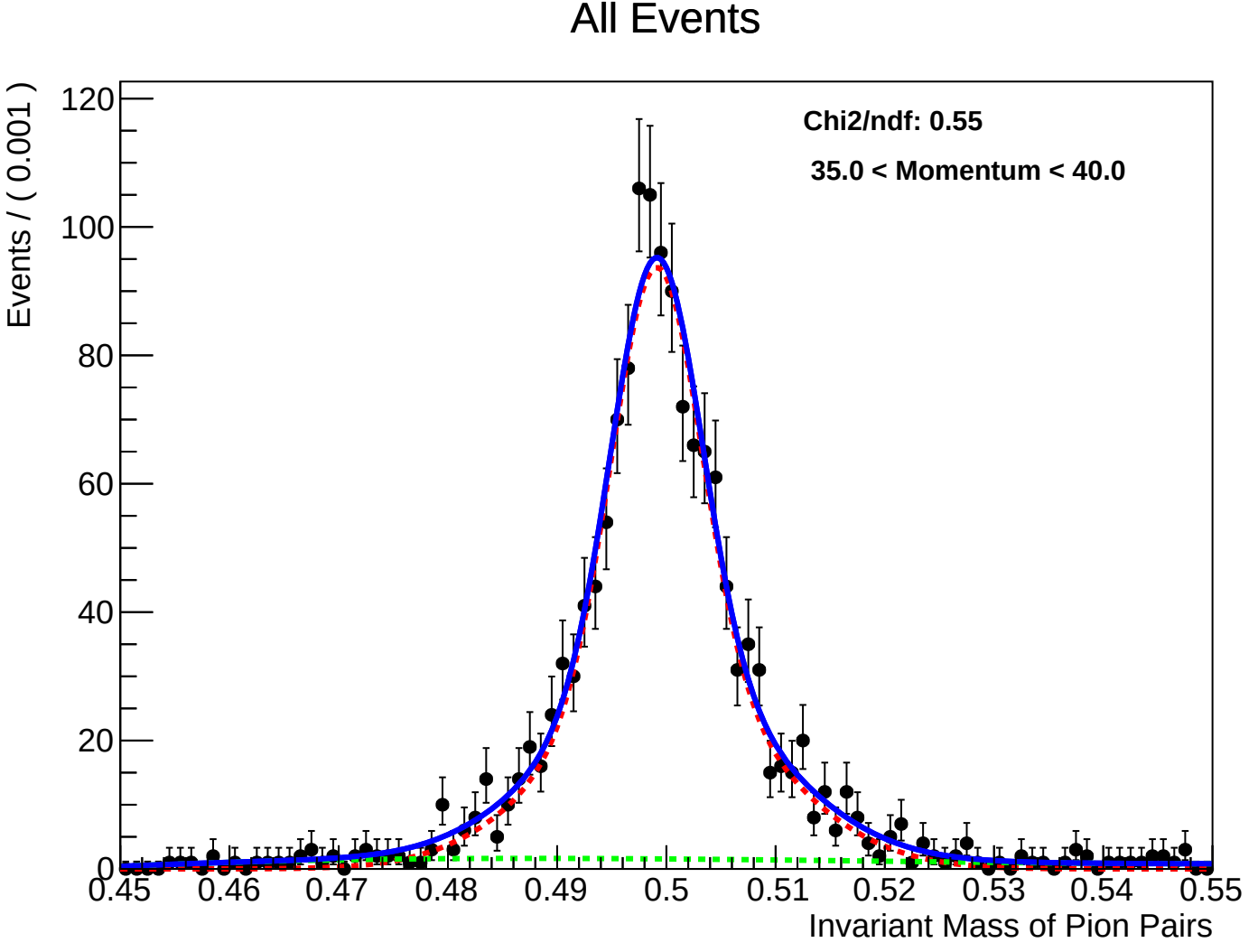

All Events
Chi2/ndf: 0.69
30.0 < Momentum < 35.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
140
160
180
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

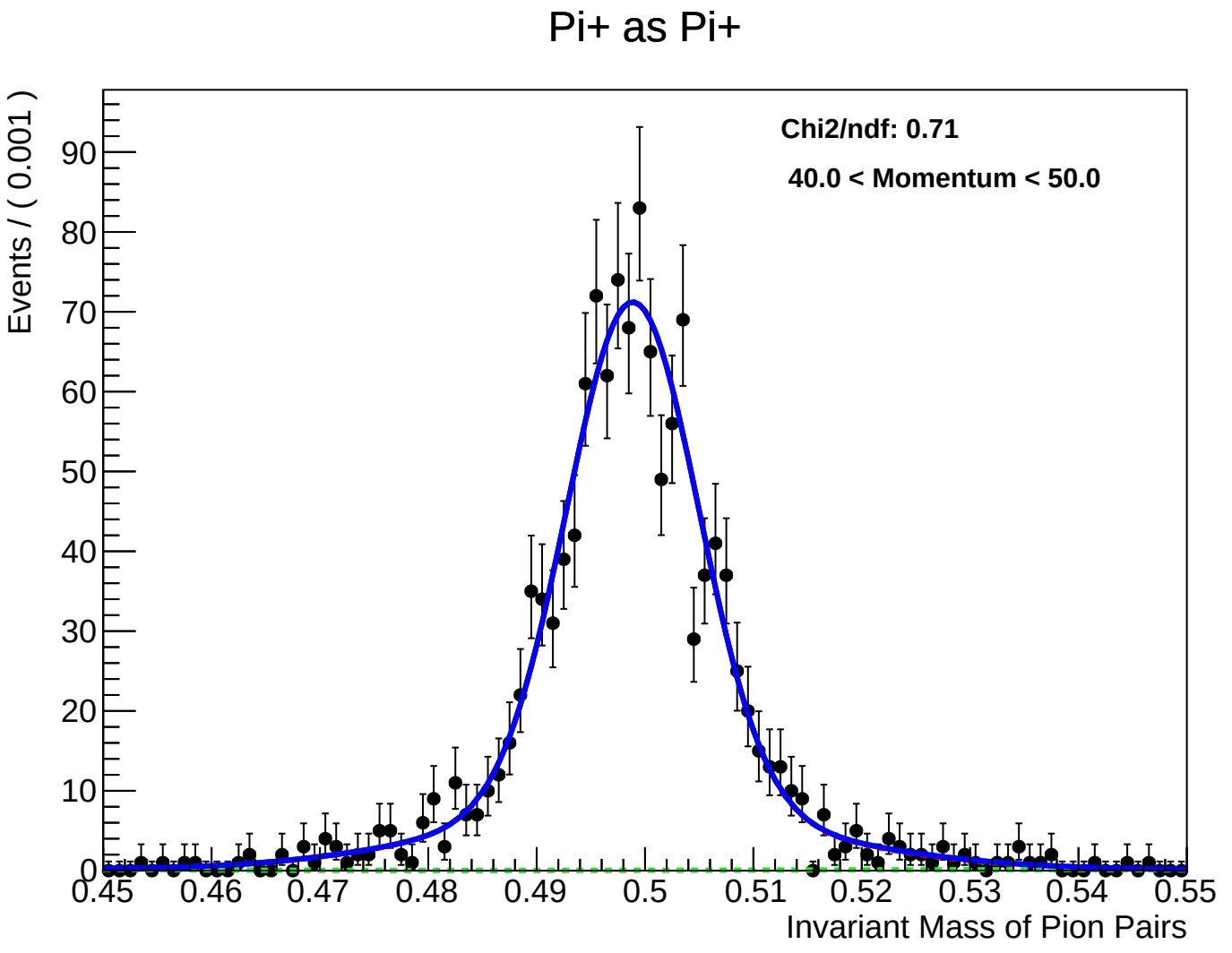

Pi+ as Pi+
Chi2/ndf: 0.61
35.0 < Momentum < 40.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

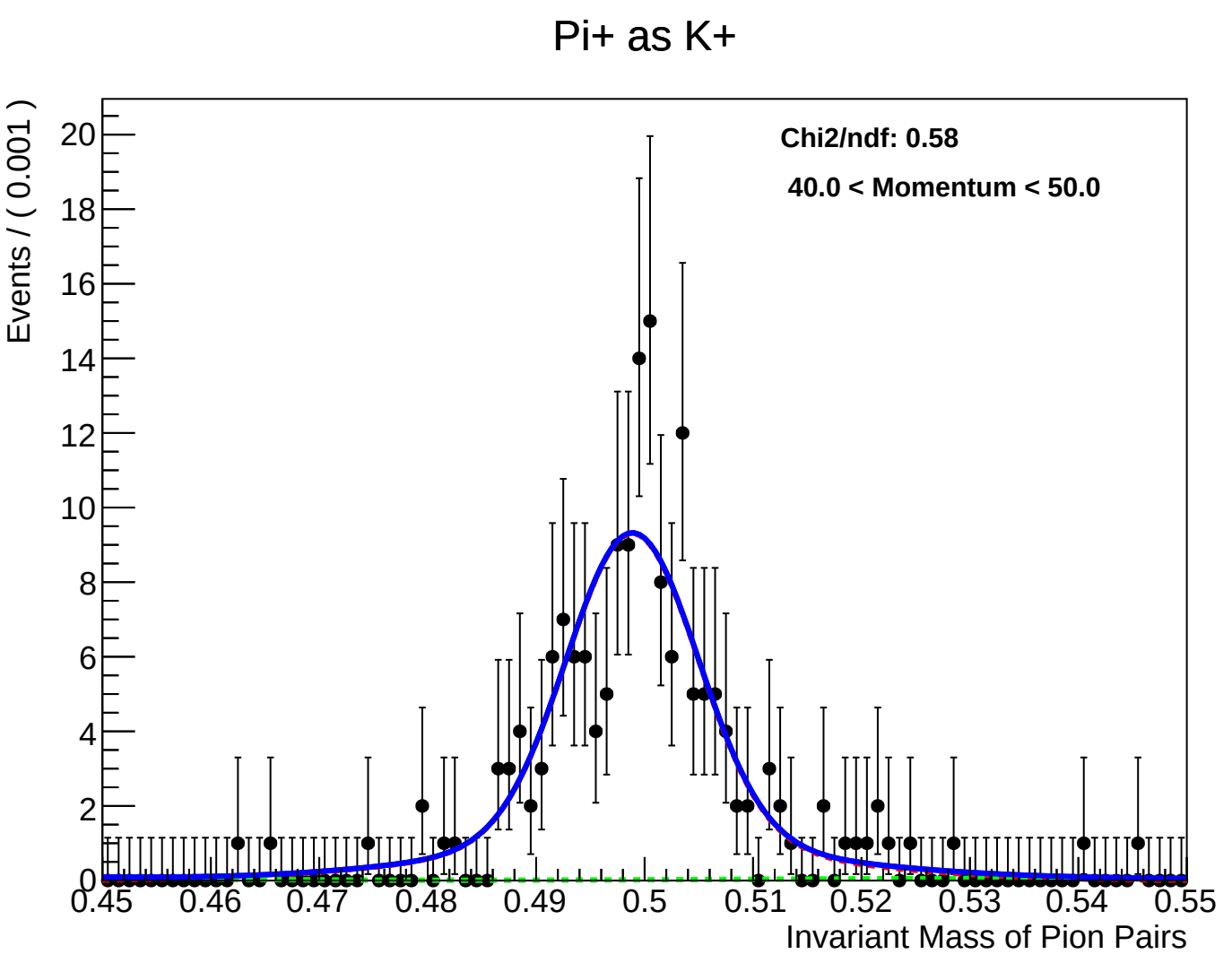

Pi+ as K+
Chi2/ndf: 0.61
35.0 < Momentum < 40.0
Events / (0.001)
0
2
4
6
8
10
12
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

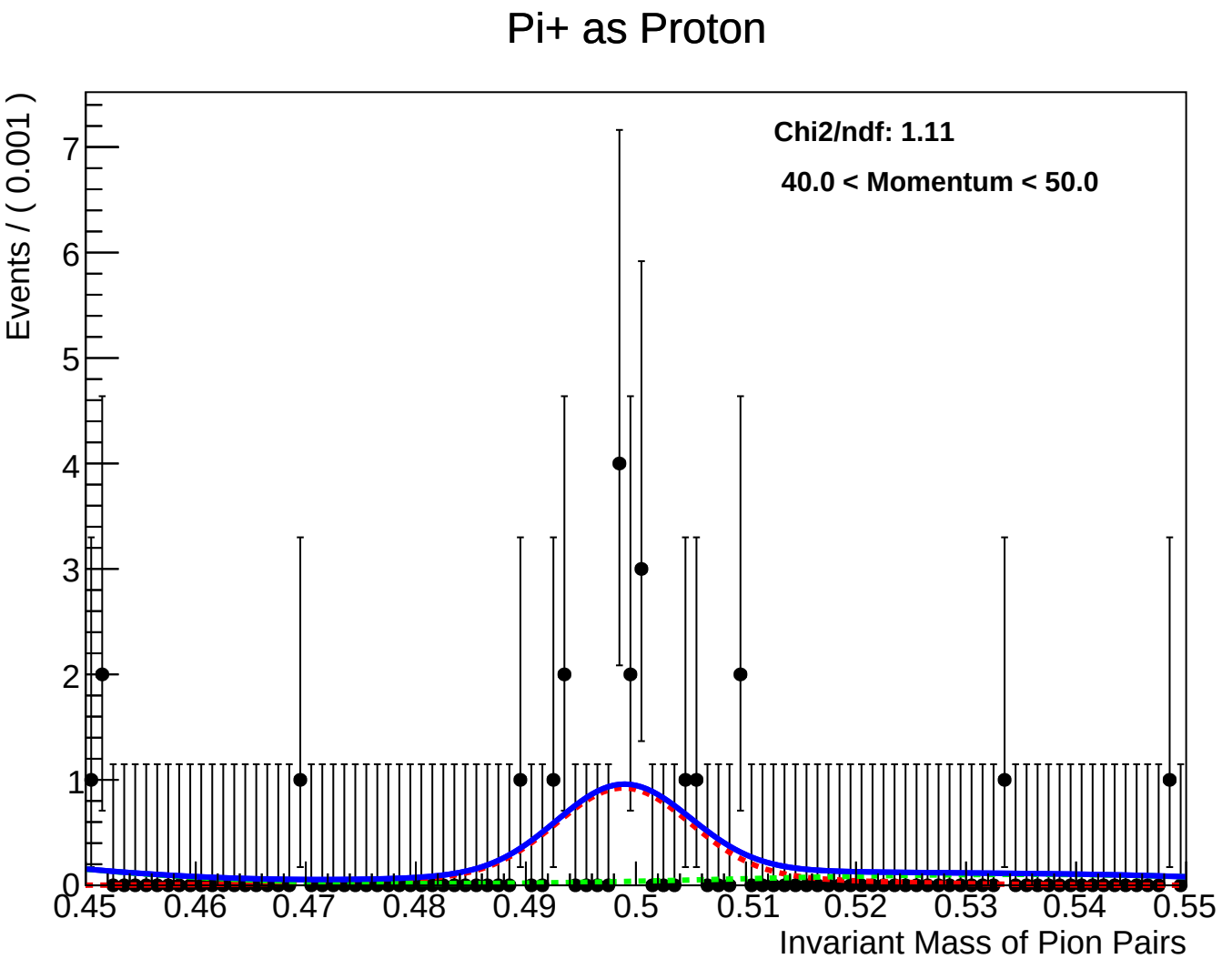

Pi+ as Proton
Chi2/ndf: 0.75
35.0 < Momentum < 40.0
Events / (0.001)
0
1
2
3
4
5
6
7
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

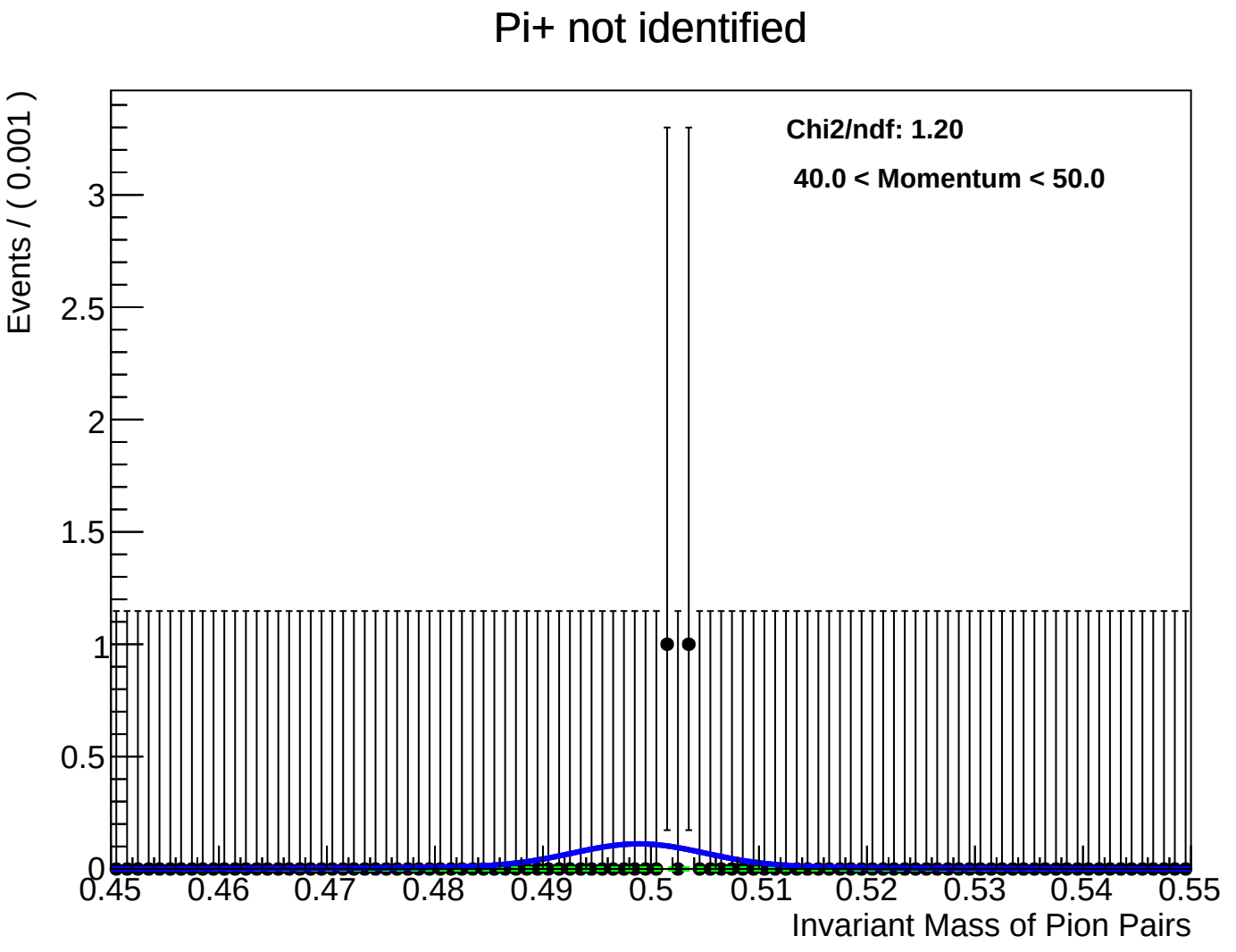

Pi+ not identified
Chi2/ndf: 1.32
35.0 < Momentum < 40.0
Events / (0.001)
0
0.5
1
1.5
2
2.5
3
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

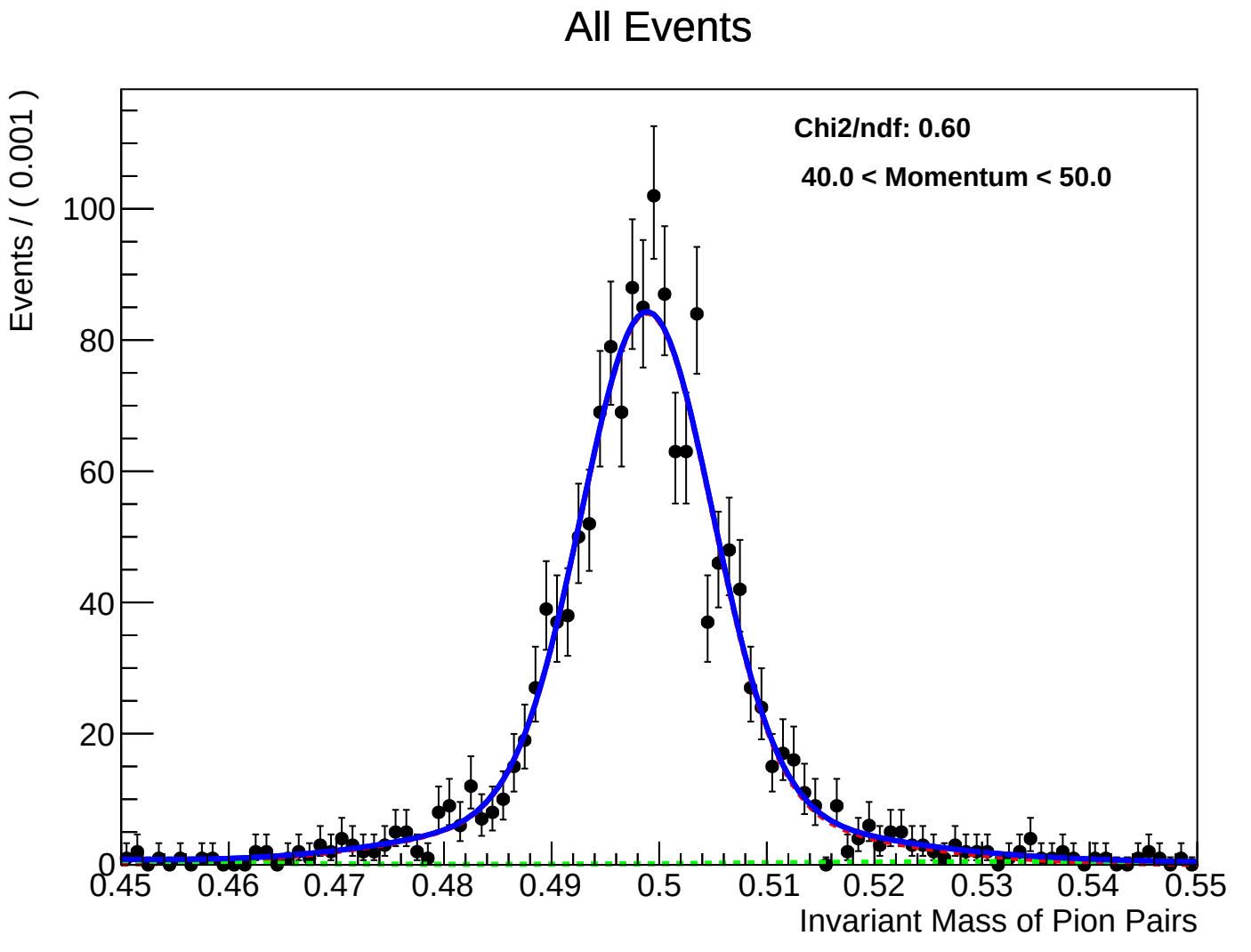

All Events
Chi2/ndf: 0.55
35.0 < Momentum < 40.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

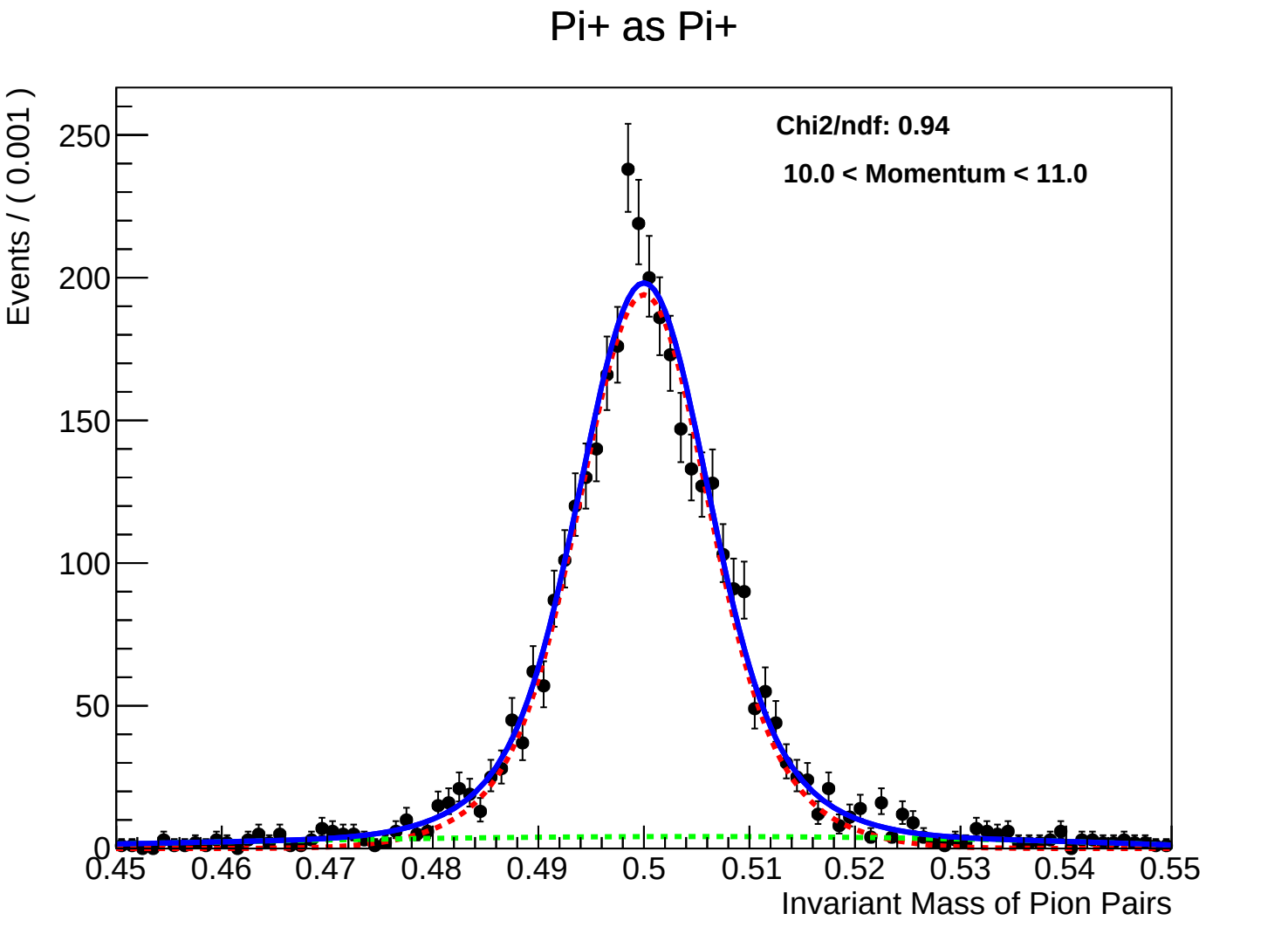

Pi+ as Pi+
Chi2/ndf: 0.71
40.0 < Momentum < 50.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
10
20
30
40
50
60
70
80
90
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

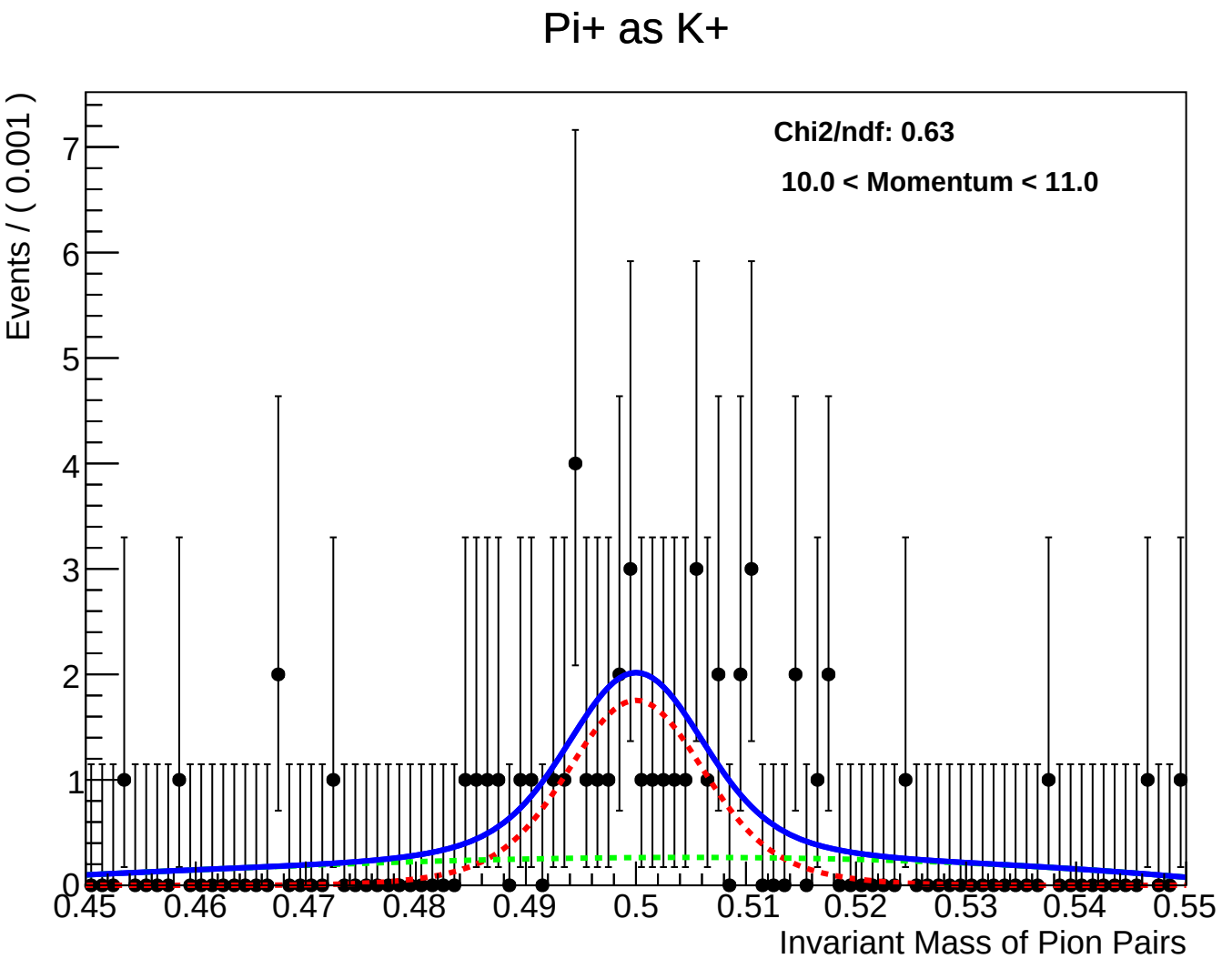

Pi+ as K+
Chi2/ndf: 0.58
40.0 < Momentum < 50.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
2
4
6
8
10
12
14
16
18
20
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

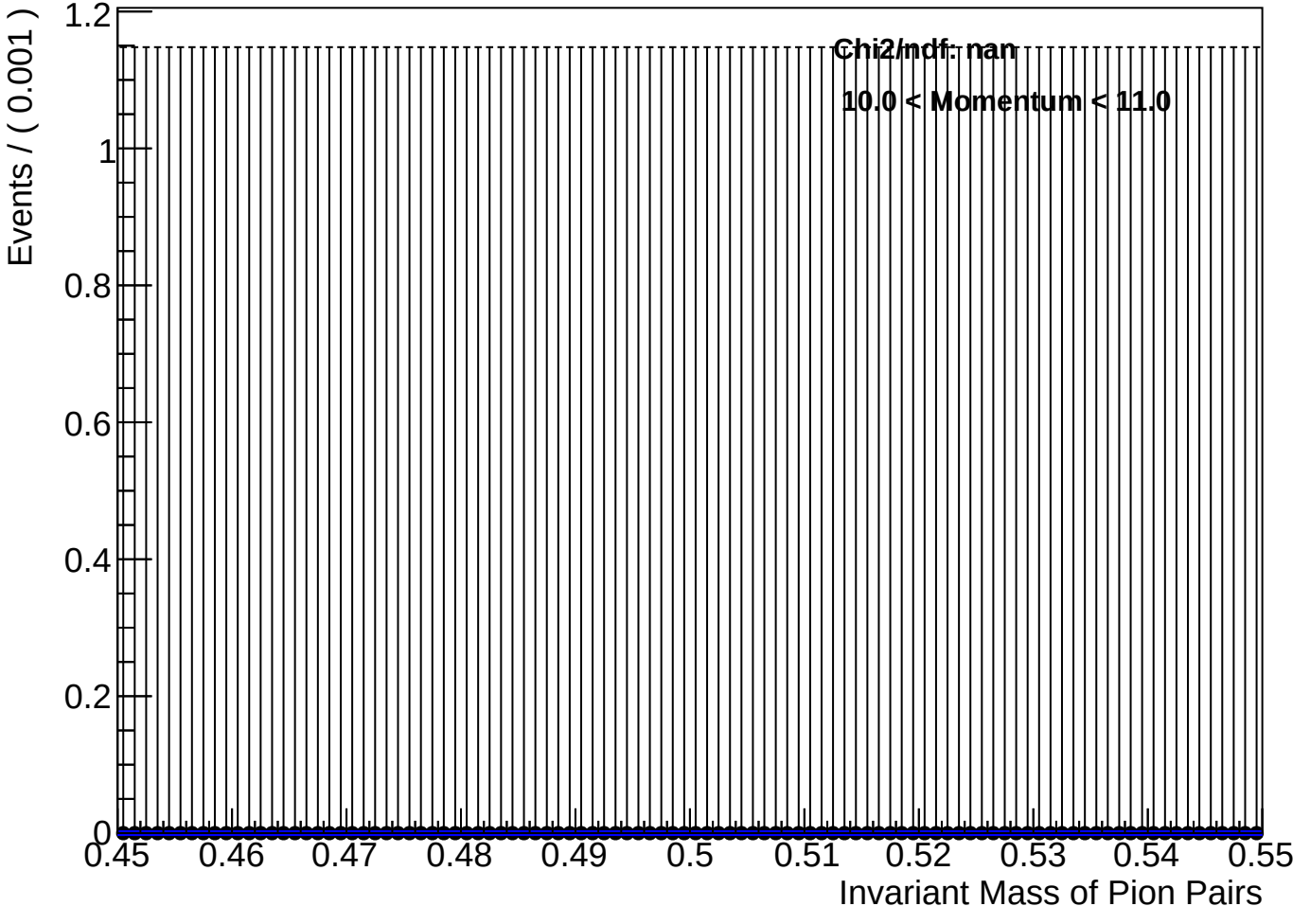

Pi+ as Proton
Chi2/ndf: 1.11
40.0 < Momentum < 50.0
Events / (0.001)
0
1
2
3
4
5
6
7
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

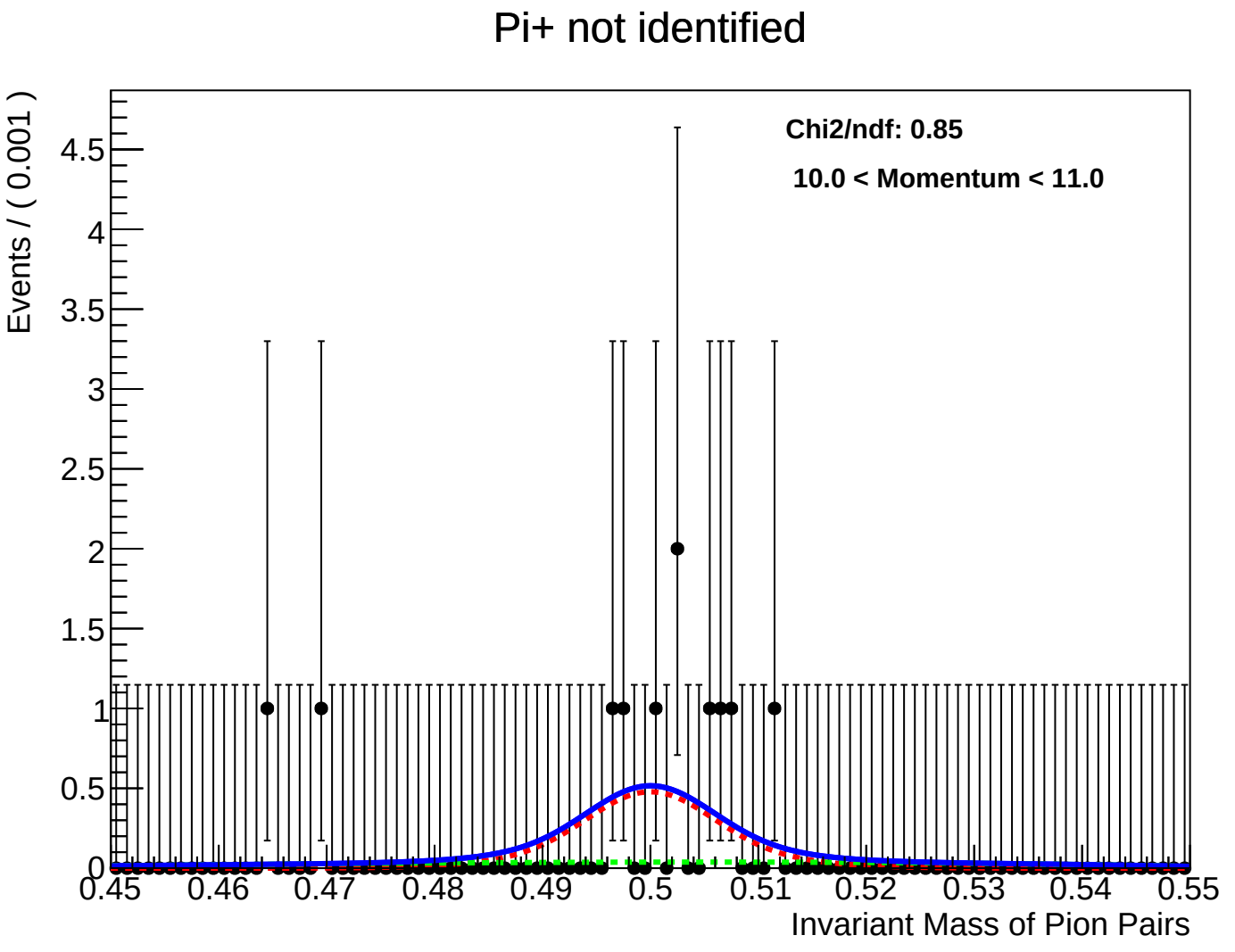

Pi+ not identified
Chi2/ndf: 1.20
40.0 < Momentum < 50.0
Events / (0.001)
0
0.5
1
1.5
2
2.5
3
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

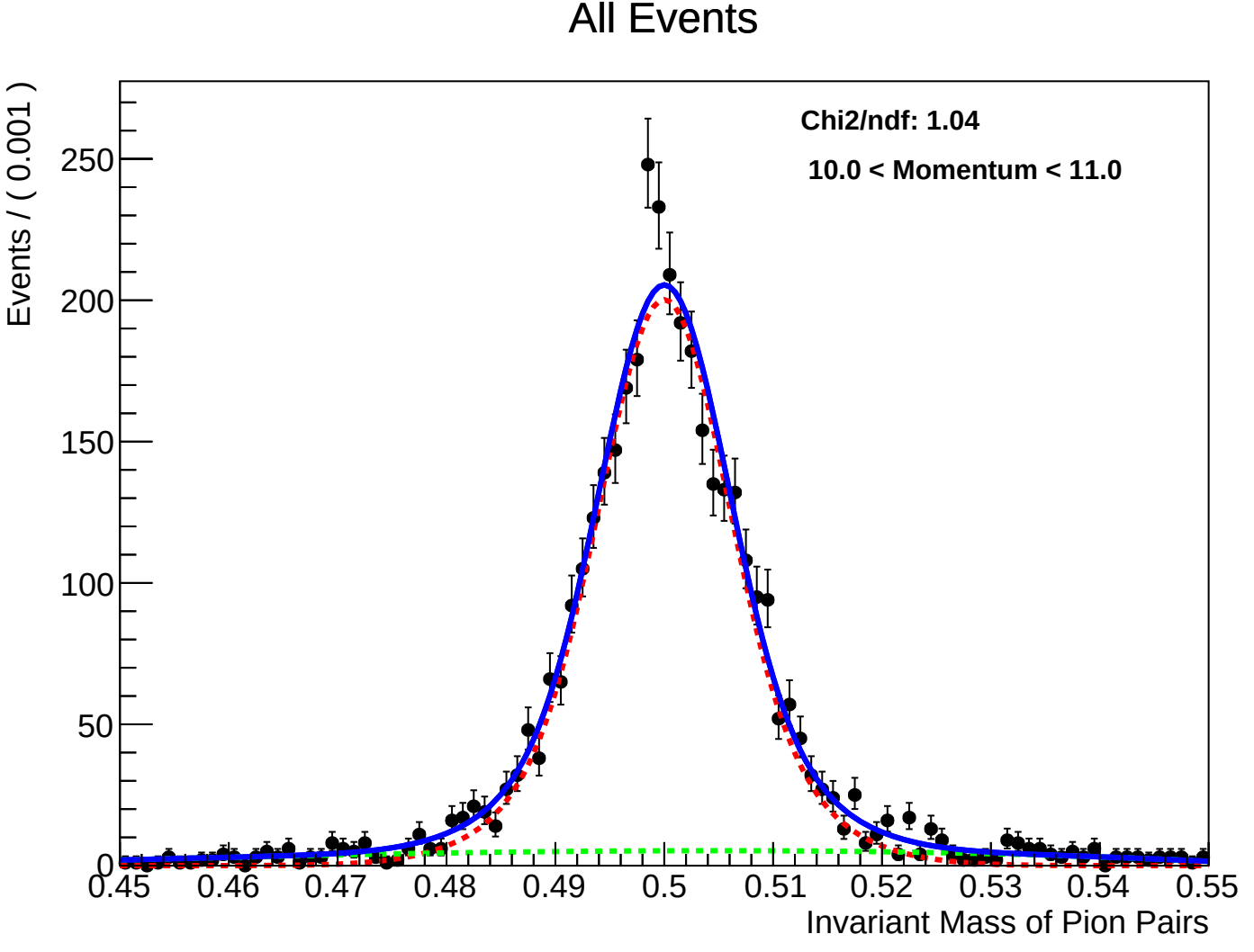

All Events
Chi2/ndf: 0.60
40.0 < Momentum < 50.0
Events / (0.001)
0
20
40
60
80
100
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

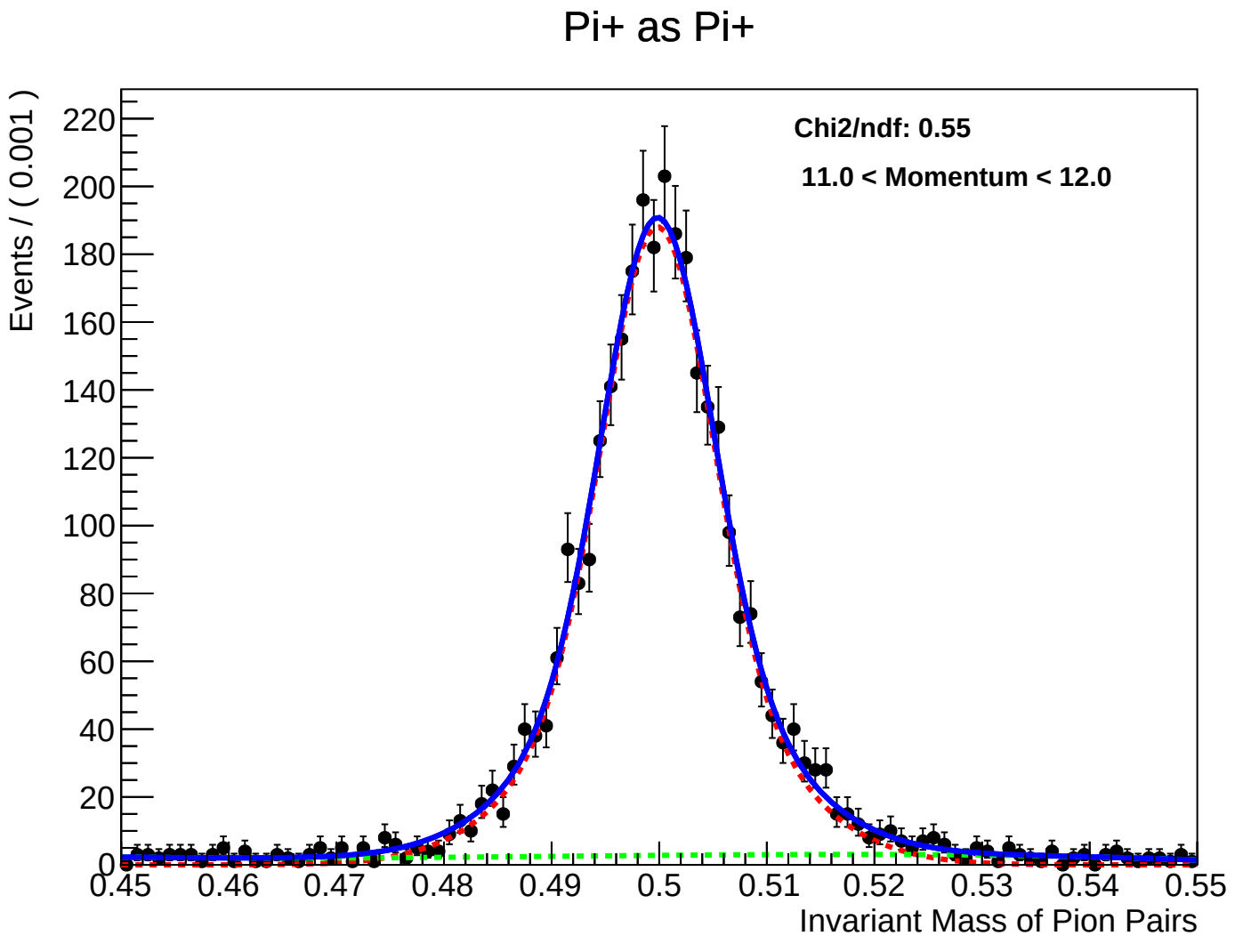

Pi+ as Pi+
Chi2/ndf: 0.94
10.0 < Momentum < 11.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
50
100
150
200
250
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

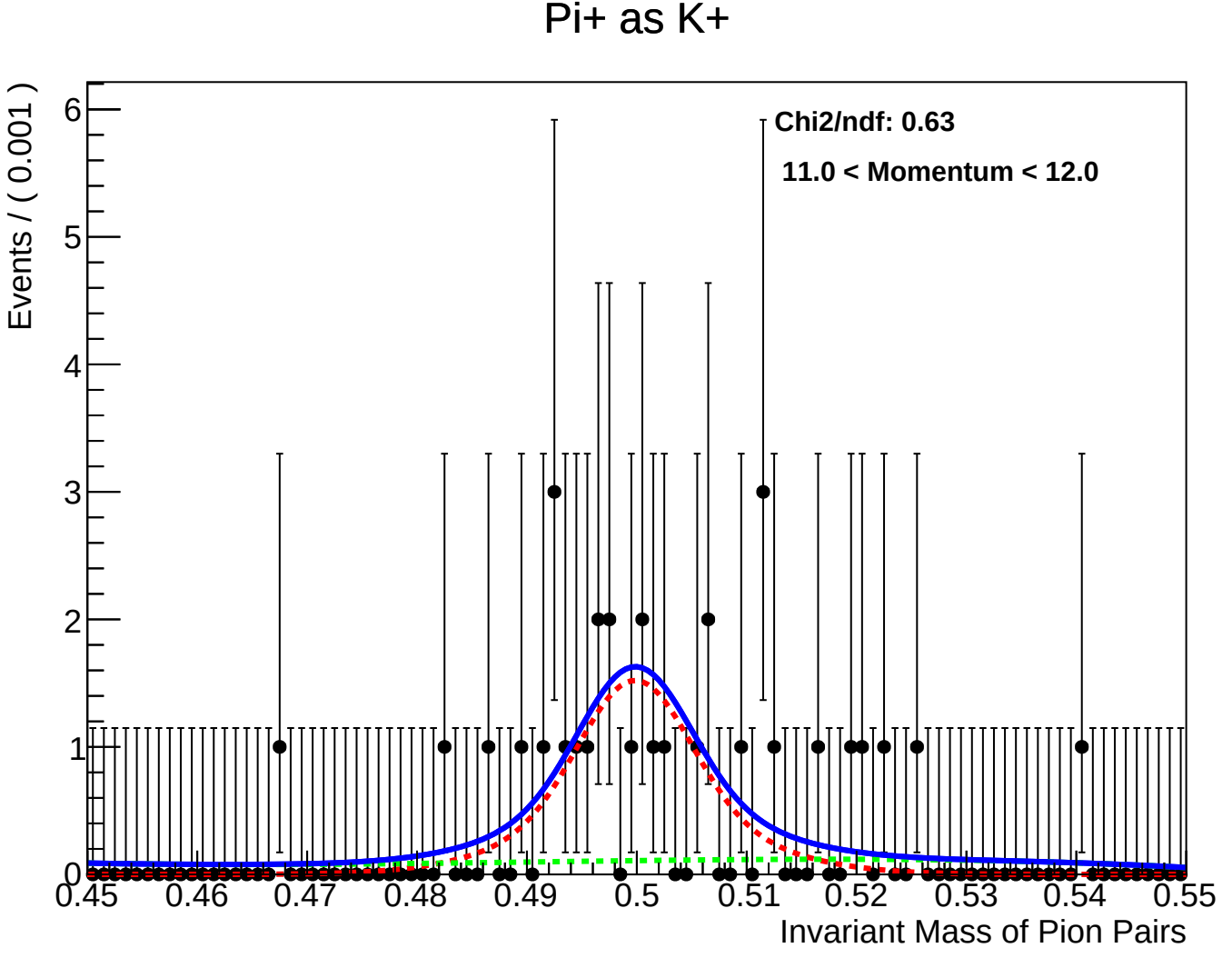

Pi+ as K+
Chi2/ndf: 0.63
10.0 < Momentum < 11.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
1
2
3
4
5
6
7
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

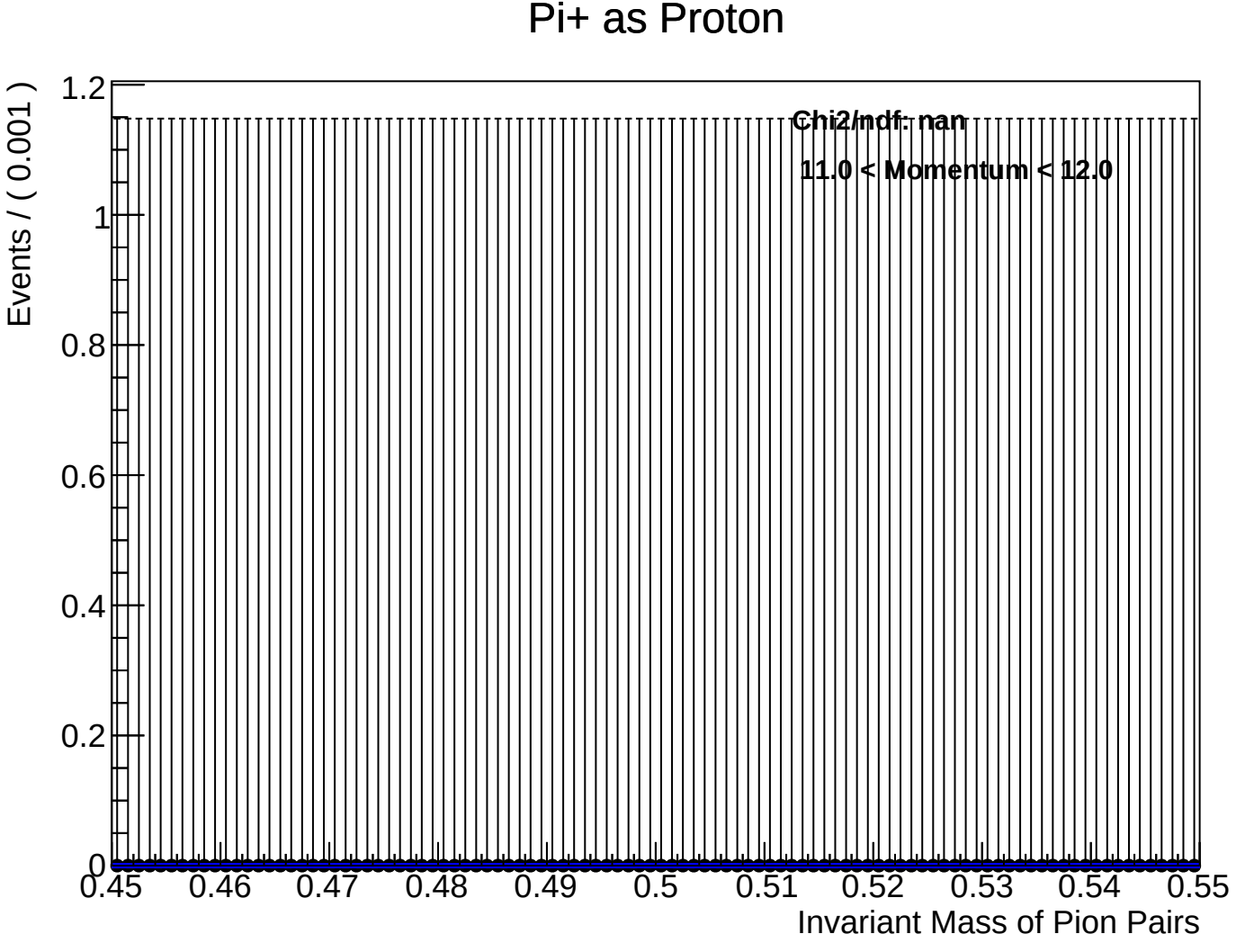

Pi+ as Proton
Chi2/ndf: nan
10.0 < Momentum < 11.0
Events / (0.001)
1.2
1
0.8
0.6
0.4
0.2
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

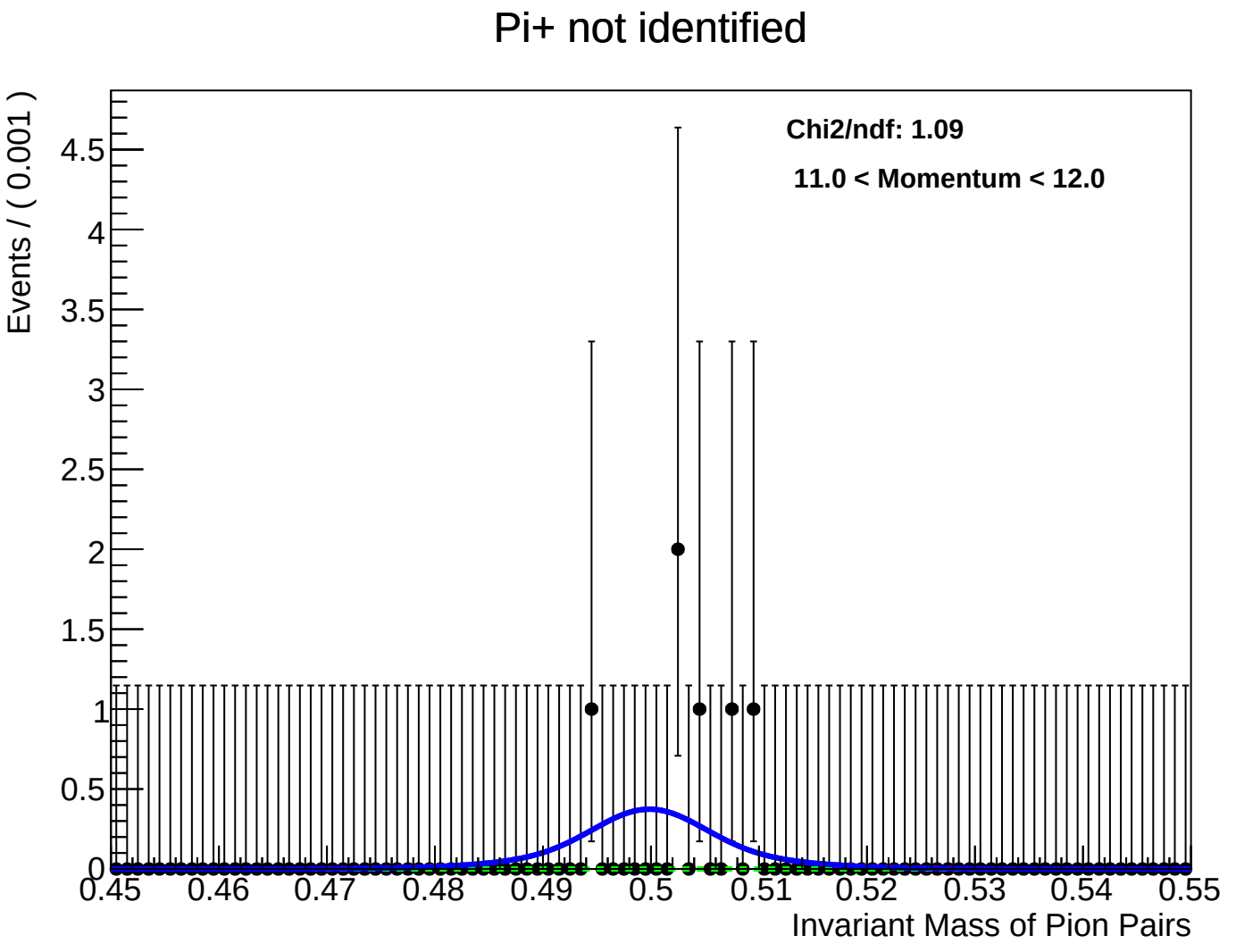

Pi+ not identified
Chi2/ndf: 0.85
10.0 < Momentum < 11.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

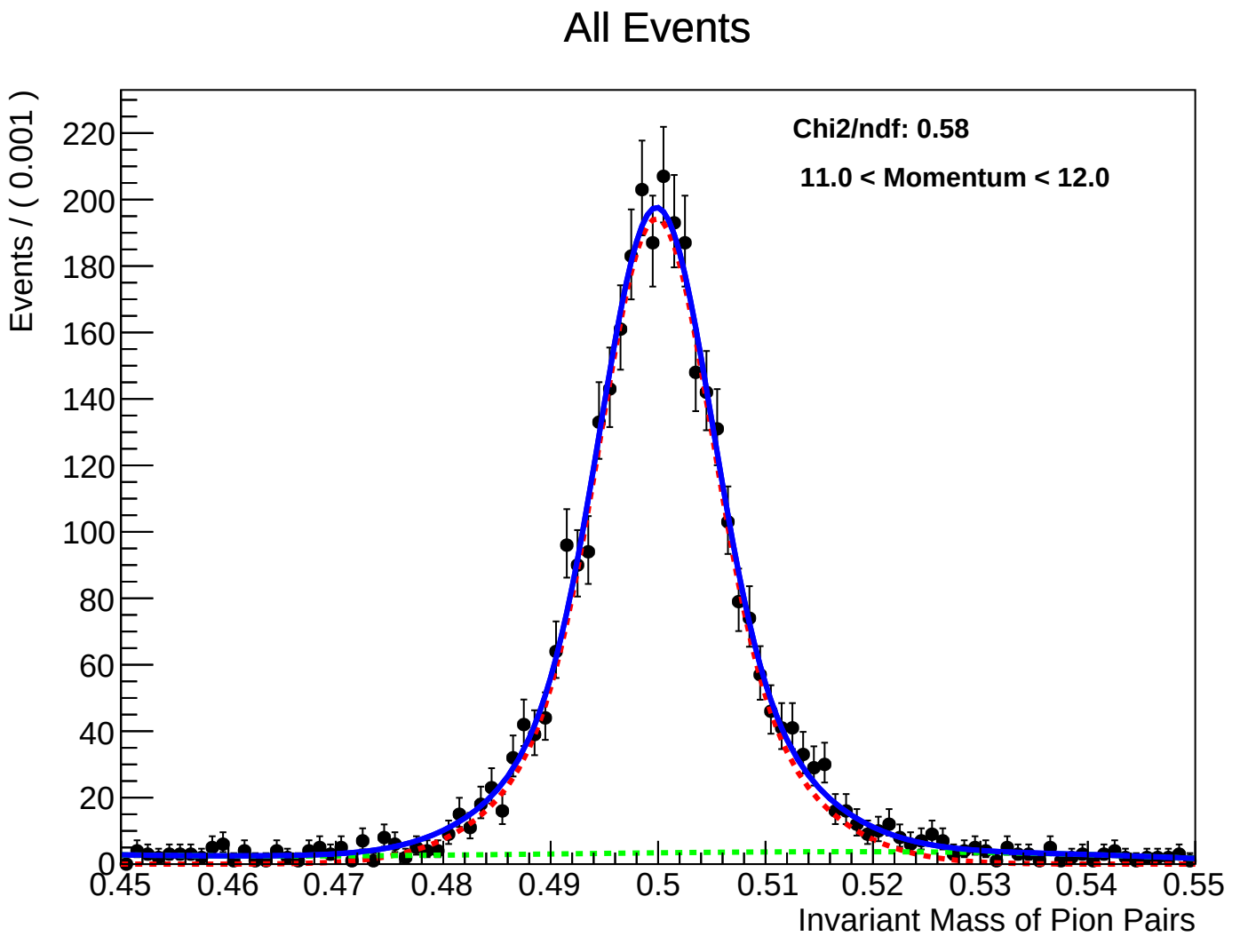

All Events
Chi2/ndf: 1.04
10.0 < Momentum < 11.0
Events / (0.001)
0
50
100
150
200
250
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

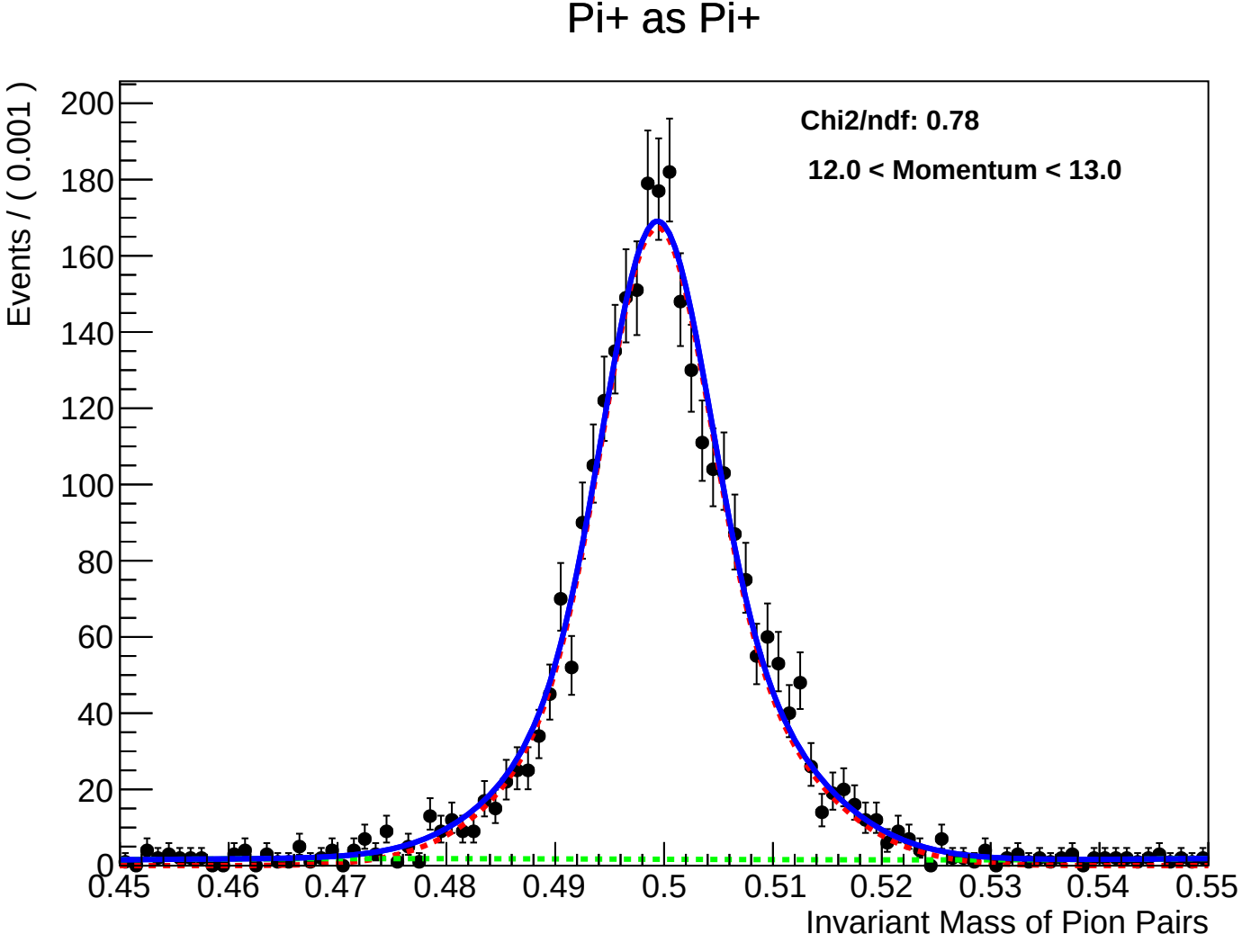

Pi+ as Pi+
Chi2/ndf: 0.55
11.0 < Momentum < 12.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
140
160
180
200
220
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

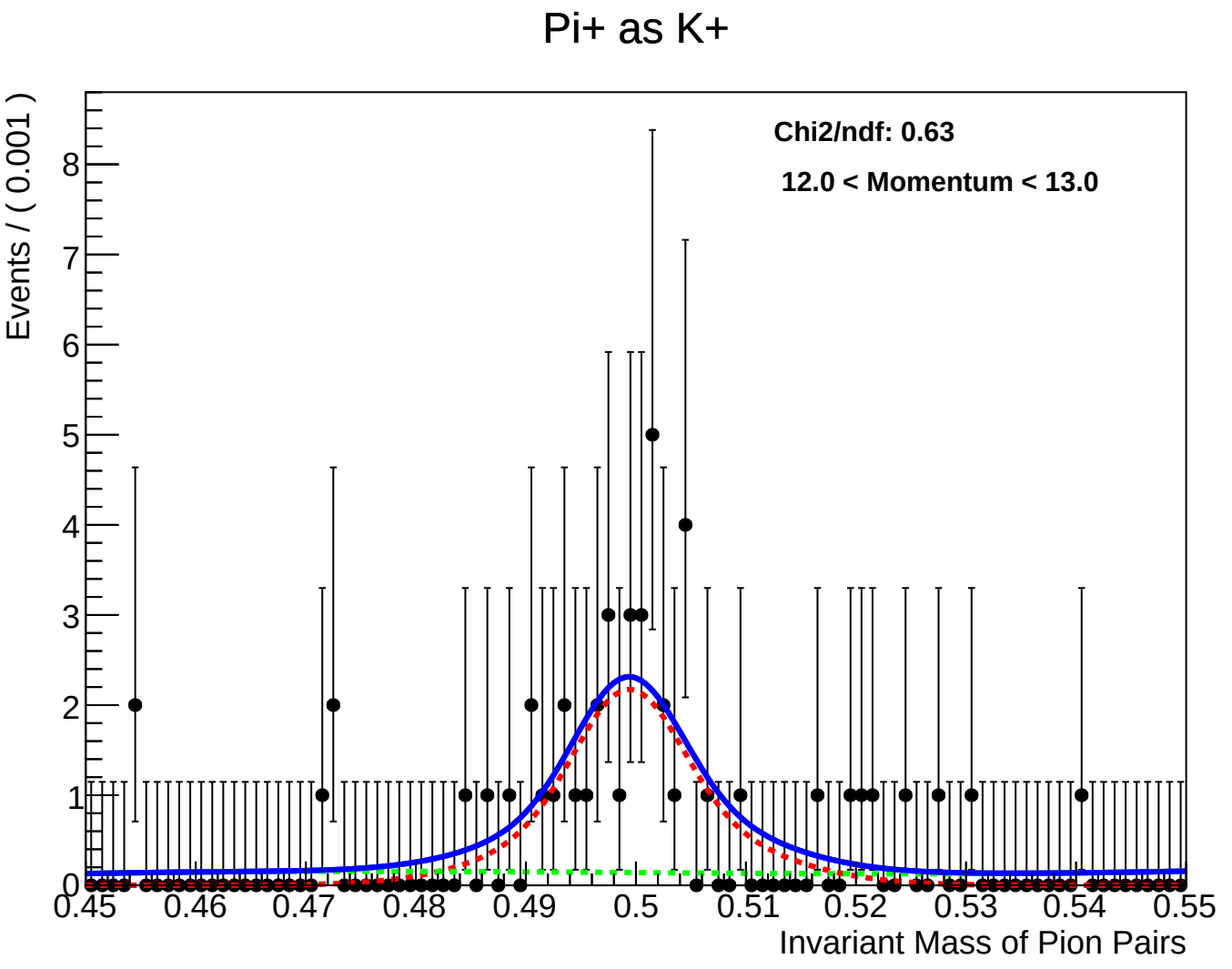

Pi+ as K+
Chi2/ndf: 0.63
11.0 < Momentum < 12.0
Events / (0.001)
0
1
2
3
4
5
6
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

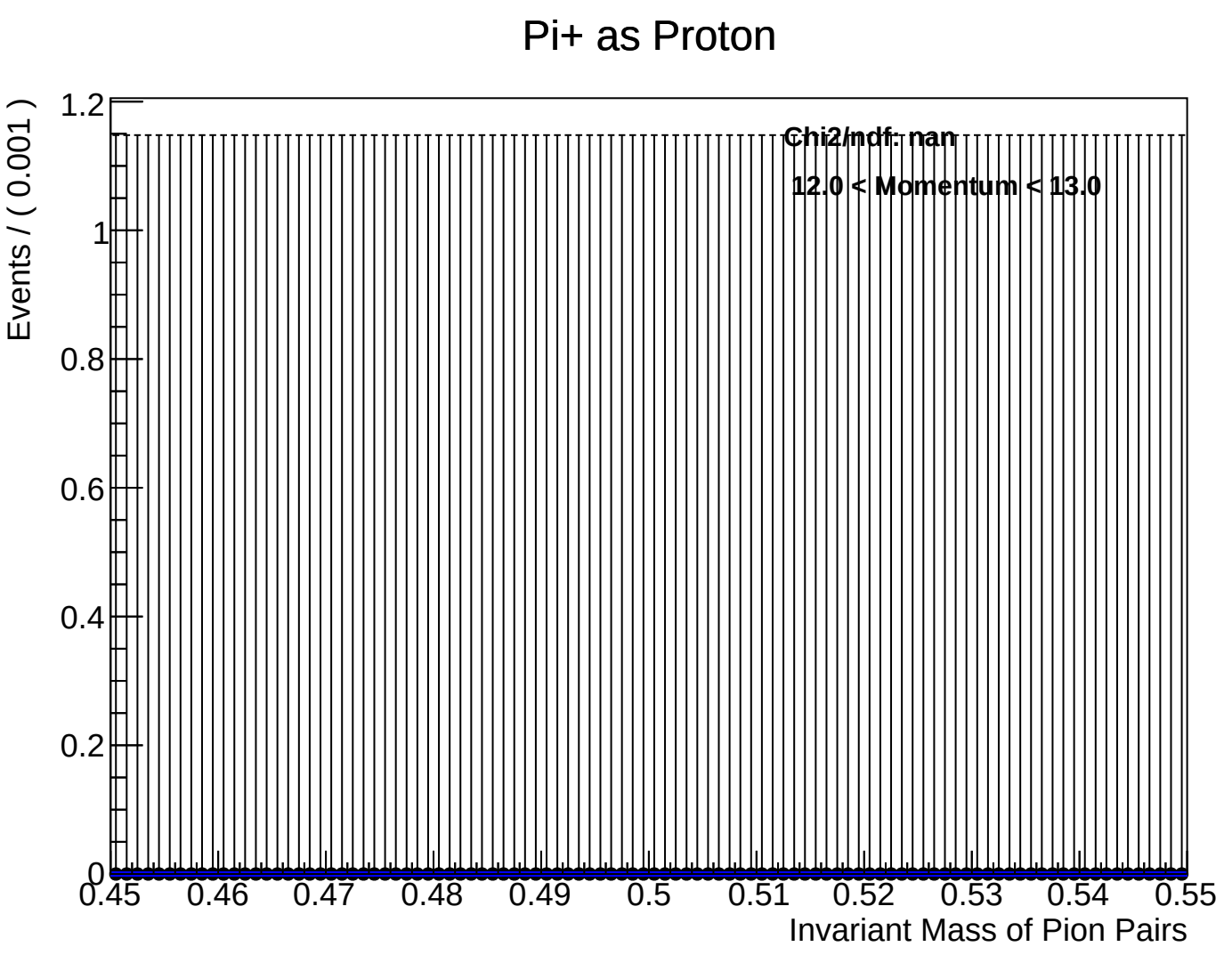

Pi+ as Proton
Chi2/ndf: nan
11.0 < Momentum < 12.0
Events / (0.001)
1.2
1
0.8
0.6
0.4
0.2
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

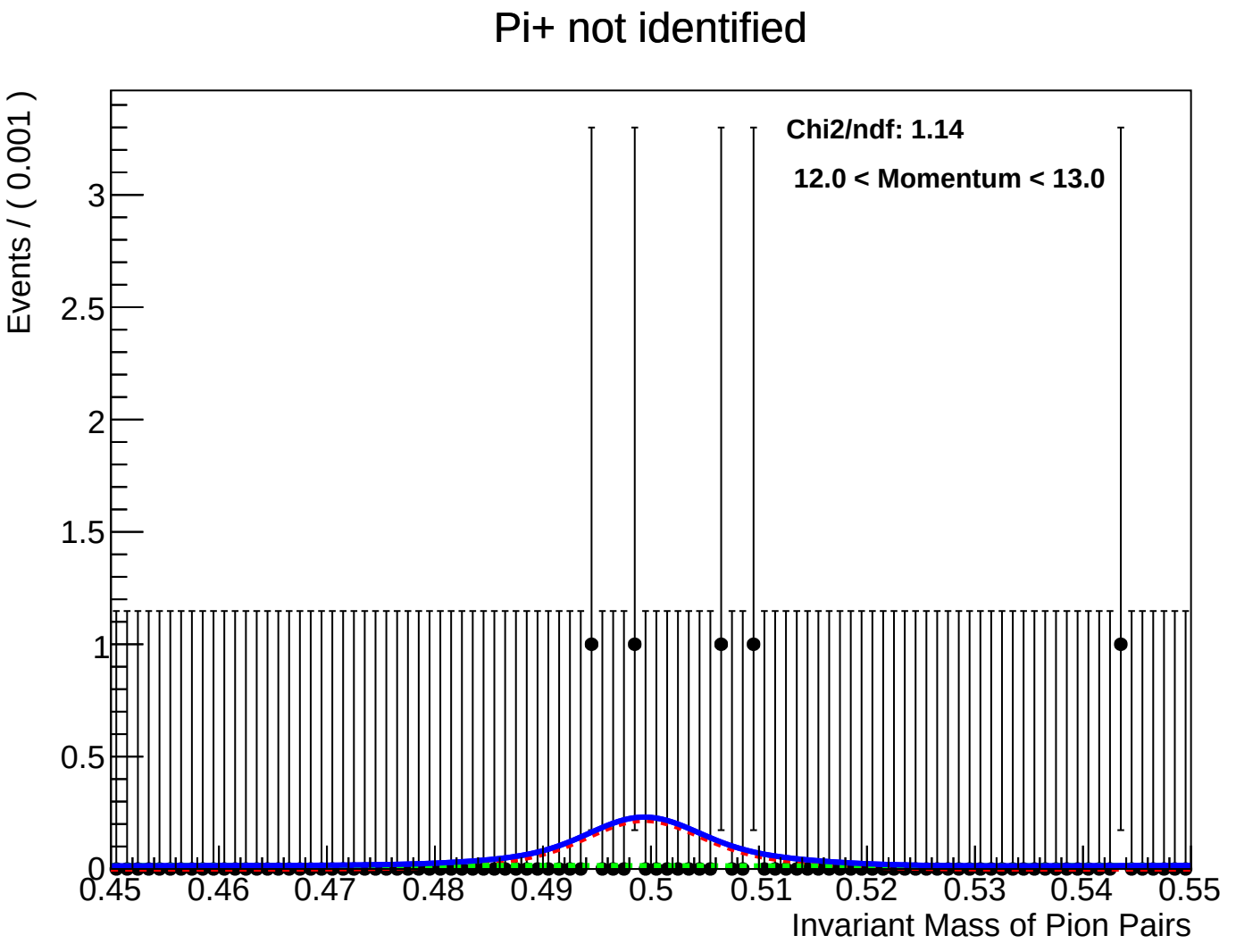

Pi+ not identified
Chi2/ndf: 1.09
11.0 < Momentum < 12.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55


All Events
Chi2/ndf: 0.58
11.0 < Momentum < 12.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
140
160
180
200
220
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

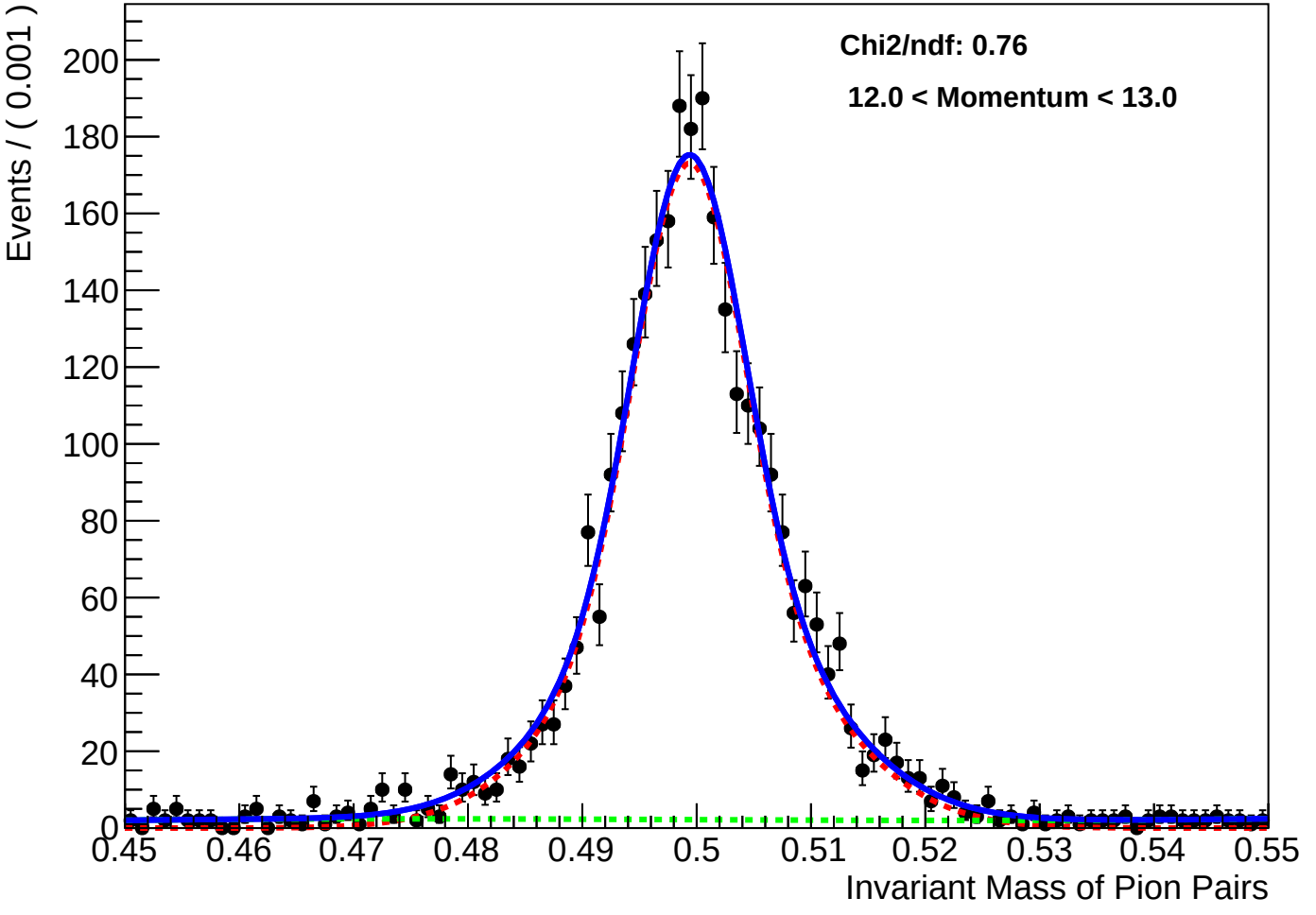

Pi+ as Pi+
Chi2/ndf: 0.78
12.0 < Momentum < 13.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
140
160
180
200
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

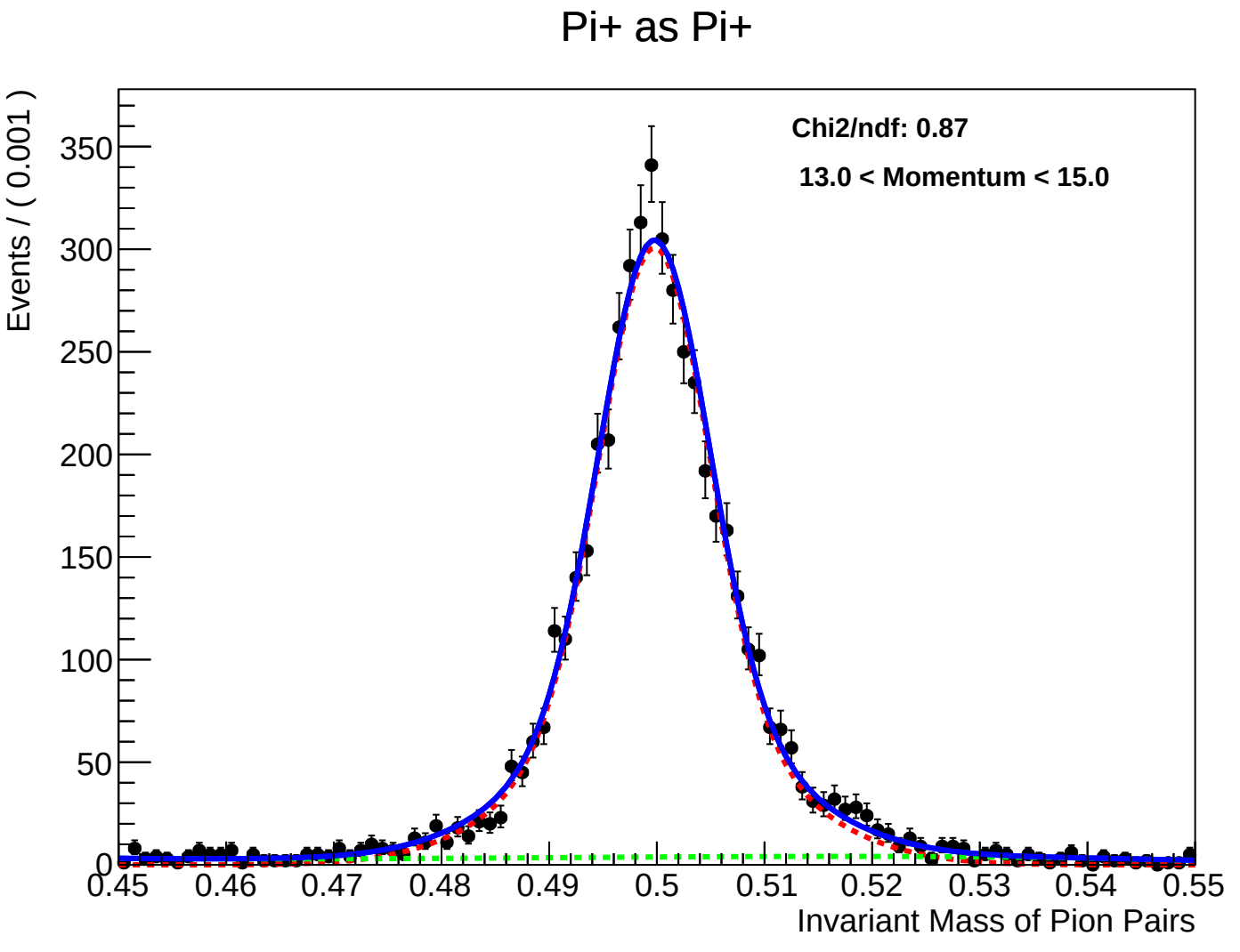

Pi+ as K+
Chi2/ndf: 0.63
12.0 < Momentum < 13.0
Events / (0.001)
0
1
2
3
4
5
6
7
8
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

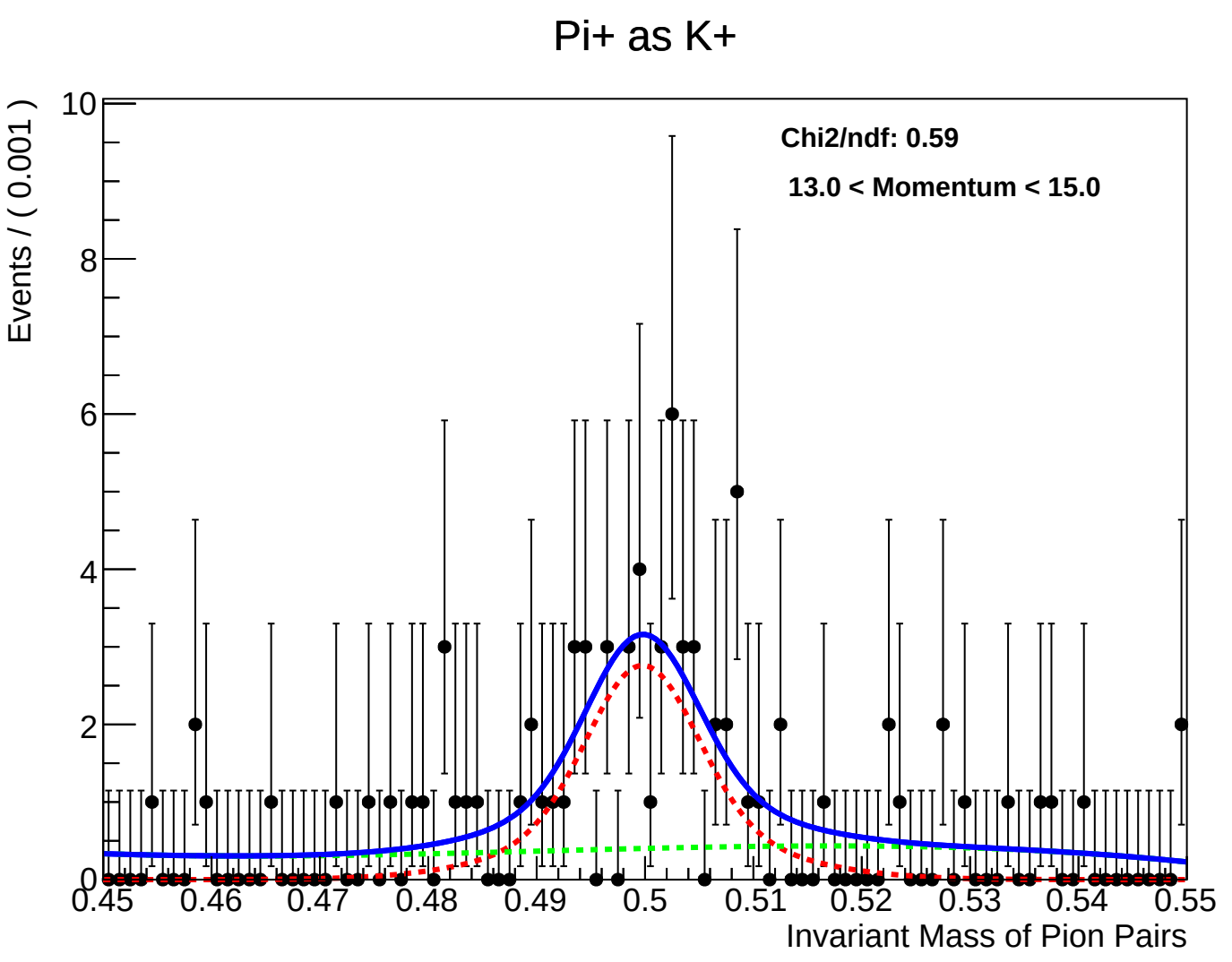

Pi+ as Proton
Chi2/ndf: nan
12.0 < Momentum < 13.0
Events / (0.001)
1.2
1
0.8
0.6
0.4
0.2
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

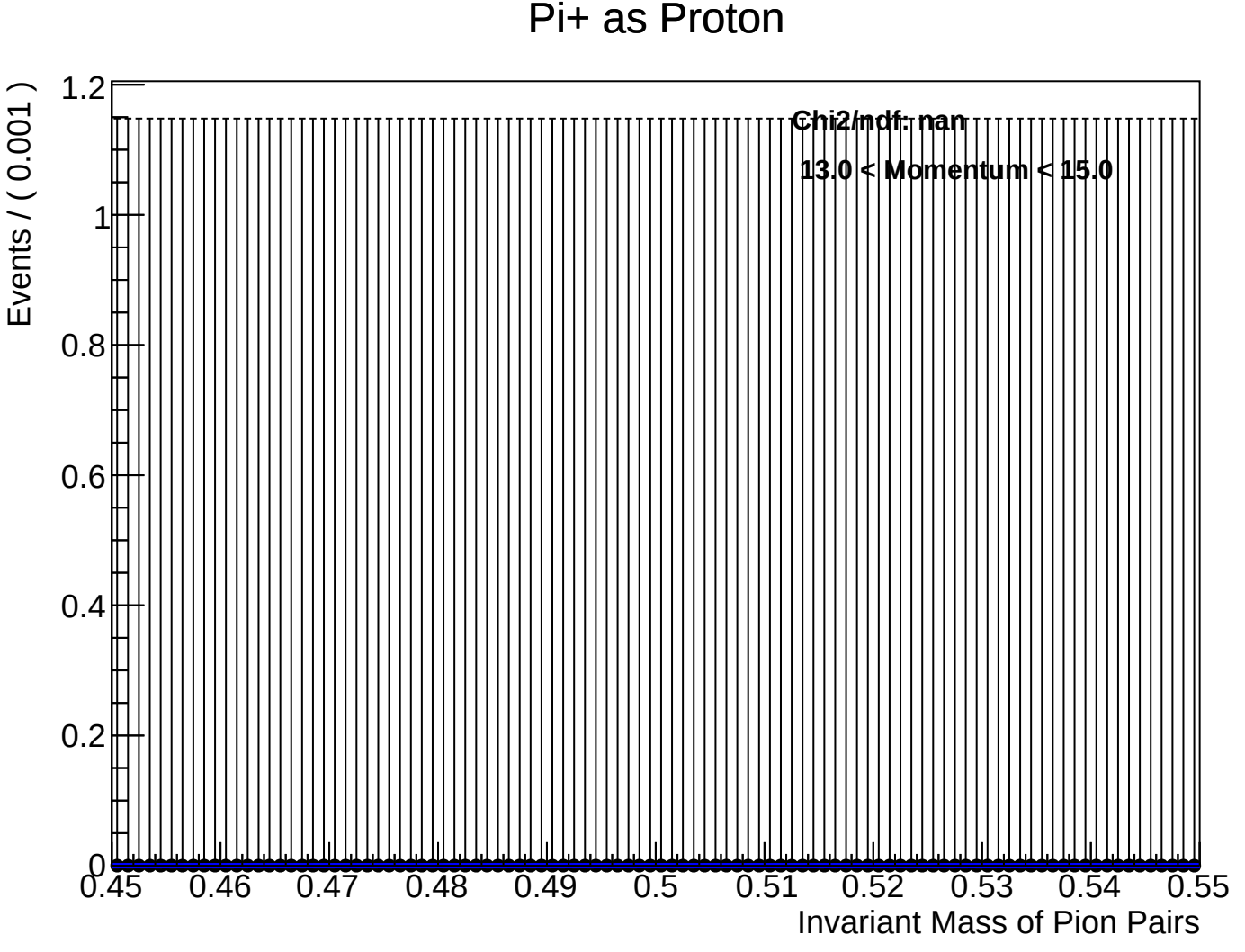

Pi+ not identified
Chi2/ndf: 1.14
12.0 < Momentum < 13.0
Events / (0.001)
0
0.5
1
1.5
2
2.5
3
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

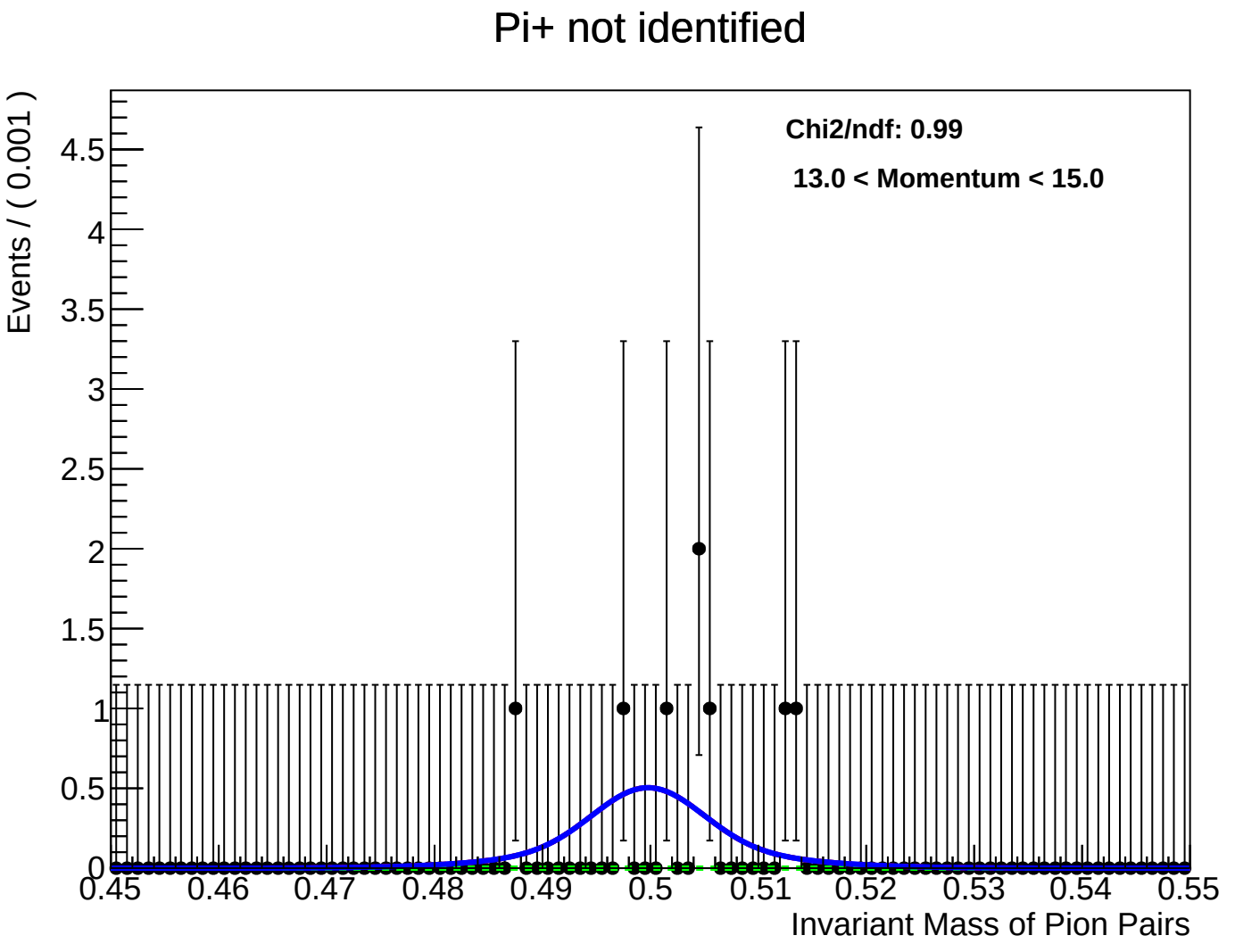
All Events

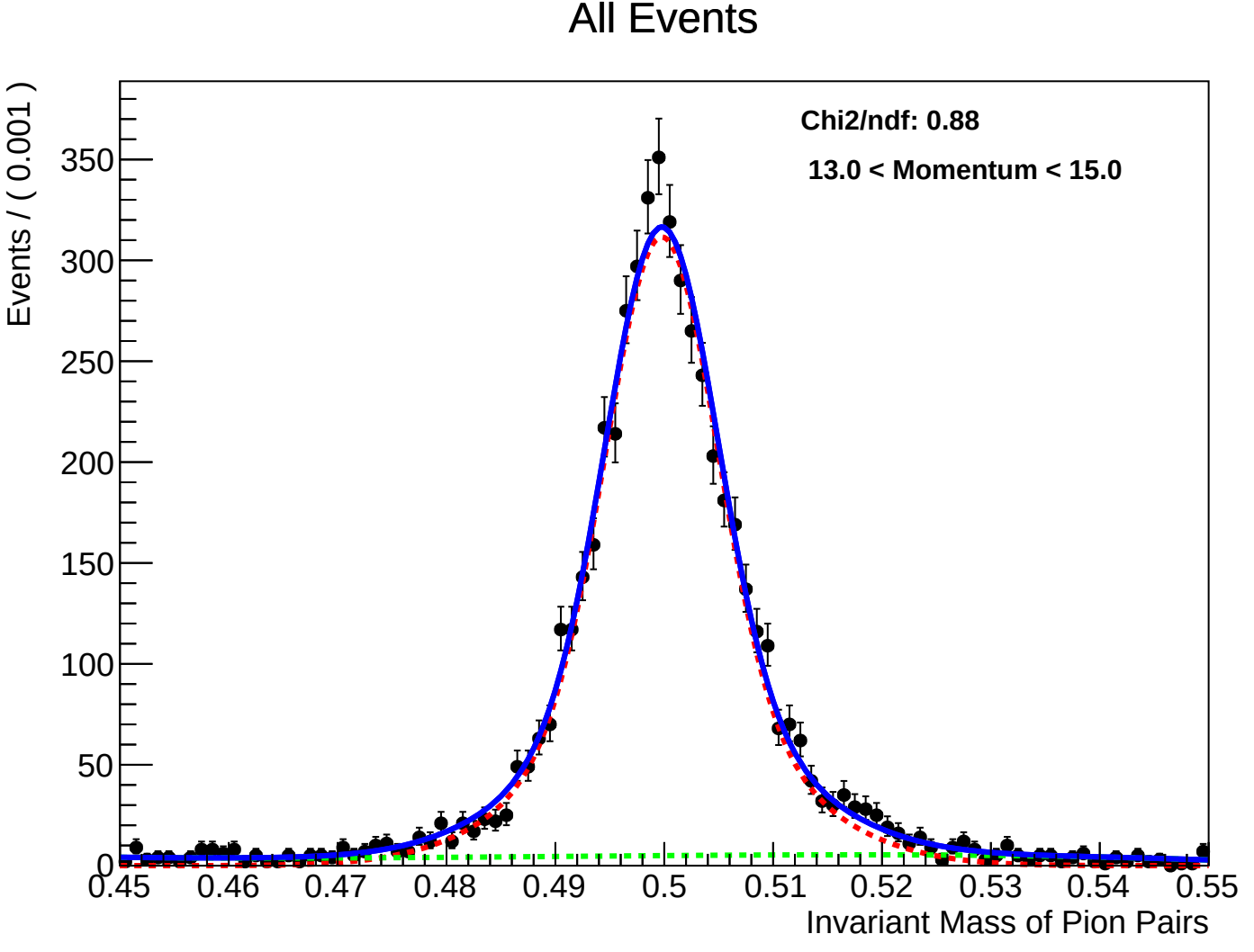

Chi2/ndf: 0.76
12.0 < Momentum < 13.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
140
160
180
200
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

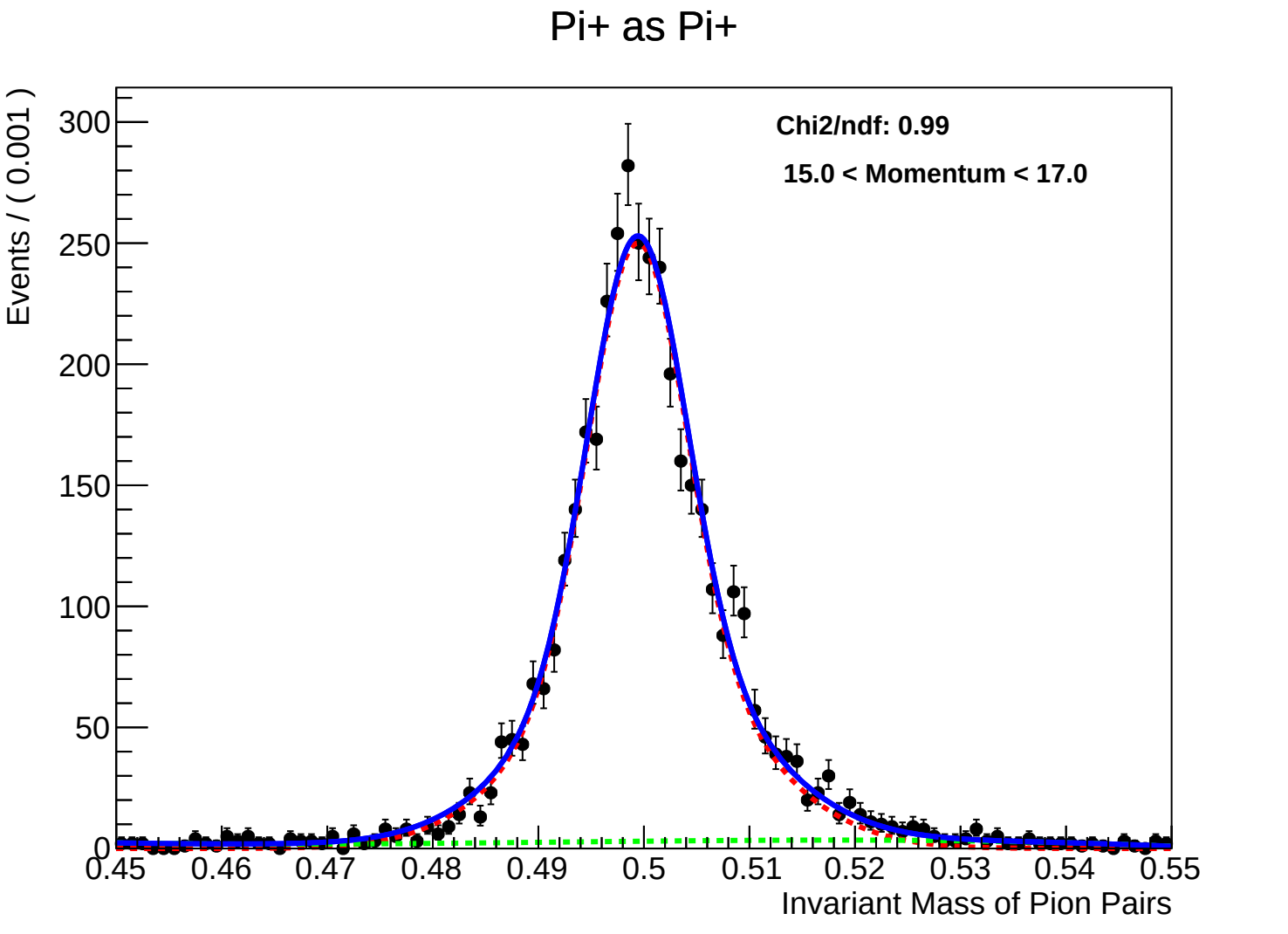

Pi+ as Pi+
Chi2/ndf: 0.87
13.0 < Momentum < 15.0
Events / (0.001)
0
50
100
150
200
250
300
350
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

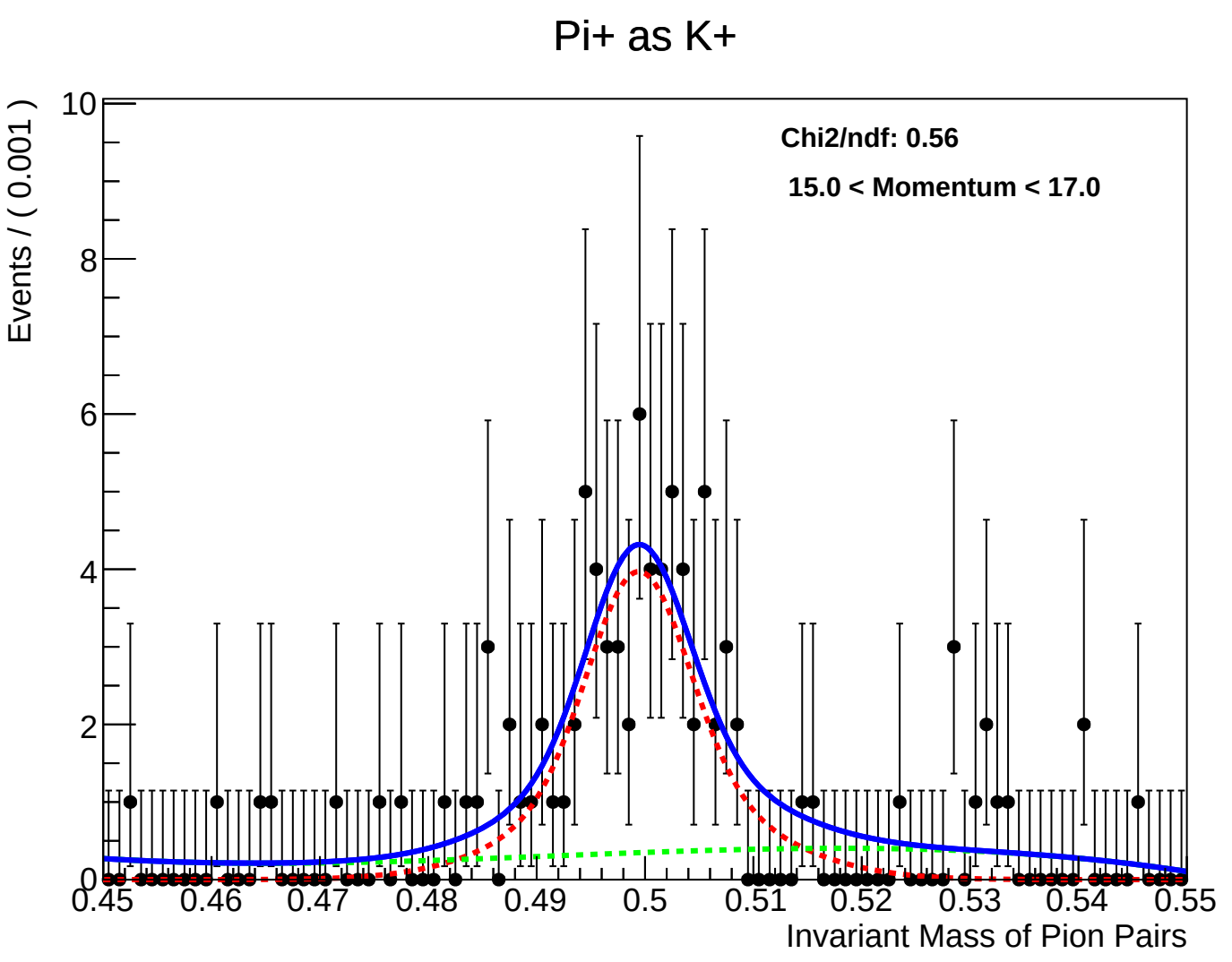

Pi+ as K+
Chi2/ndf: 0.59
13.0 < Momentum < 15.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
2
4
6
8
10
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

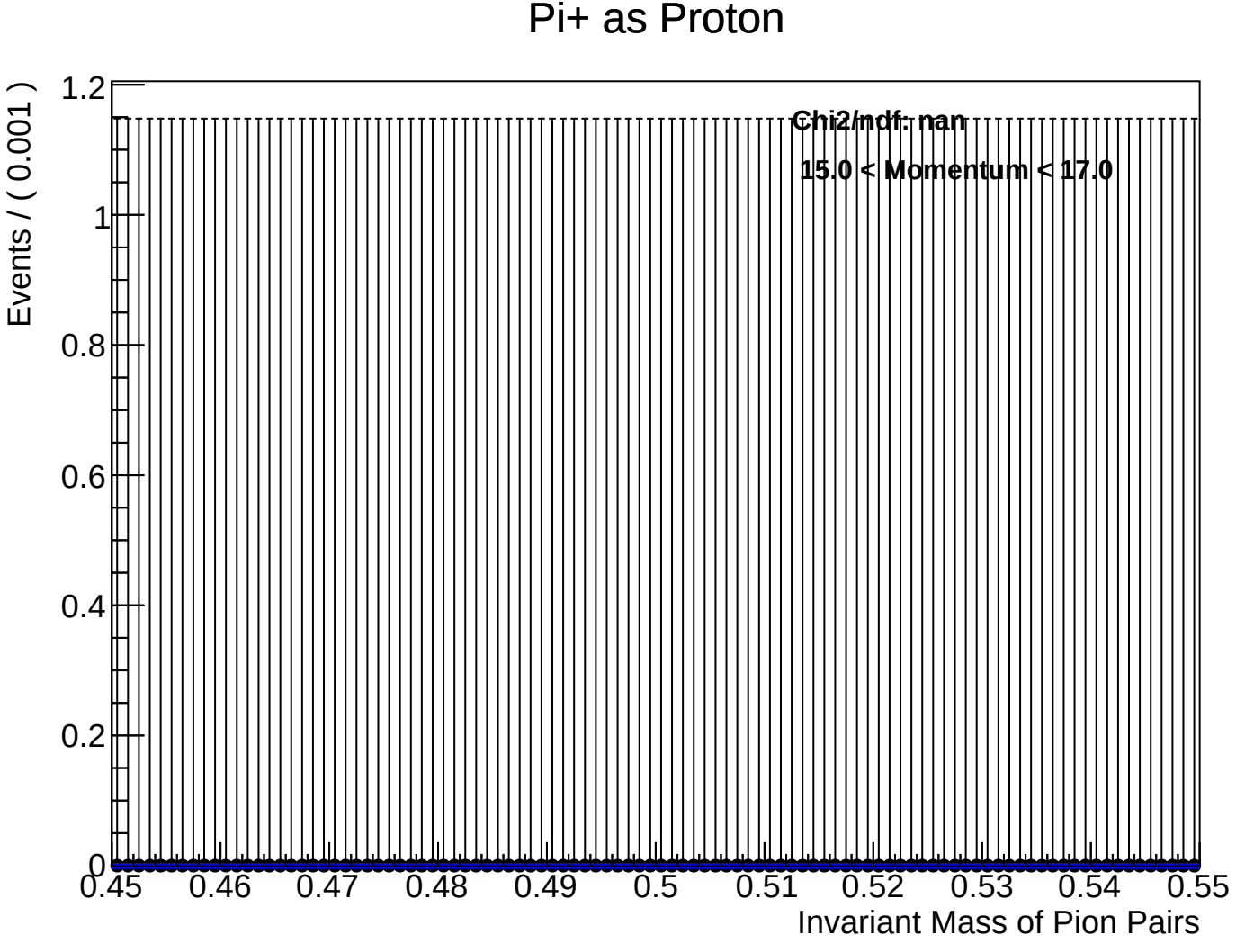

Pi+ as Proton
Chi2/ndf: nan
13.0 < Momentum < 15.0
Events / (0.001)
1.2
1
0.8
0.6
0.4
0.2
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

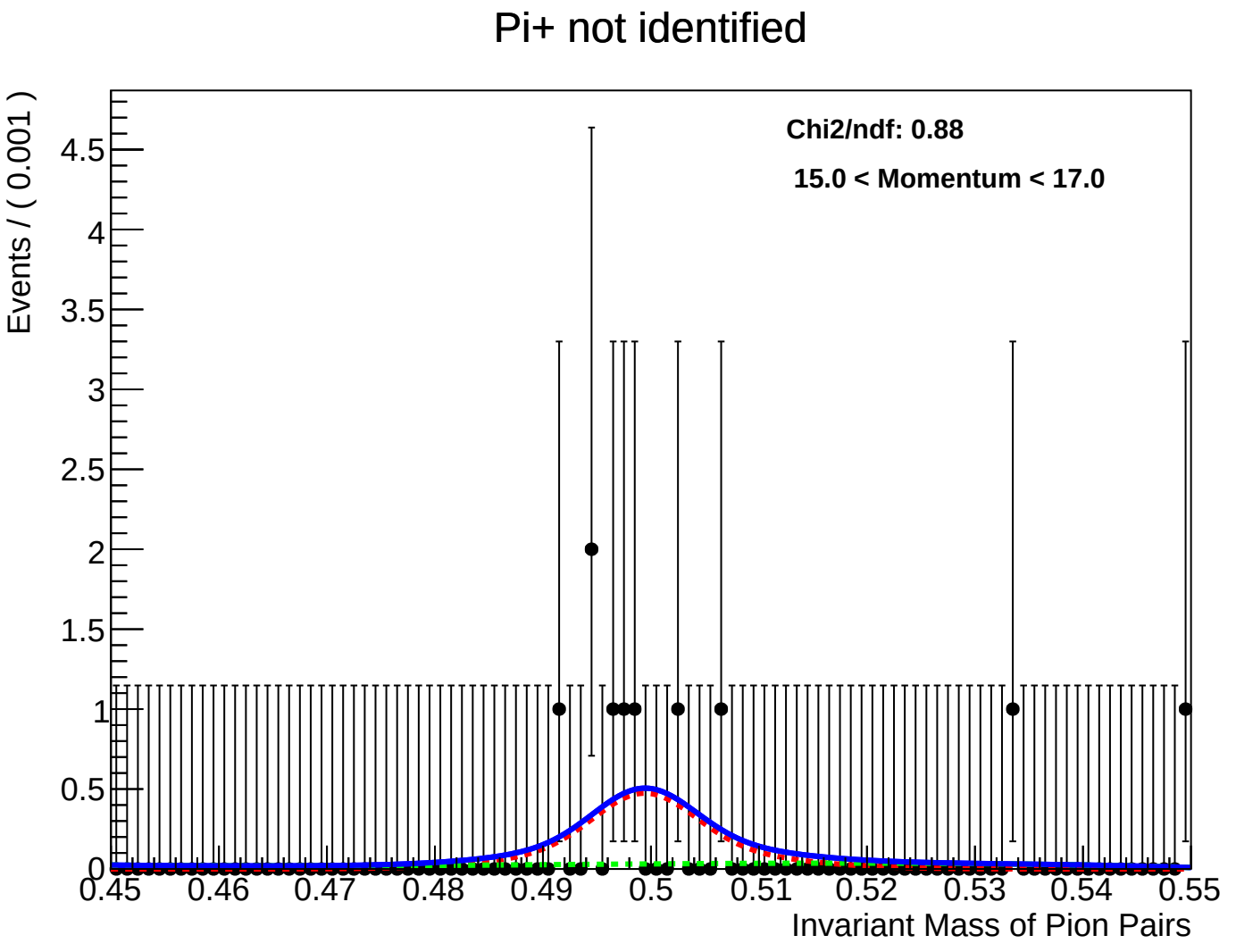

Pi+ not identified
Chi2/ndf: 0.99
13.0 < Momentum < 15.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

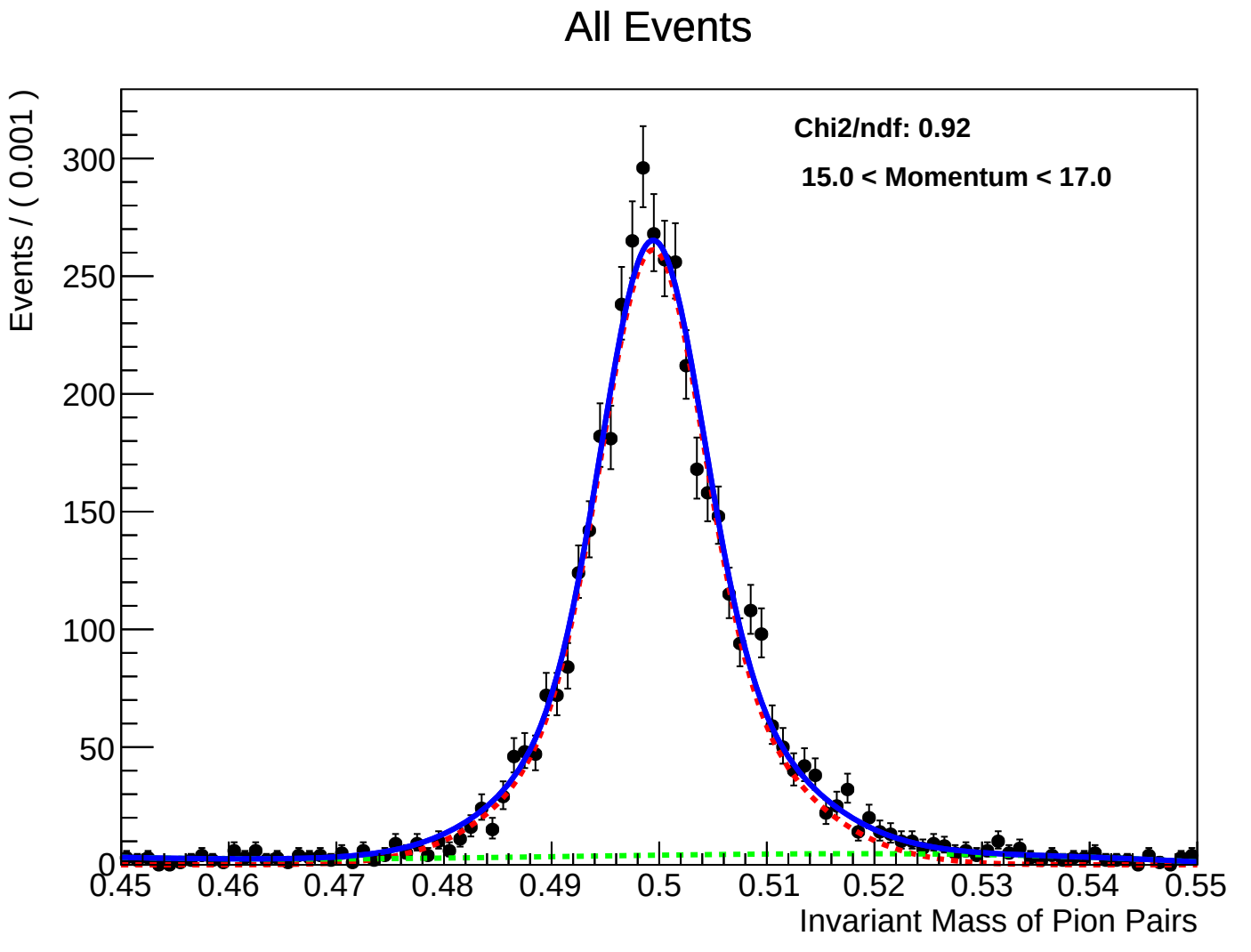

All Events
Chi2/ndf: 0.88
13.0 < Momentum < 15.0
Events / (0.001)
0
50
100
150
200
250
300
350
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

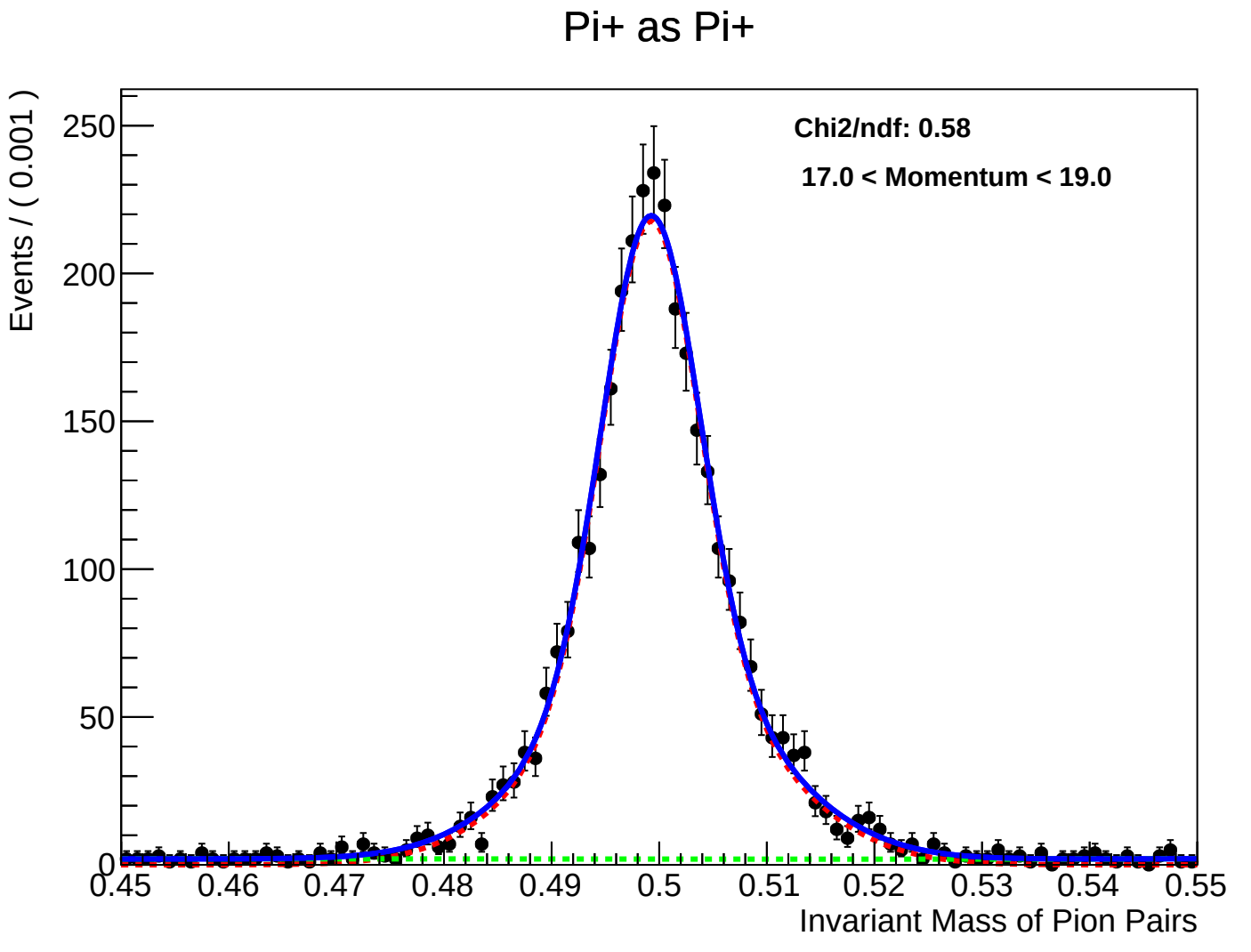

Pi+ as Pi+
Chi2/ndf: 0.99
15.0 < Momentum < 17.0
Events / (0.001)
300
250
200
150
100
50
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

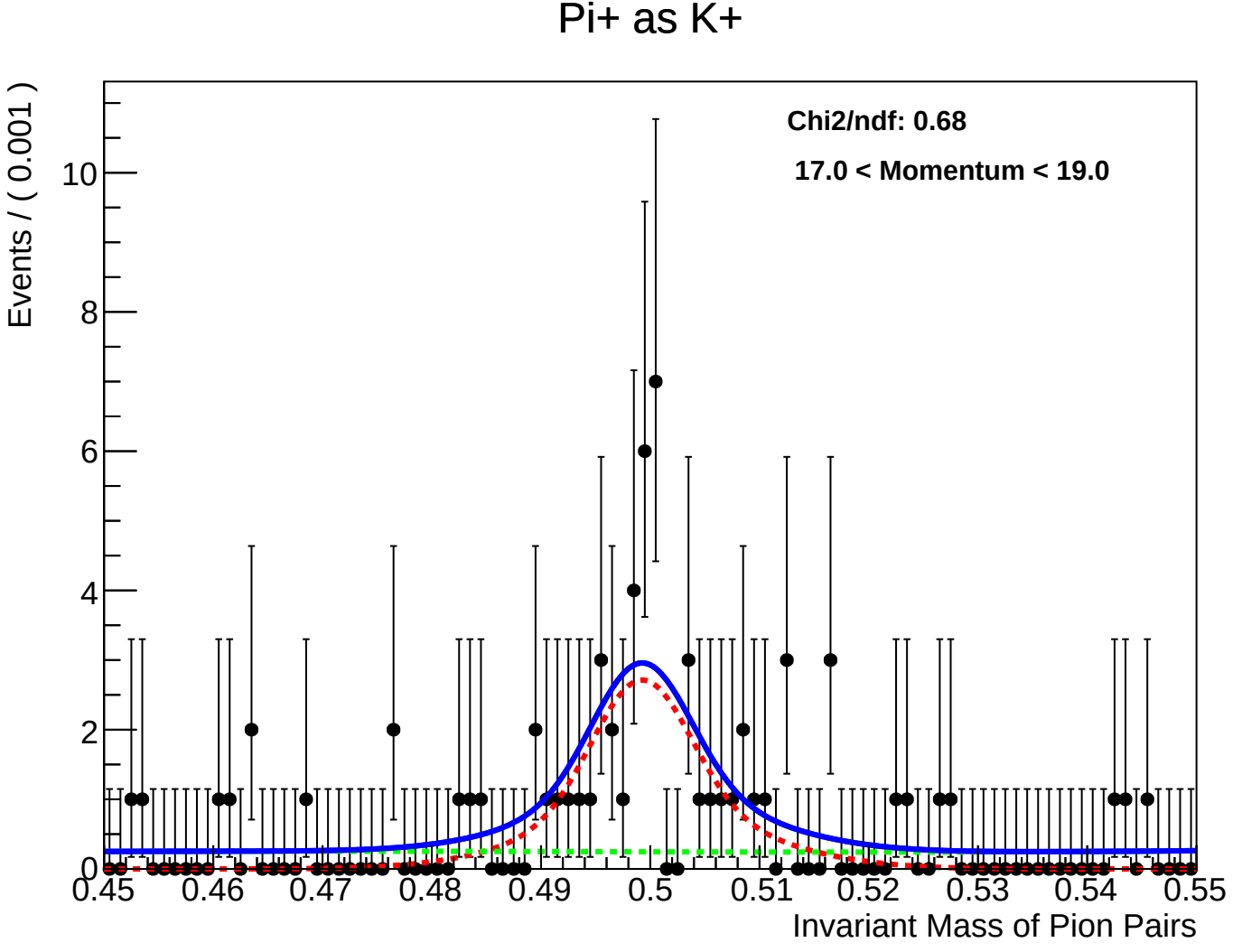

Pi+ as K+
Chi2/ndf: 0.56
15.0 < Momentum < 17.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
2
4
6
8
10
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

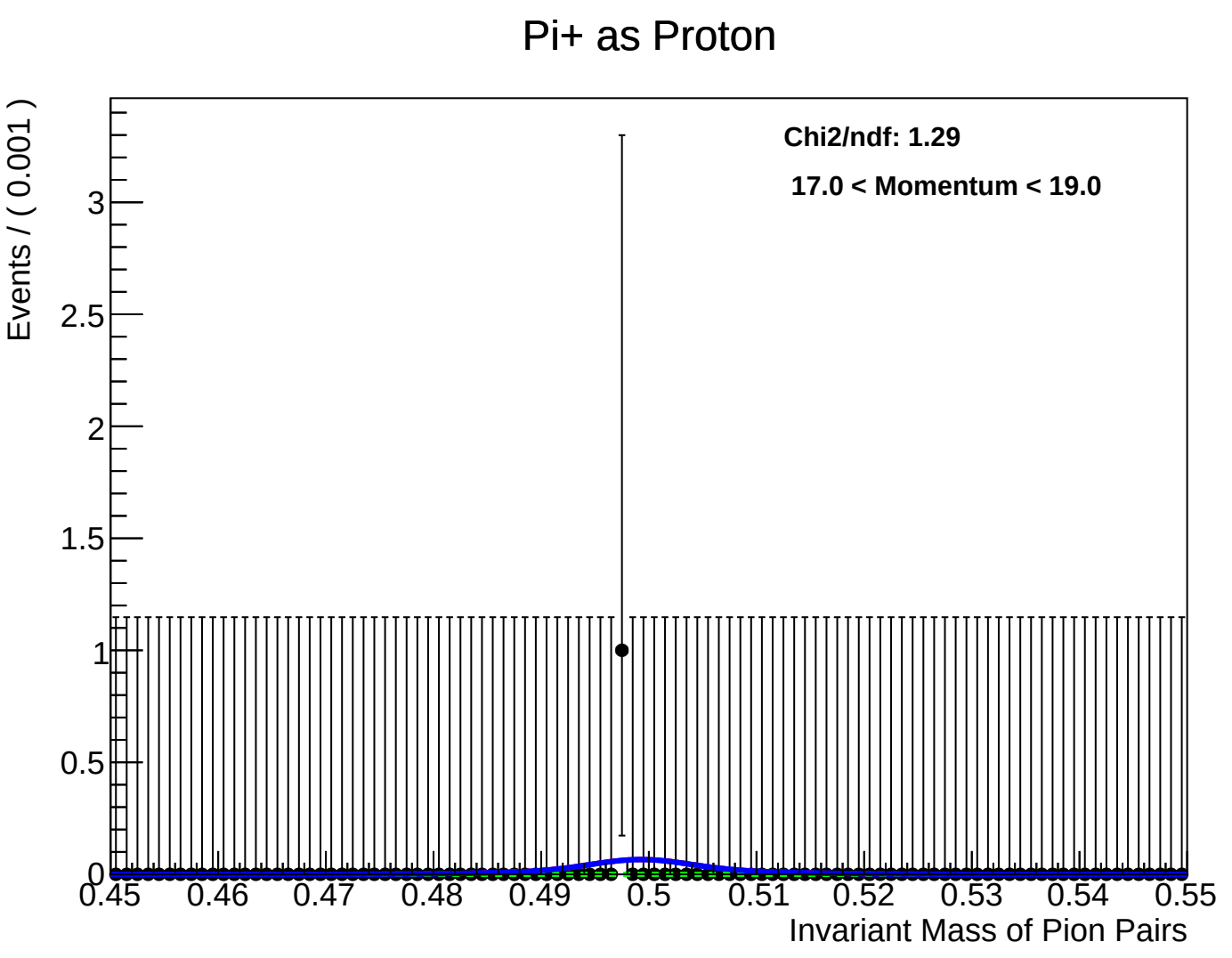

Pi+ as Proton
Chi2/ndf: nan
15.0 < Momentum < 17.0
Events / (0.001)
1.2
1
0.8
0.6
0.4
0.2
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

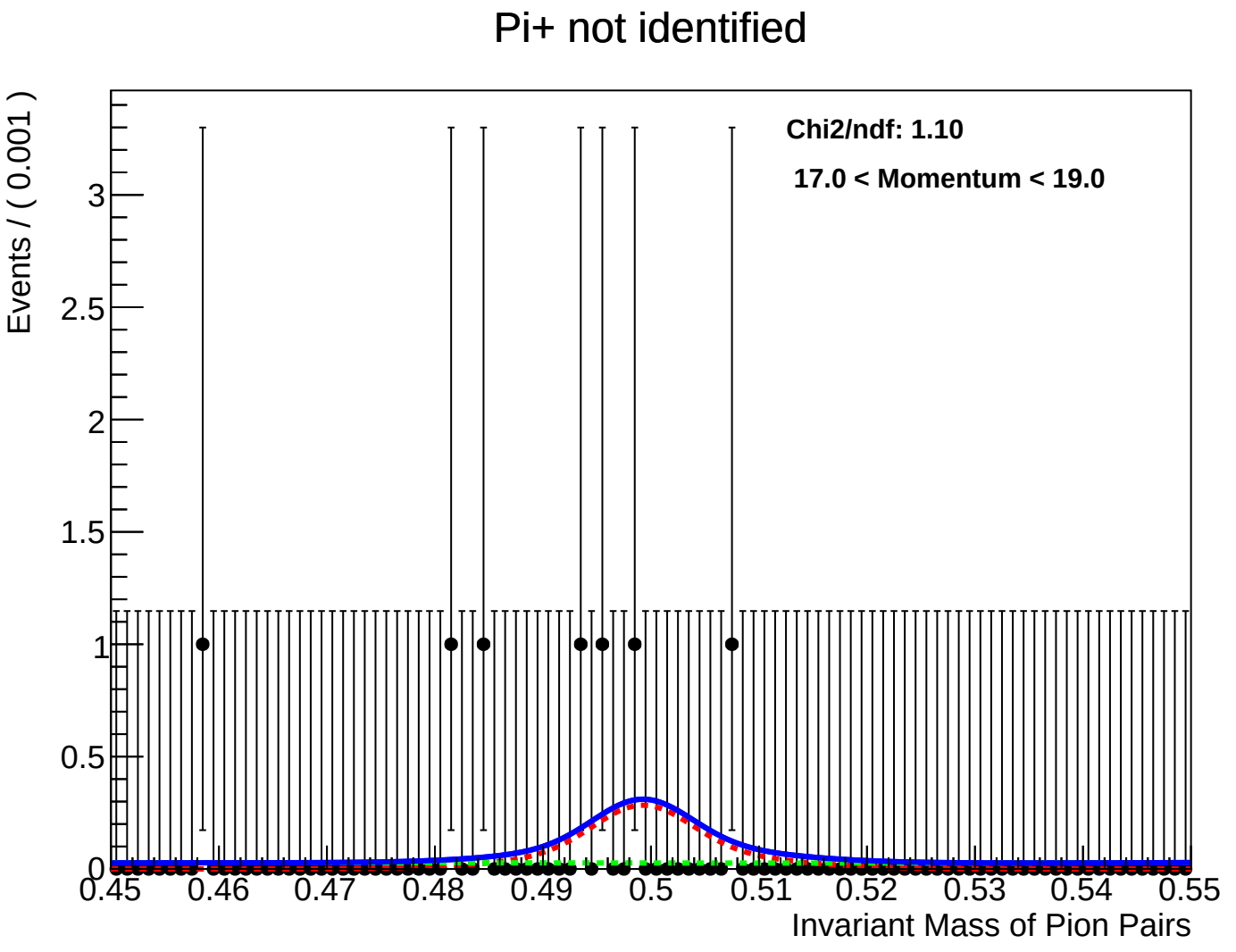

Pi+ not identified
Chi2/ndf: 0.88
15.0 < Momentum < 17.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

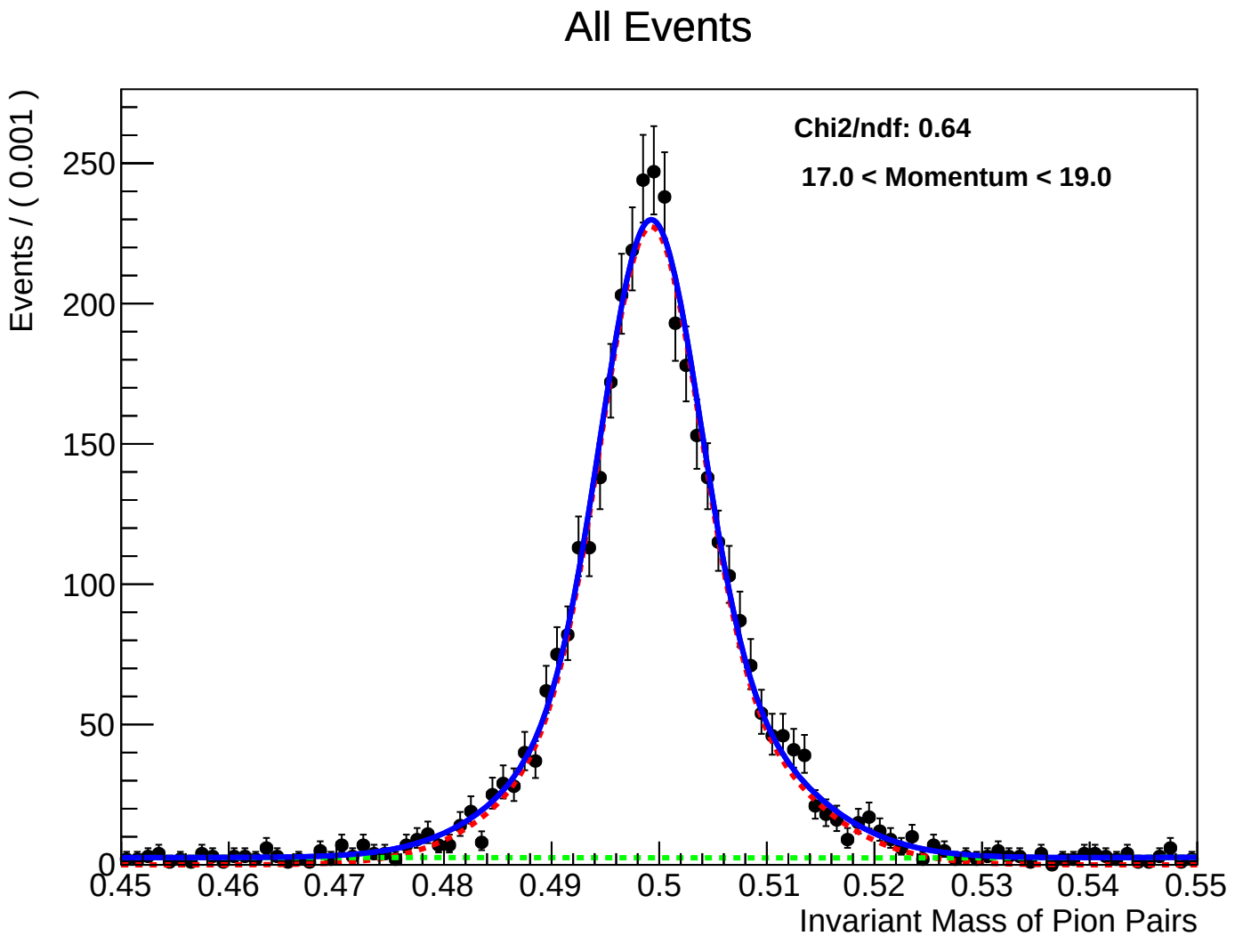

All Events
Chi2/ndf: 0.92
15.0 < Momentum < 17.0
Events / (0.001)
0
50
100
150
200
250
300
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

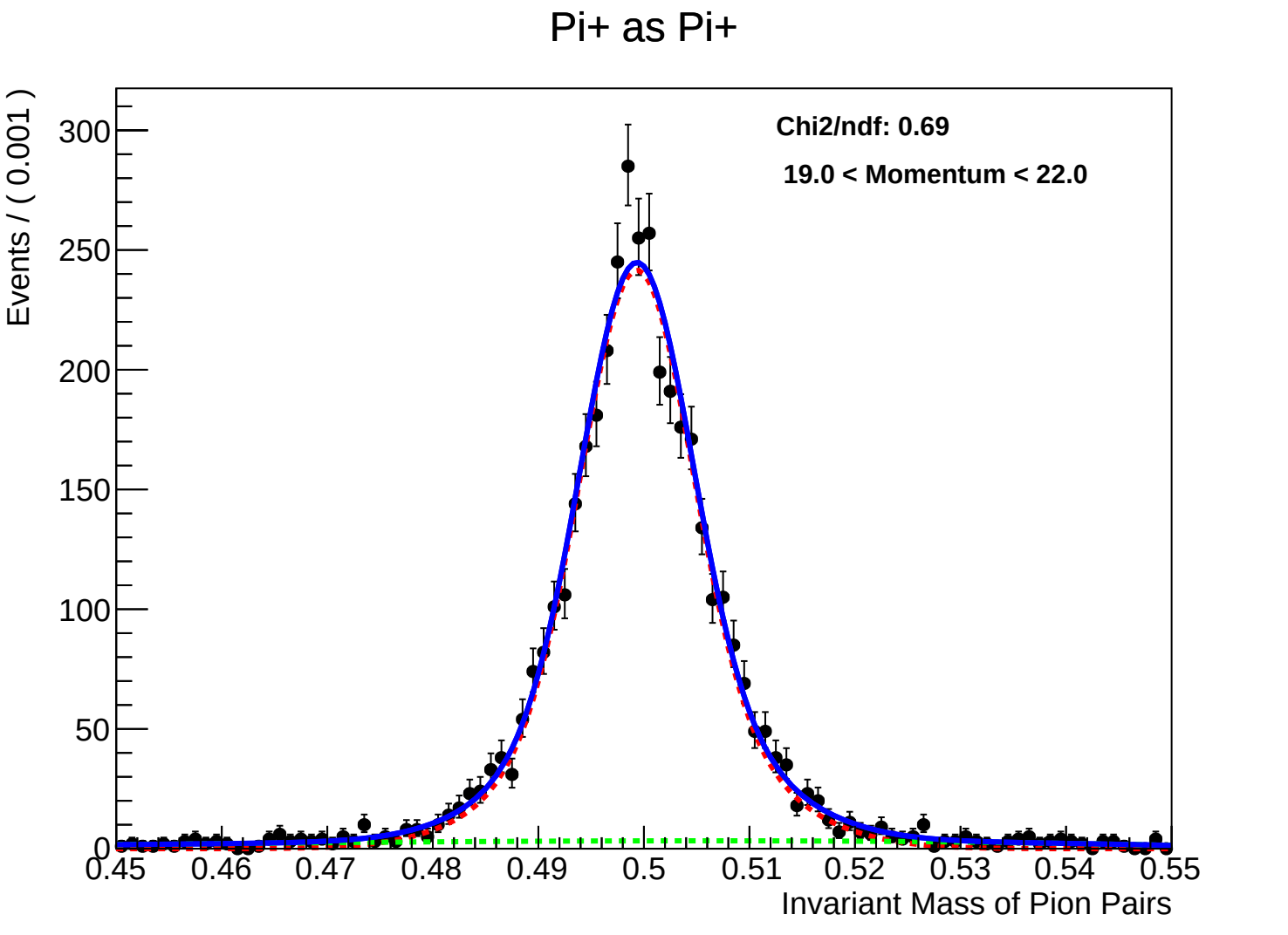

Pi+ as Pi+
Chi2/ndf: 0.58
17.0 < Momentum < 19.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
50
100
150
200
250
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

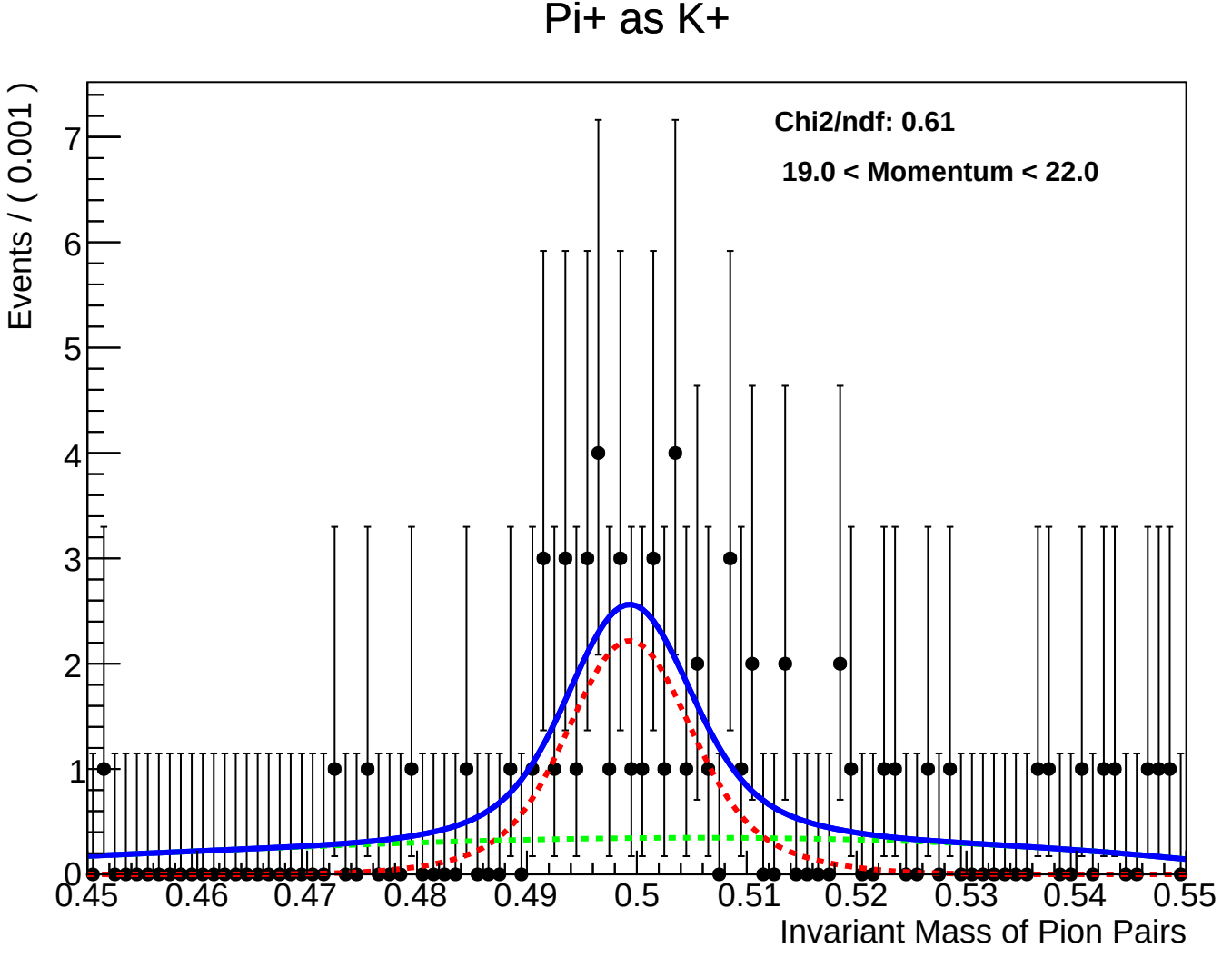

Pi+ as K+
Chi2/ndf: 0.68
17.0 < Momentum < 19.0
Events / (0.001)
0
2
4
6
8
10
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

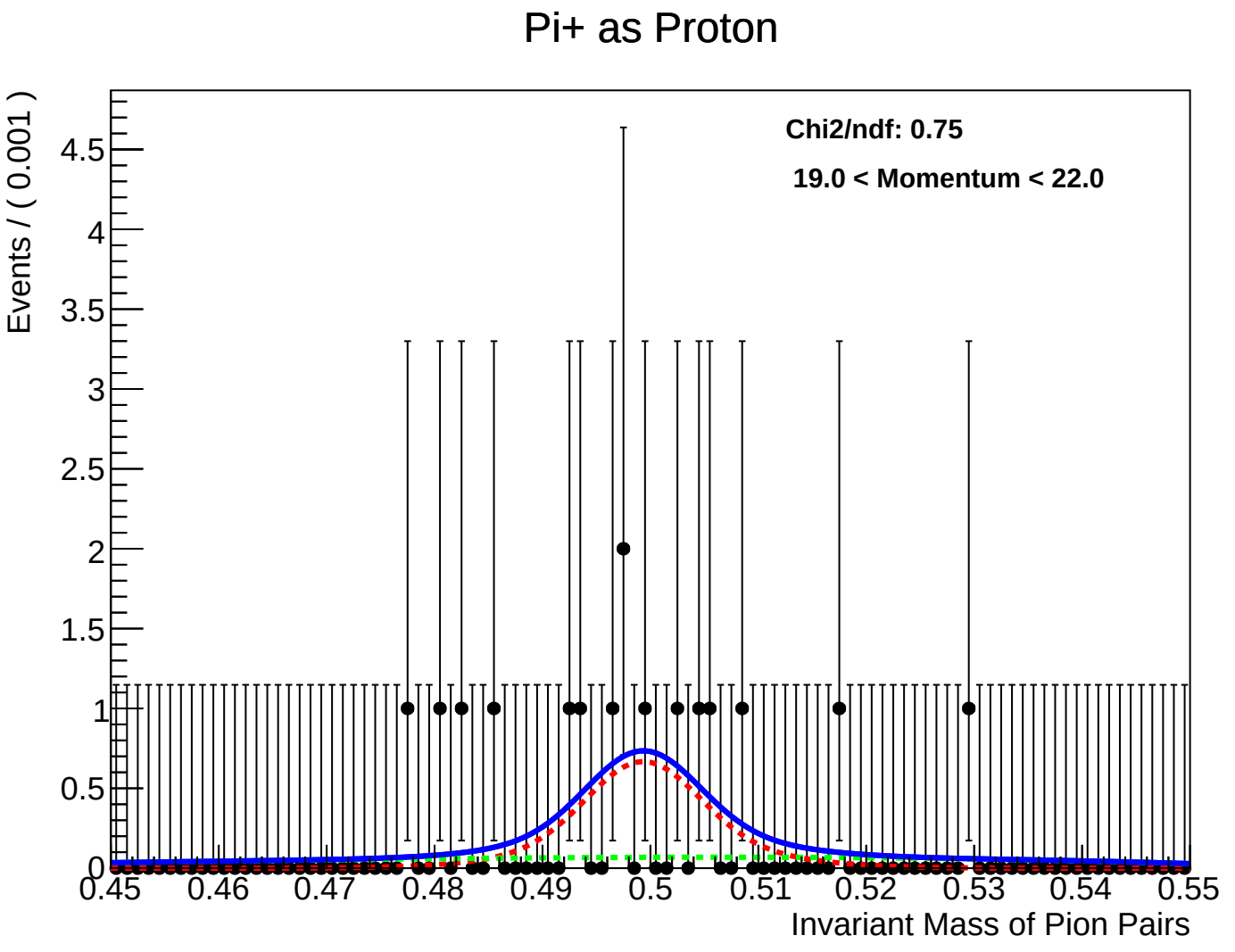

Pi+ as Proton
Chi2/ndf: 1.29
17.0 < Momentum < 19.0
Events / (0.001)
0
0.5
1
1.5
2
2.5
3
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

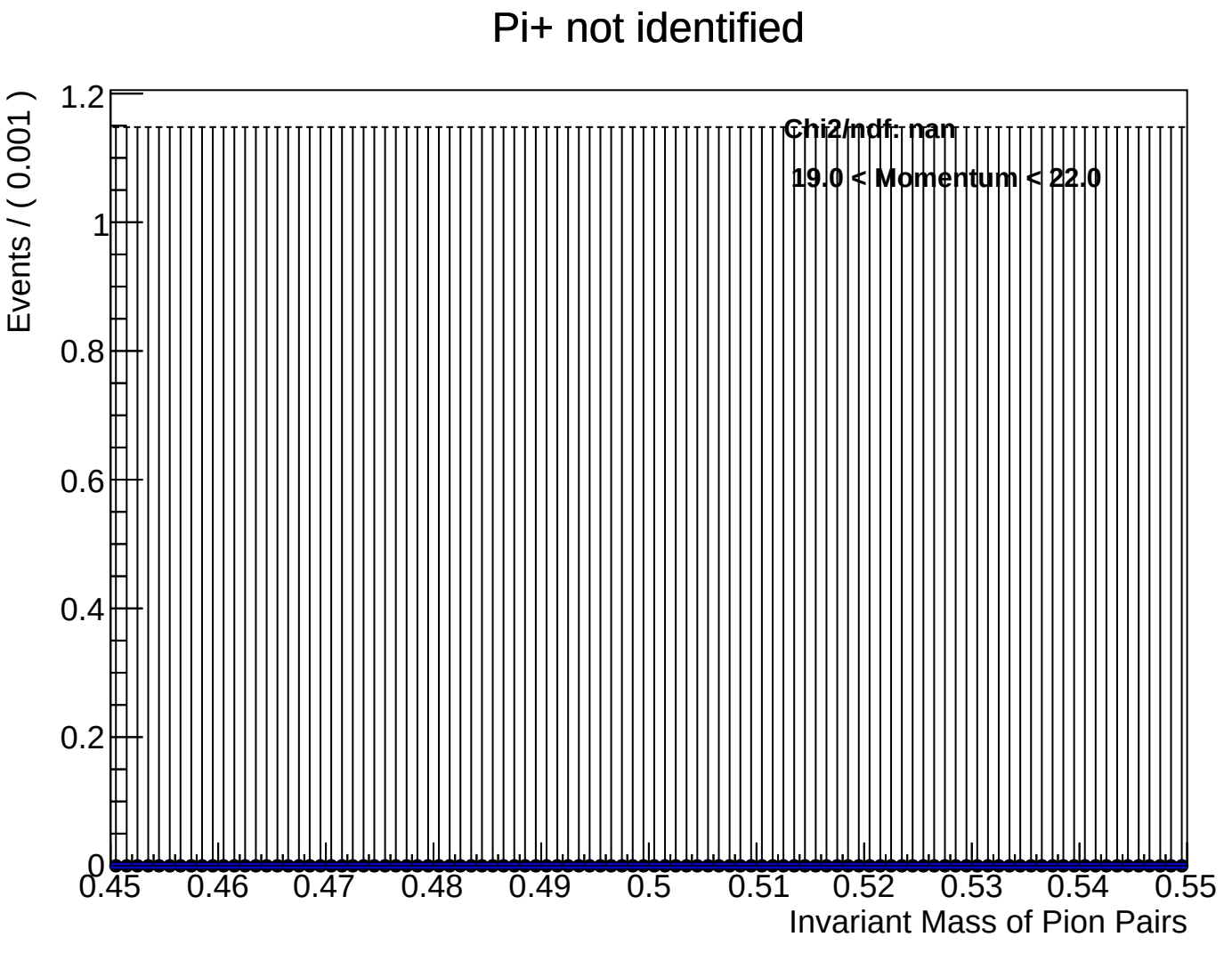

Pi+ not identified
Chi2/ndf: 1.10
17.0 < Momentum < 19.0
Events / (0.001)
0
0.5
1
1.5
2
2.5
3
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

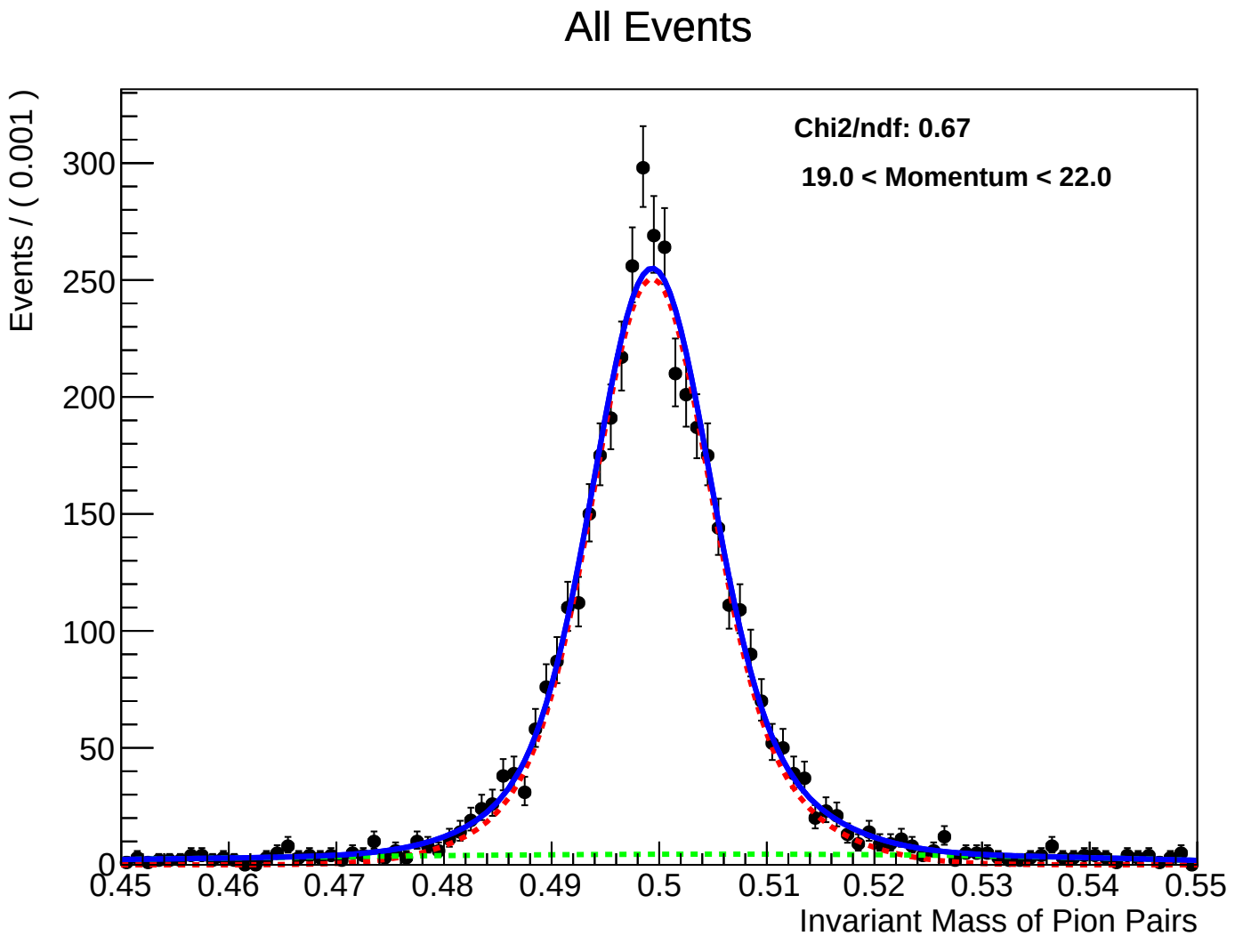

All Events
Chi2/ndf: 0.64
17.0 < Momentum < 19.0
Events / (0.001)
0
50
100
150
200
250
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

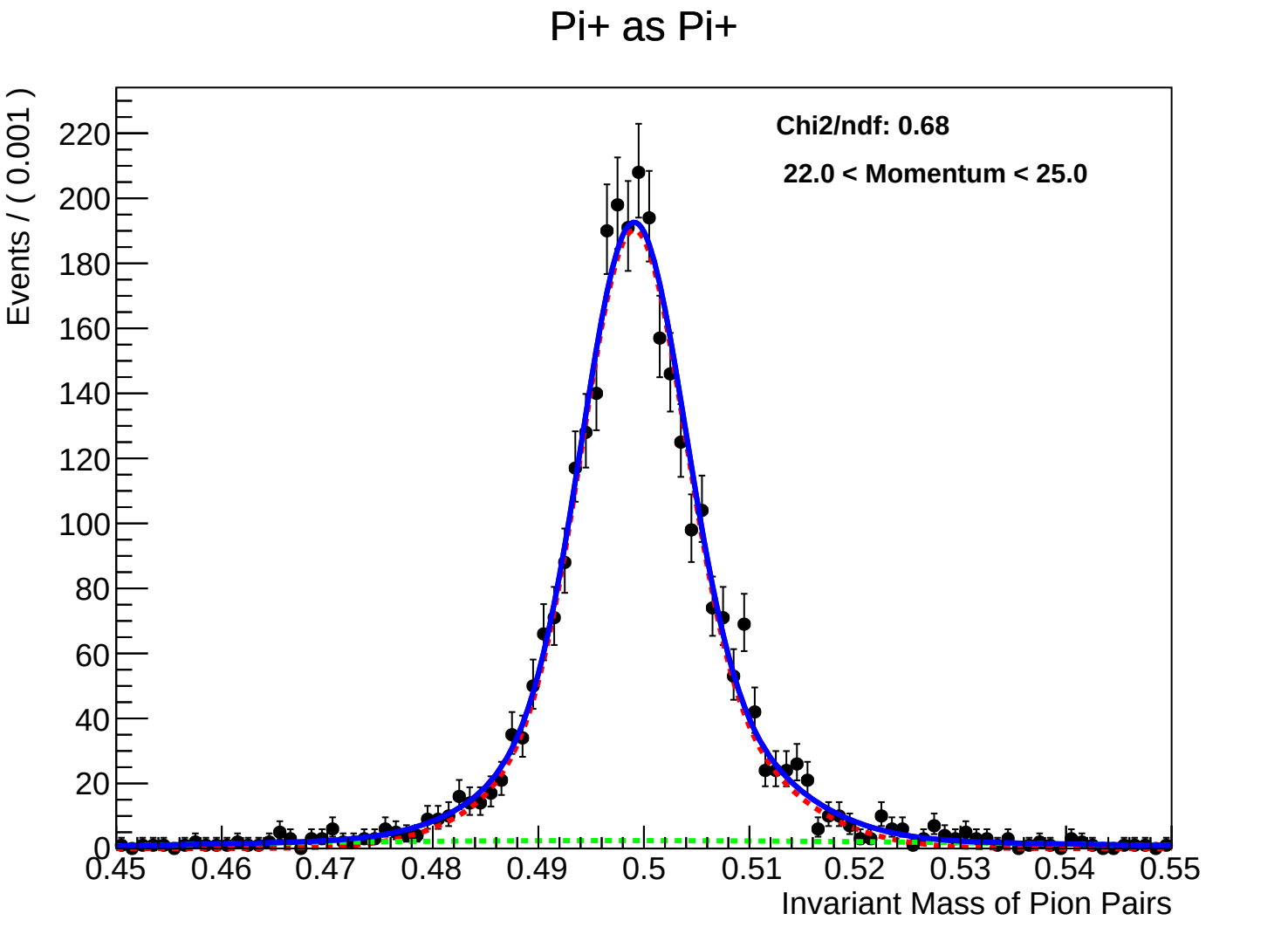

Pi+ as Pi+
Chi2/ndf: 0.69
19.0 < Momentum < 22.0
Events / (0.001)
300
250
200
150
100
50
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

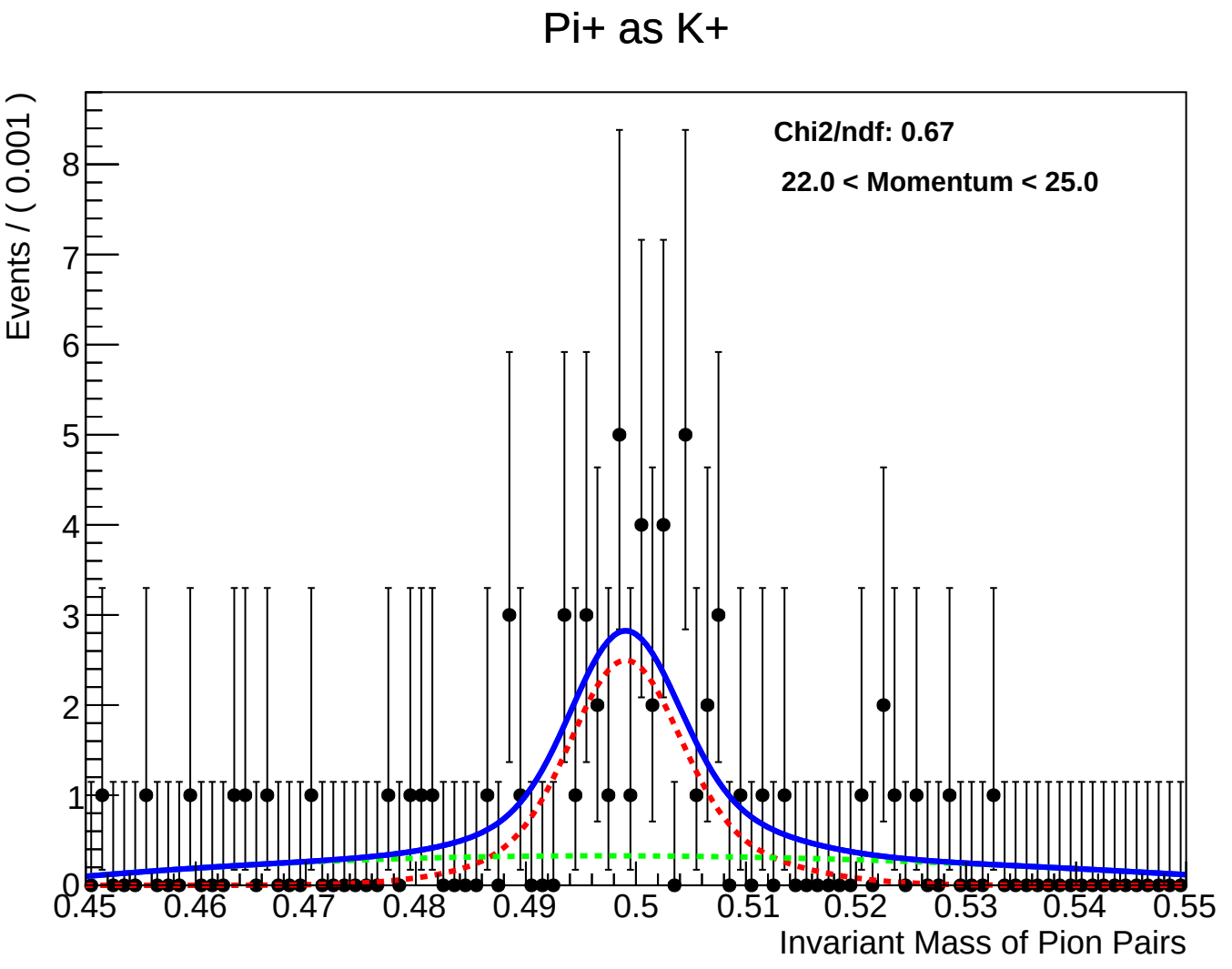

Pi+ as K+
Chi2/ndf: 0.61
19.0 < Momentum < 22.0
Events / (0.001)
0
1
2
3
4
5
6
7
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

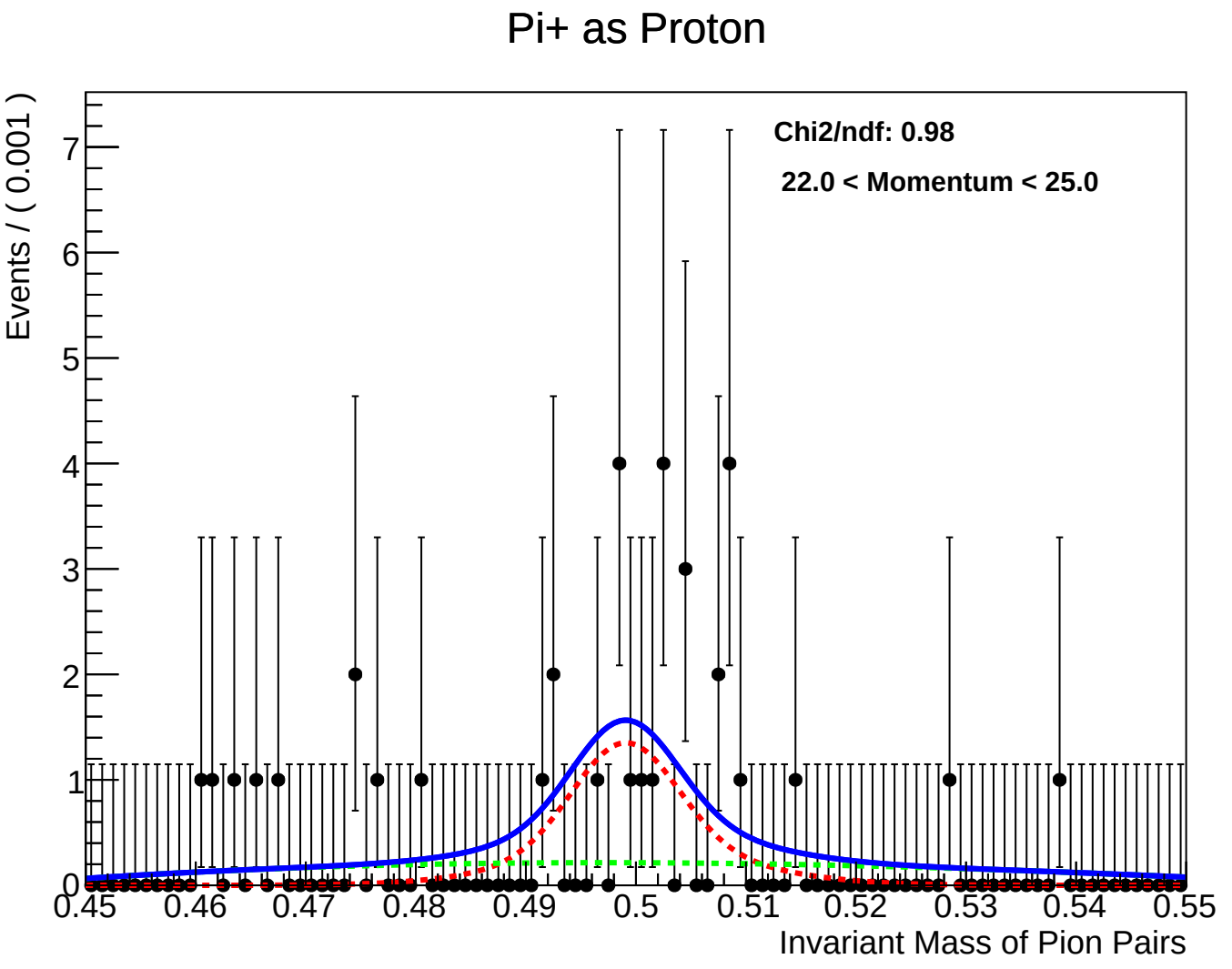

Pi+ as Proton
Chi2/ndf: 0.75
19.0 < Momentum < 22.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

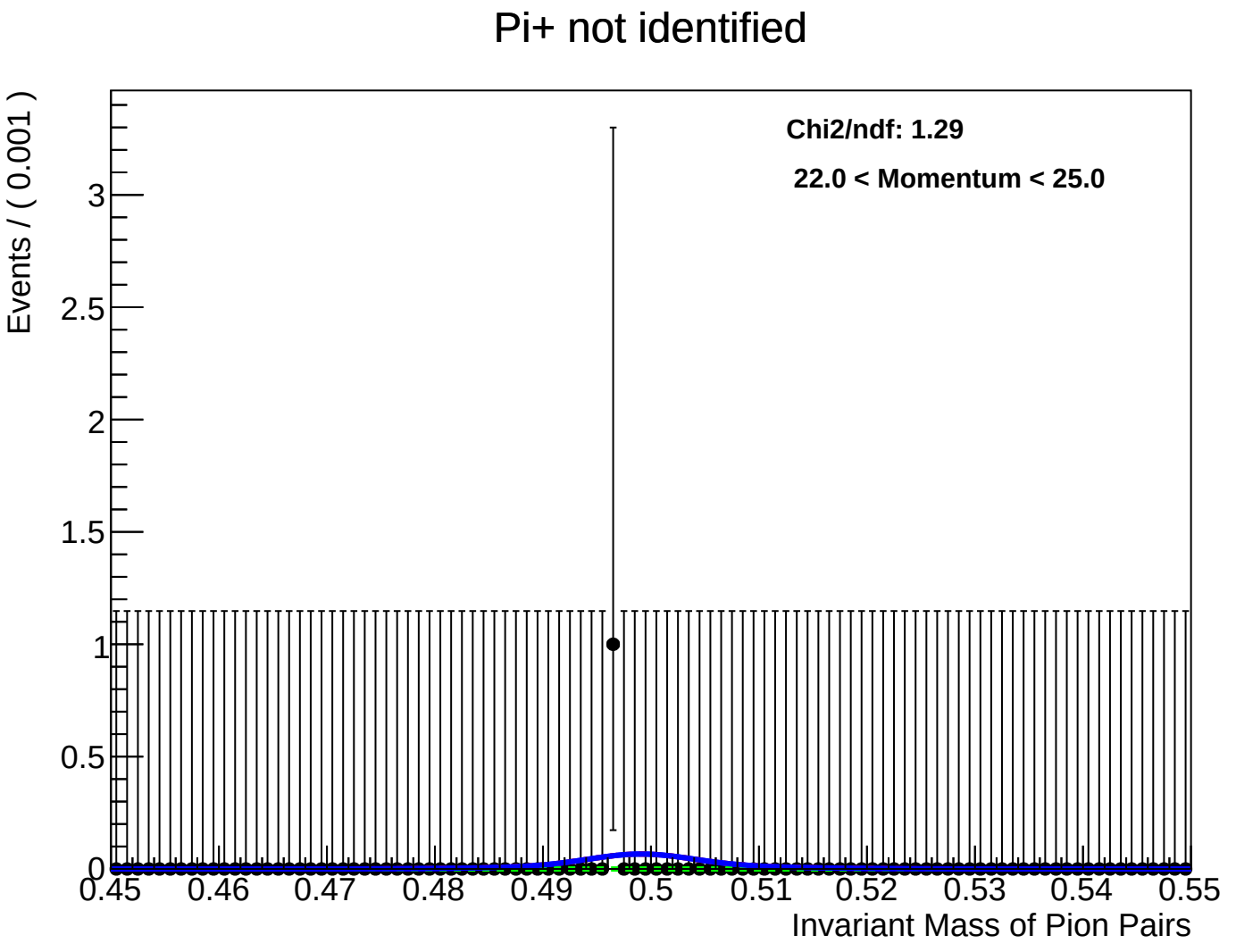

Pi+ not identified
Chi2/ndf: nan
19.0 < Momentum < 22.0
Events / (0.001)
1.2
1
0.8
0.6
0.4
0.2
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

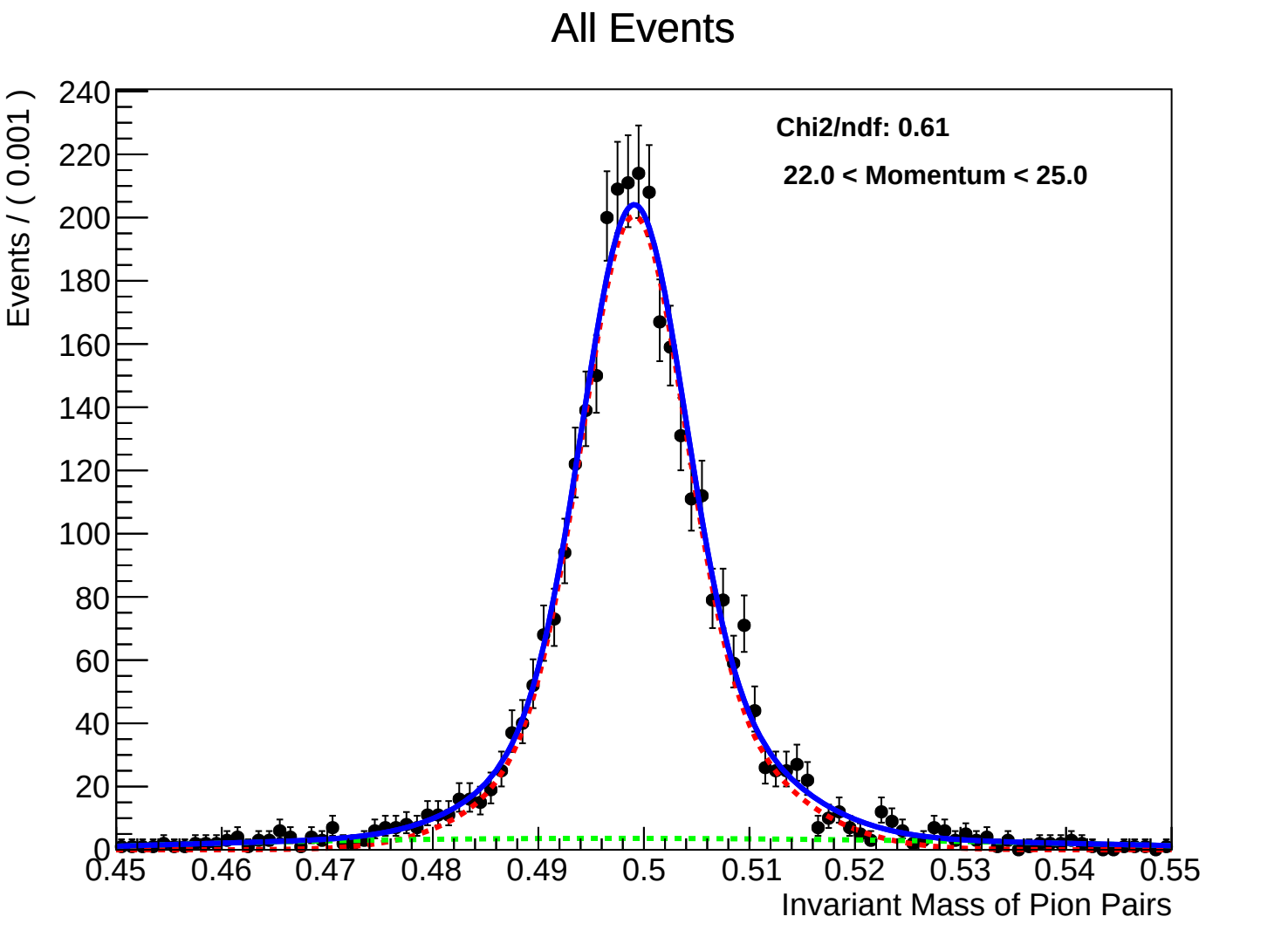

All Events
Chi2/ndf: 0.67
19.0 < Momentum < 22.0
Events / (0.001)
0
50
100
150
200
250
300
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

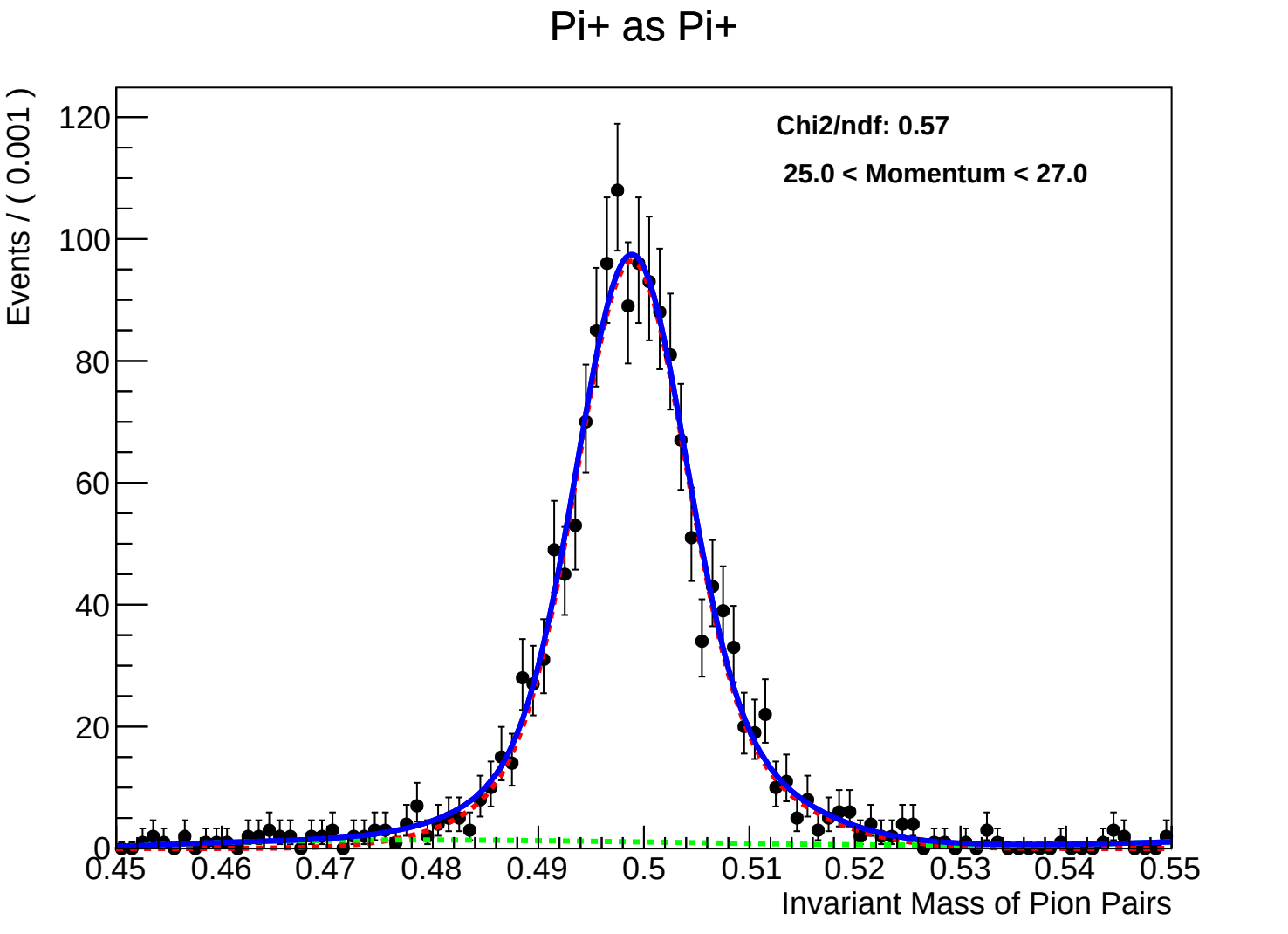

Pi+ as Pi+
Chi2/ndf: 0.68
22.0 < Momentum < 25.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
140
160
180
200
220
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

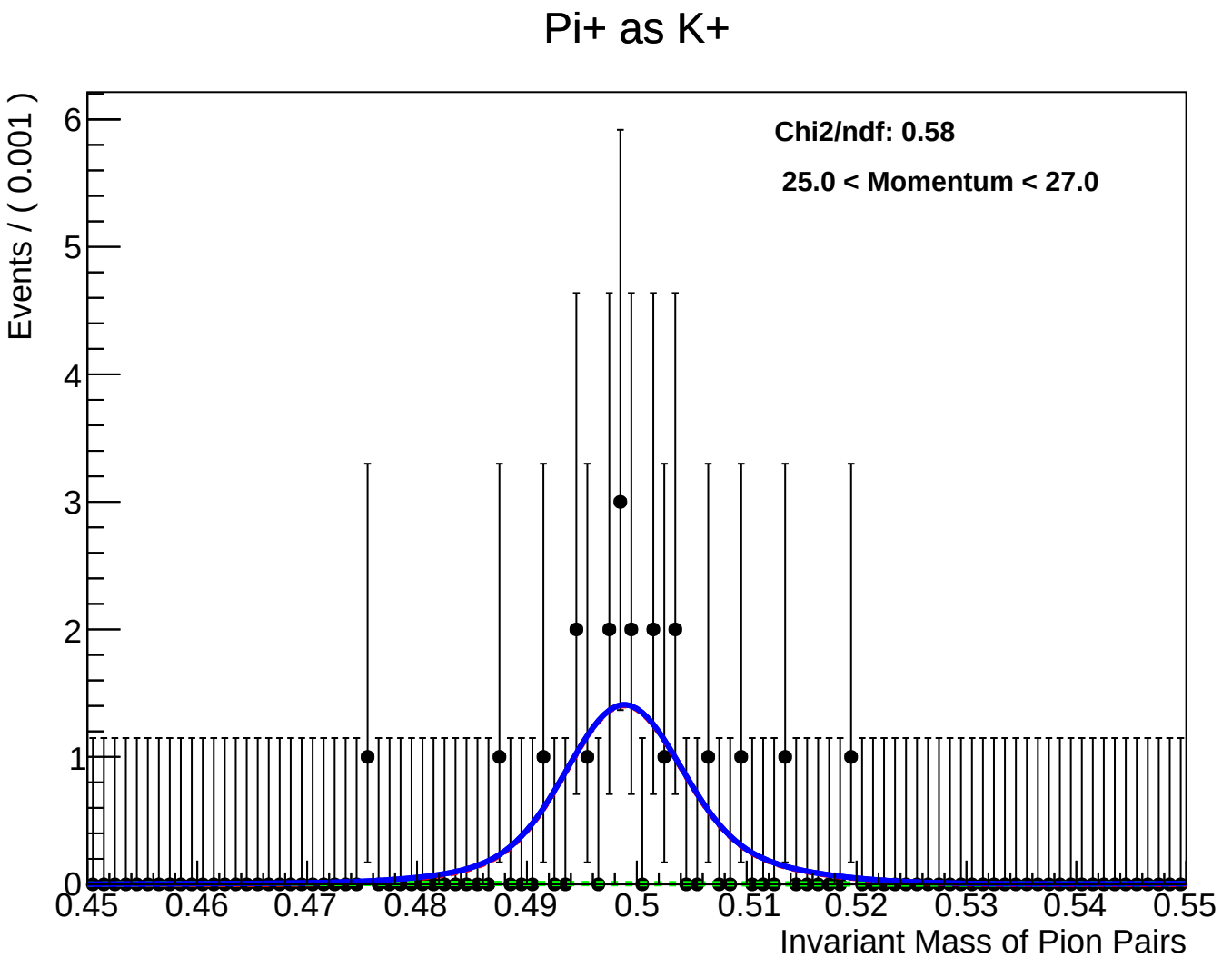

Pi+ as K+
Chi2/ndf: 0.67
22.0 < Momentum < 25.0
Events / (0.001)
0
1
2
3
4
5
6
7
8
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

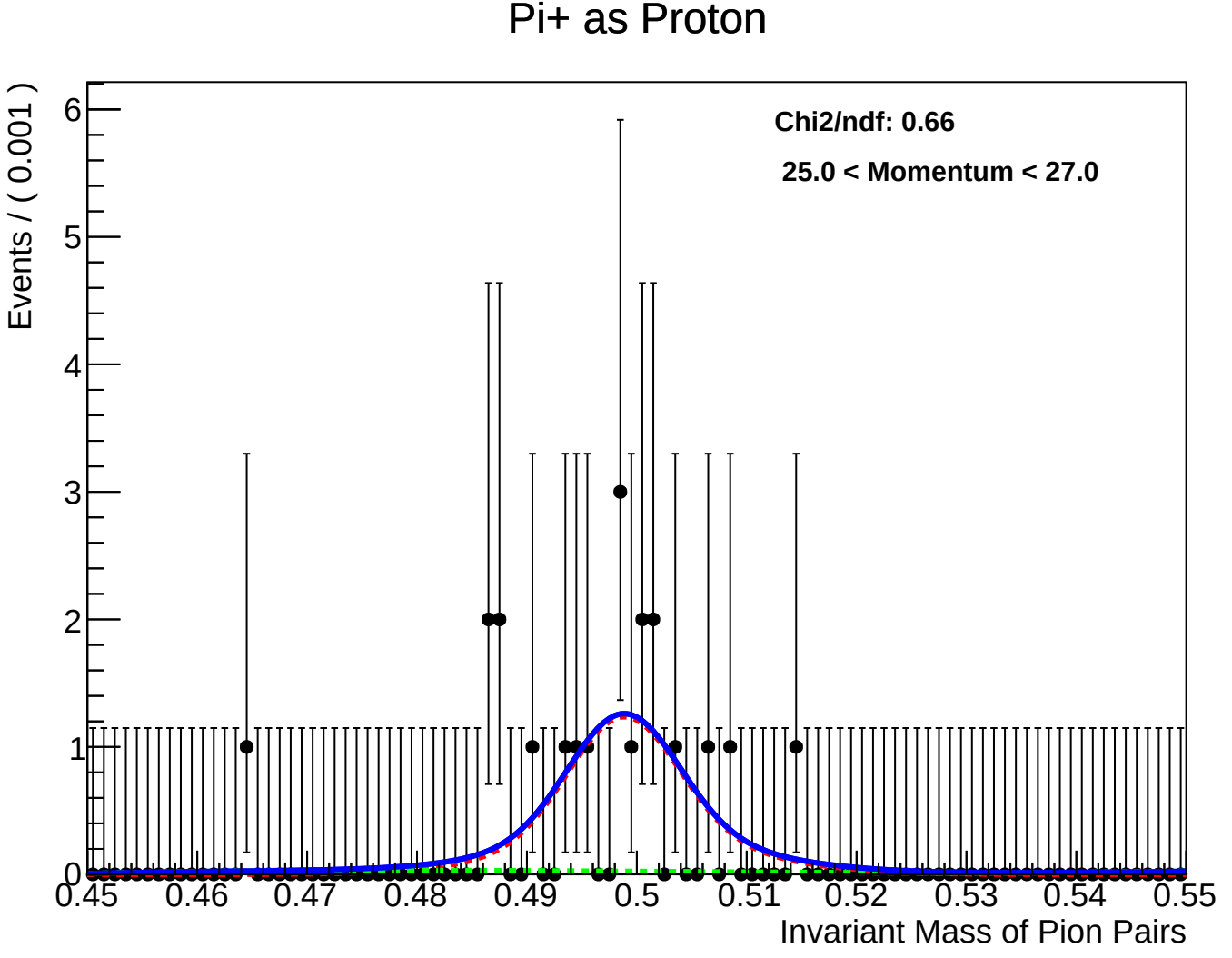

Pi+ as Proton
Chi2/ndf: 0.98
22.0 < Momentum < 25.0
Events / (0.001)
0
1
2
3
4
5
6
7
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

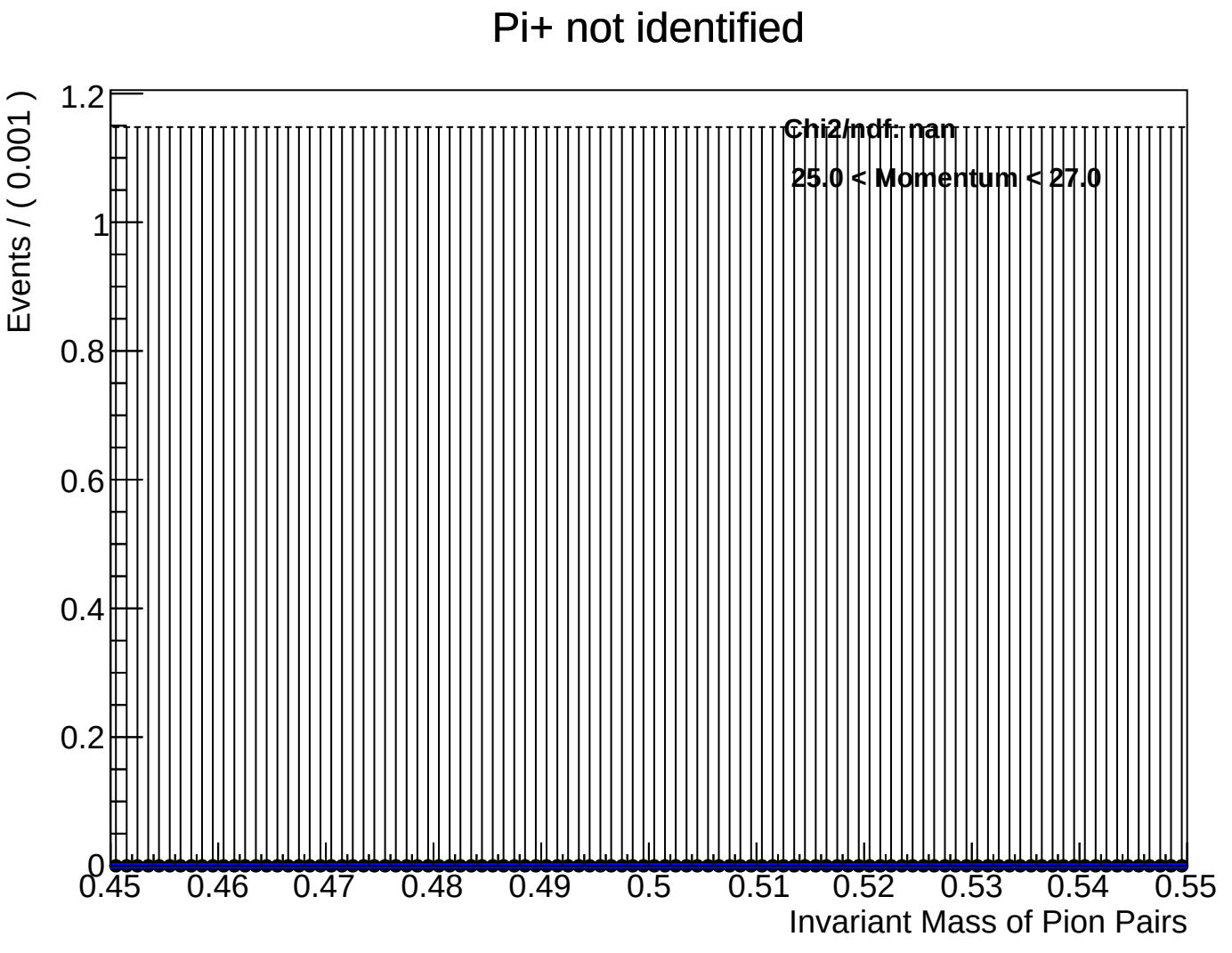

Pi+ not identified
Chi2/ndf: 1.29
22.0 < Momentum < 25.0
Events / (0.001)
0
0.5
1
1.5
2
2.5
3
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs


All Events
Chi2/ndf: 0.61
22.0 < Momentum < 25.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
140
160
180
200
220
240
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

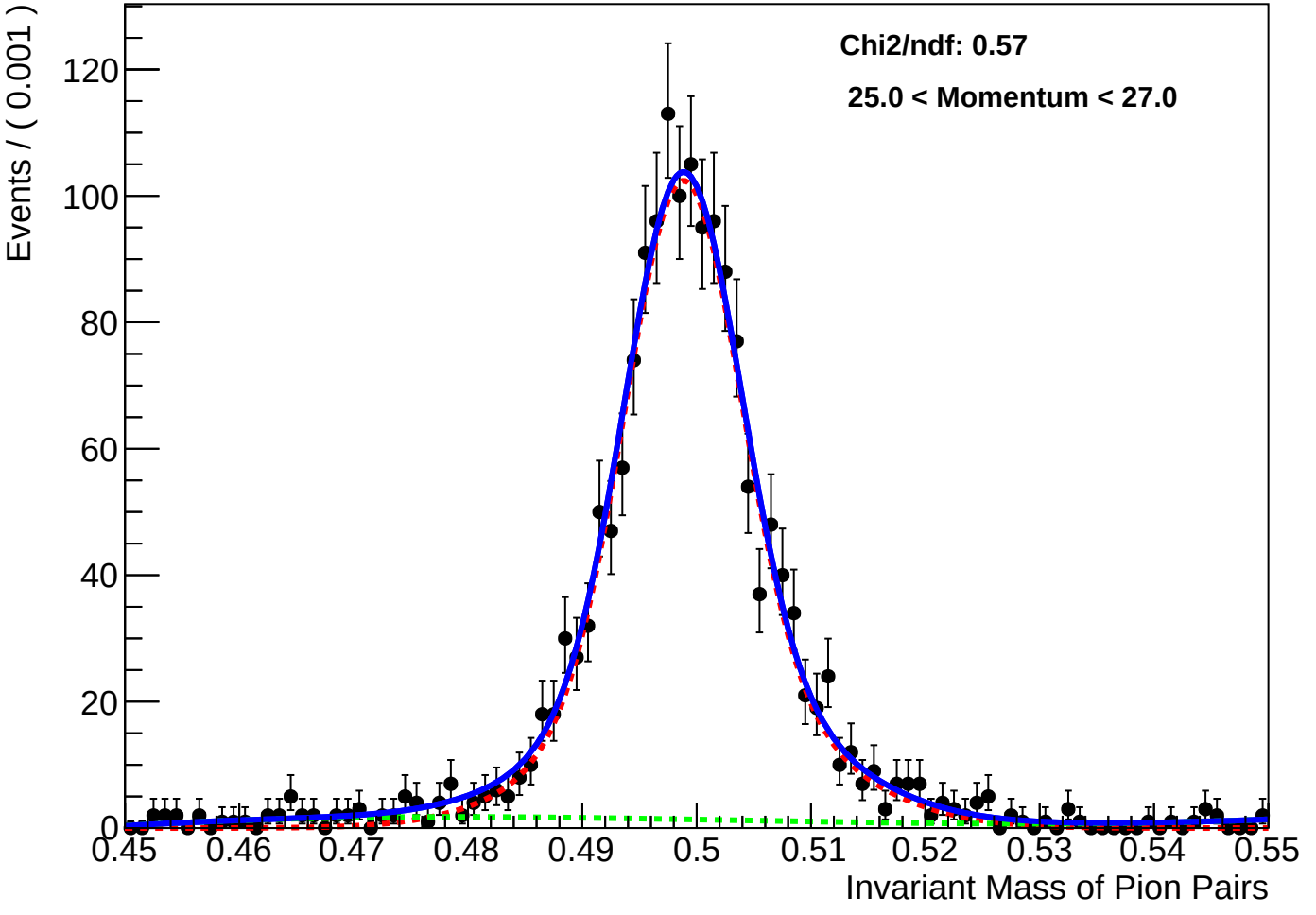

Pi+ as Pi+
Chi2/ndf: 0.57
25.0 < Momentum < 27.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

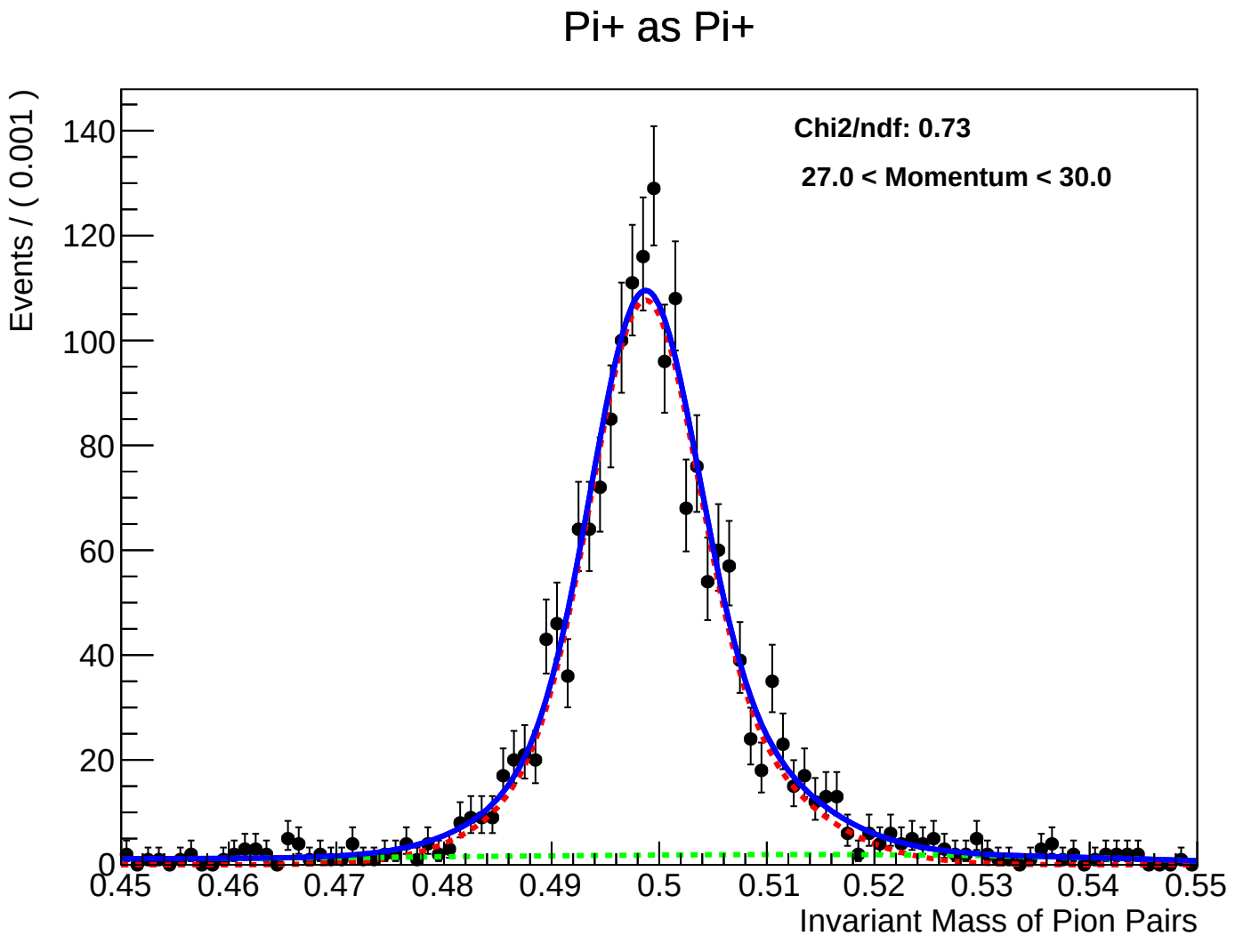

Pi+ as K+
Chi2/ndf: 0.58
25.0 < Momentum < 27.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
1
2
3
4
5
6
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

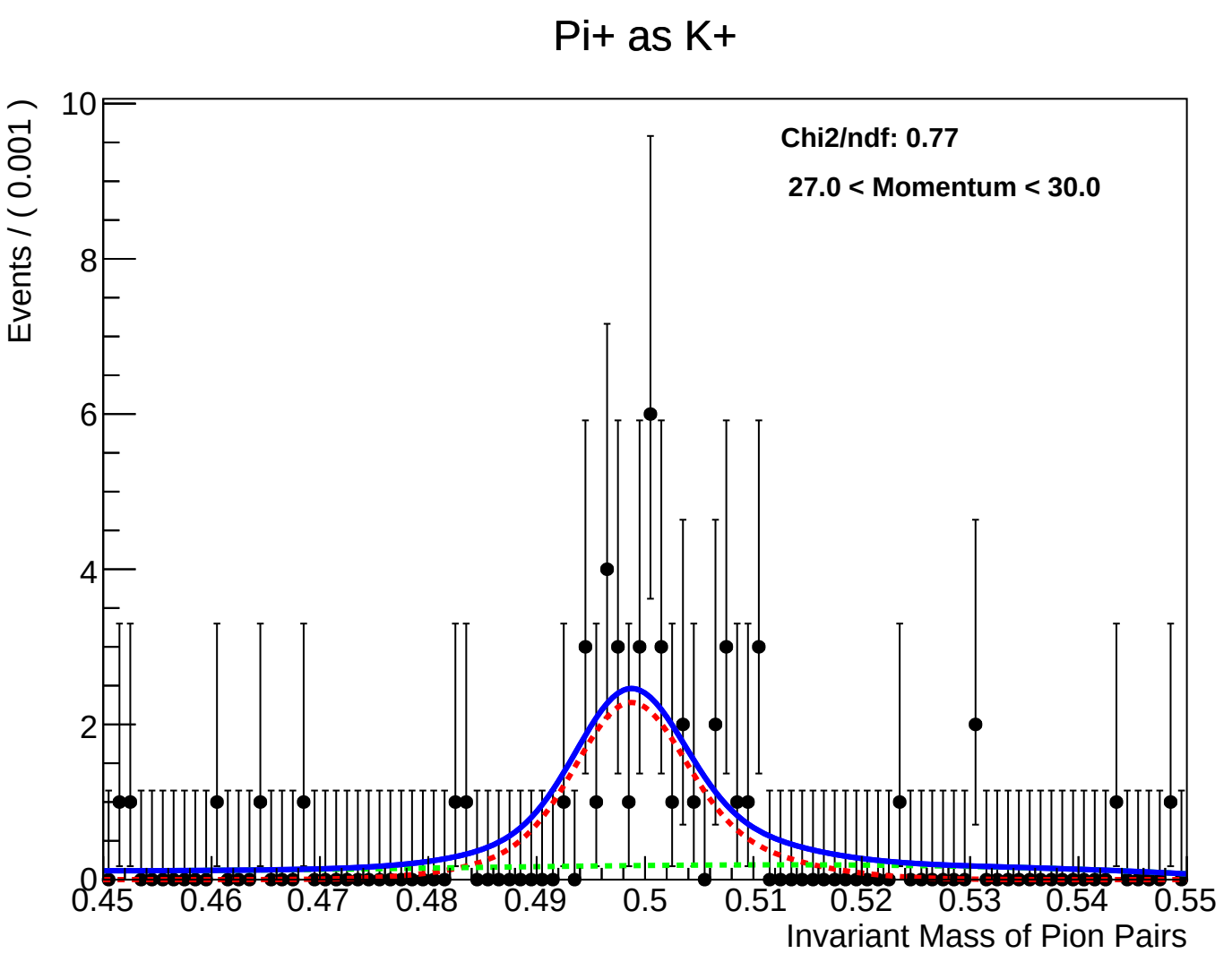

Pi+ as Proton
Chi2/ndf: 0.66
25.0 < Momentum < 27.0
Events / (0.001)
0
1
2
3
4
5
6
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

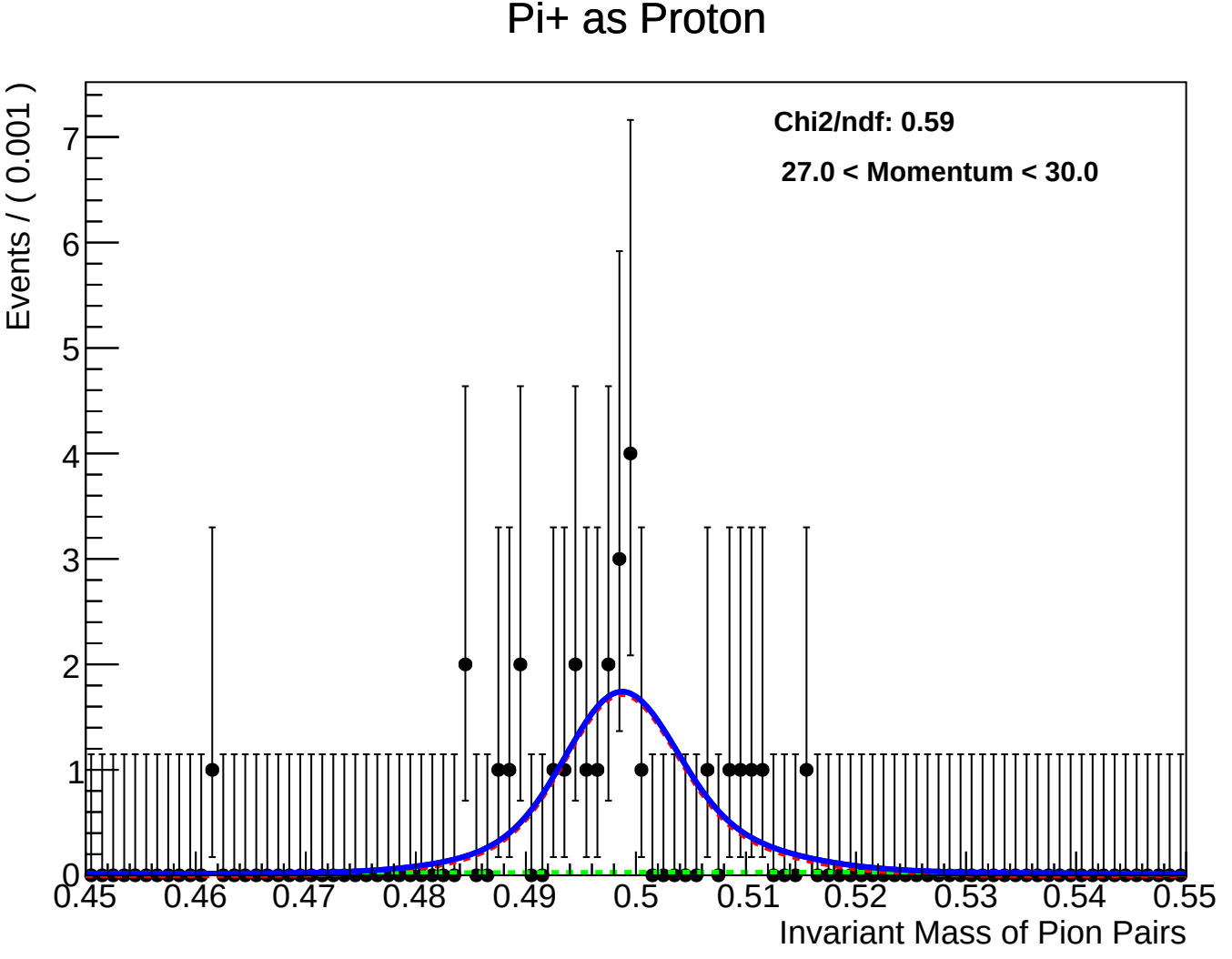

Pi+ not identified
Chi2/ndf: nan
25.0 < Momentum < 27.0
Events / (0.001)
1.2
1
0.8
0.6
0.4
0.2
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

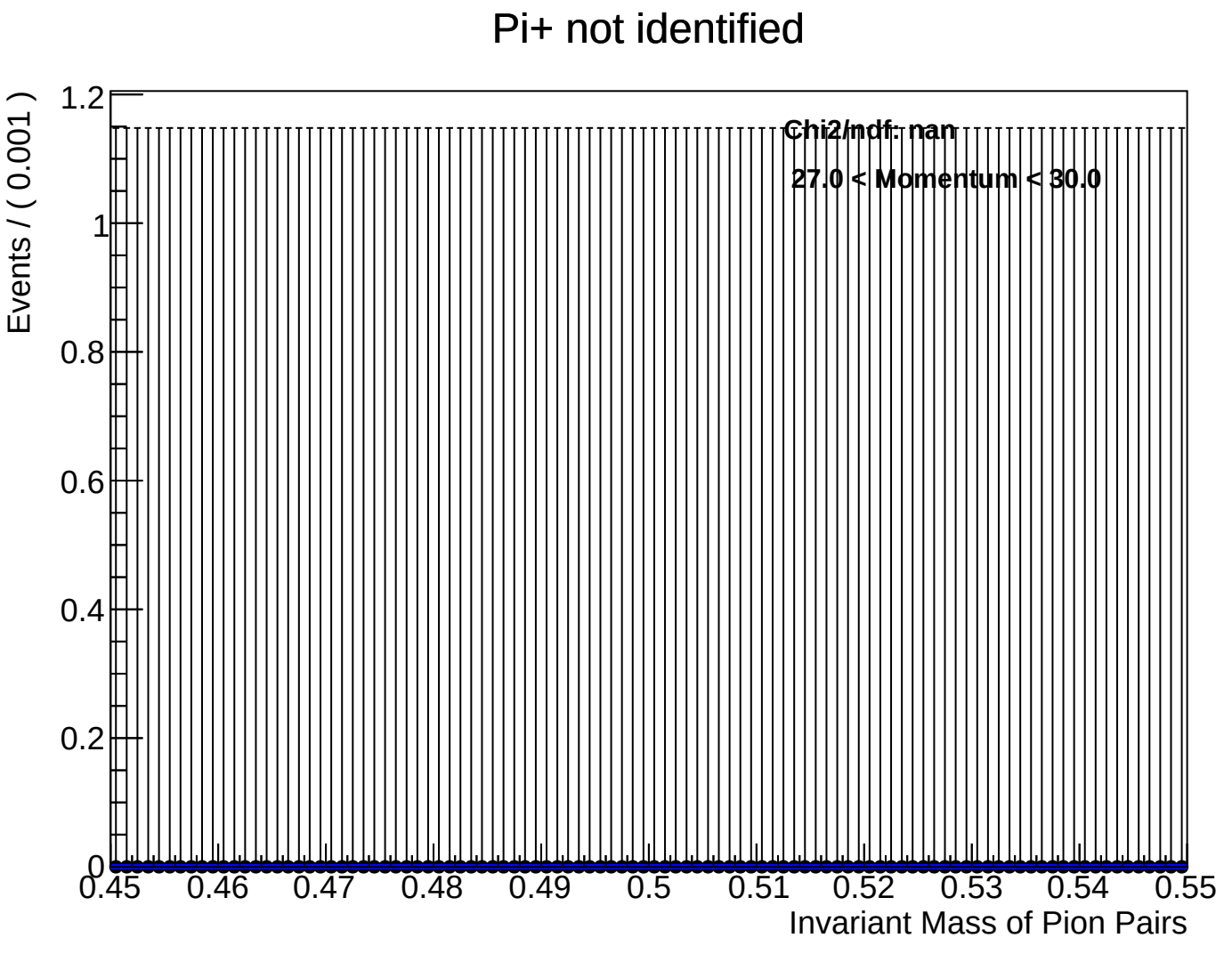
All Events

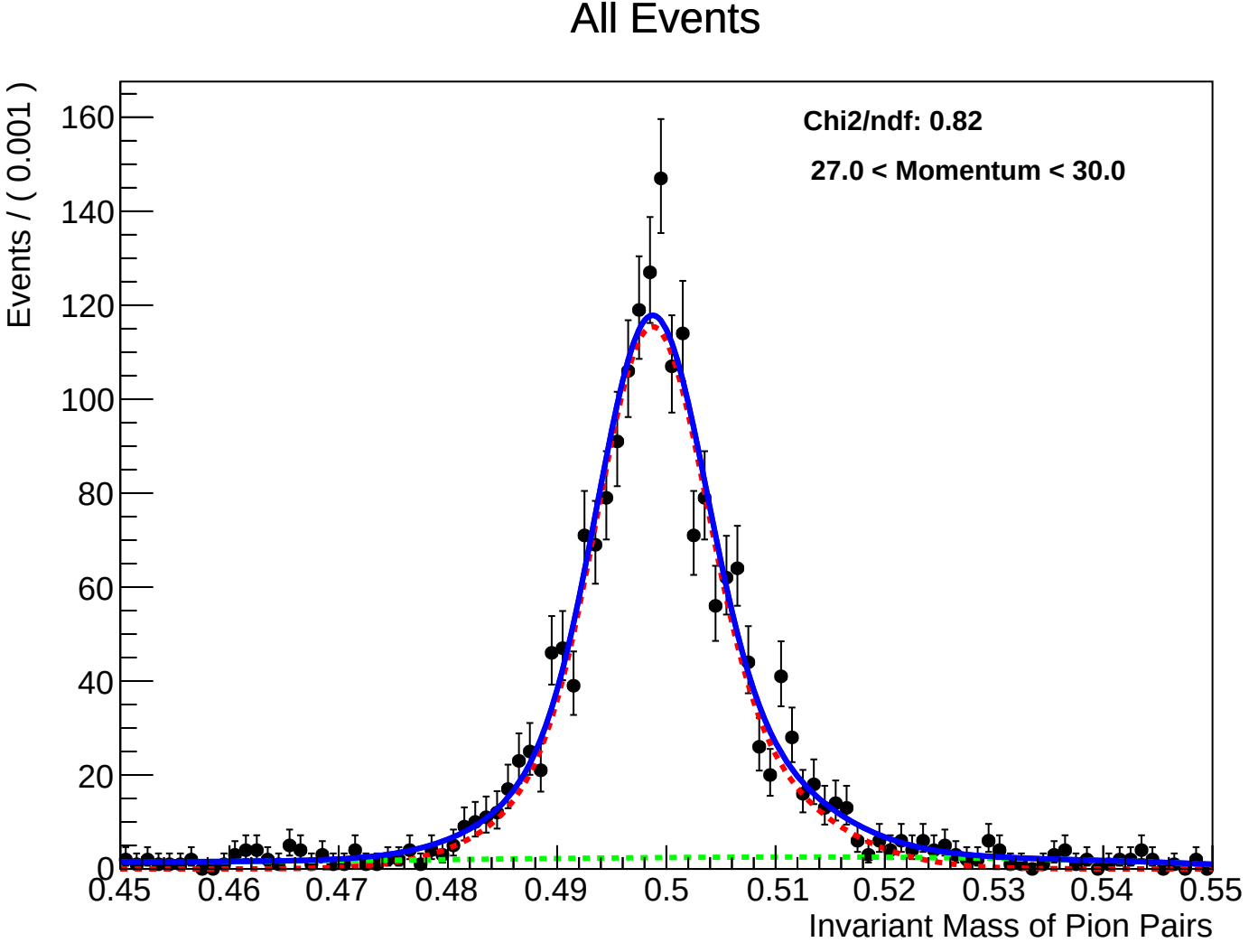

Chi2/ndf: 0.57
25.0 < Momentum < 27.0
Events / (0.001)
120
100
80
60
40
20
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

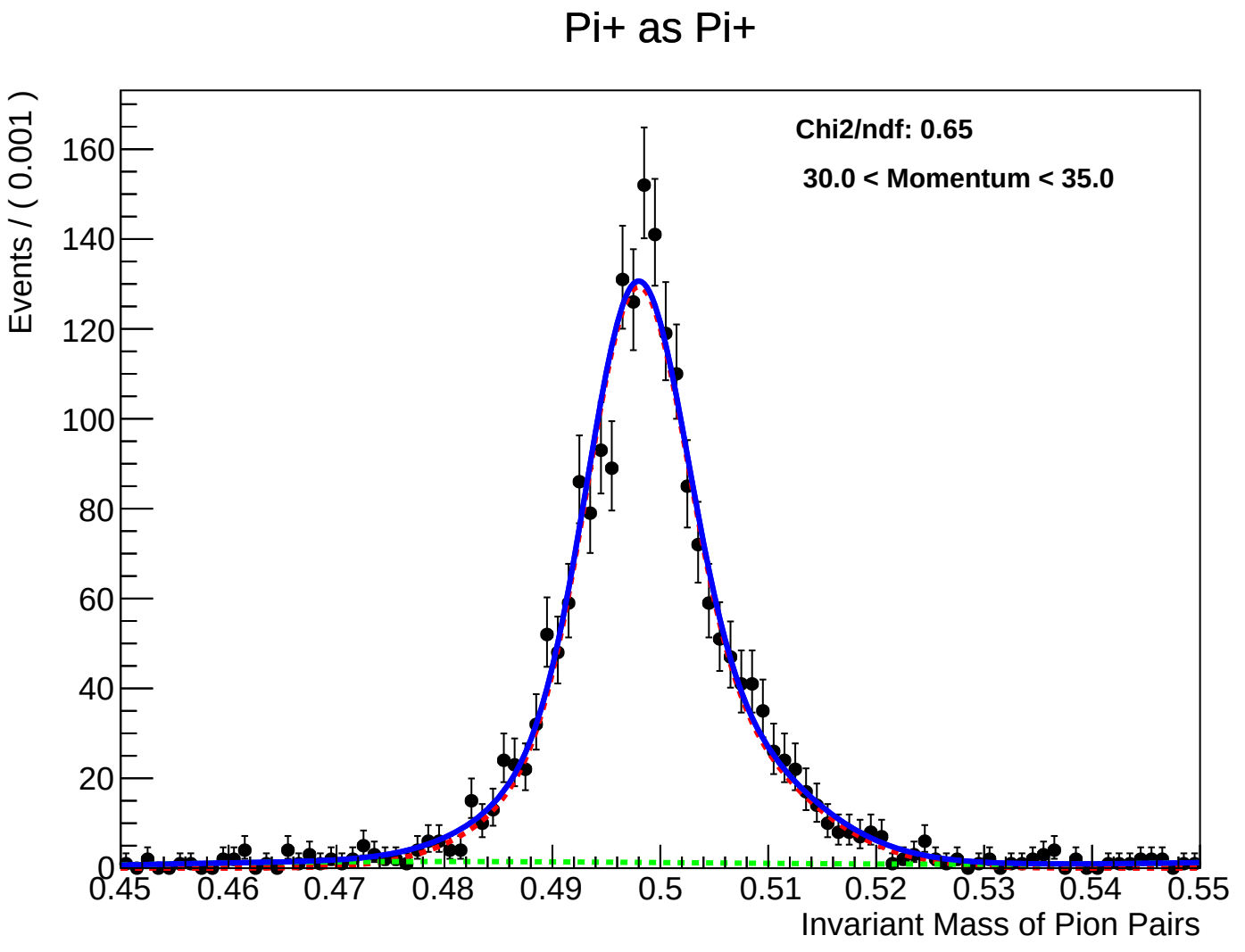

Pi+ as Pi+
Chi2/ndf: 0.73
27.0 < Momentum < 30.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
140
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

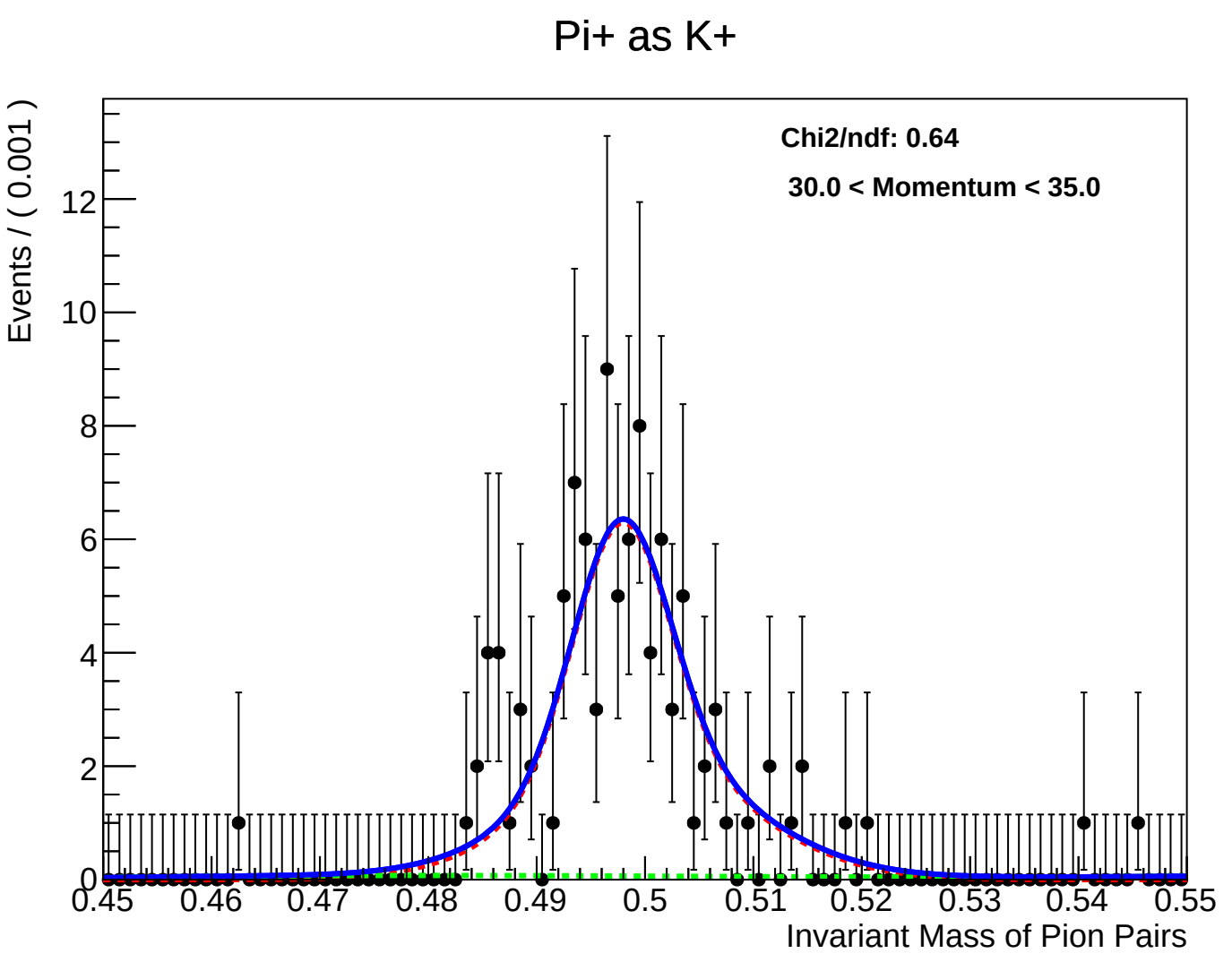

Pi+ as K+
Chi2/ndf: 0.77
27.0 < Momentum < 30.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
2
4
6
8
10
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

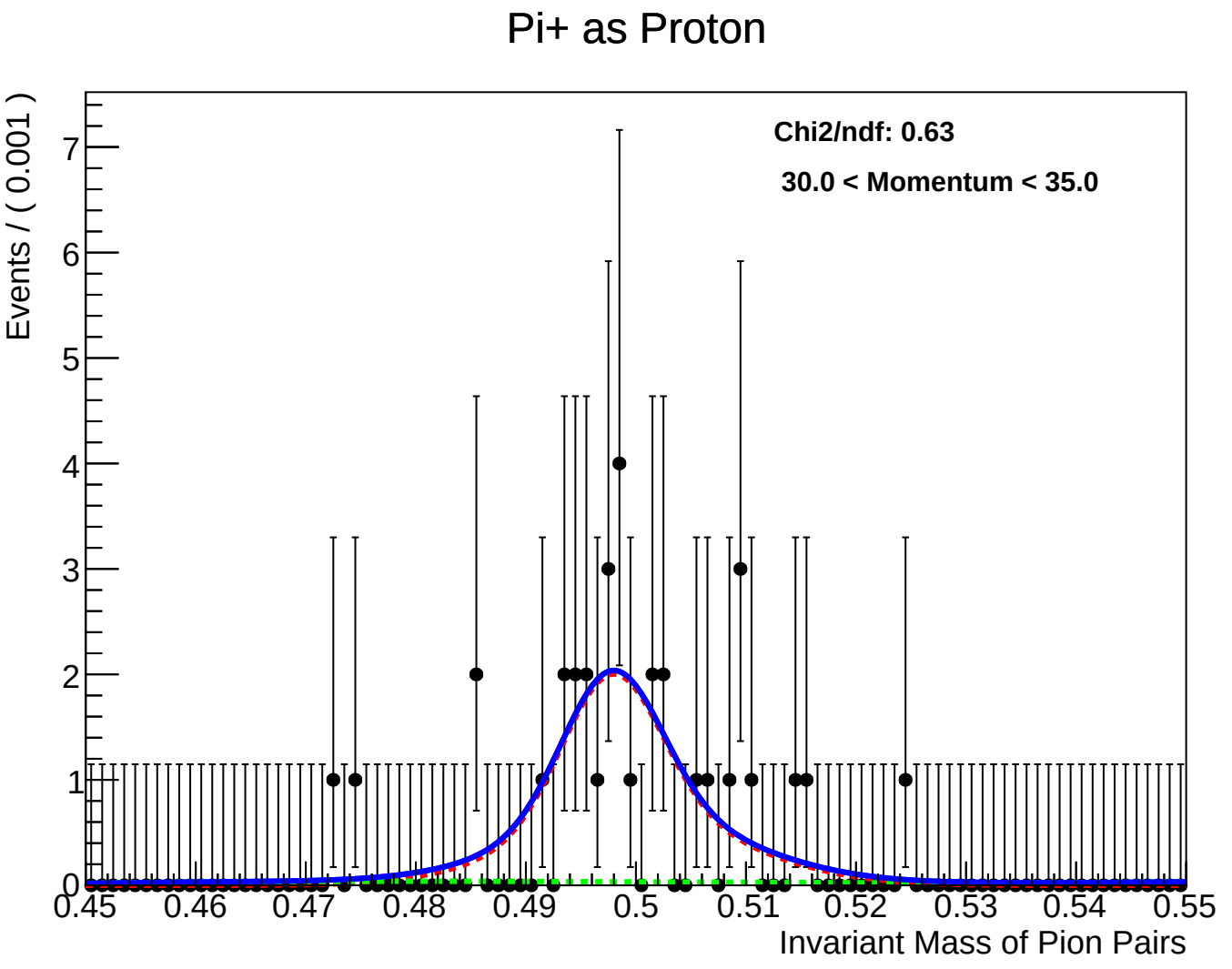

Pi+ as Proton
Chi2/ndf: 0.59
27.0 < Momentum < 30.0
Events / (0.001)
0
1
2
3
4
5
6
7
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

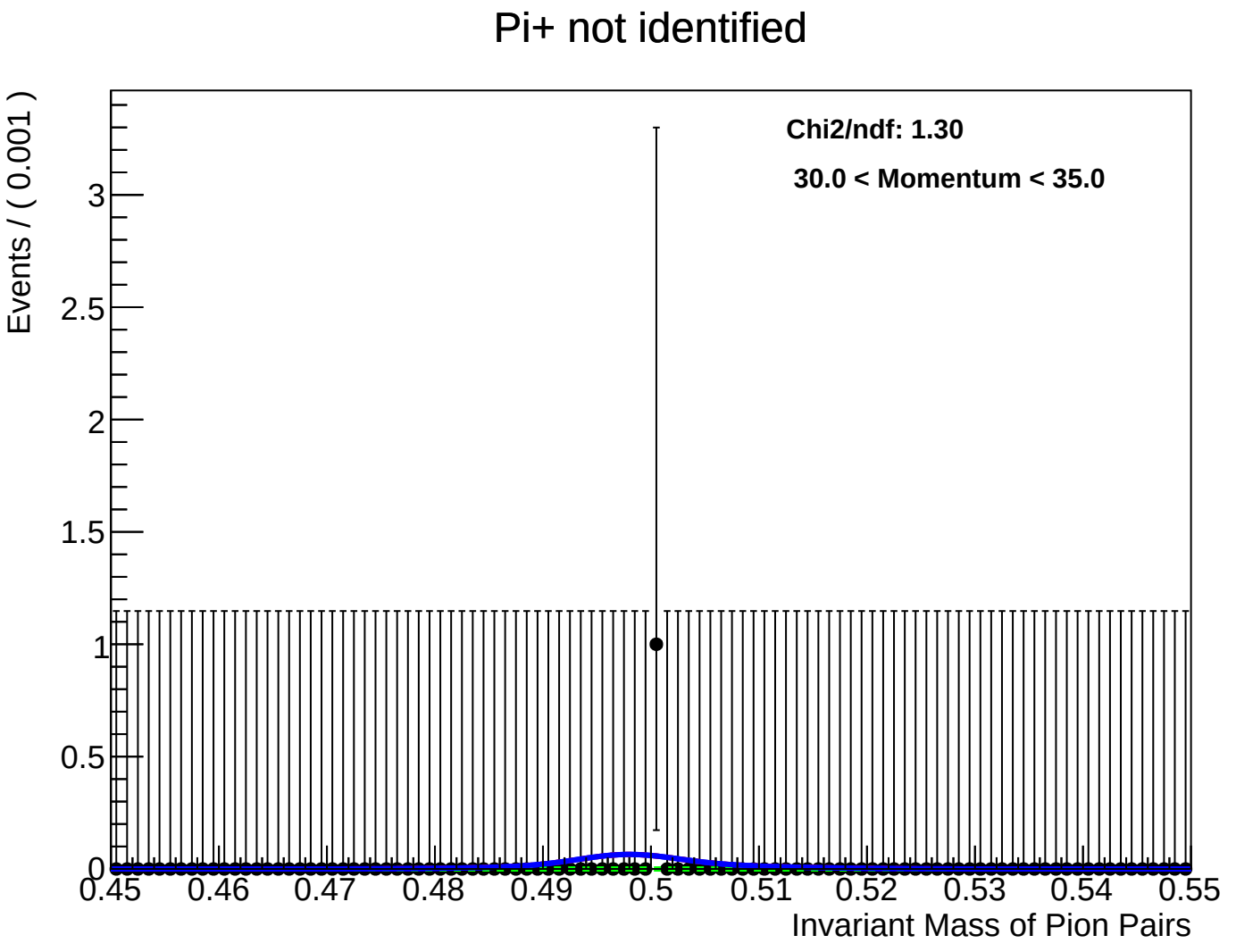

Pi+ not identified
Chi2/ndf: nan
27.0 < Momentum < 30.0
Events / (0.001)
1.2
1
0.8
0.6
0.4
0.2
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

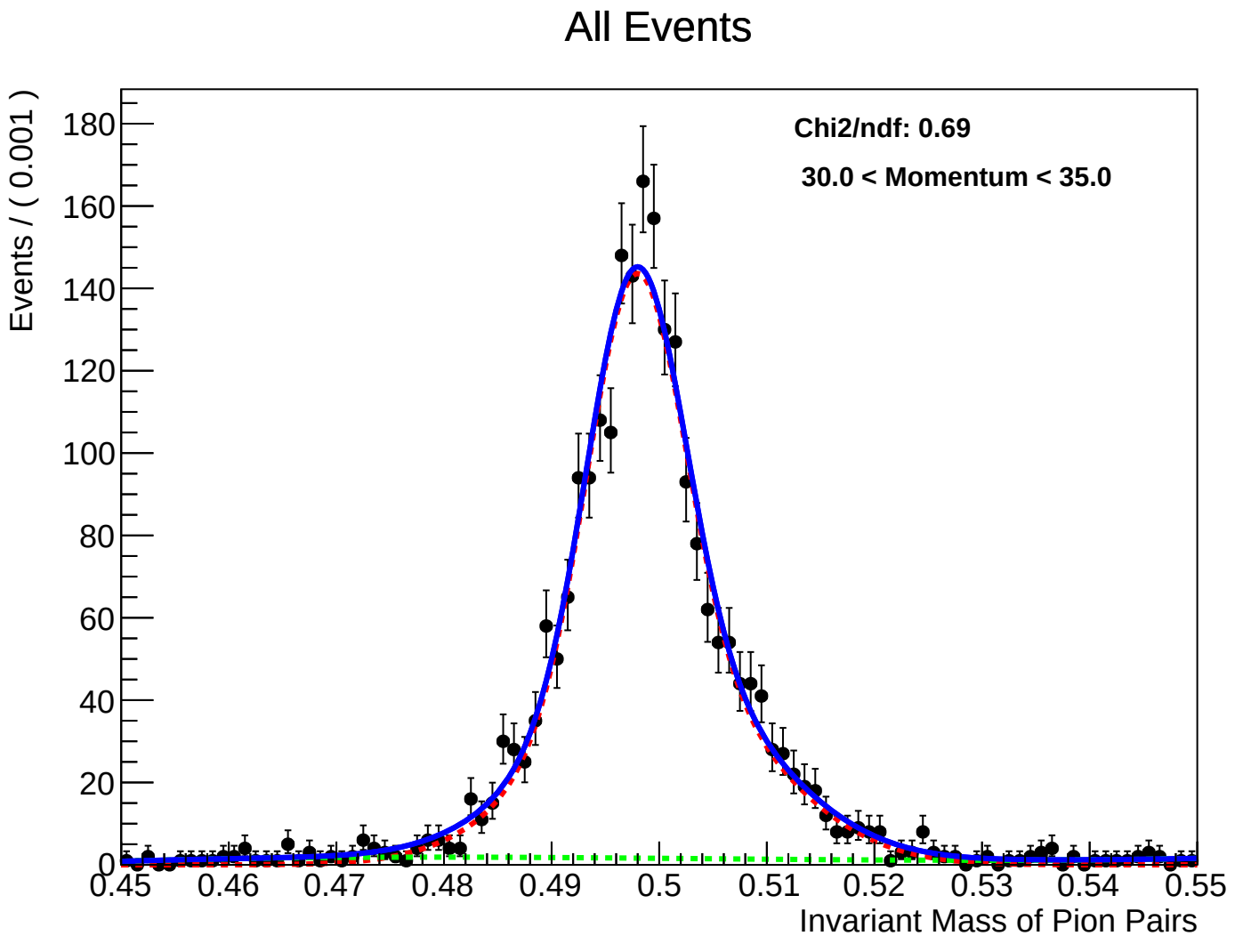

All Events
Chi2/ndf: 0.82
27.0 < Momentum < 30.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
140
160
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

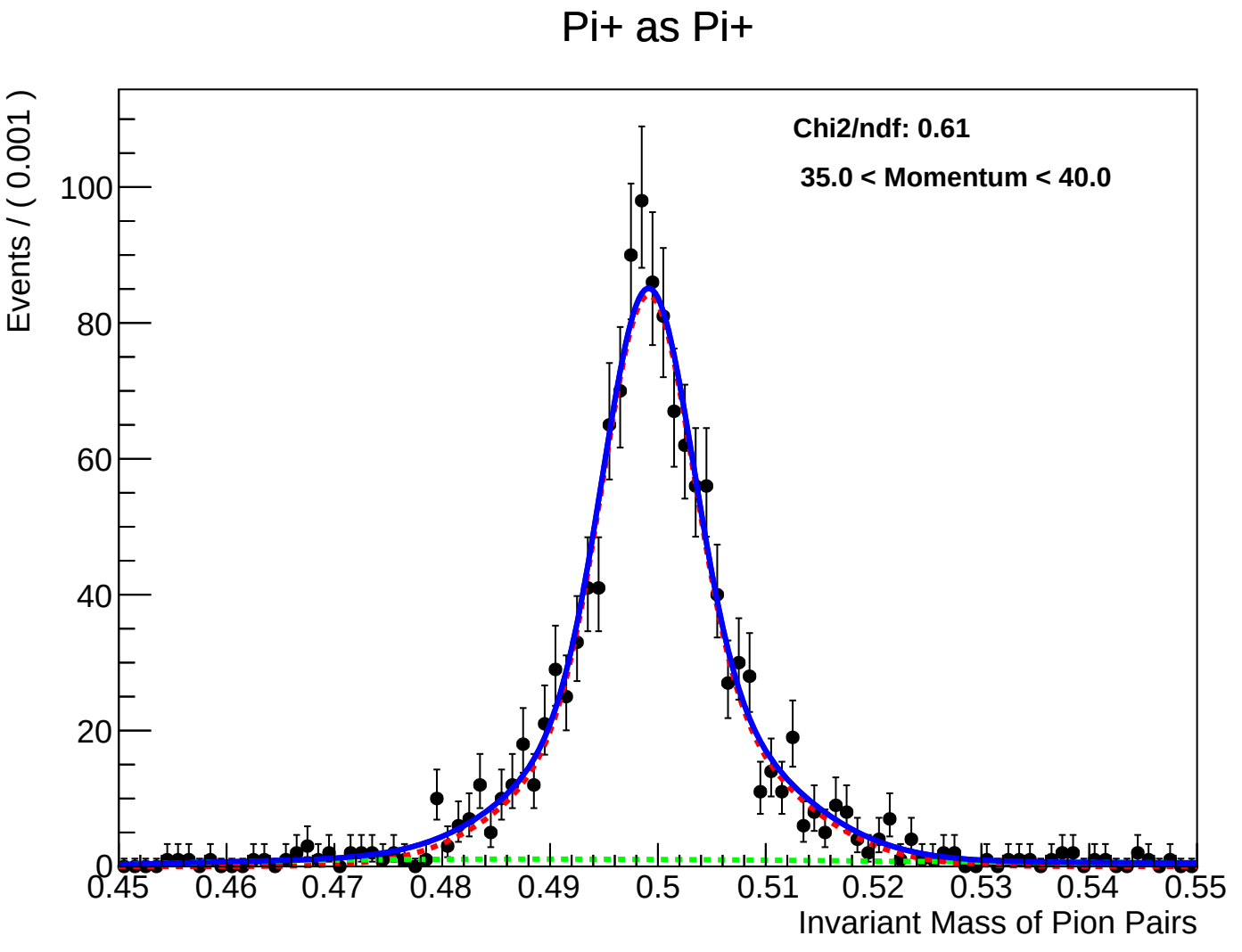

Pi+ as Pi+
Chi2/ndf: 0.65
30.0 < Momentum < 35.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
140
160
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

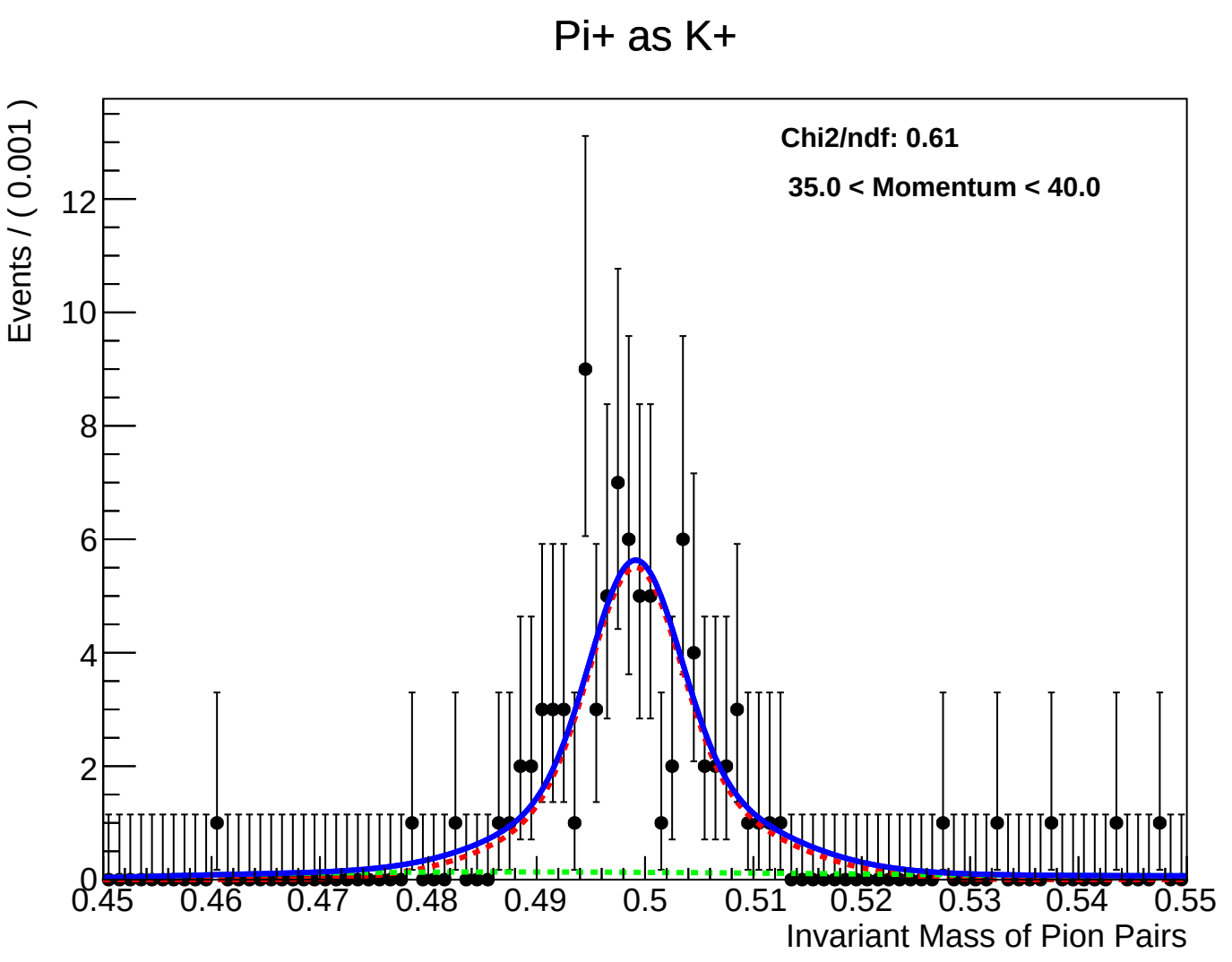

Pi+ as K+
Chi2/ndf: 0.64
30.0 < Momentum < 35.0
Events / (0.001)
0
2
4
6
8
10
12
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

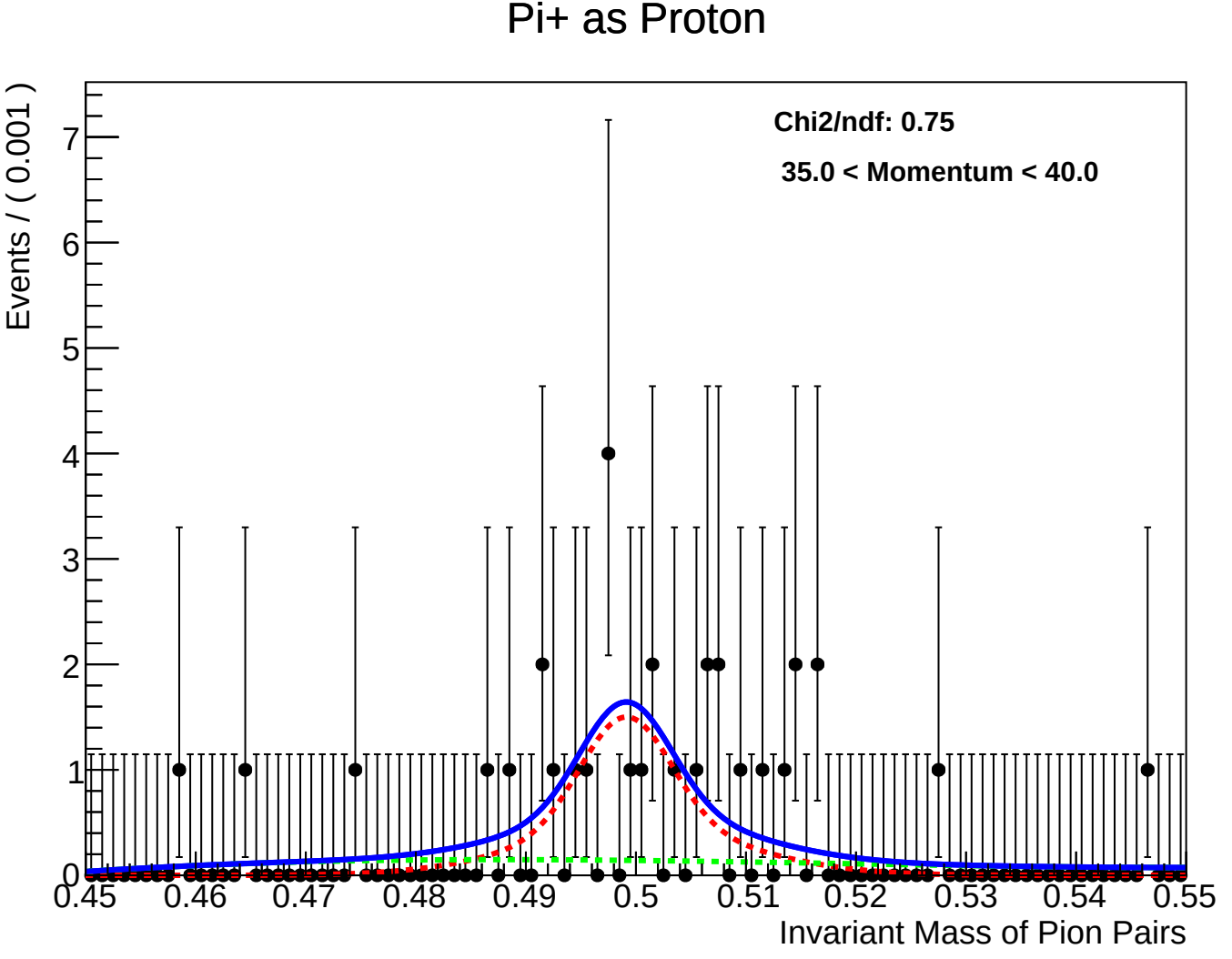

Pi+ as Proton
Chi2/ndf: 0.63
30.0 < Momentum < 35.0
Events / (0.001)
0
1
2
3
4
5
6
7
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

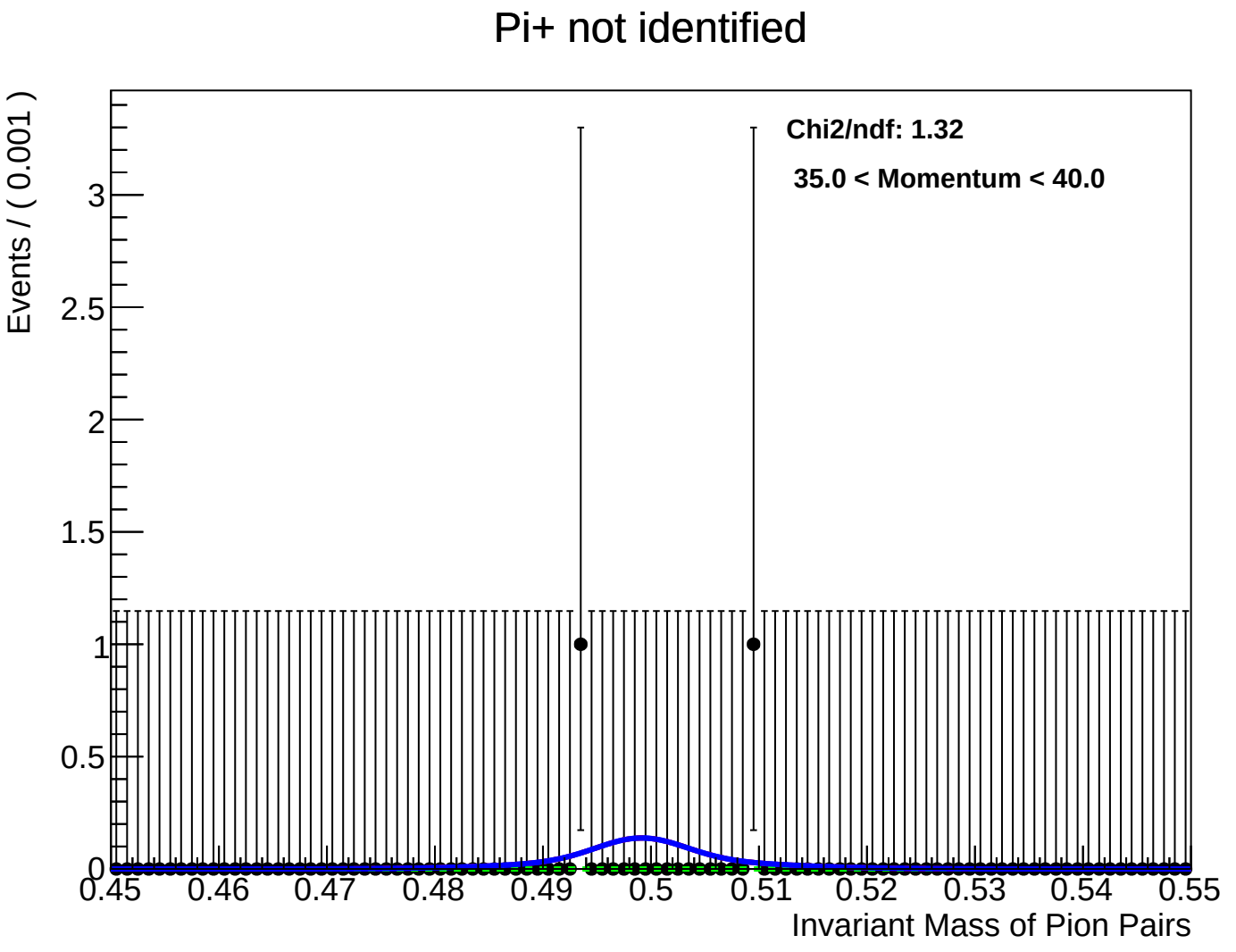

Pi+ not identified
Chi2/ndf: 1.30
30.0 < Momentum < 35.0
Events / (0.001)
0
0.5
1
1.5
2
2.5
3
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

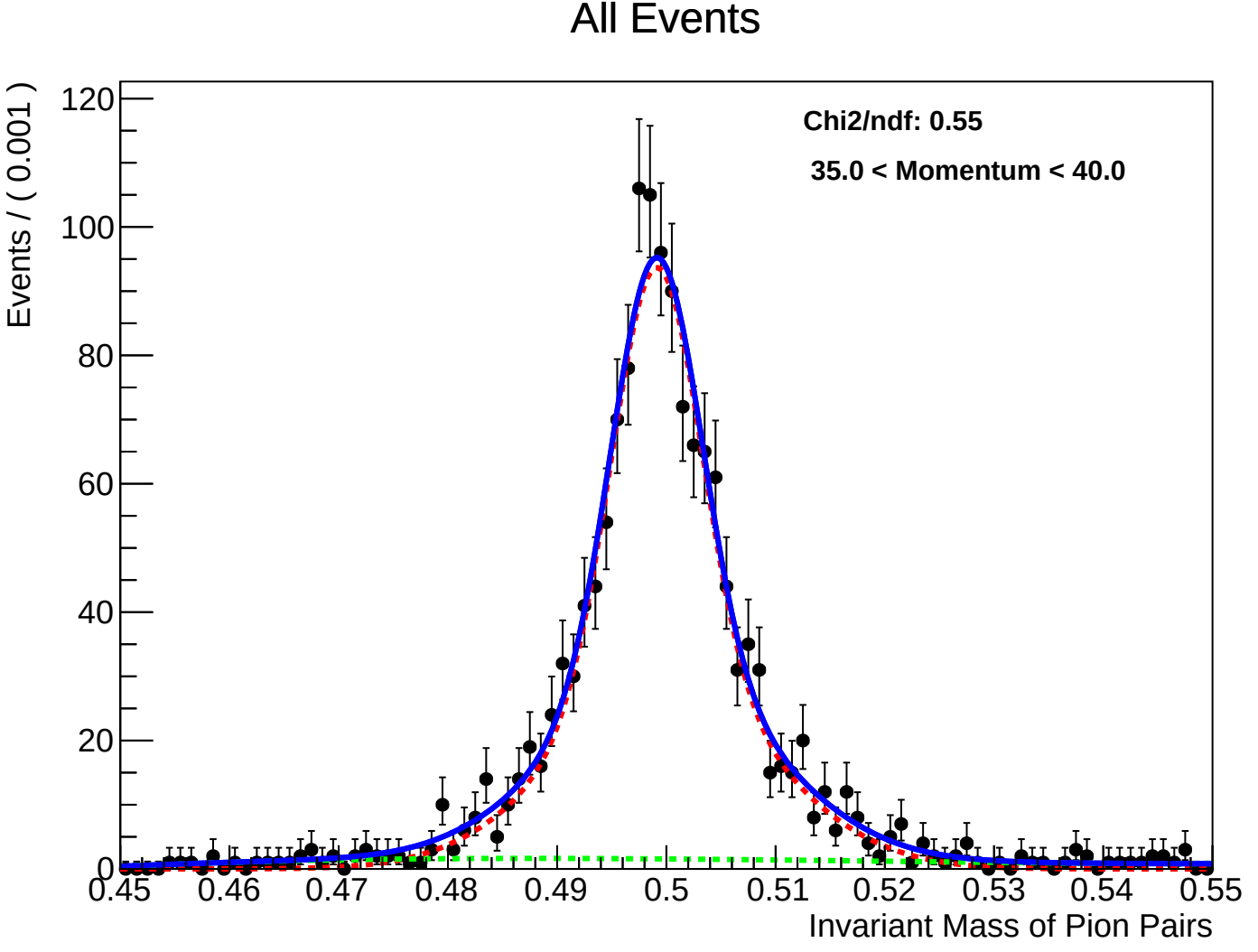

All Events
Chi2/ndf: 0.69
30.0 < Momentum < 35.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
140
160
180
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

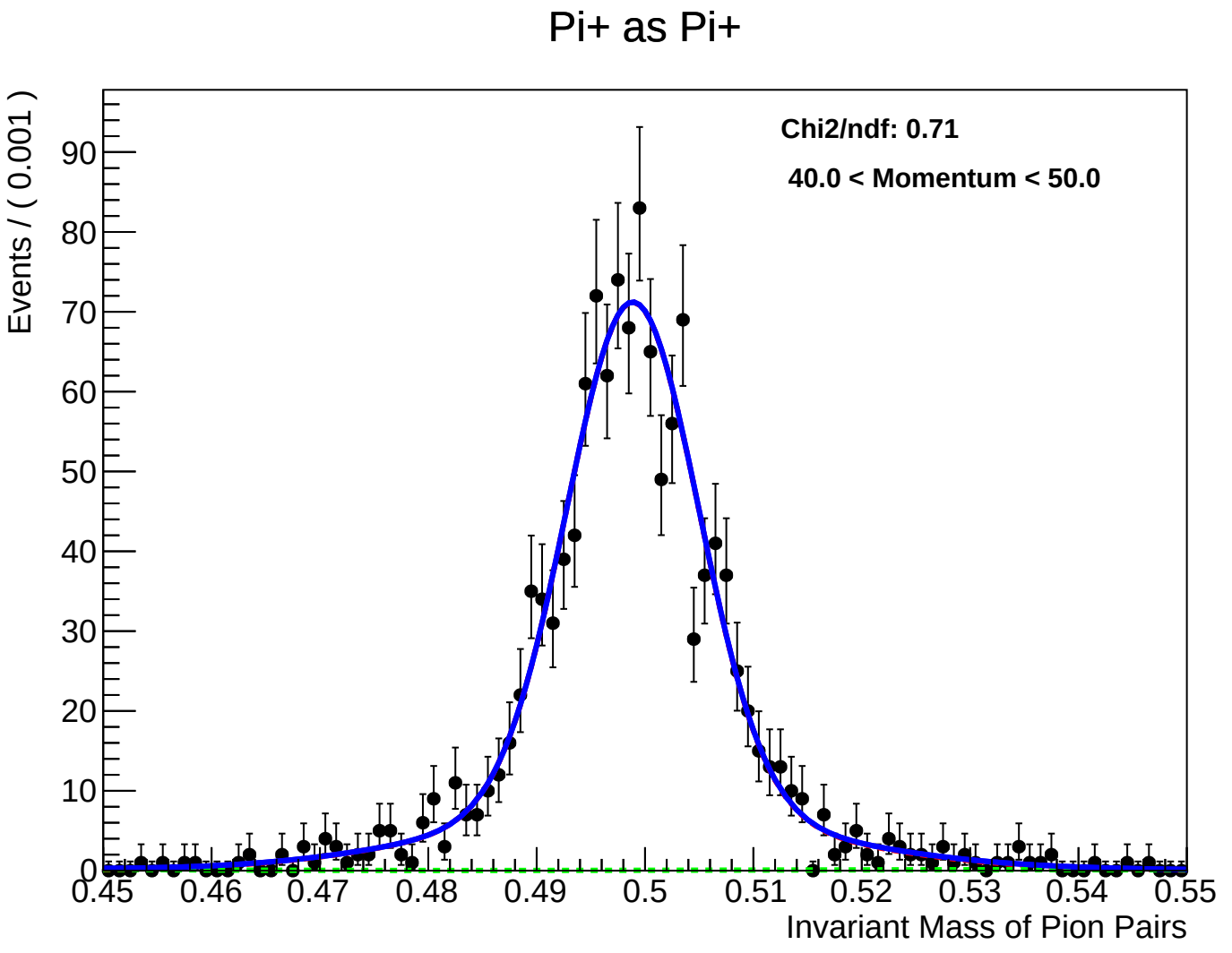

Pi+ as Pi+
Chi2/ndf: 0.61
35.0 < Momentum < 40.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

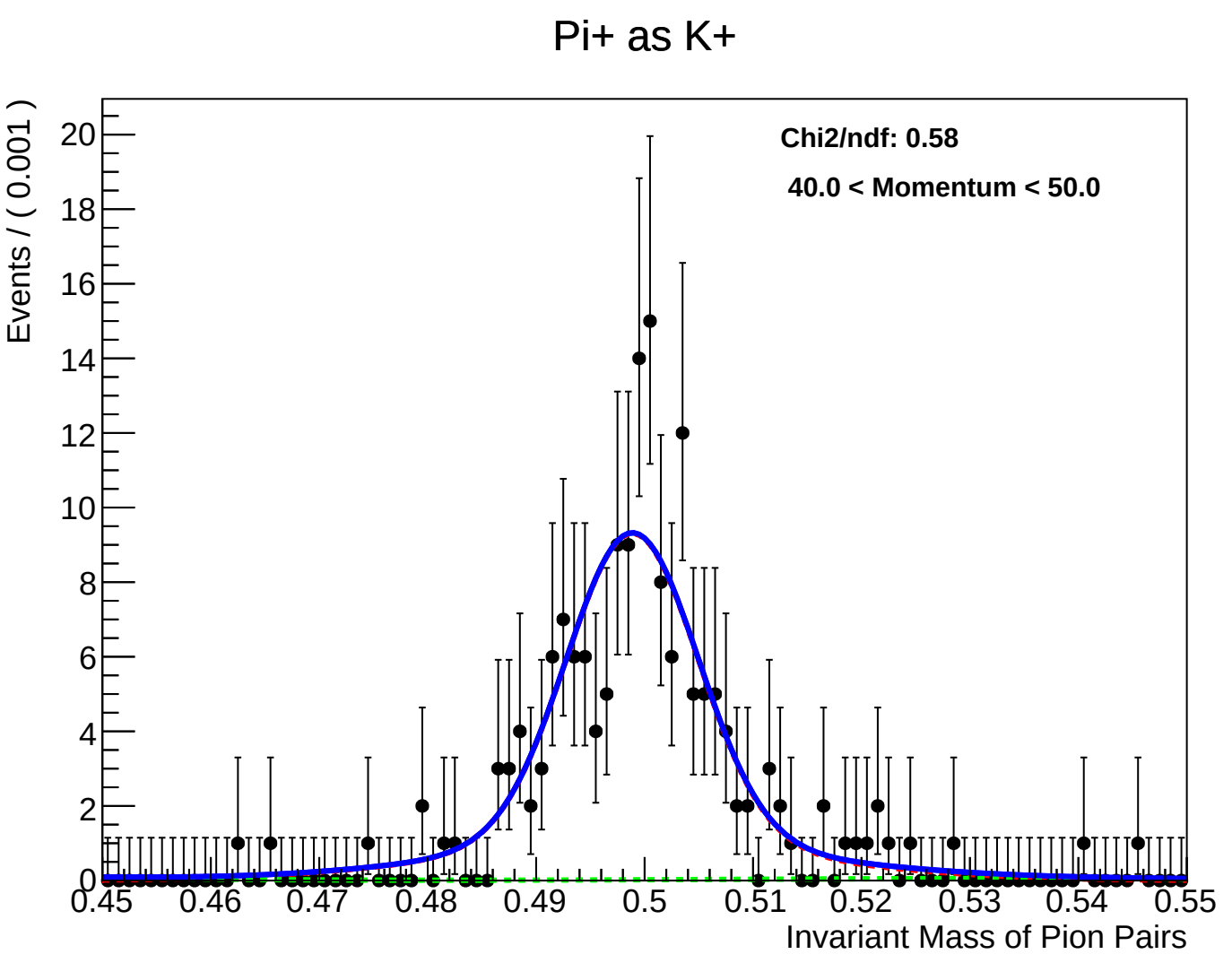

Pi+ as K+
Chi2/ndf: 0.61
35.0 < Momentum < 40.0
Events / (0.001)
0
2
4
6
8
10
12
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

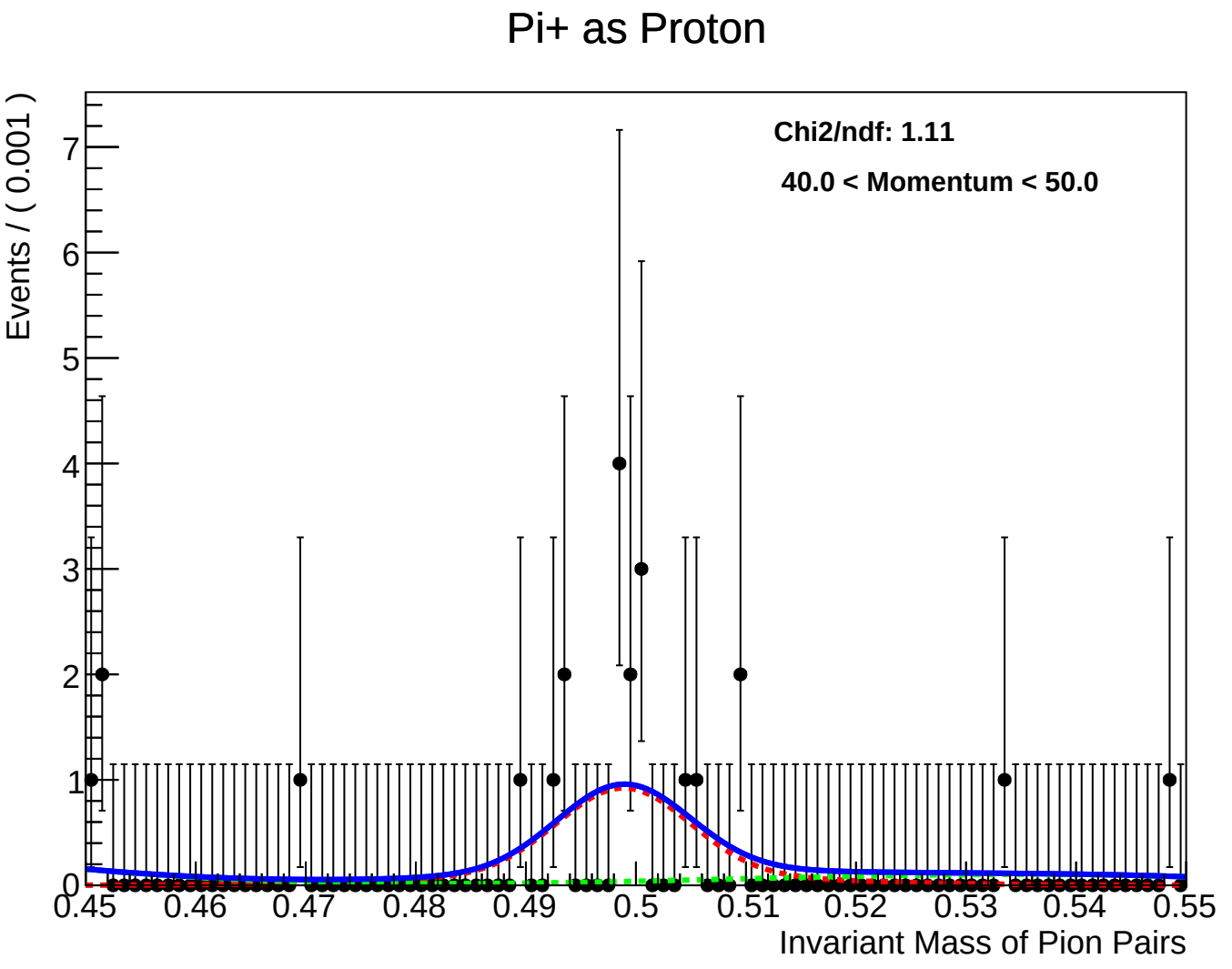

Pi+ as Proton
Chi2/ndf: 0.75
35.0 < Momentum < 40.0
Events / (0.001)
0
1
2
3
4
5
6
7
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

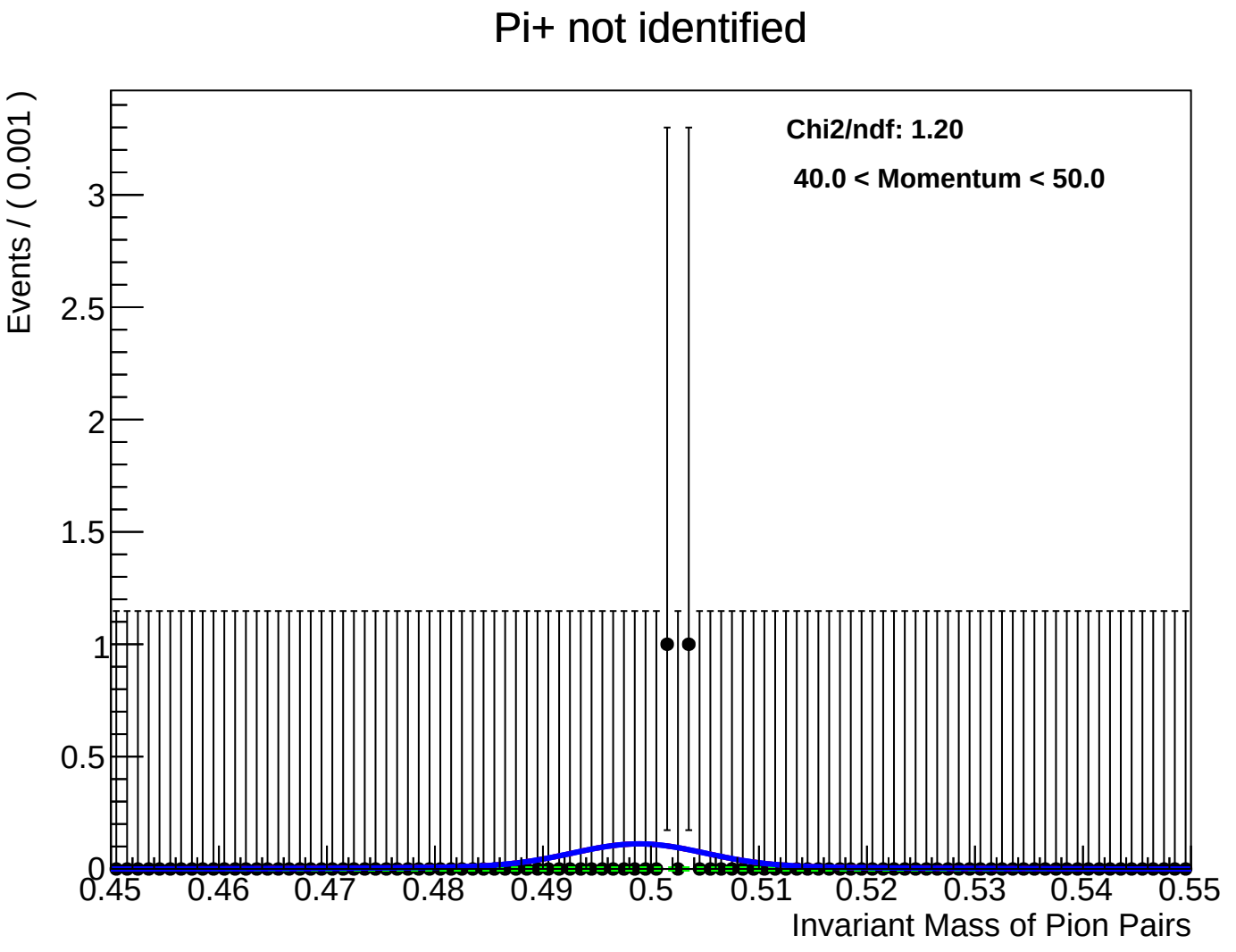

Pi+ not identified
Chi2/ndf: 1.32
35.0 < Momentum < 40.0
Events / (0.001)
0
0.5
1
1.5
2
2.5
3
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

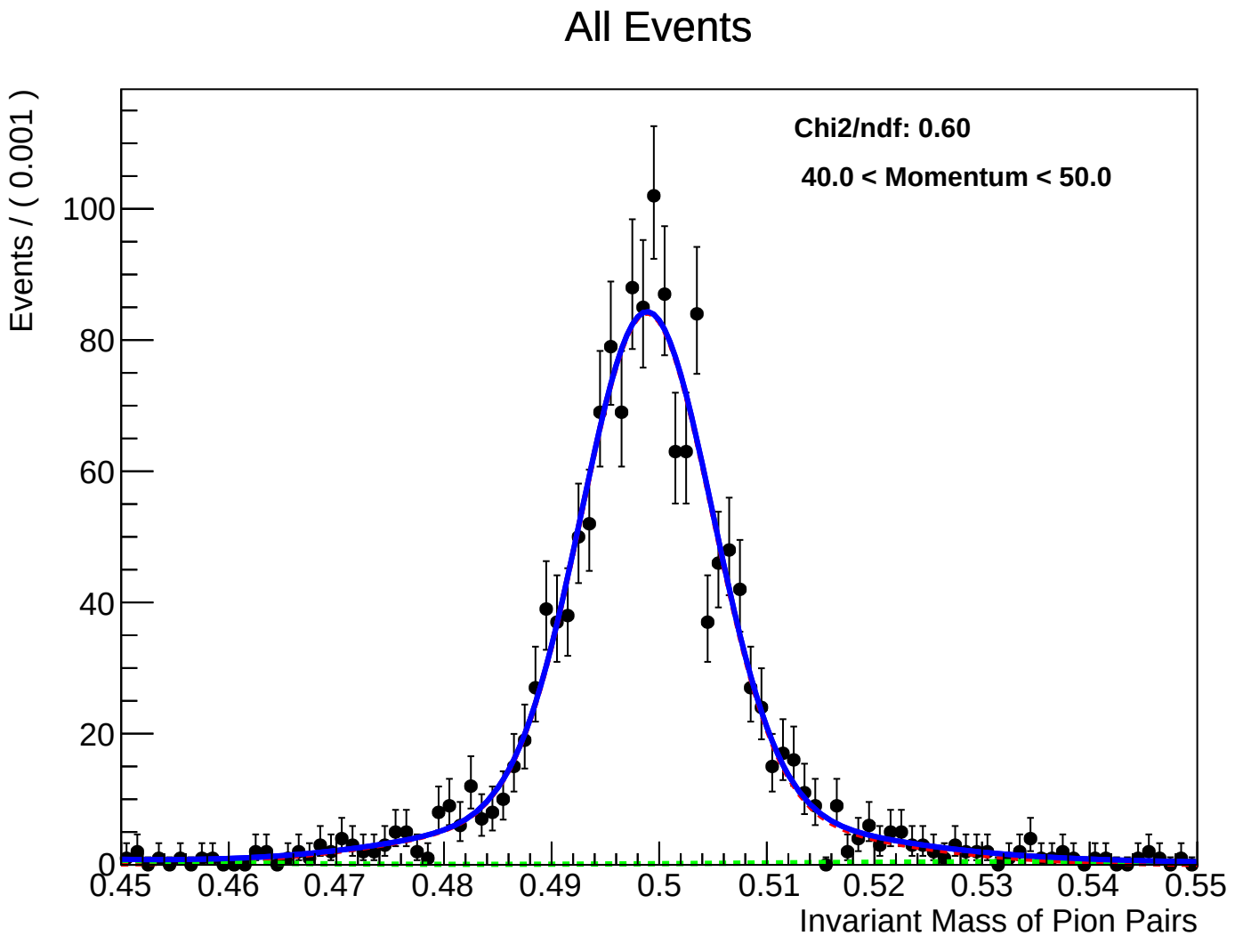

All Events
Chi2/ndf: 0.55
35.0 < Momentum < 40.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

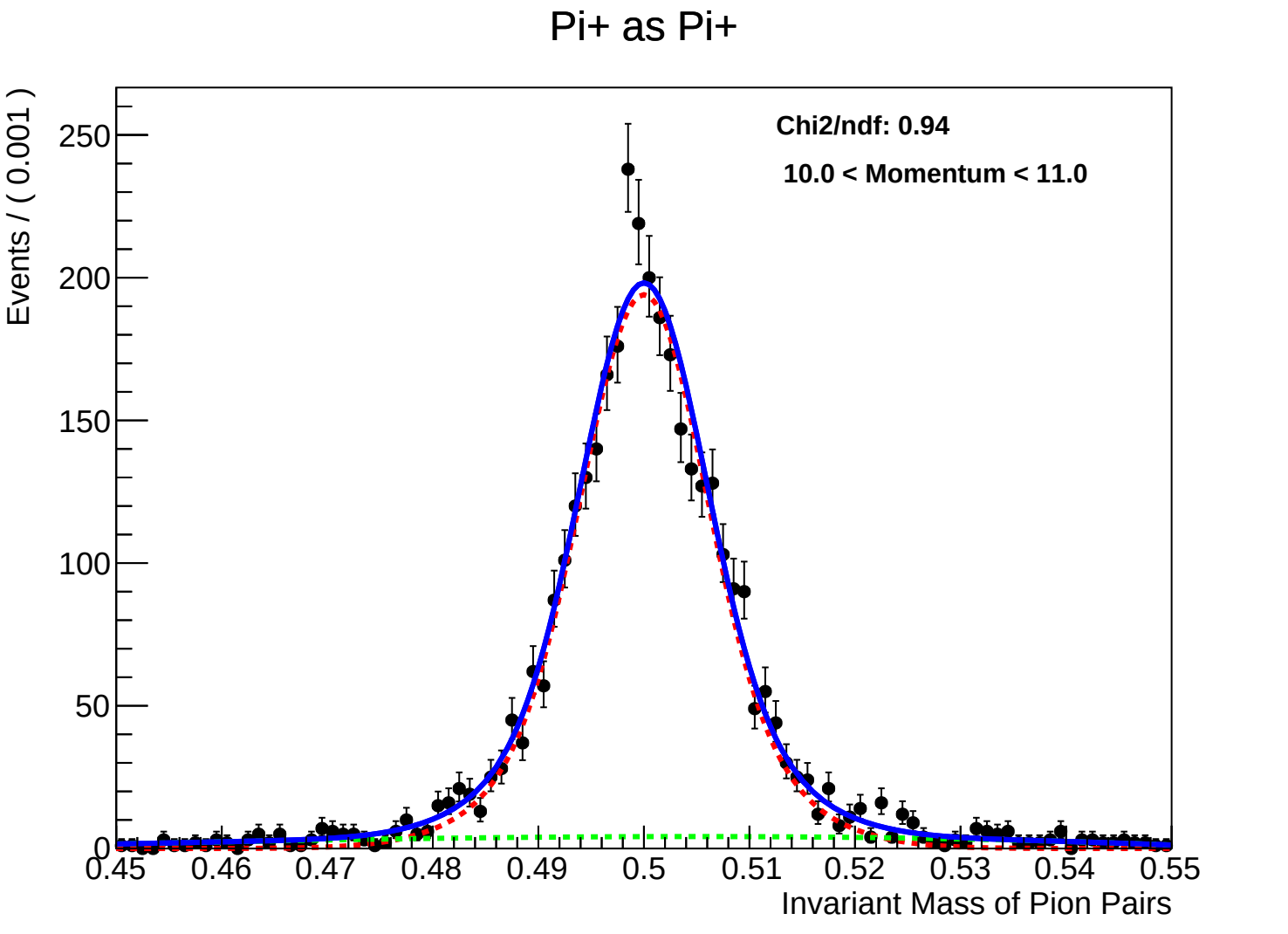

Pi+ as Pi+
Chi2/ndf: 0.71
40.0 < Momentum < 50.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
10
20
30
40
50
60
70
80
90
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

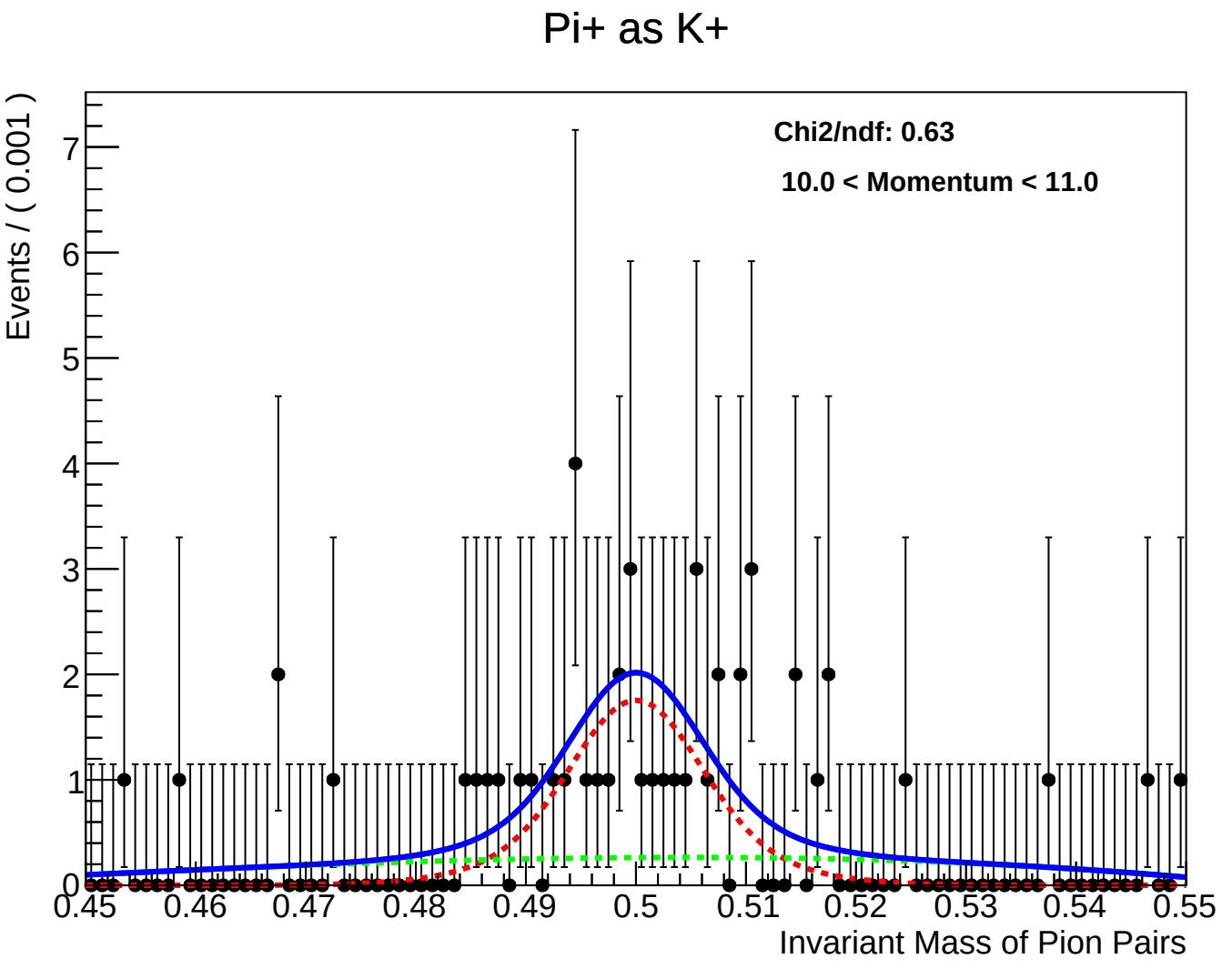

Pi+ as K+
Chi2/ndf: 0.58
40.0 < Momentum < 50.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
2
4
6
8
10
12
14
16
18
20
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

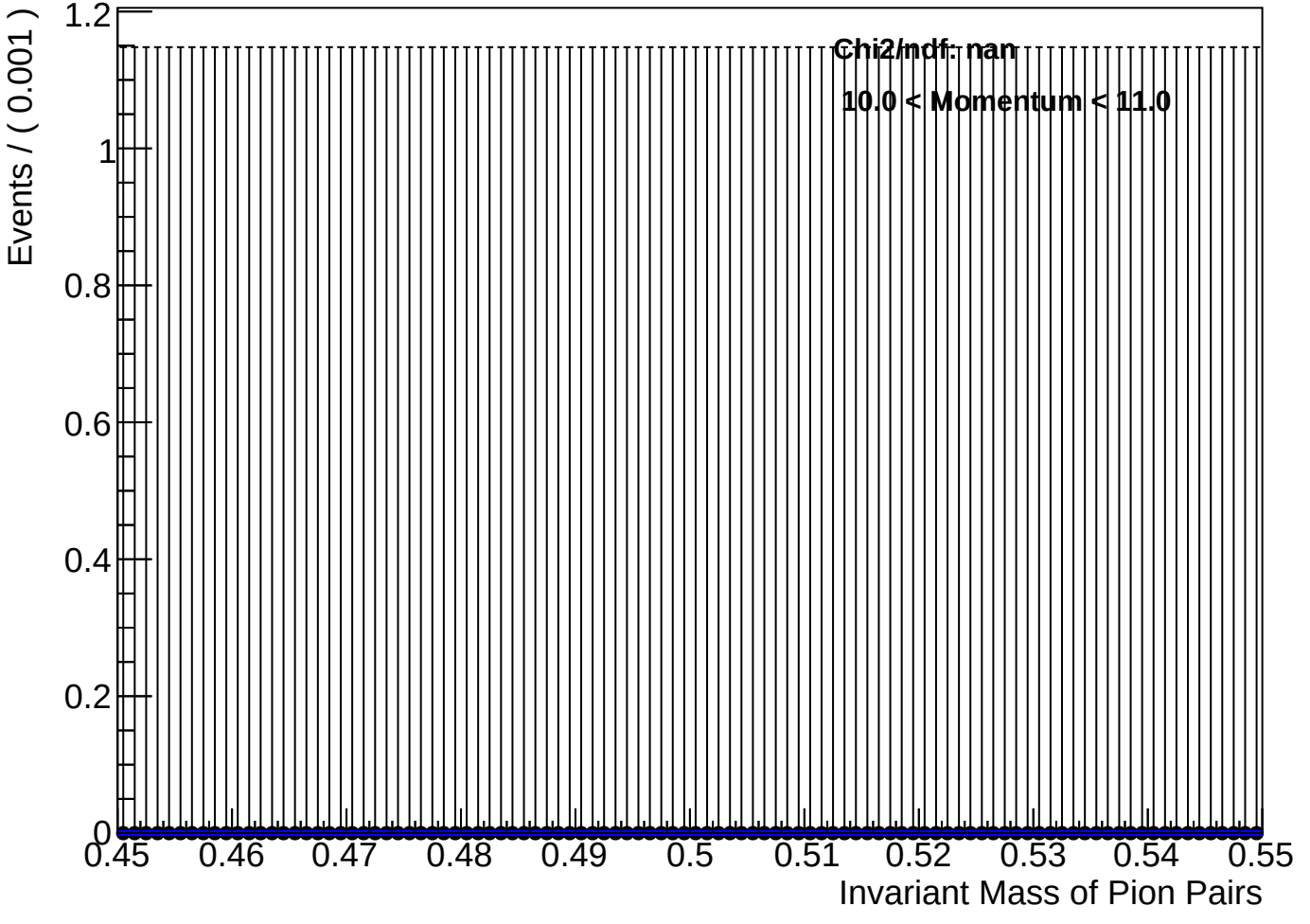

Pi+ as Proton
Chi2/ndf: 1.11
40.0 < Momentum < 50.0
Events / (0.001)
0
1
2
3
4
5
6
7
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

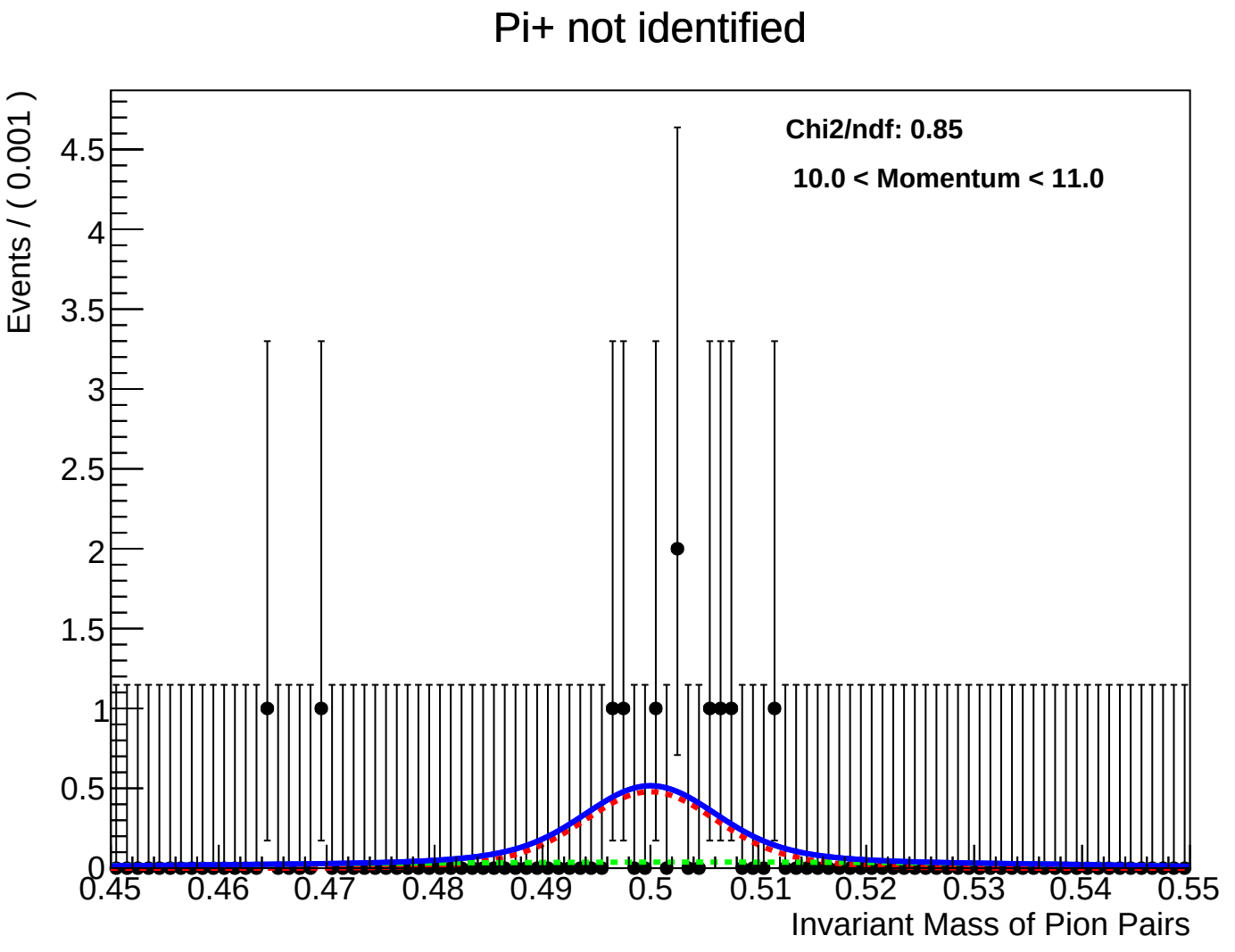

Pi+ not identified
Chi2/ndf: 1.20
40.0 < Momentum < 50.0
Events / (0.001)
0
0.5
1
1.5
2
2.5
3
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

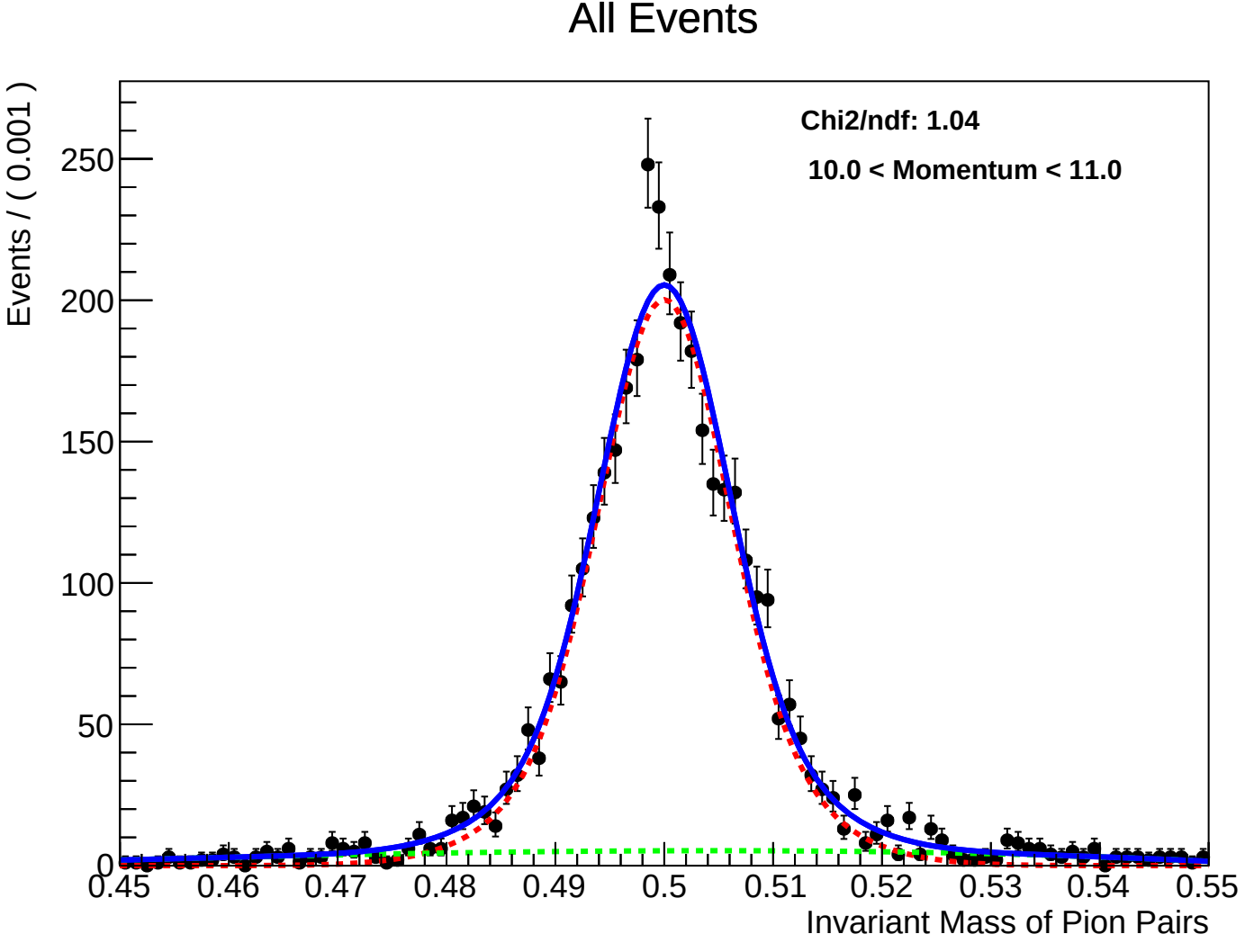

All Events
Chi2/ndf: 0.60
40.0 < Momentum < 50.0
Events / (0.001)
0
20
40
60
80
100
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

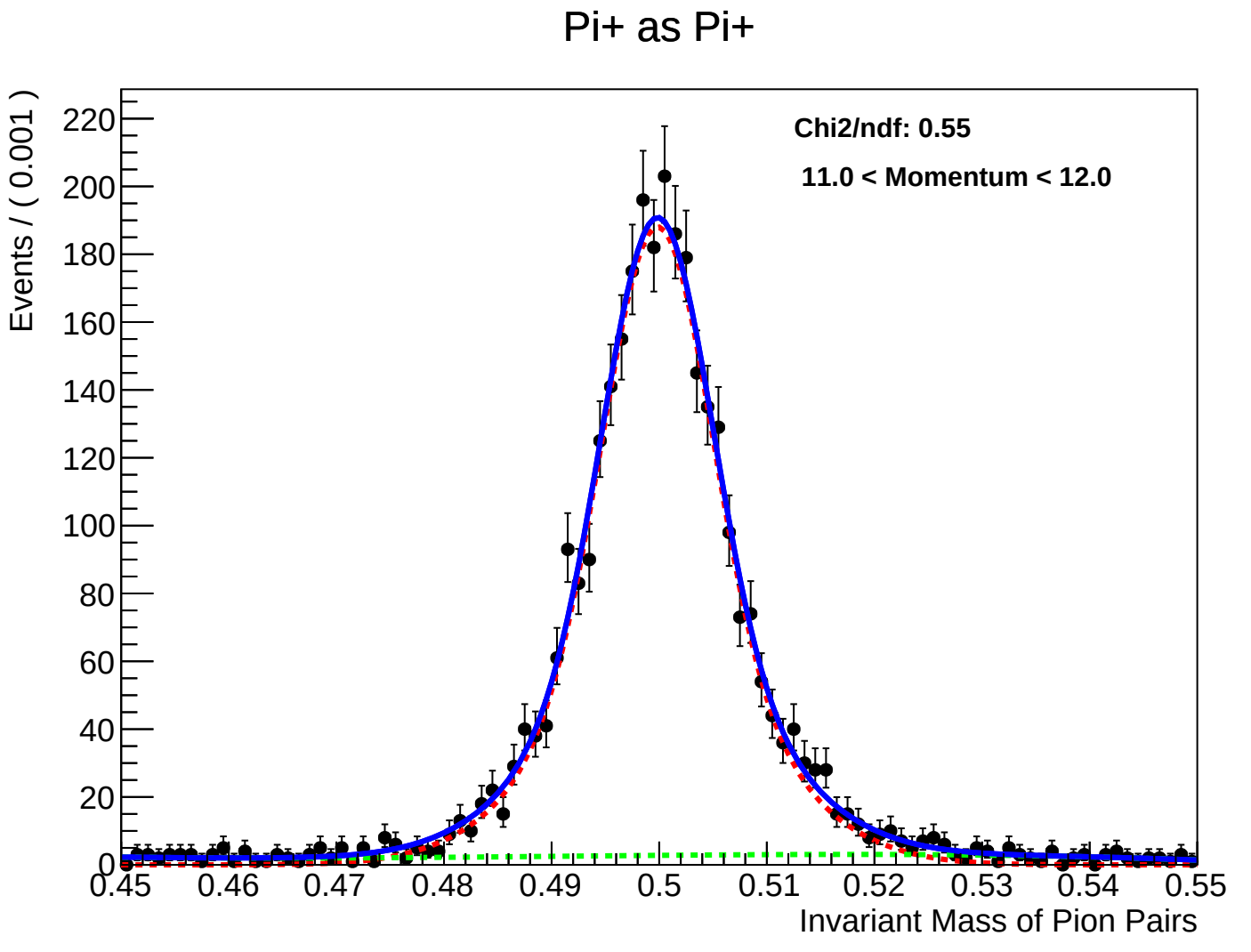

Pi+ as Pi+
Chi2/ndf: 0.94
10.0 < Momentum < 11.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
50
100
150
200
250
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

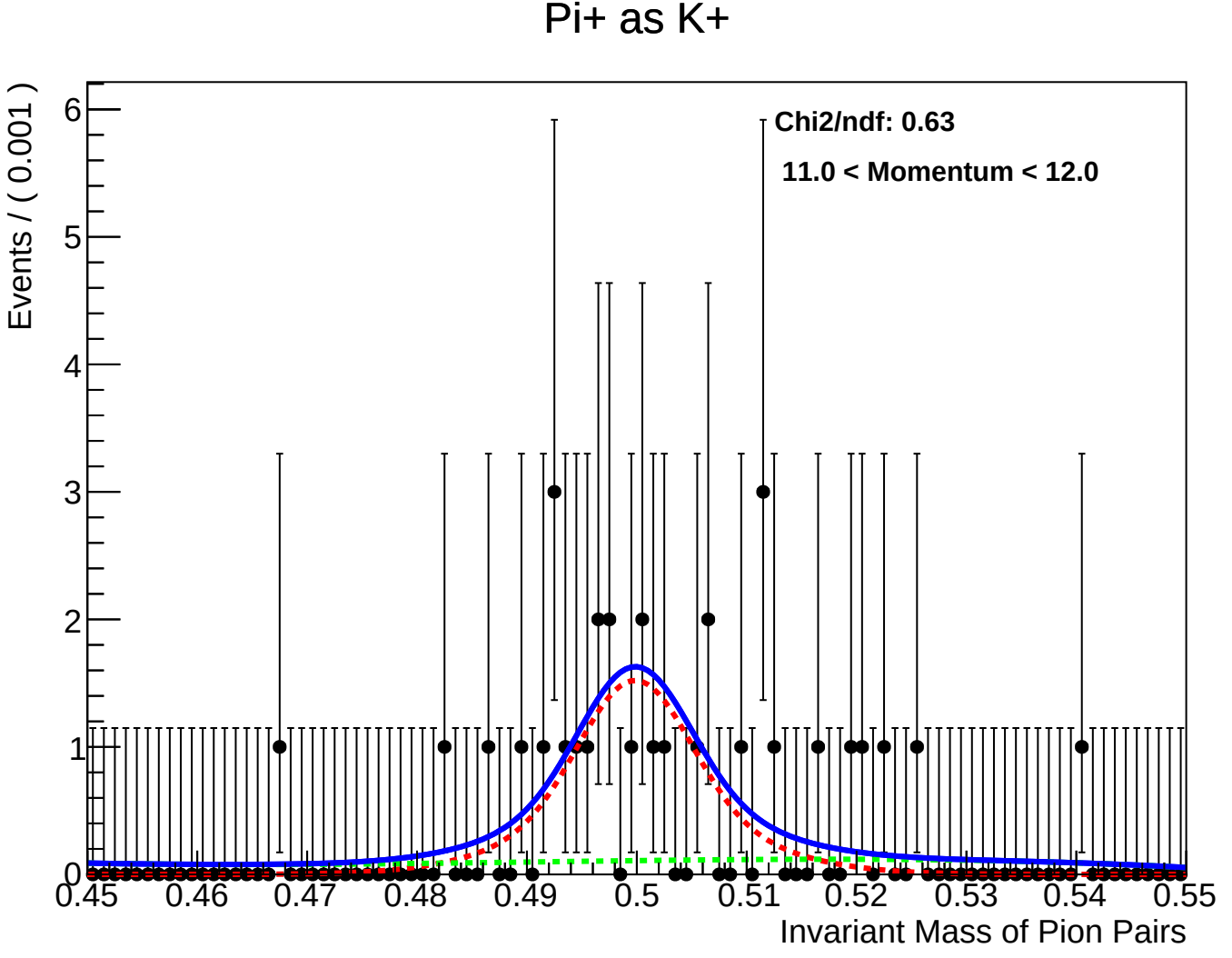

Pi+ as K+
Chi2/ndf: 0.63
10.0 < Momentum < 11.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
1
2
3
4
5
6
7
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

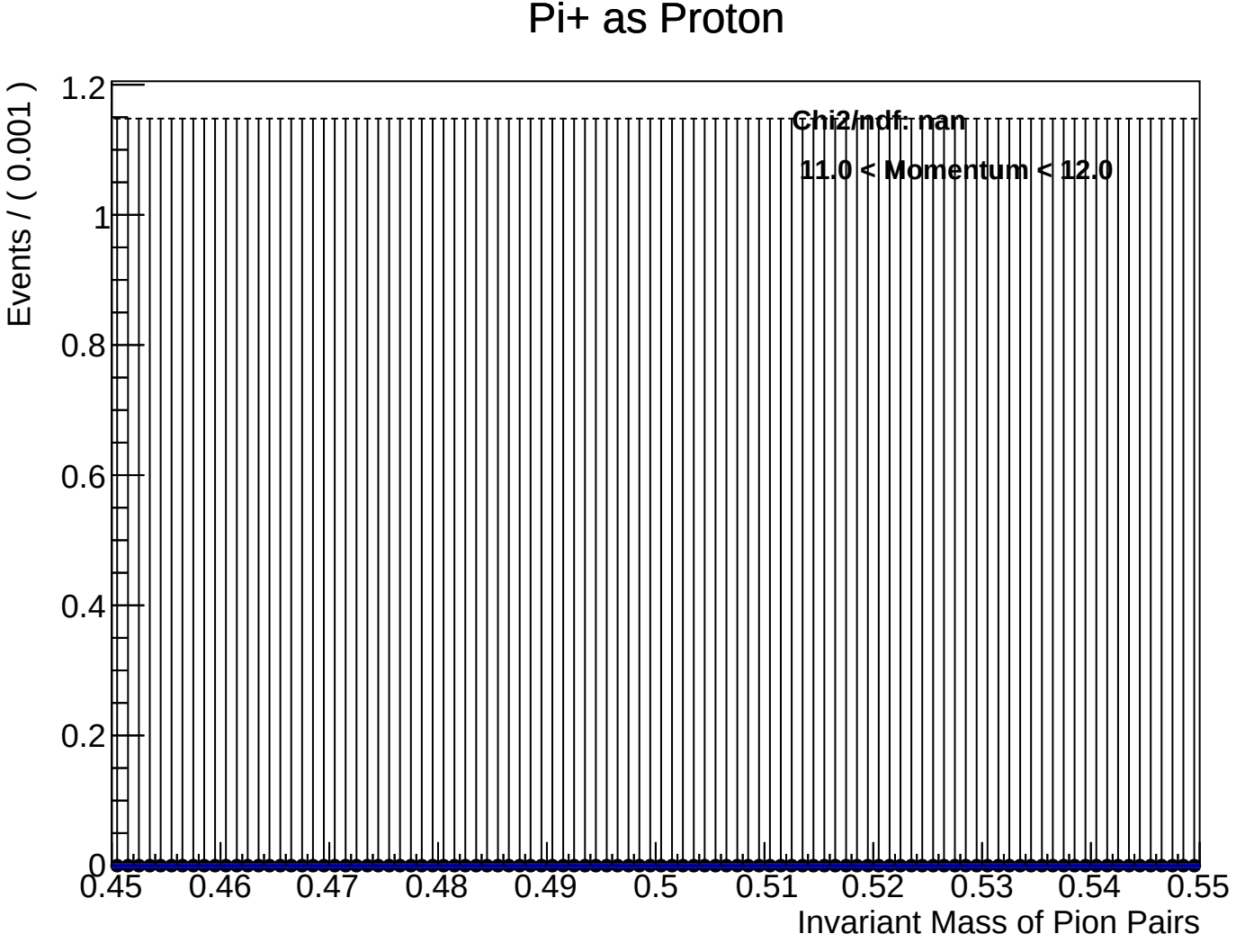

Pi+ as Proton
Chi2/ndf: nan
10.0 < Momentum < 11.0
Events / (0.001)
1.2
1
0.8
0.6
0.4
0.2
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

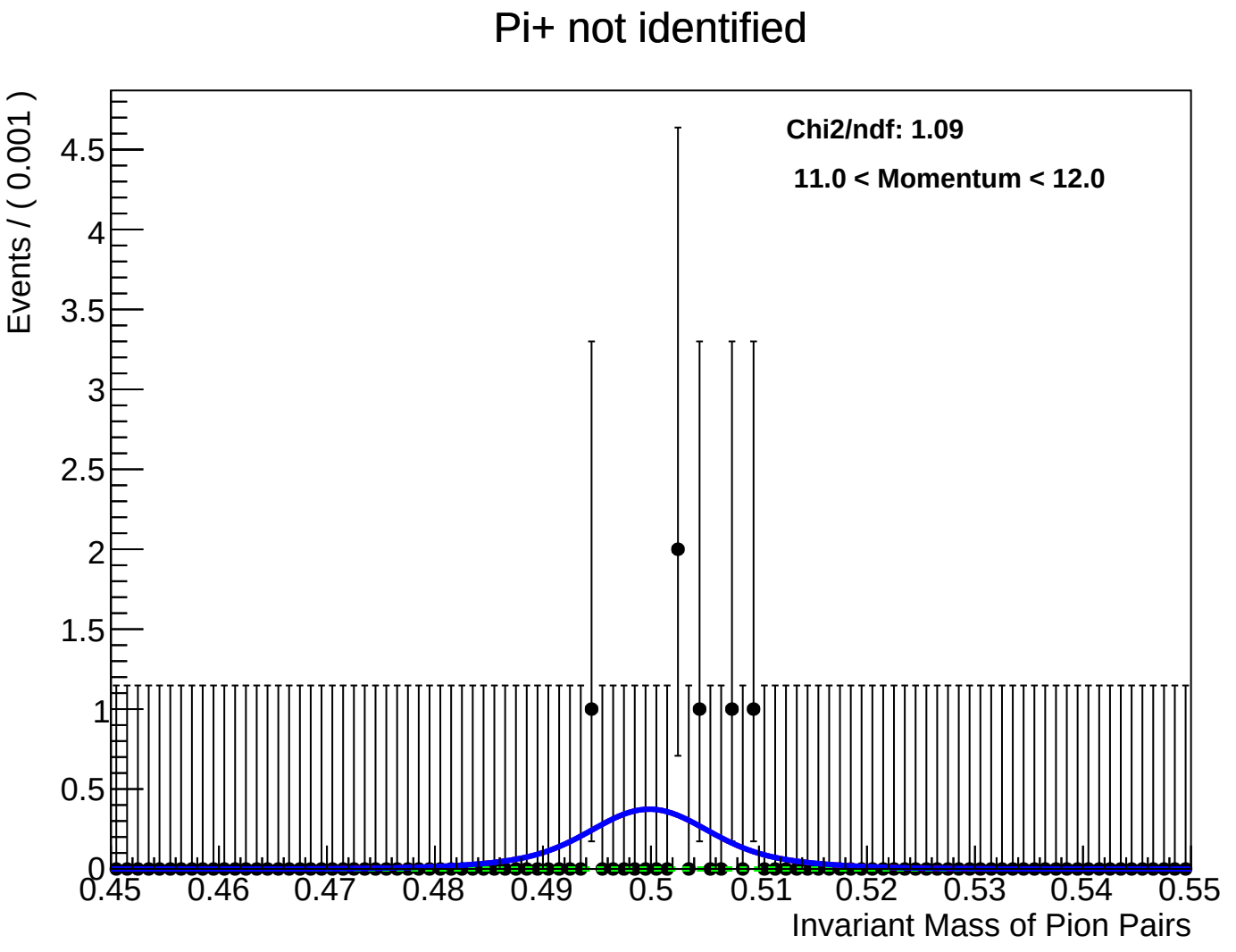

Pi+ not identified
Chi2/ndf: 0.85
10.0 < Momentum < 11.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

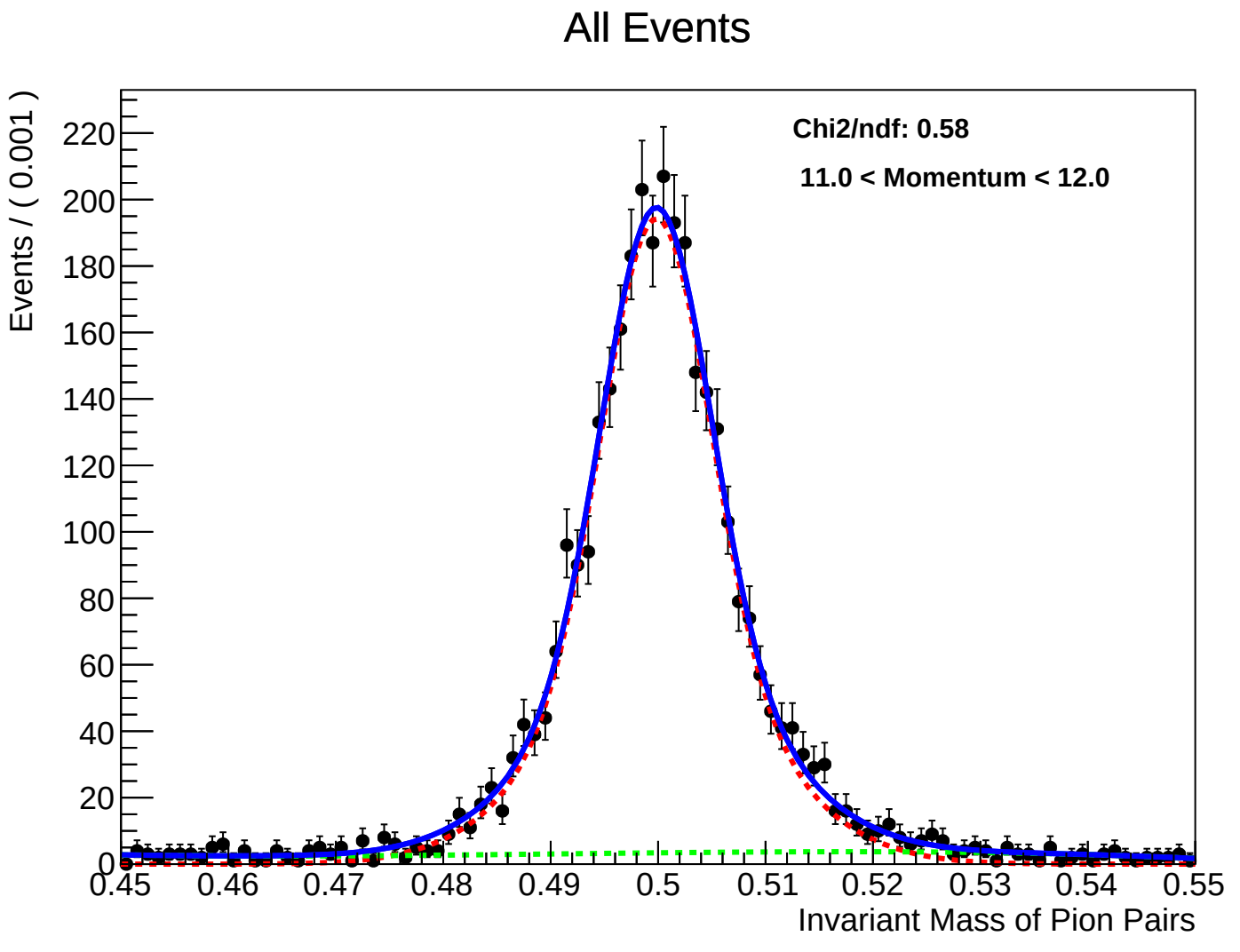

All Events
Chi2/ndf: 1.04
10.0 < Momentum < 11.0
Events / (0.001)
0
50
100
150
200
250
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

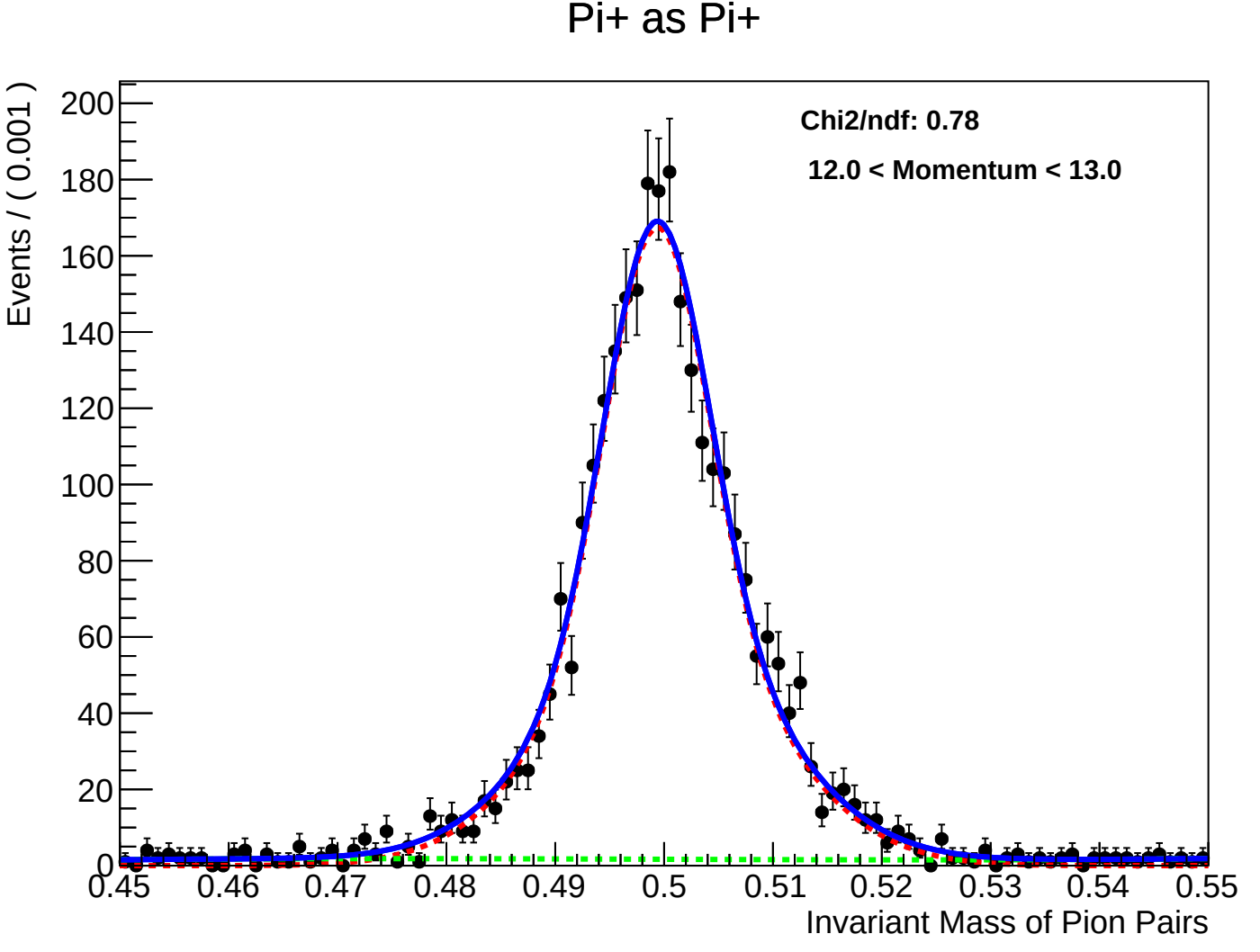

Pi+ as Pi+
Chi2/ndf: 0.55
11.0 < Momentum < 12.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
140
160
180
200
220
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

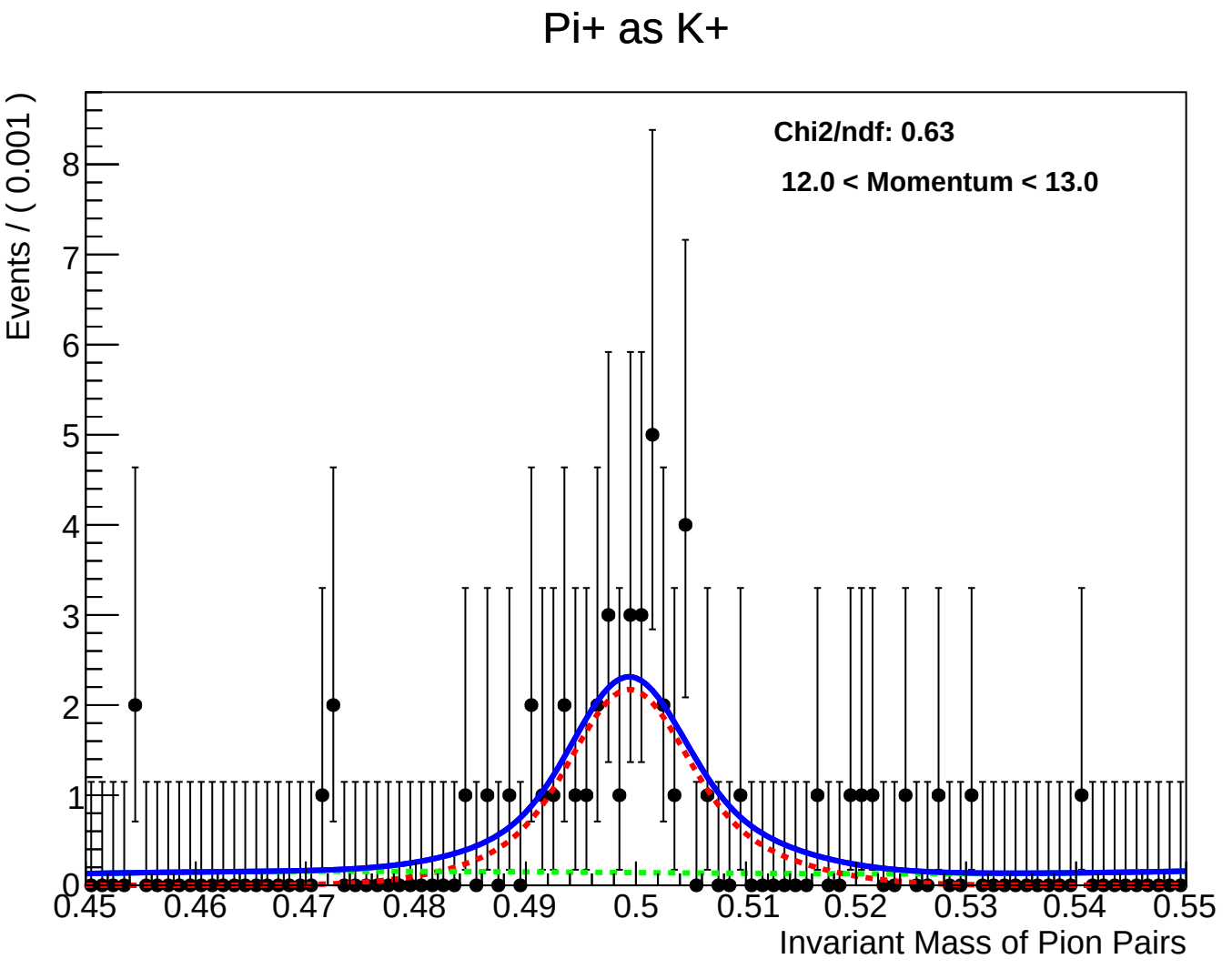

Pi+ as K+
Chi2/ndf: 0.63
11.0 < Momentum < 12.0
Events / (0.001)
0
1
2
3
4
5
6
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

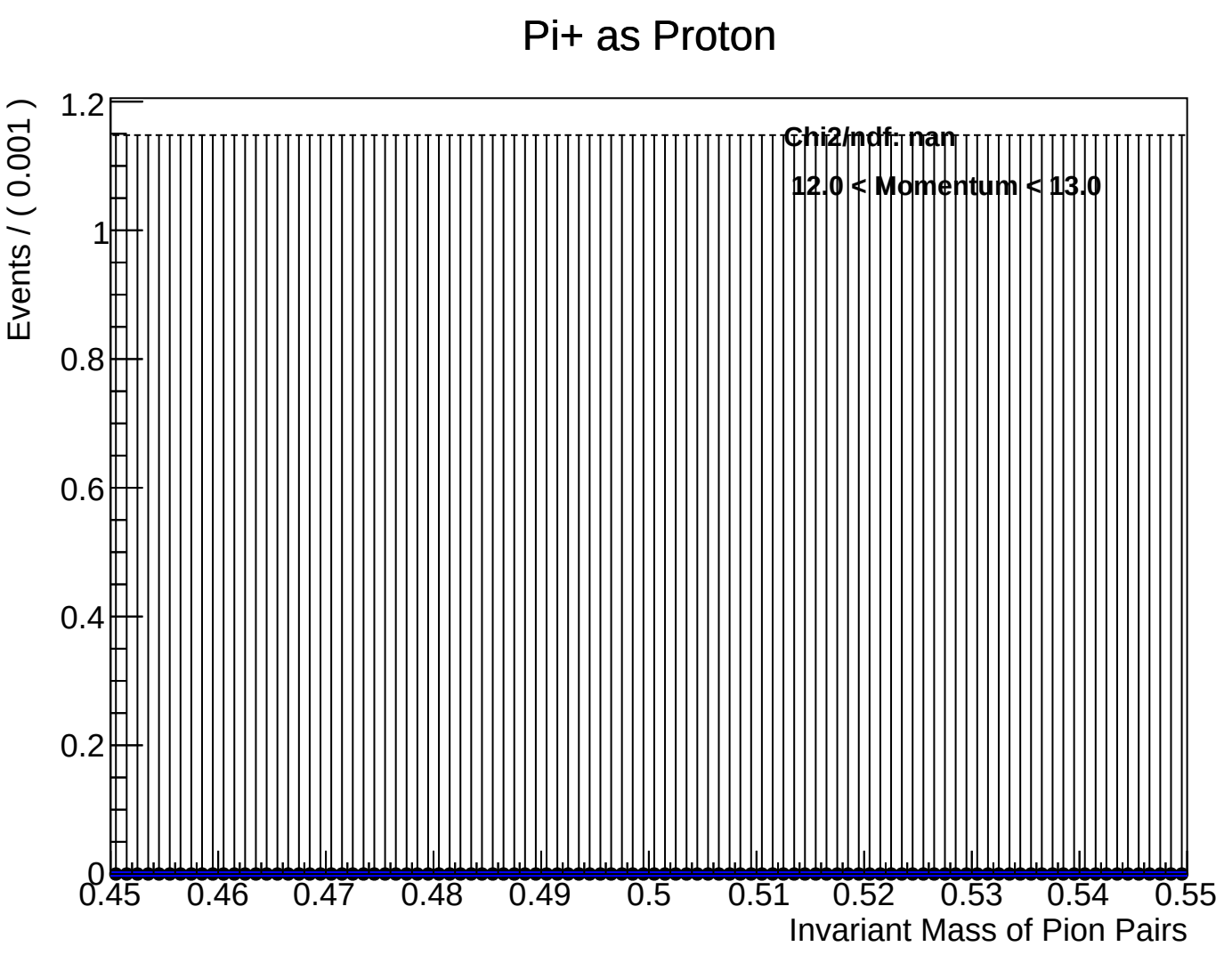

Pi+ as Proton
Chi2/ndf: nan
11.0 < Momentum < 12.0
Events / (0.001)
1.2
1
0.8
0.6
0.4
0.2
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

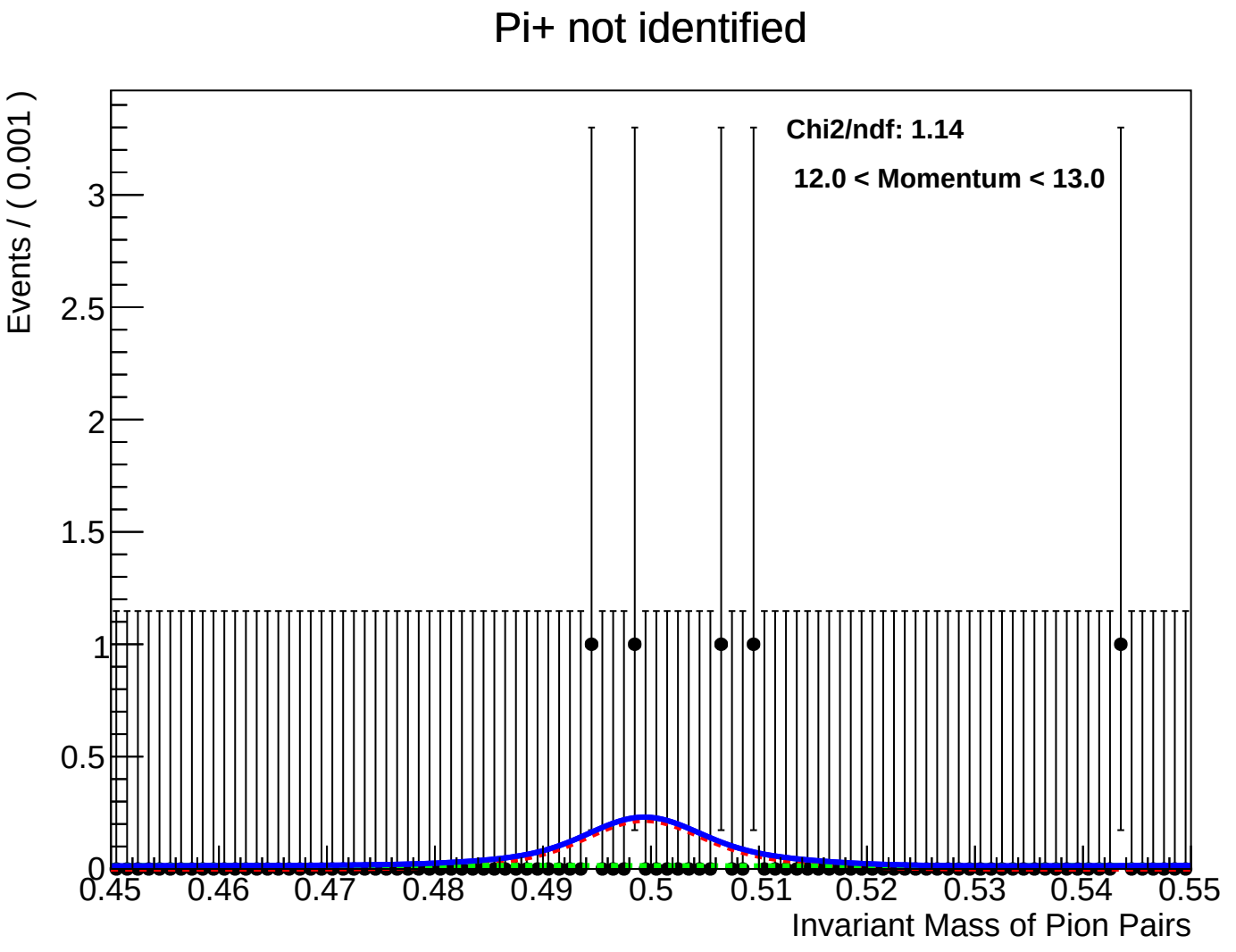

Pi+ not identified
Chi2/ndf: 1.09
11.0 < Momentum < 12.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55


All Events
Chi2/ndf: 0.58
11.0 < Momentum < 12.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
140
160
180
200
220
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

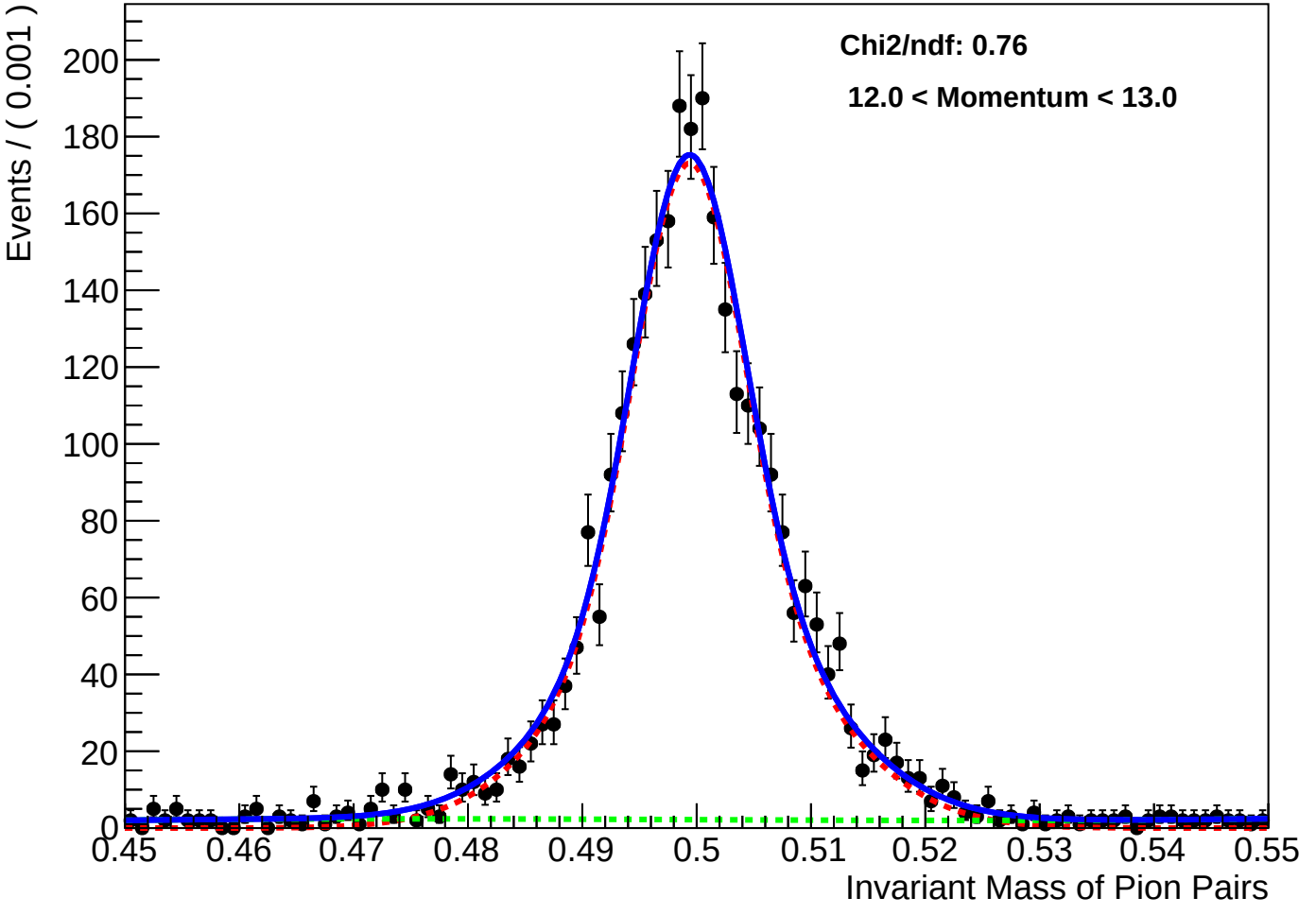

Pi+ as Pi+
Chi2/ndf: 0.78
12.0 < Momentum < 13.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
140
160
180
200
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

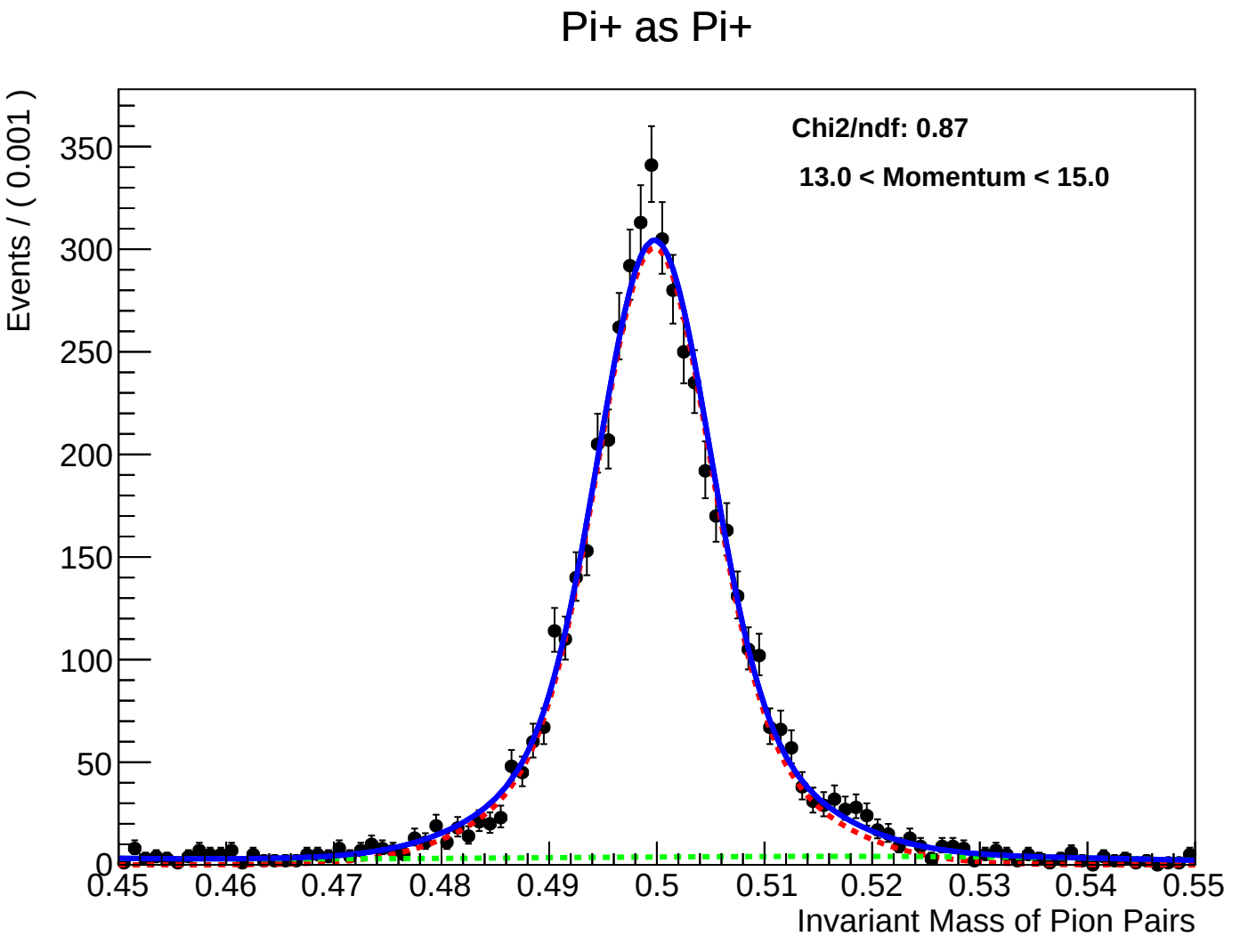

Pi+ as K+
Chi2/ndf: 0.63
12.0 < Momentum < 13.0
Events / (0.001)
0
1
2
3
4
5
6
7
8
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

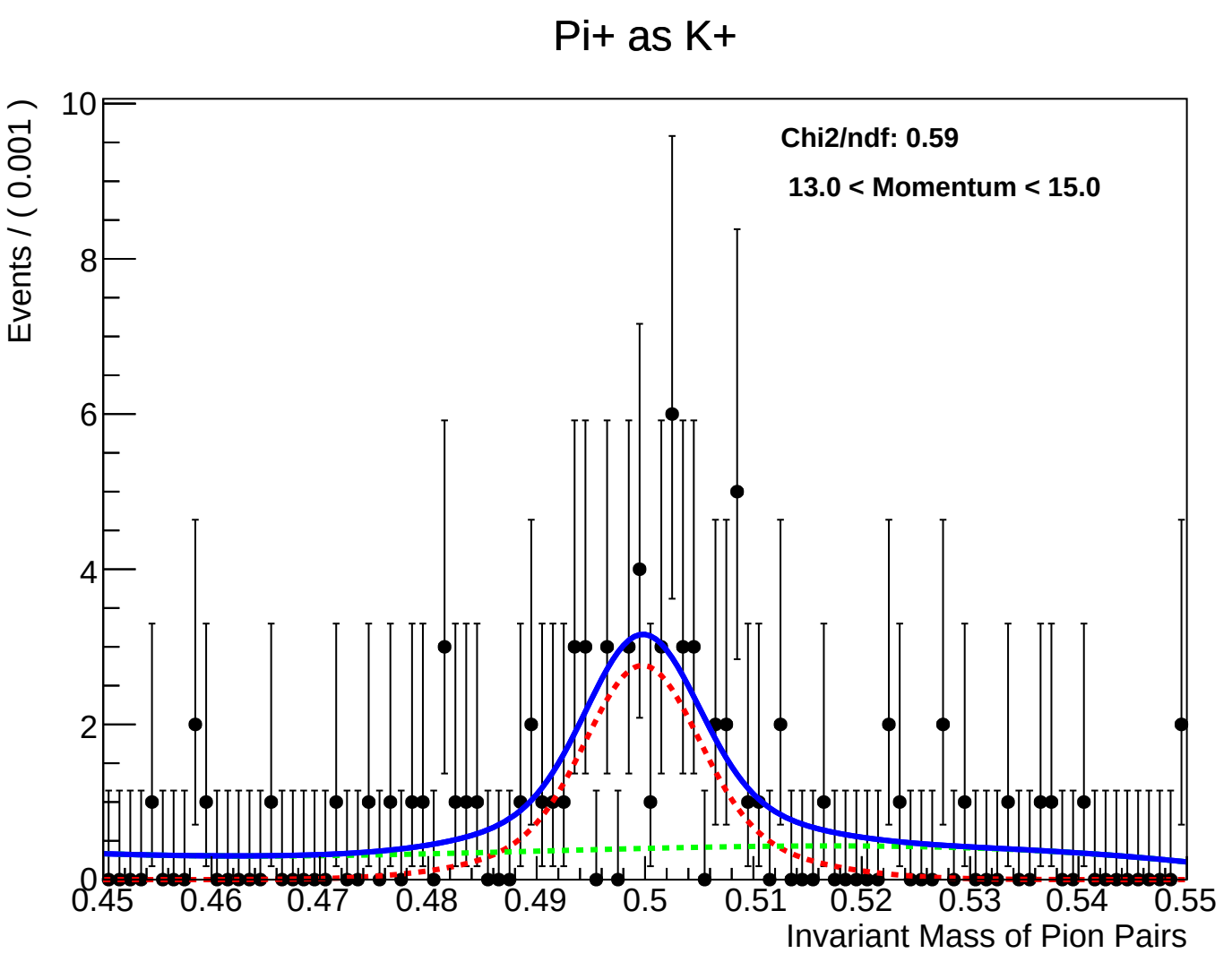

Pi+ as Proton
Chi2/ndf: nan
12.0 < Momentum < 13.0
Events / (0.001)
1.2
1
0.8
0.6
0.4
0.2
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

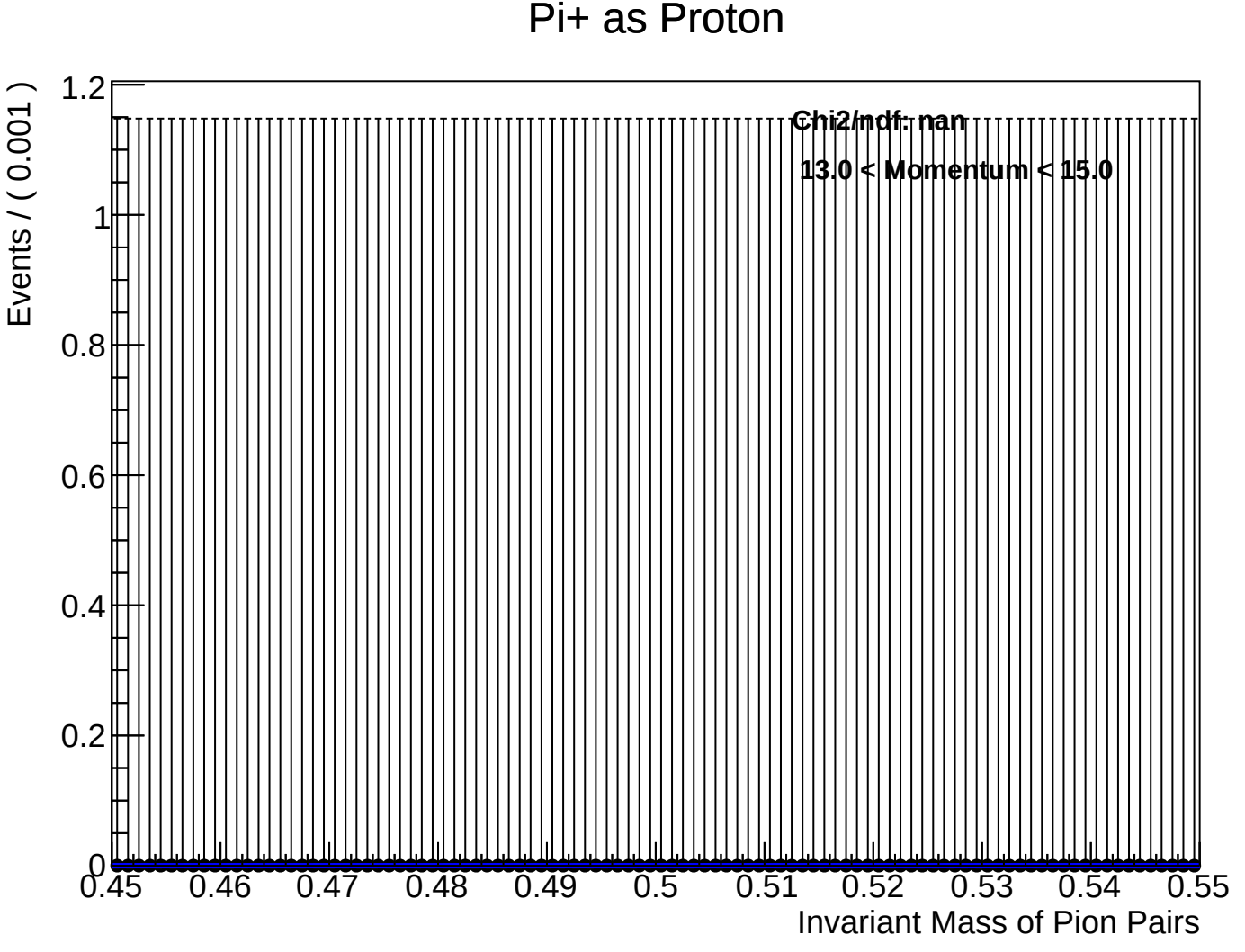

Pi+ not identified
Chi2/ndf: 1.14
12.0 < Momentum < 13.0
Events / (0.001)
0
0.5
1
1.5
2
2.5
3
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

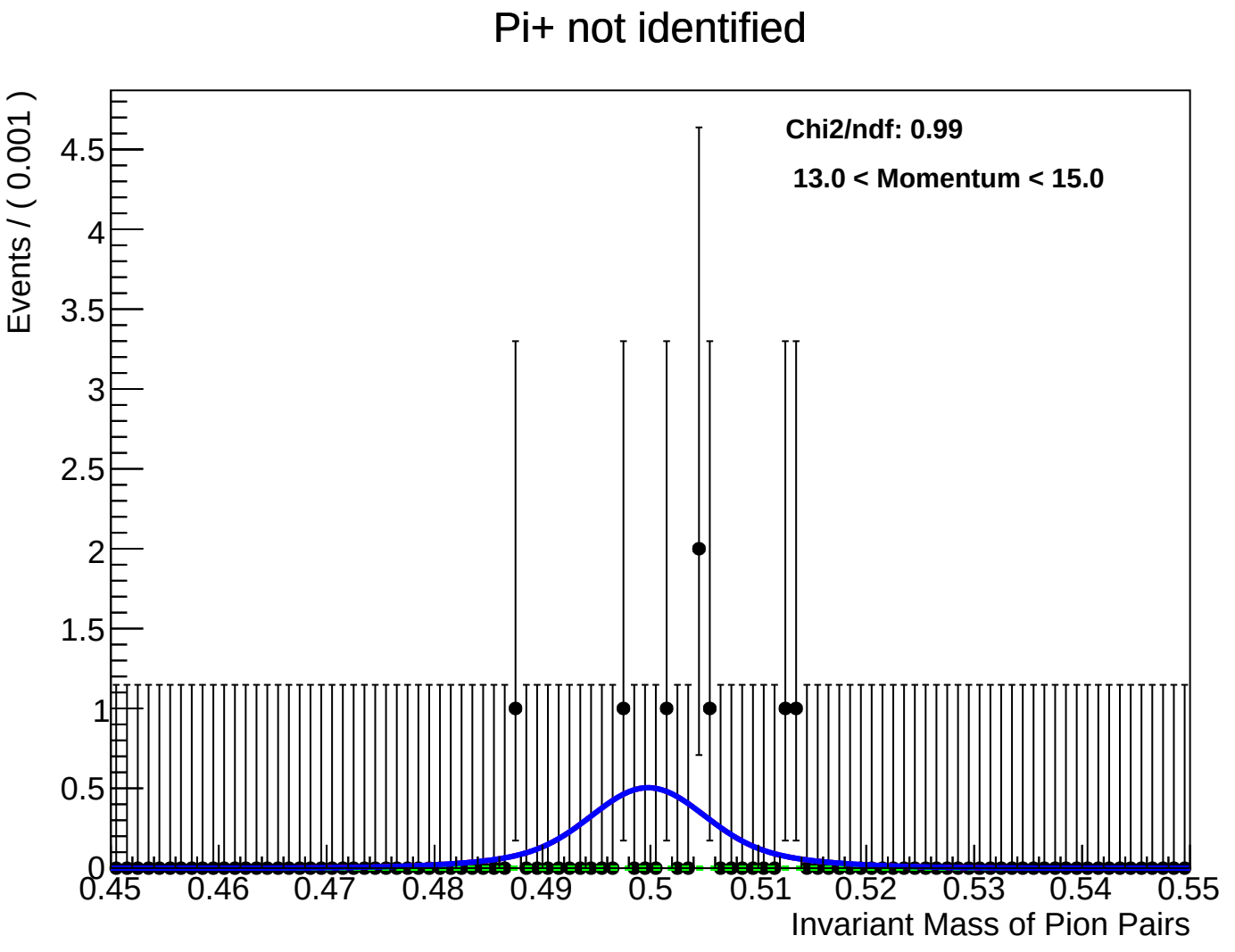
All Events

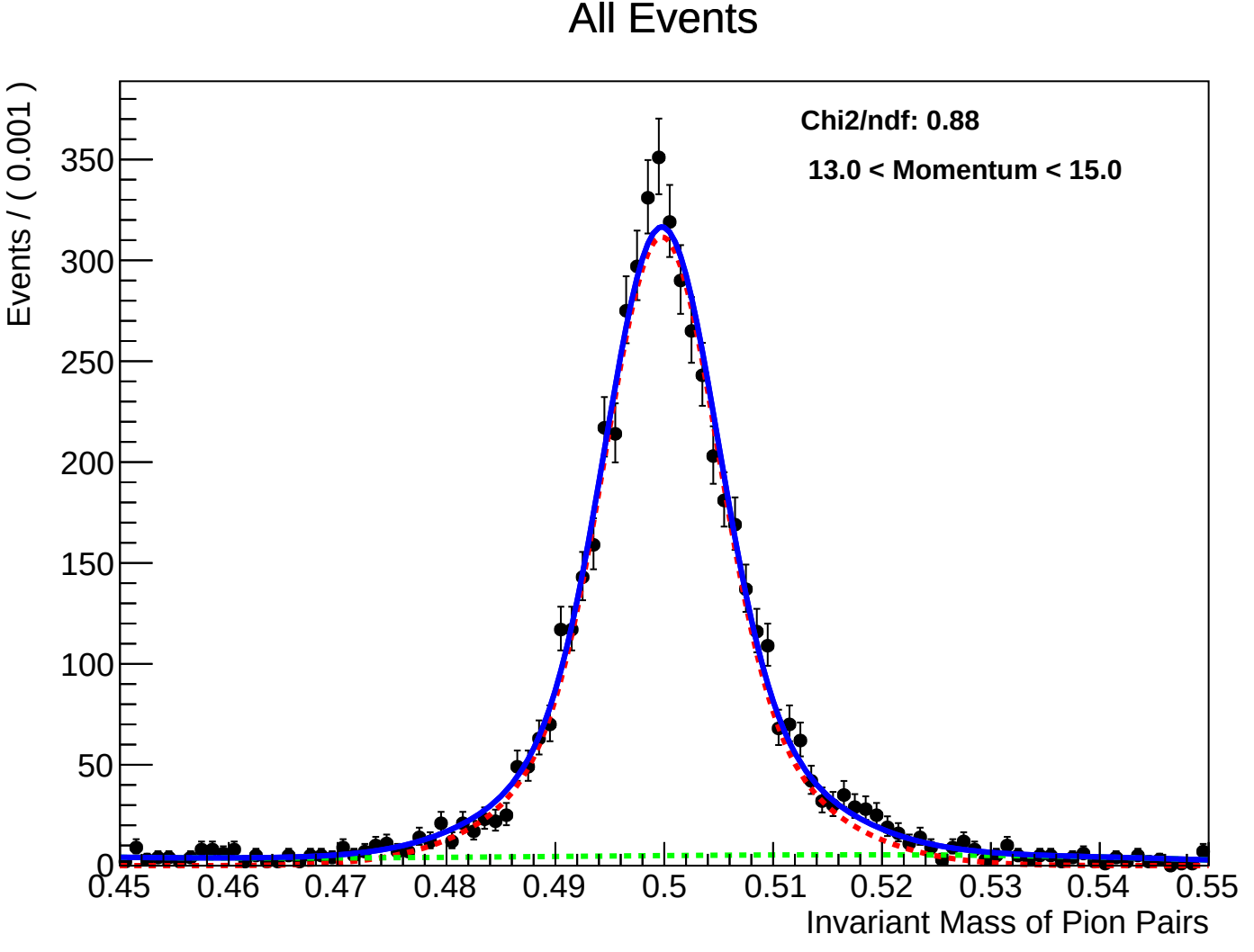

Chi2/ndf: 0.76
12.0 < Momentum < 13.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
140
160
180
200
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

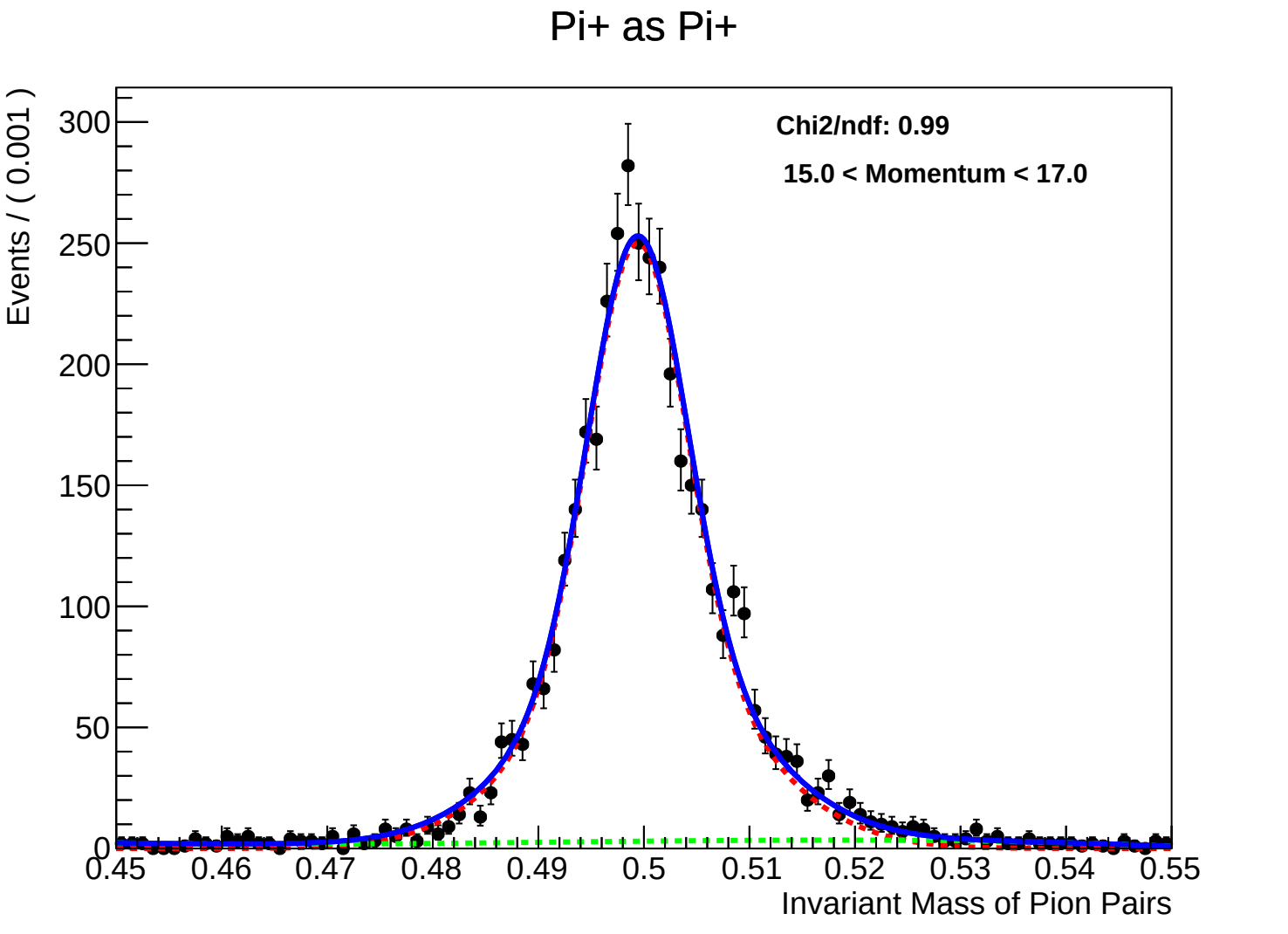

Pi+ as Pi+
Chi2/ndf: 0.87
13.0 < Momentum < 15.0
Events / (0.001)
0
50
100
150
200
250
300
350
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

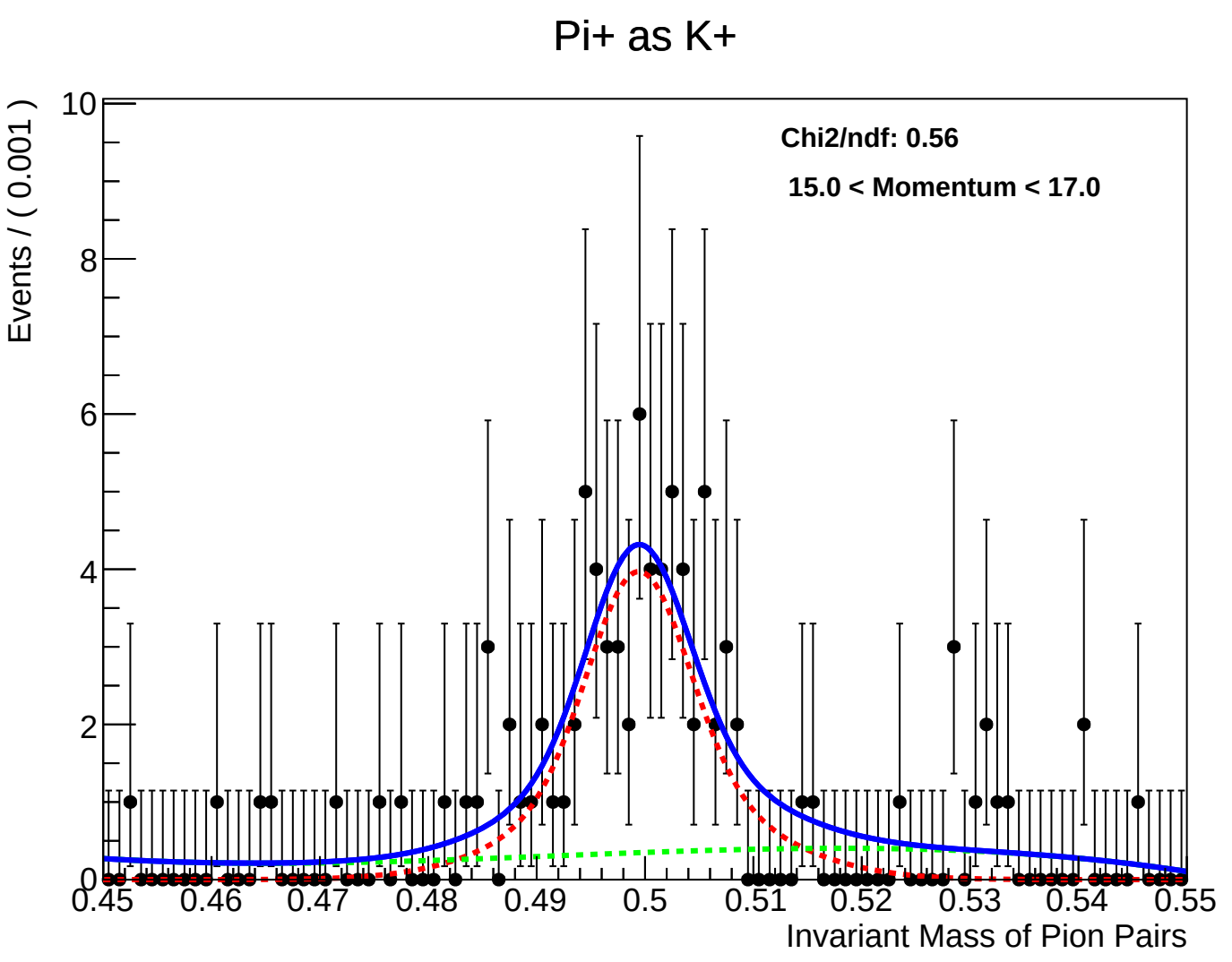

Pi+ as K+
Chi2/ndf: 0.59
13.0 < Momentum < 15.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
2
4
6
8
10
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

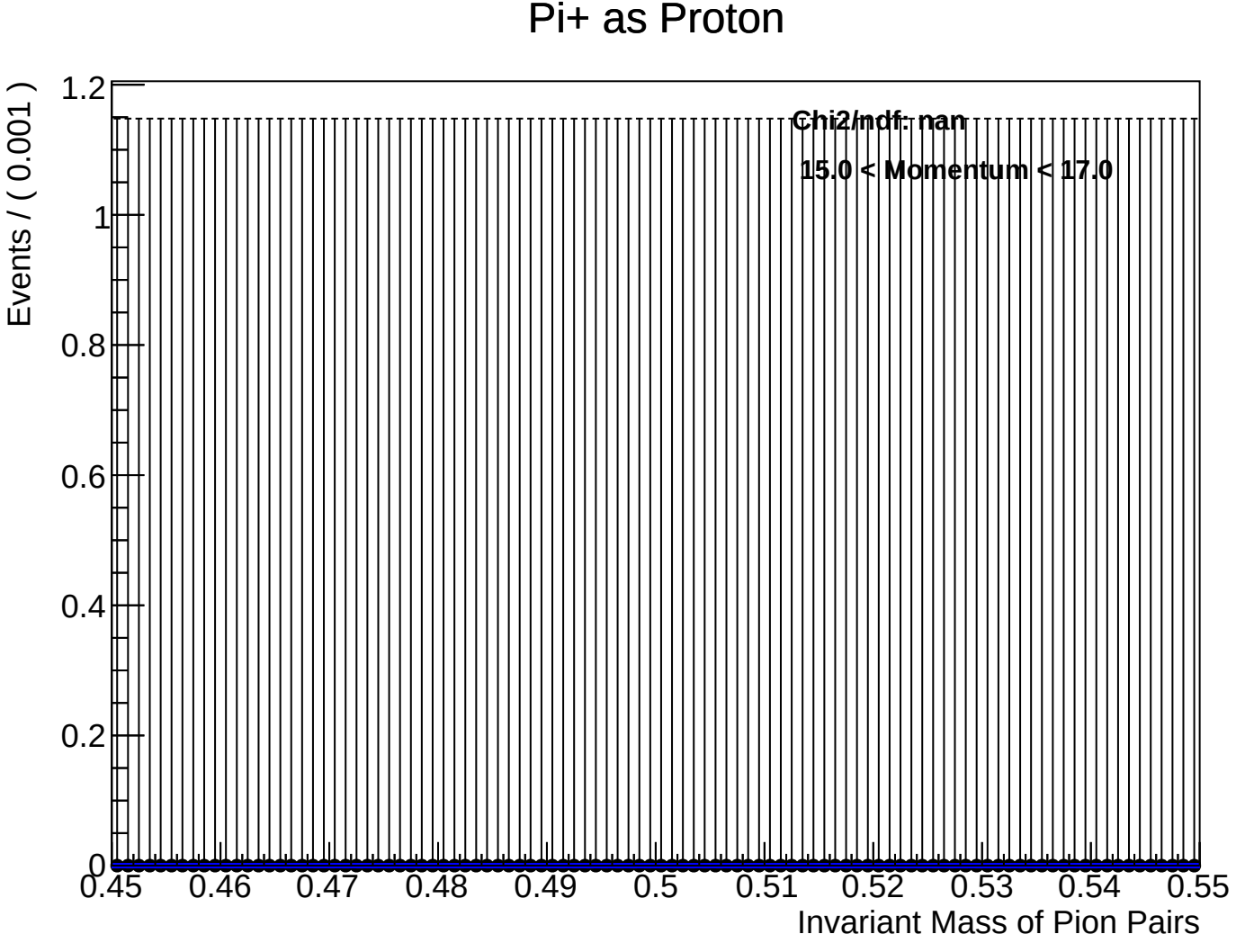

Pi+ as Proton
Chi2/ndf: nan
13.0 < Momentum < 15.0
Events / (0.001)
1.2
1
0.8
0.6
0.4
0.2
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

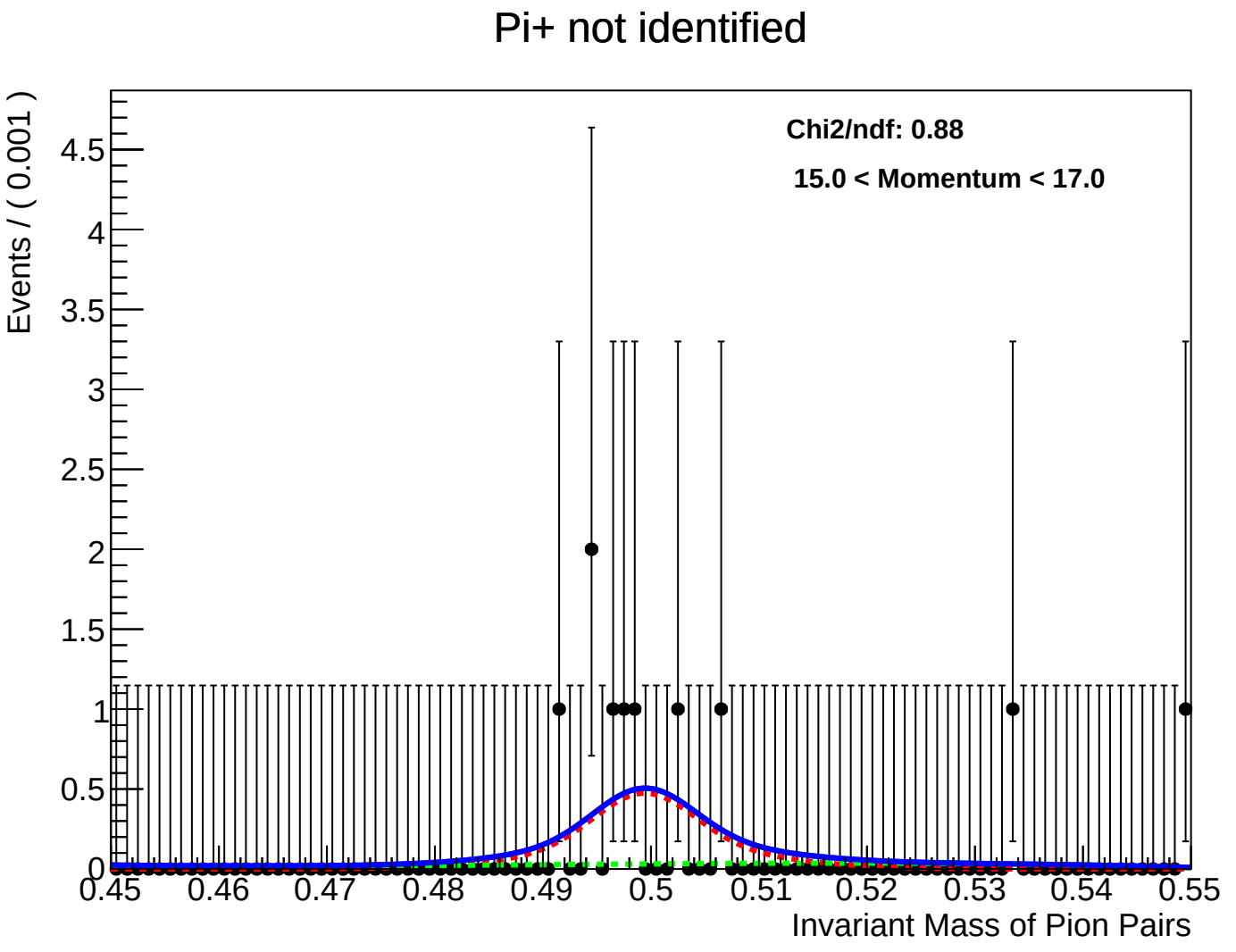

Pi+ not identified
Chi2/ndf: 0.99
13.0 < Momentum < 15.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

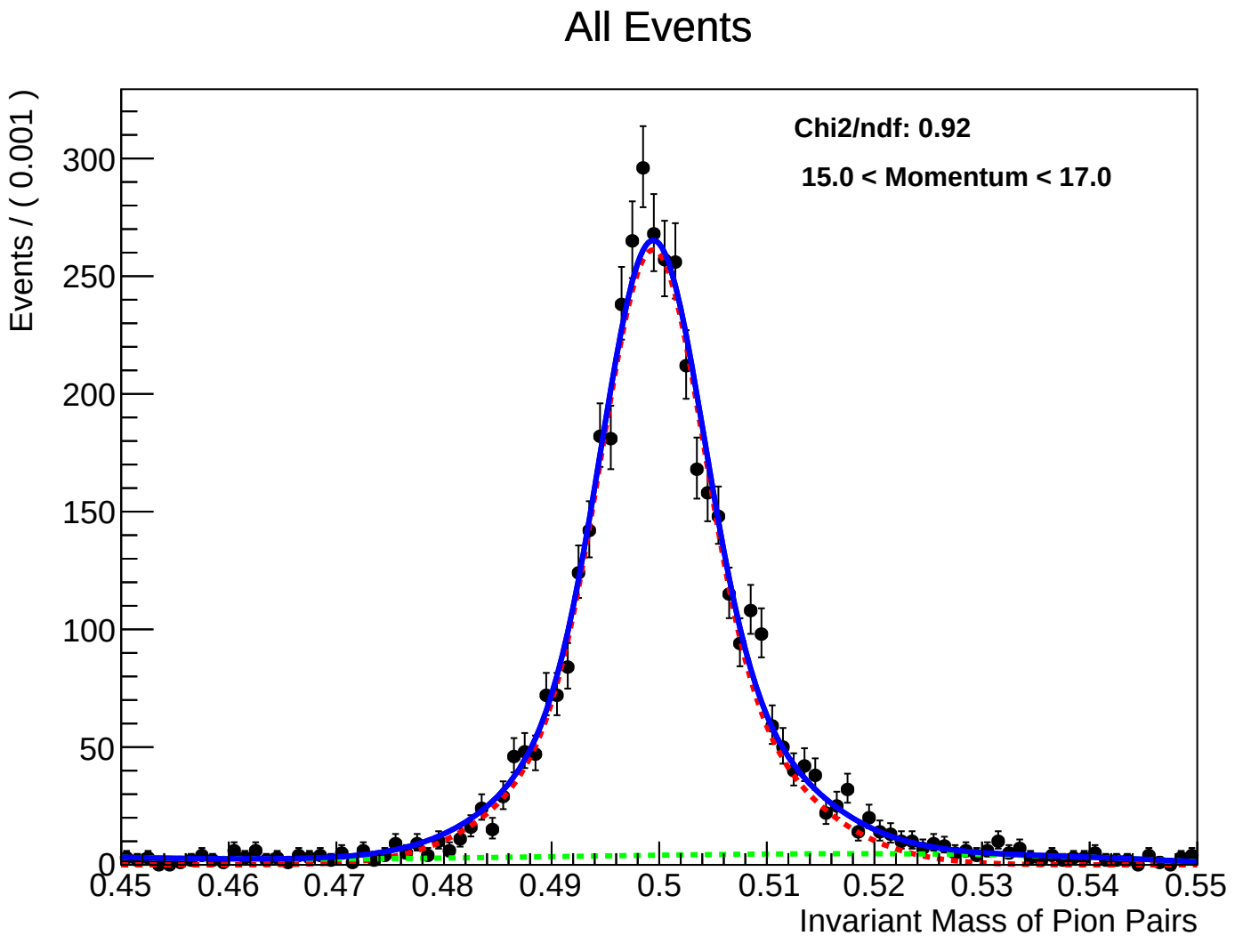

All Events
Chi2/ndf: 0.88
13.0 < Momentum < 15.0
Events / (0.001)
0
50
100
150
200
250
300
350
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

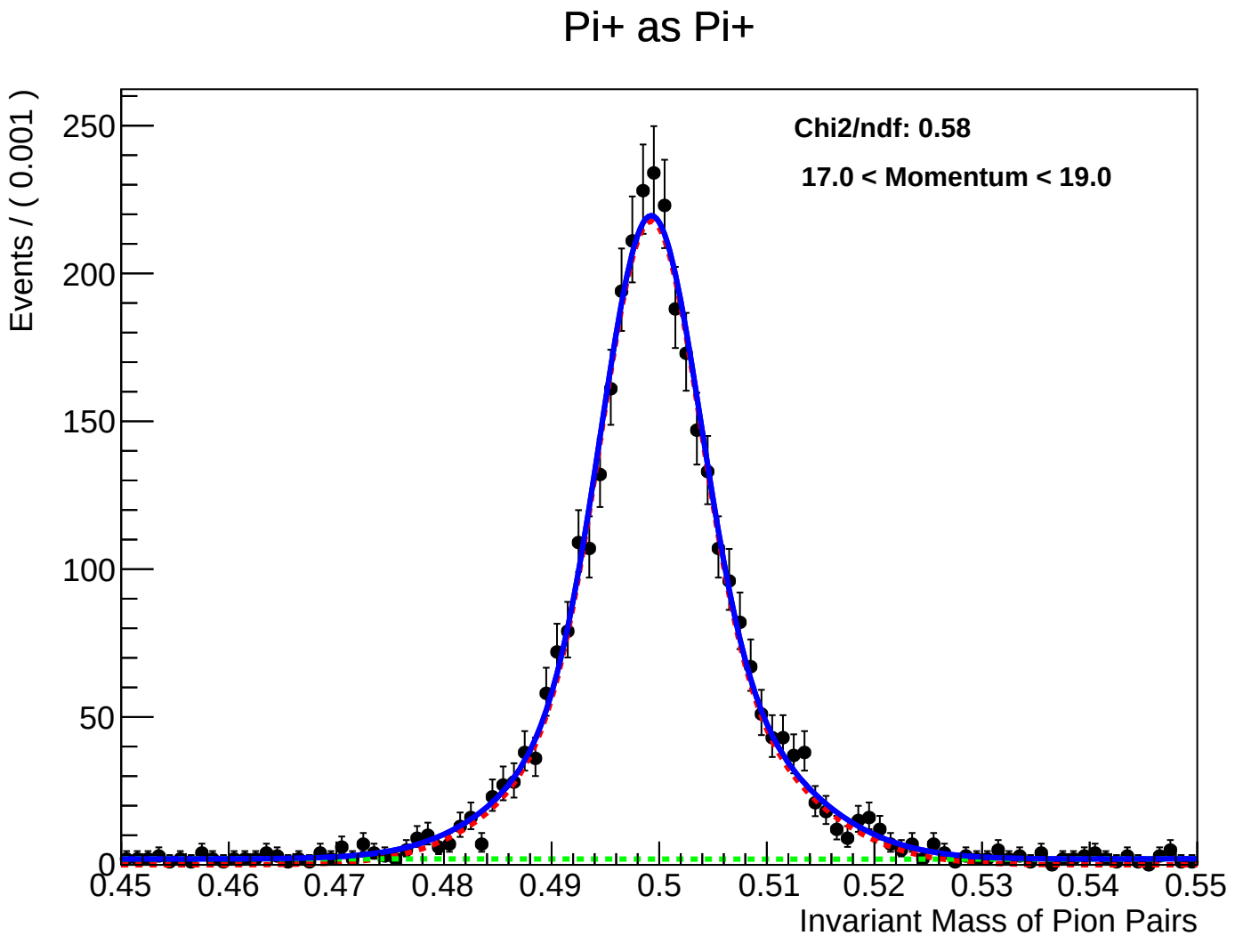

Pi+ as Pi+
Chi2/ndf: 0.99
15.0 < Momentum < 17.0
Events / (0.001)
300
250
200
150
100
50
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

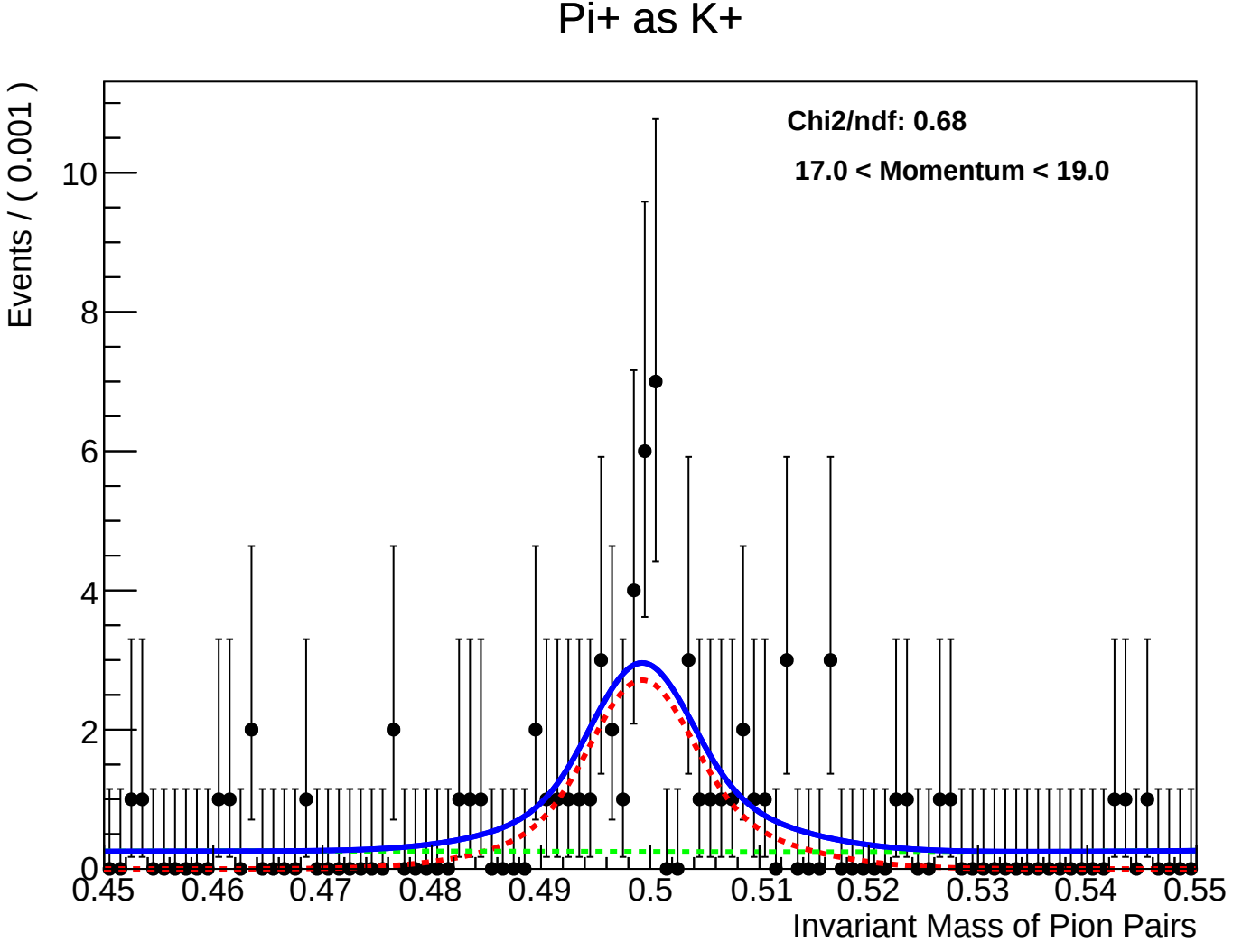

Pi+ as K+
Chi2/ndf: 0.56
15.0 < Momentum < 17.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
2
4
6
8
10
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

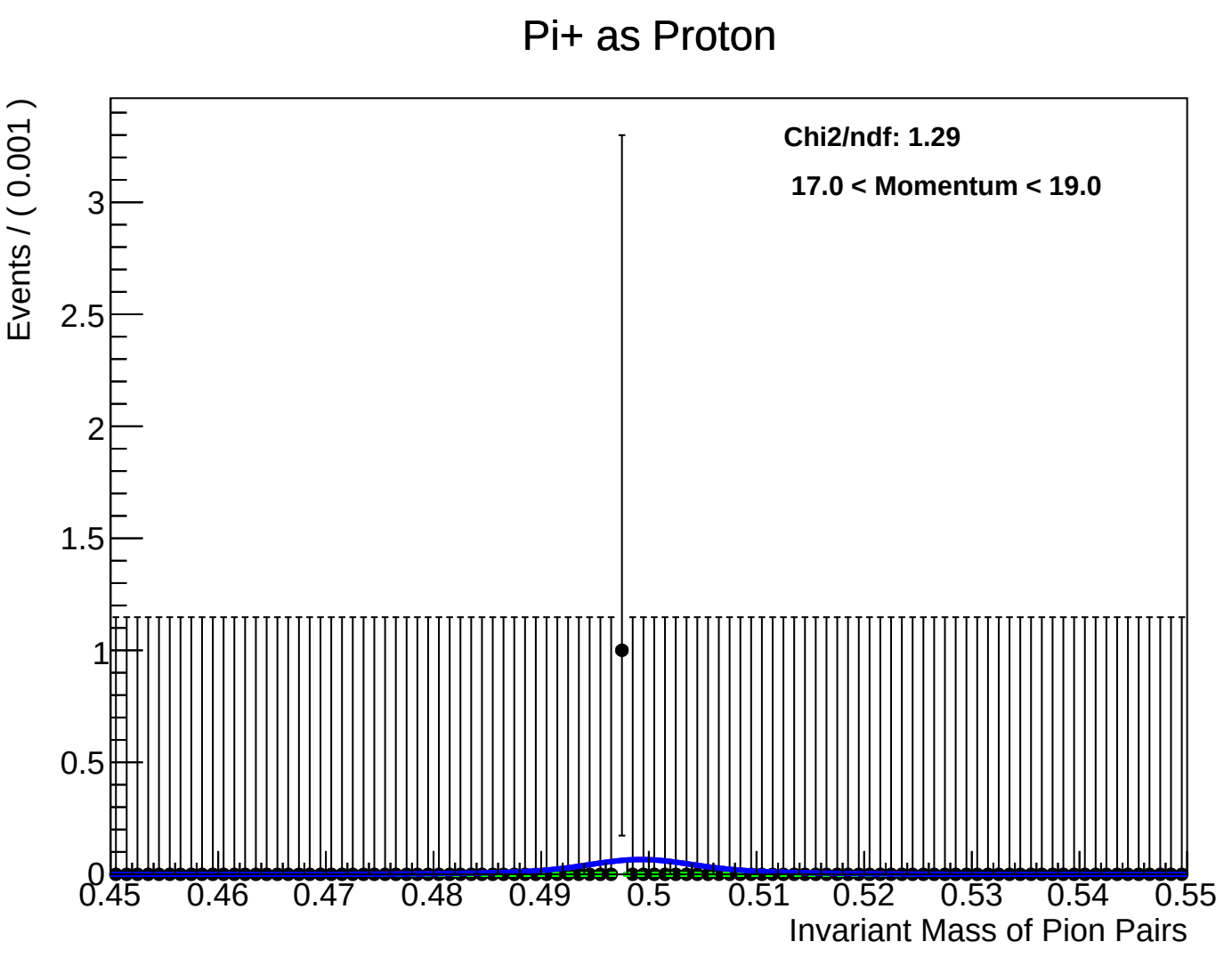

Pi+ as Proton
Chi2/ndf: nan
15.0 < Momentum < 17.0
Events / (0.001)
1.2
1
0.8
0.6
0.4
0.2
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

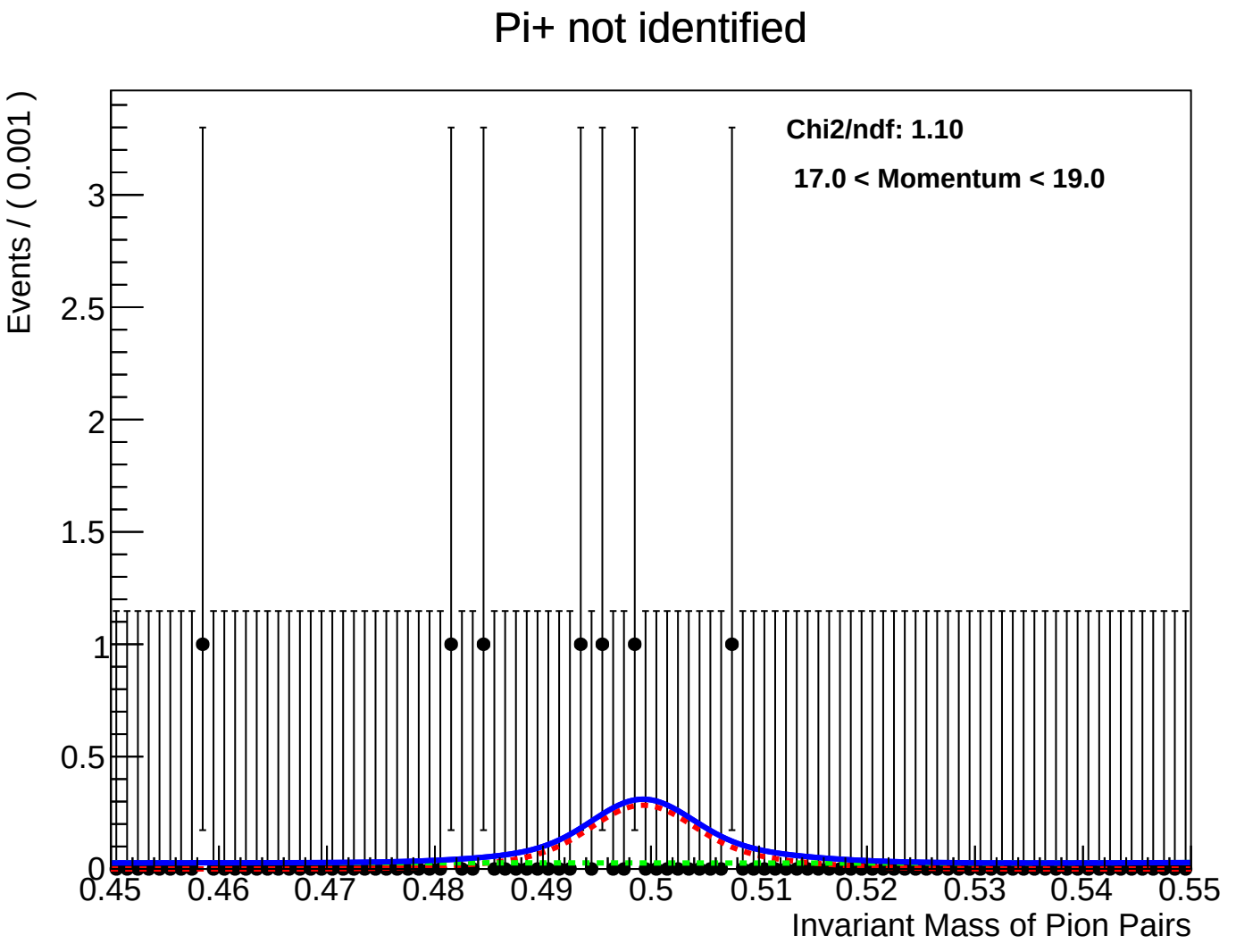

Pi+ not identified
Chi2/ndf: 0.88
15.0 < Momentum < 17.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

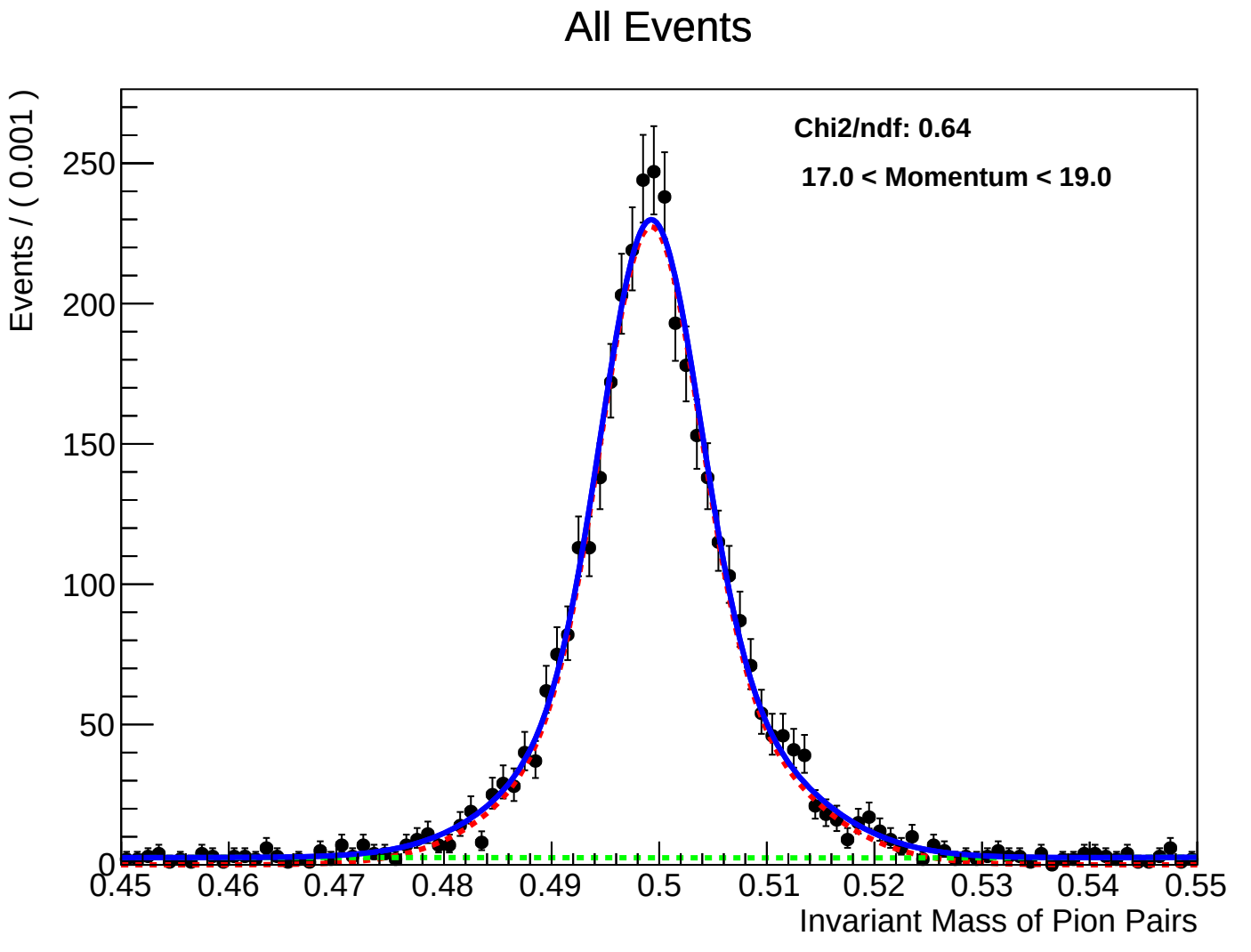

All Events
Chi2/ndf: 0.92
15.0 < Momentum < 17.0
Events / (0.001)
0
50
100
150
200
250
300
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

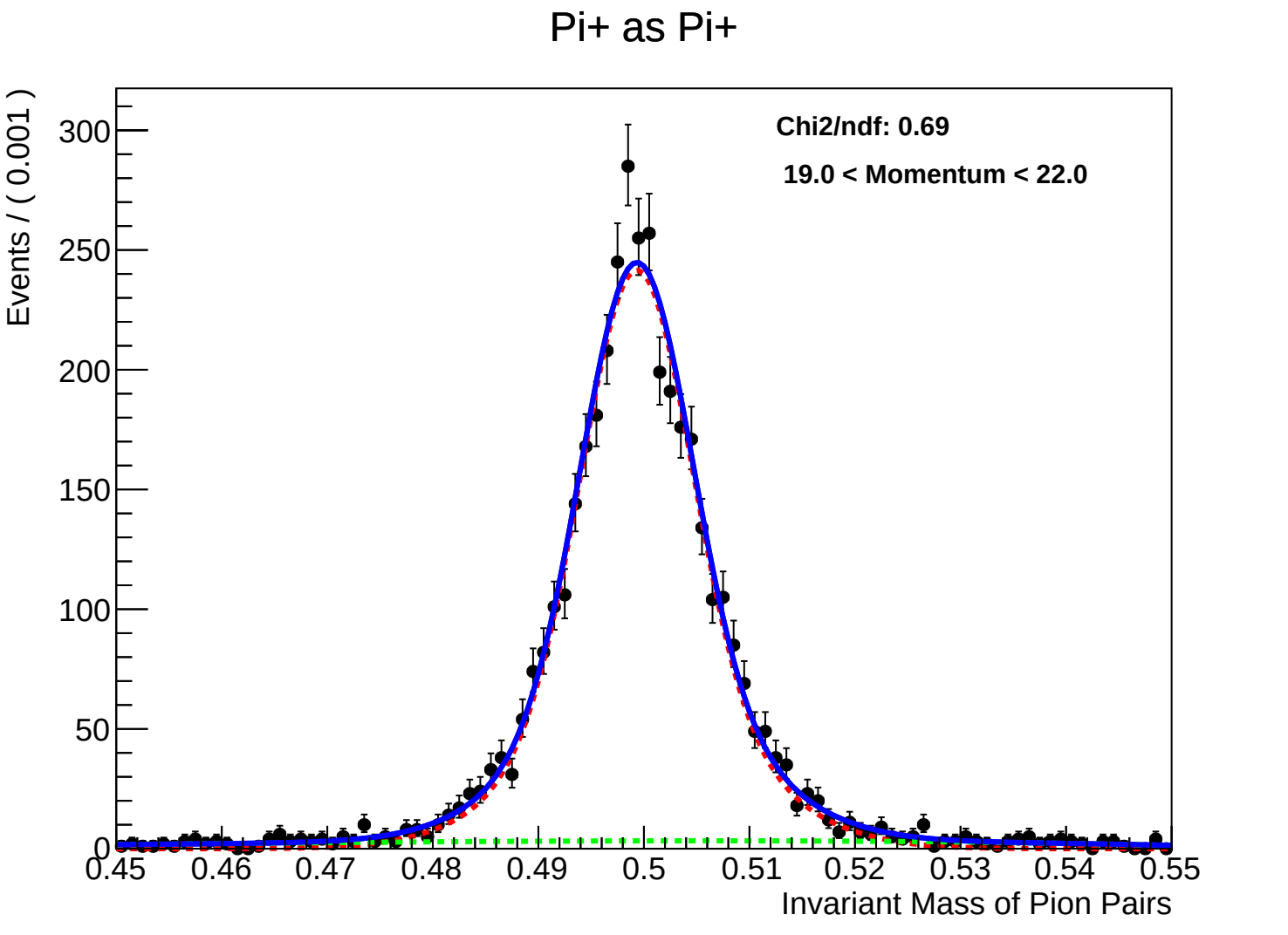

Pi+ as Pi+
Chi2/ndf: 0.58
17.0 < Momentum < 19.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
50
100
150
200
250
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

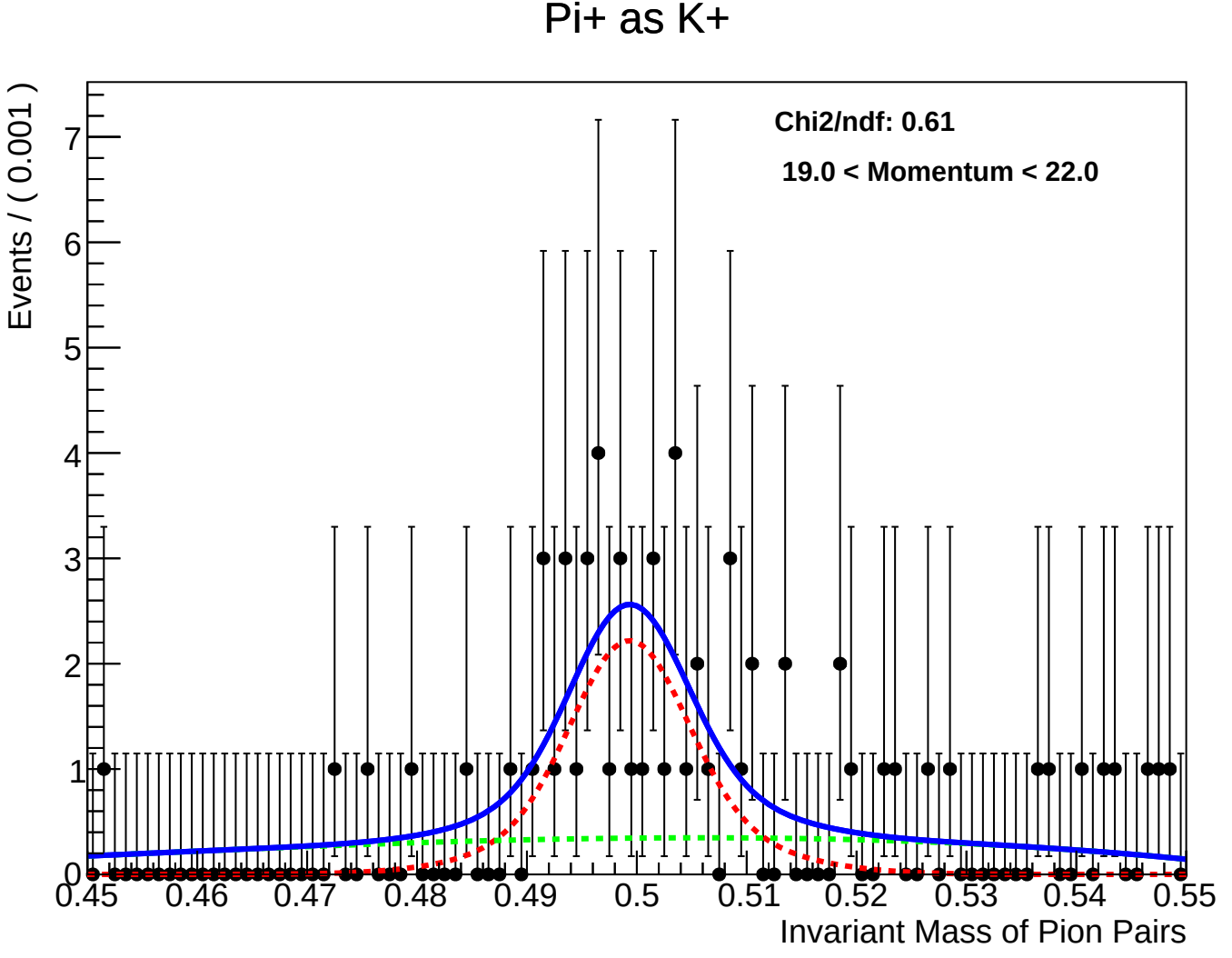

Pi+ as K+
Chi2/ndf: 0.68
17.0 < Momentum < 19.0
Events / (0.001)
0
2
4
6
8
10
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

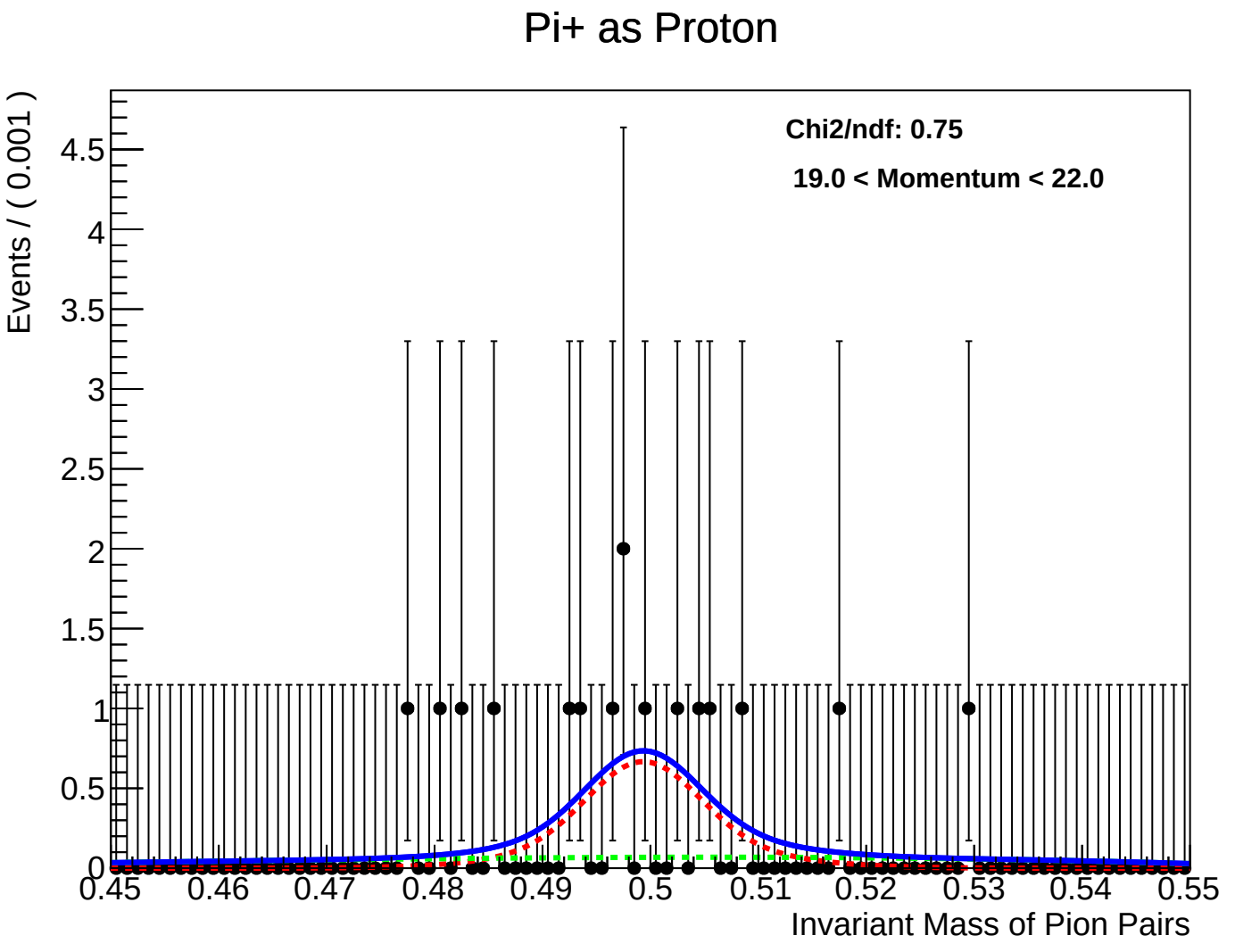

Pi+ as Proton
Chi2/ndf: 1.29
17.0 < Momentum < 19.0
Events / (0.001)
0
0.5
1
1.5
2
2.5
3
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

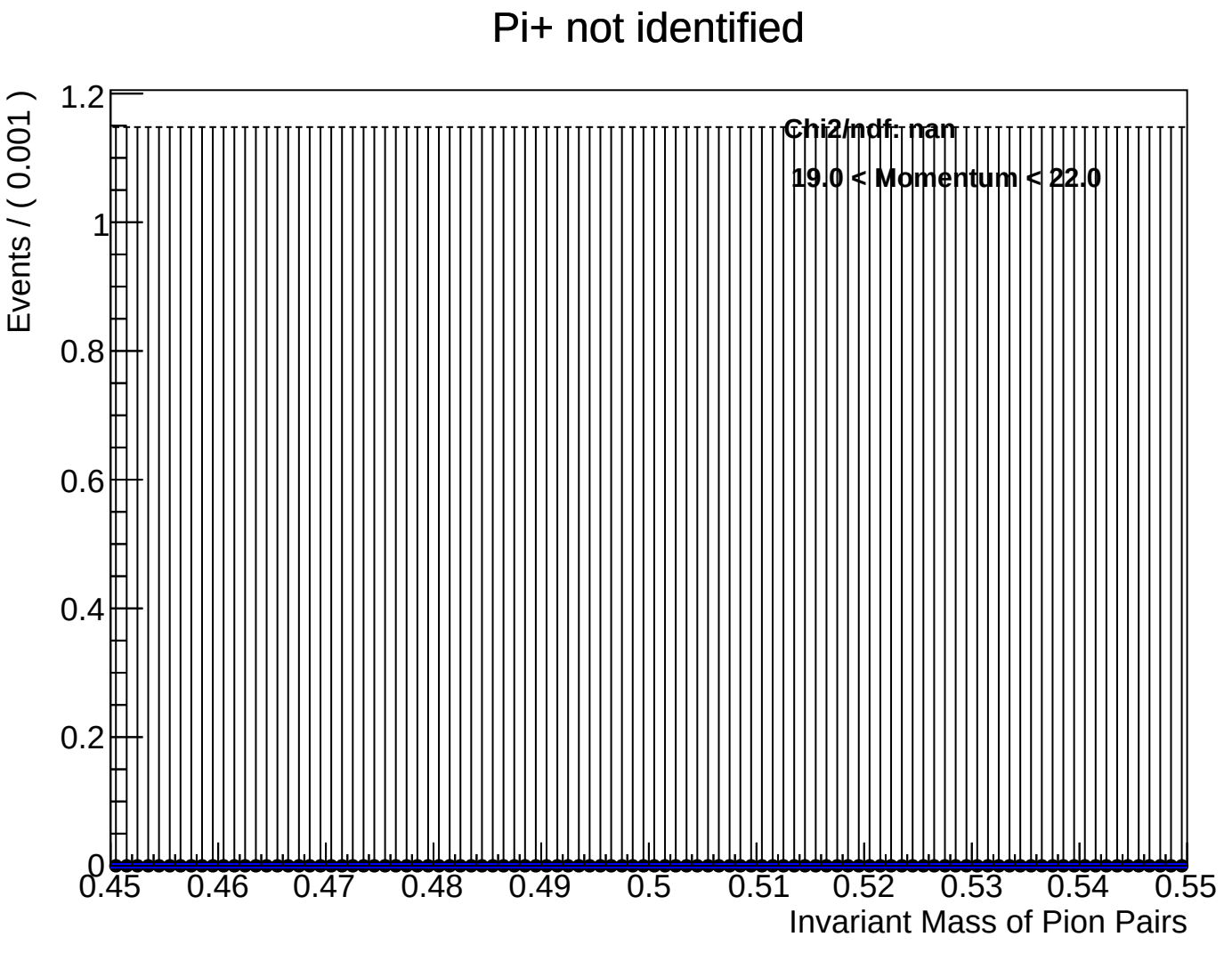

Pi+ not identified
Chi2/ndf: 1.10
17.0 < Momentum < 19.0
Events / (0.001)
0
0.5
1
1.5
2
2.5
3
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

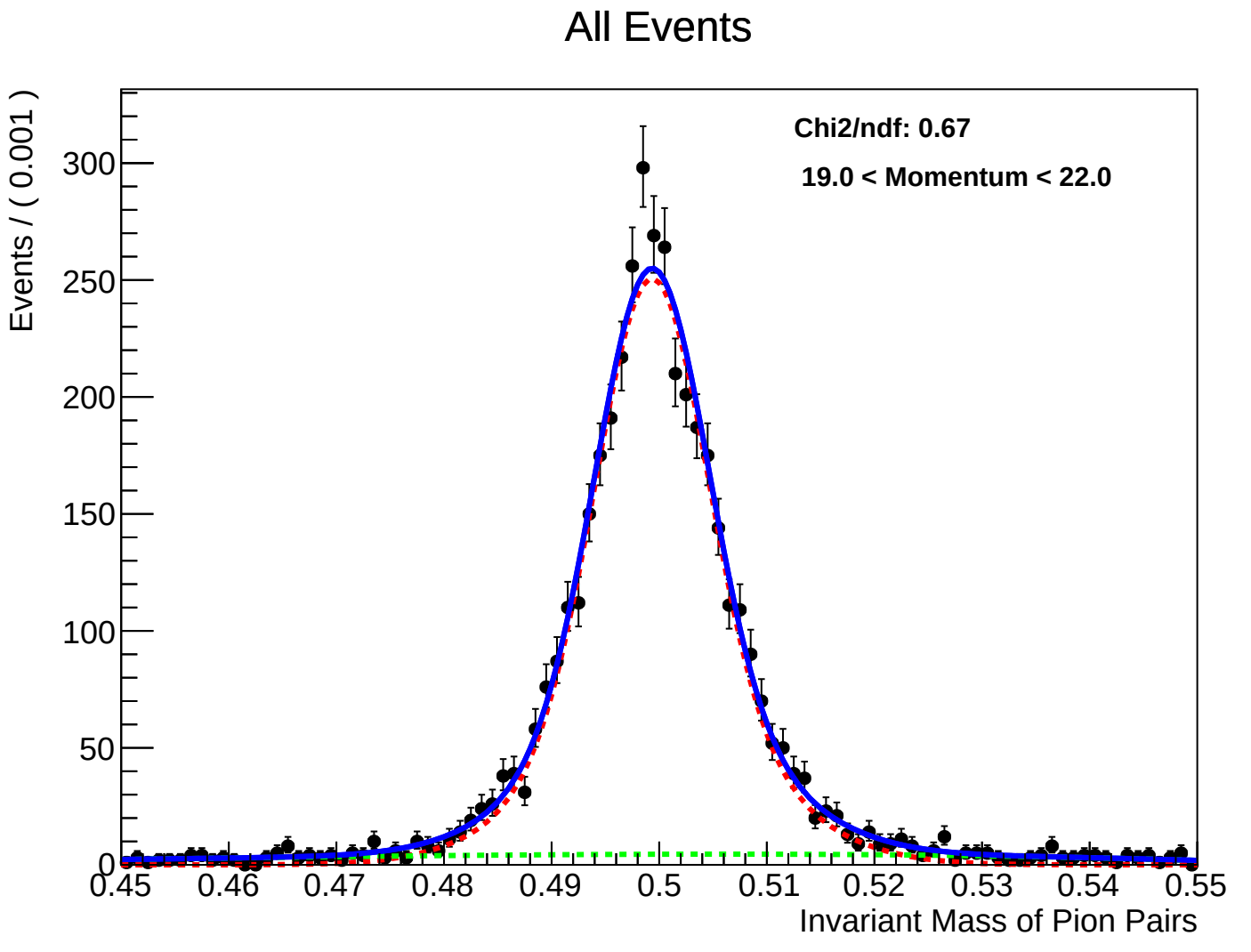

All Events
Chi2/ndf: 0.64
17.0 < Momentum < 19.0
Events / (0.001)
0
50
100
150
200
250
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

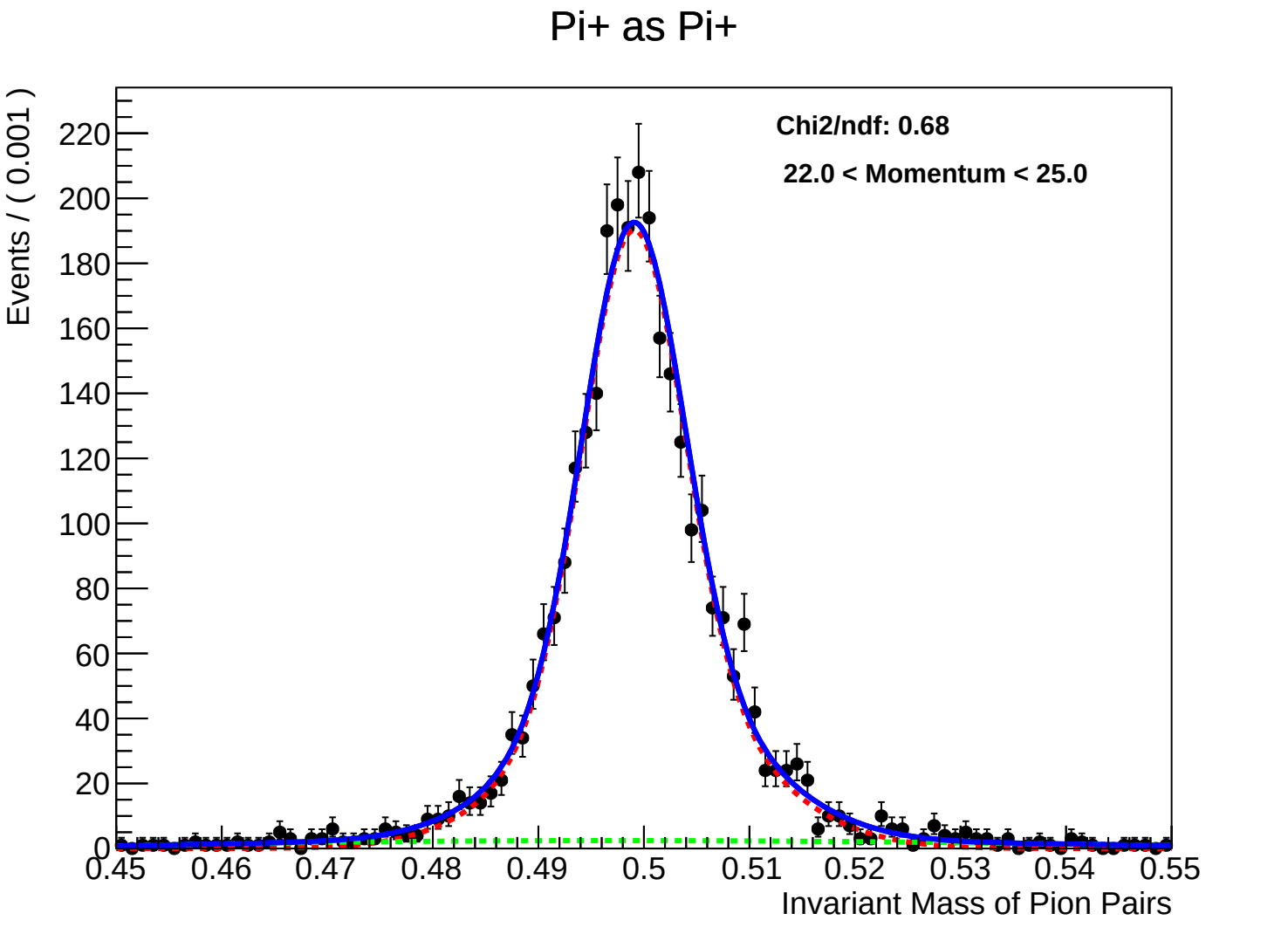

Pi+ as Pi+
Chi2/ndf: 0.69
19.0 < Momentum < 22.0
Events / (0.001)
300
250
200
150
100
50
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

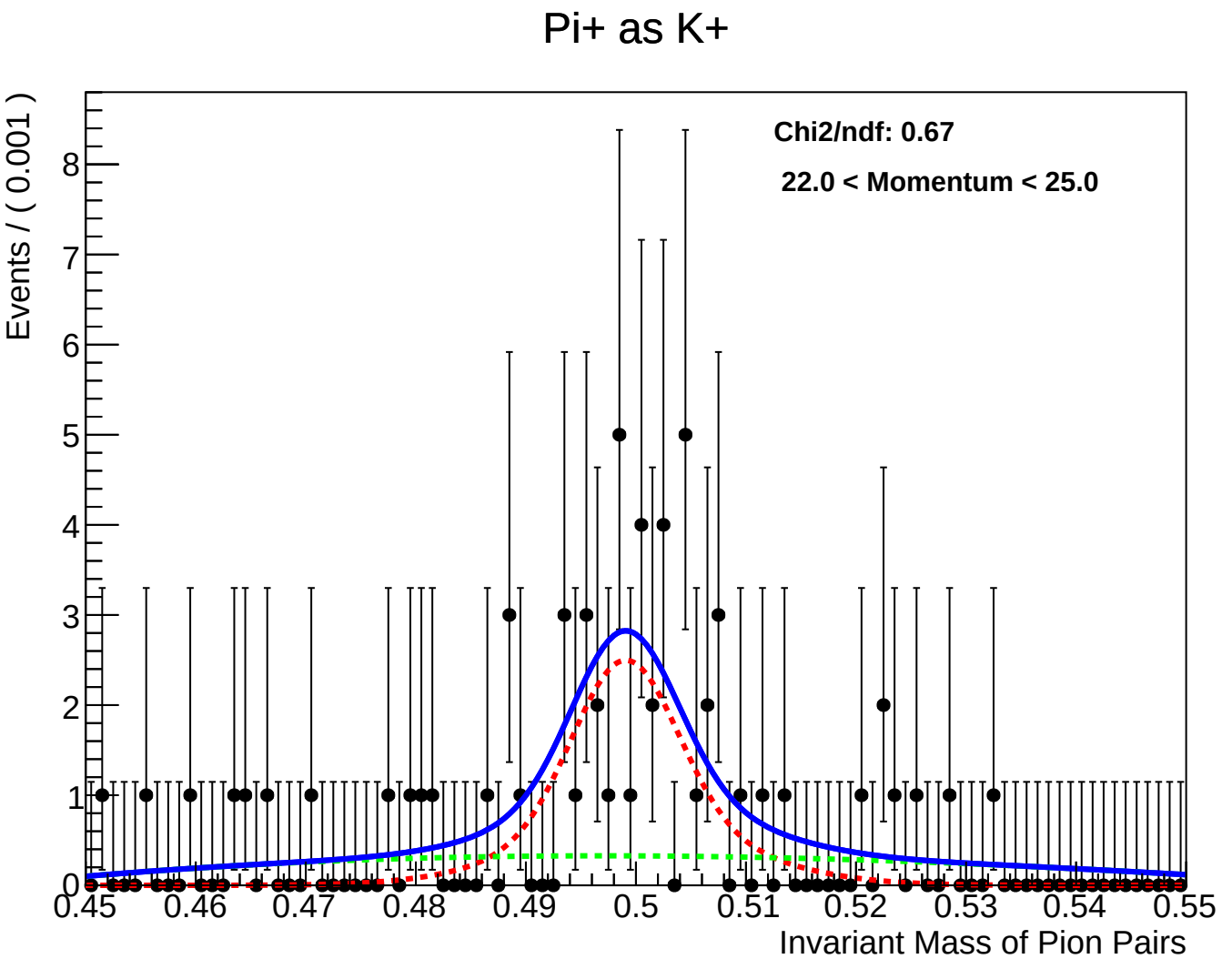

Pi+ as K+
Chi2/ndf: 0.61
19.0 < Momentum < 22.0
Events / (0.001)
0
1
2
3
4
5
6
7
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

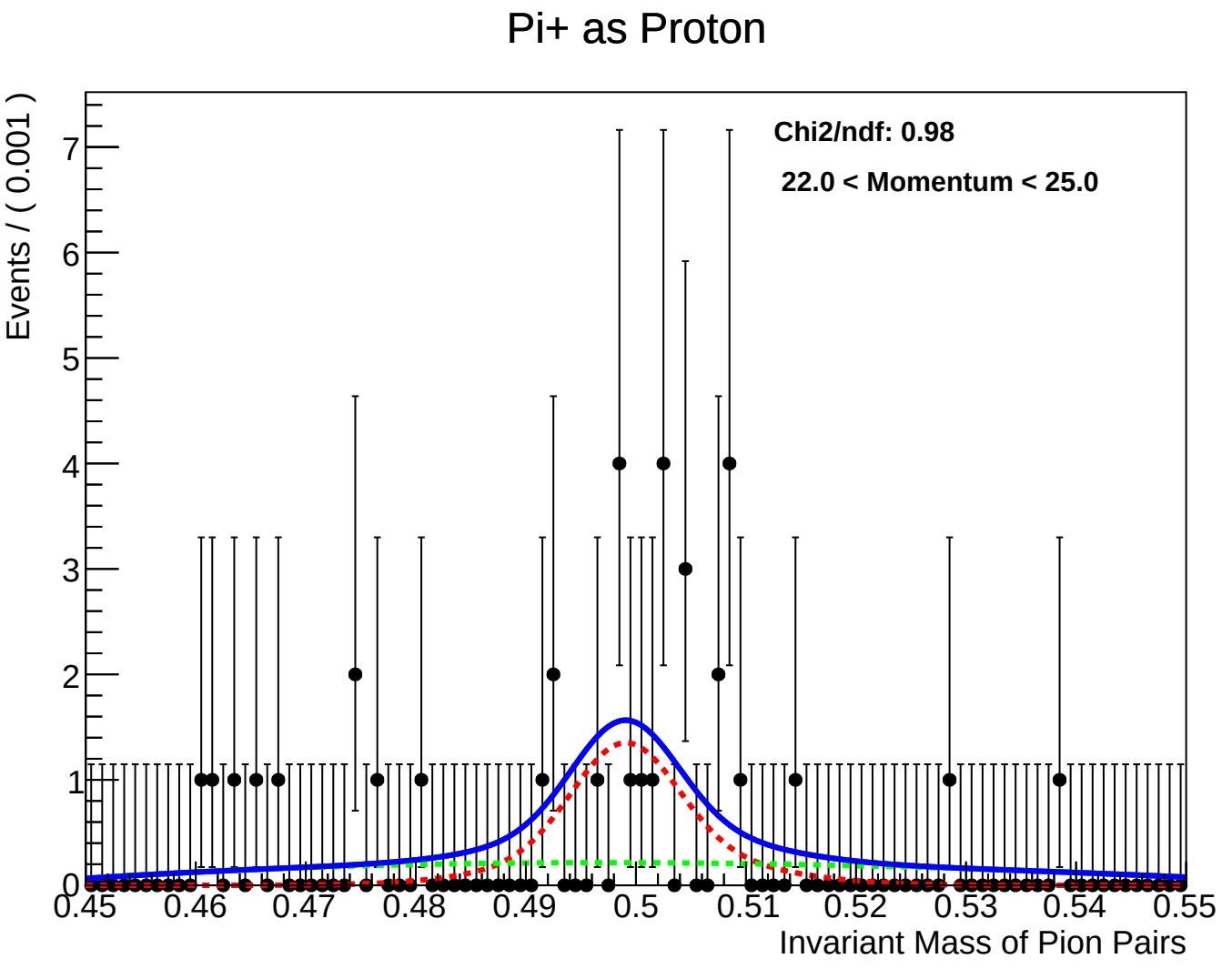

Pi+ as Proton
Chi2/ndf: 0.75
19.0 < Momentum < 22.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

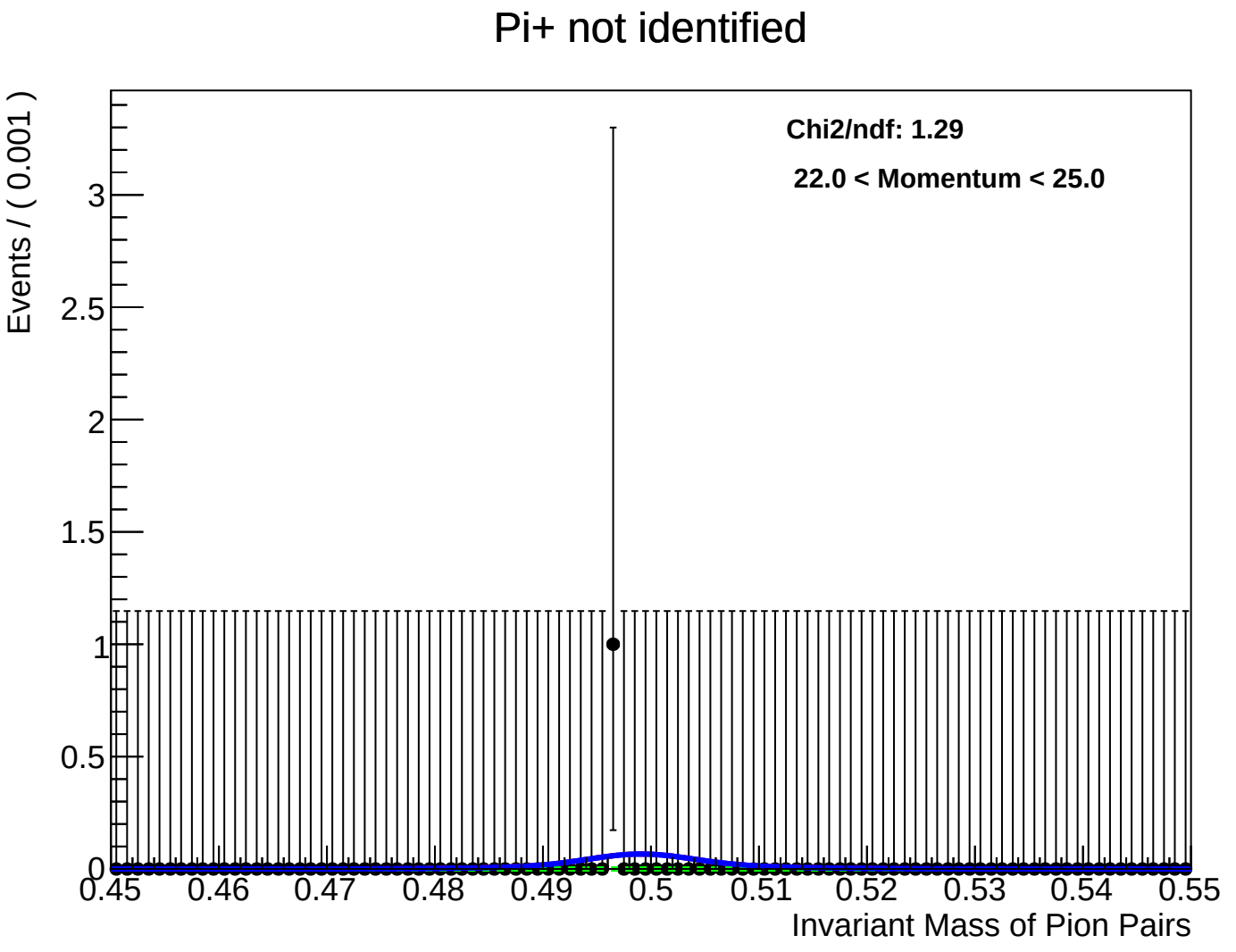

Pi+ not identified
Chi2/ndf: nan
19.0 < Momentum < 22.0
Events / (0.001)
1.2
1
0.8
0.6
0.4
0.2
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

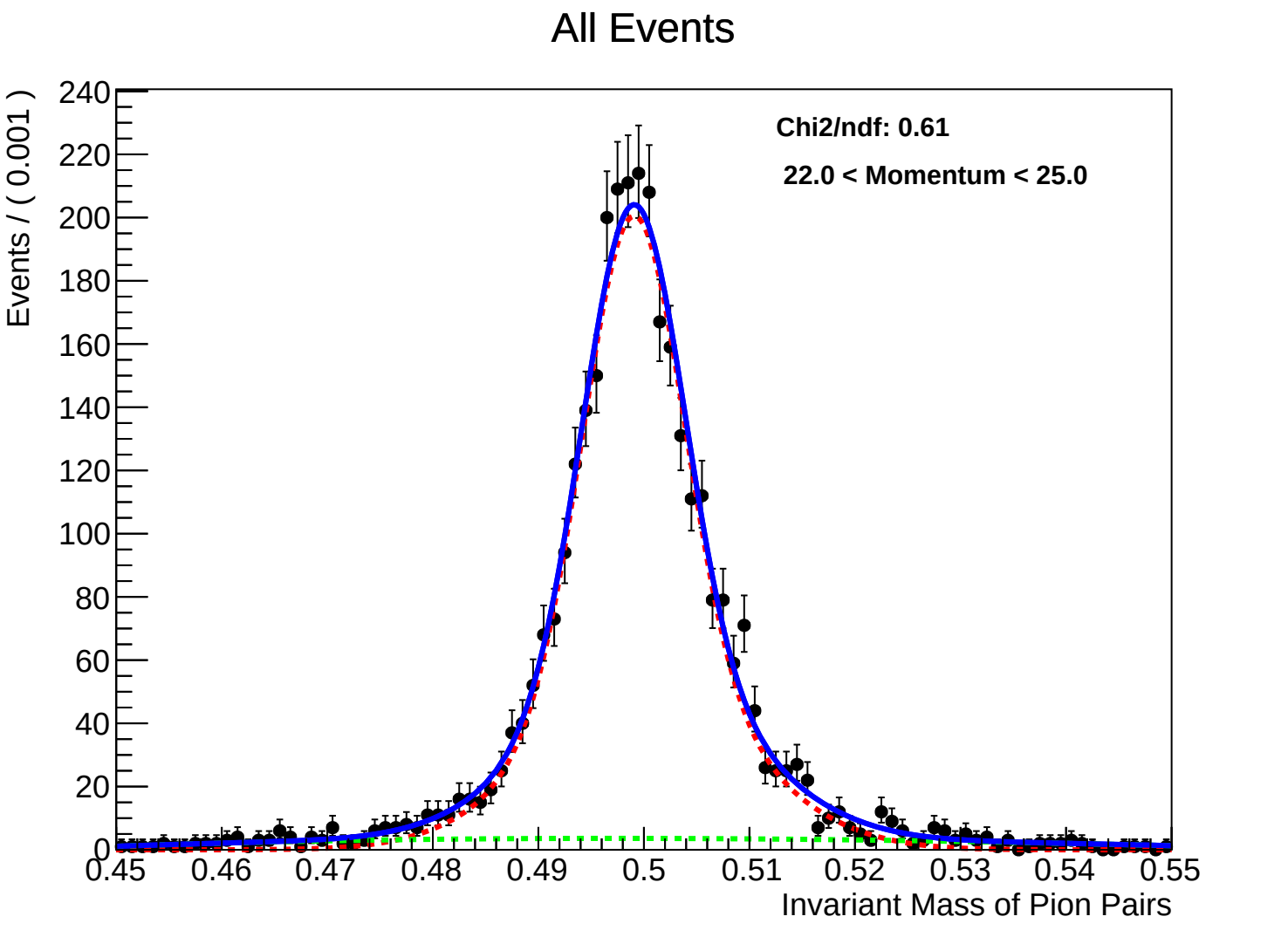

All Events
Chi2/ndf: 0.67
19.0 < Momentum < 22.0
Events / (0.001)
0
50
100
150
200
250
300
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

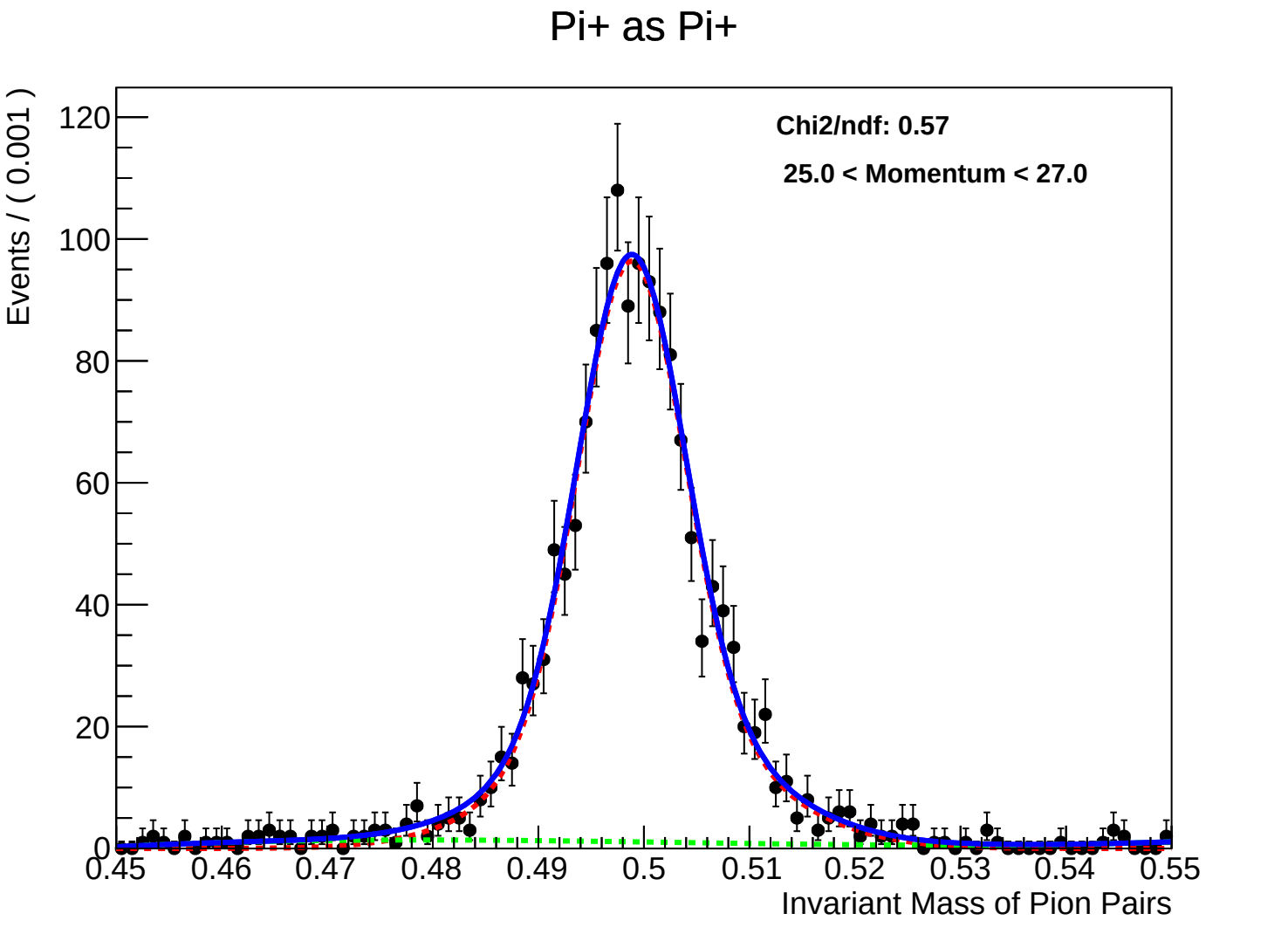

Pi+ as Pi+
Chi2/ndf: 0.68
22.0 < Momentum < 25.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
140
160
180
200
220
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

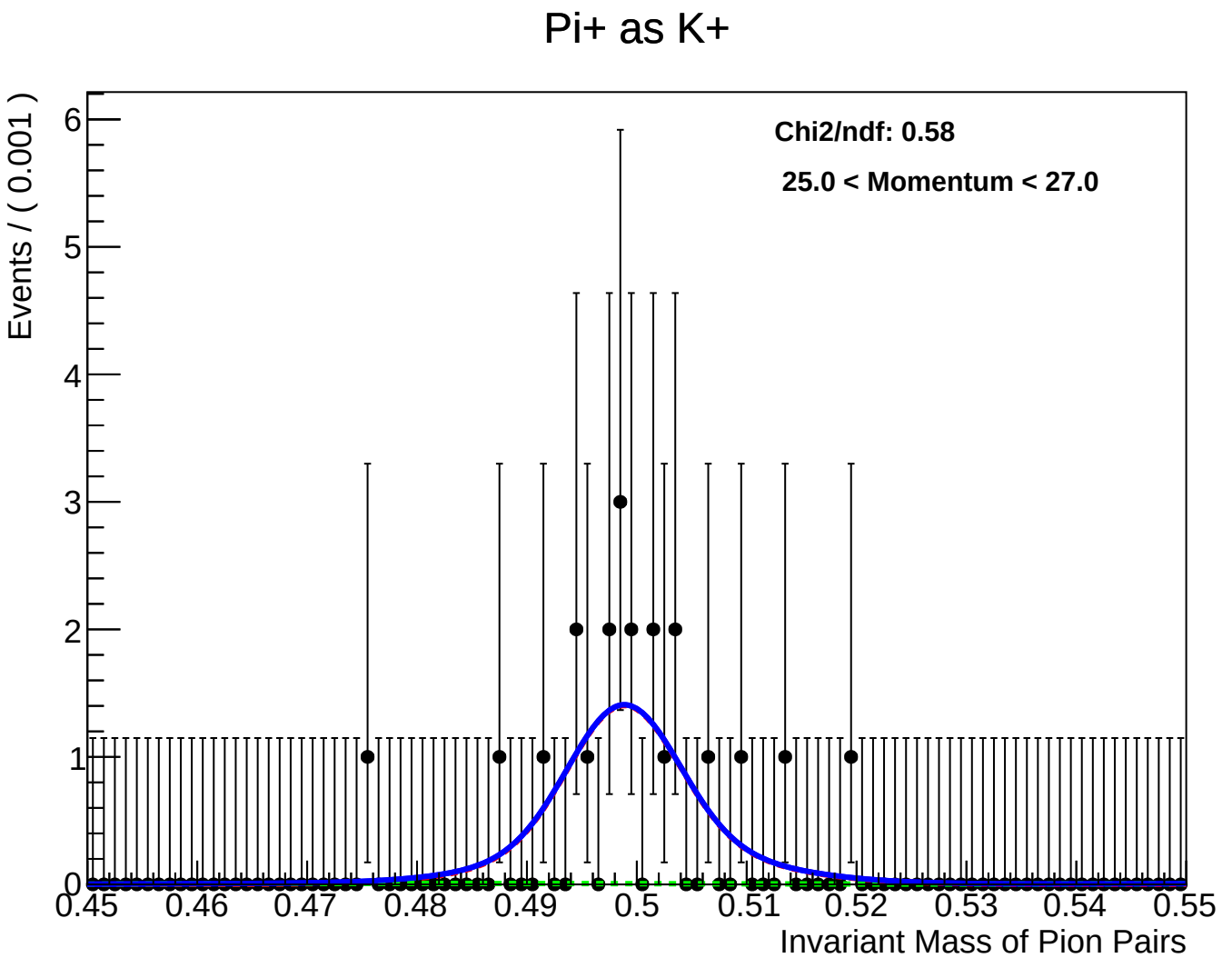

Pi+ as K+
Chi2/ndf: 0.67
22.0 < Momentum < 25.0
Events / (0.001)
0
1
2
3
4
5
6
7
8
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

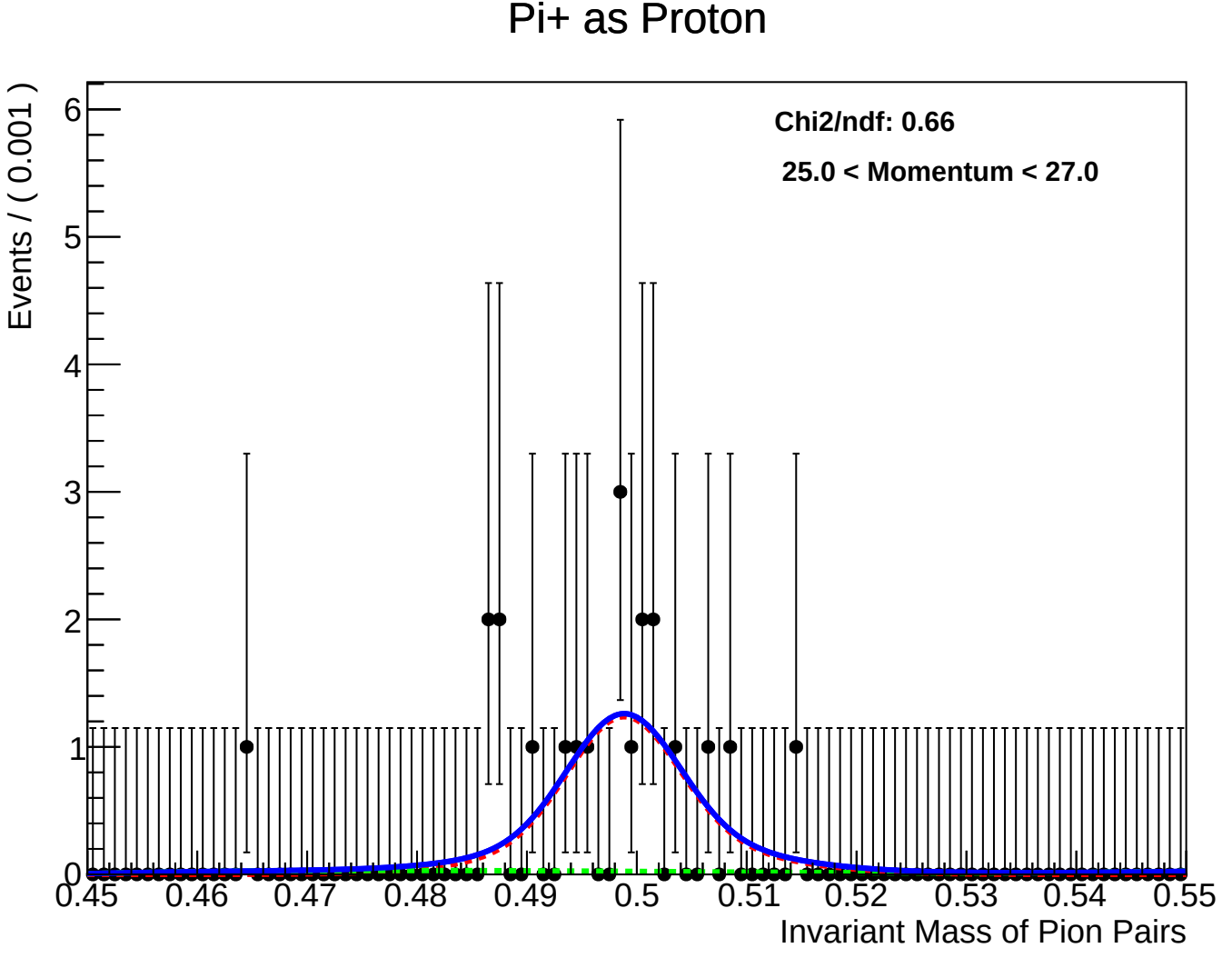

Pi+ as Proton
Chi2/ndf: 0.98
22.0 < Momentum < 25.0
Events / (0.001)
0
1
2
3
4
5
6
7
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

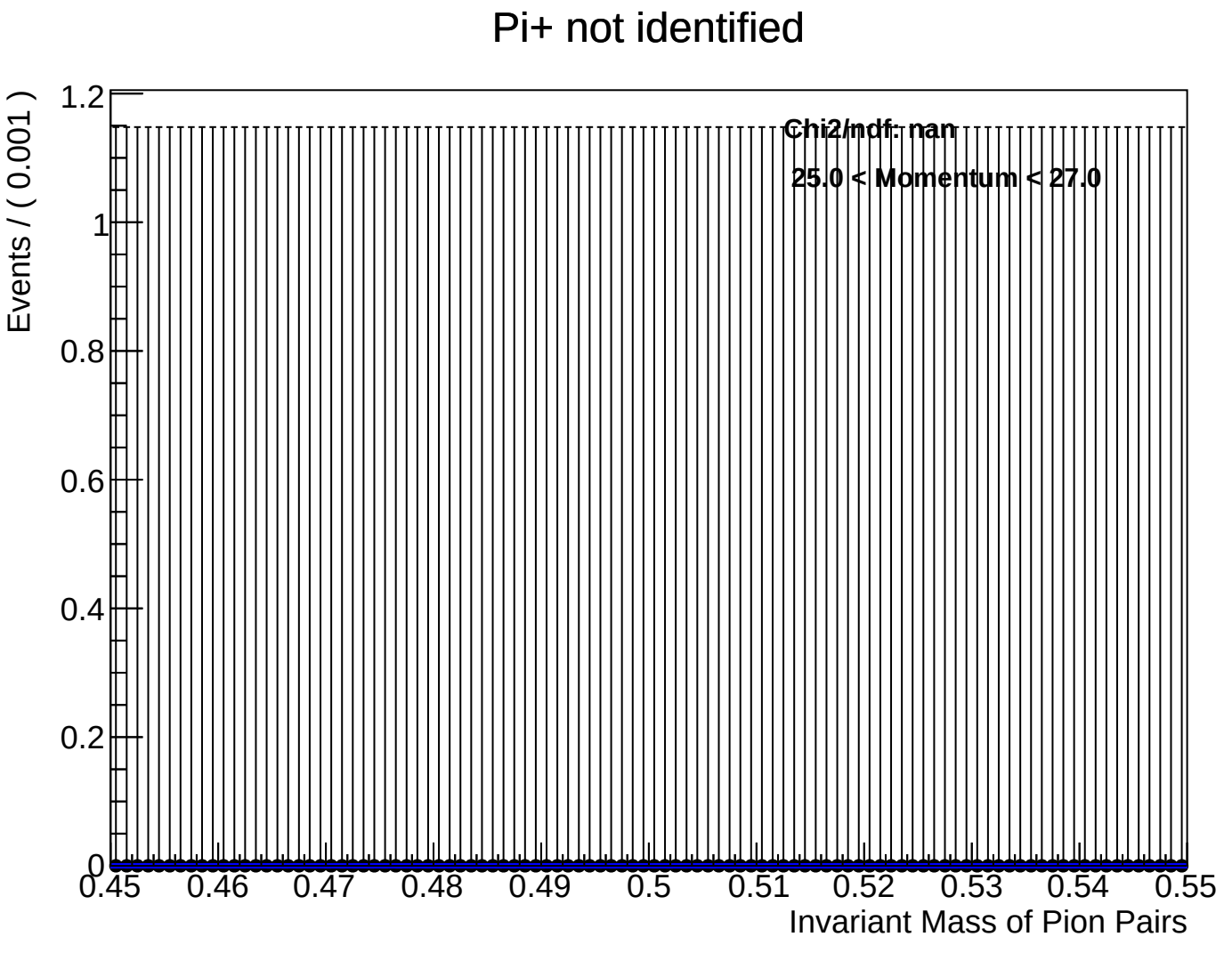

Pi+ not identified
Chi2/ndf: 1.29
22.0 < Momentum < 25.0
Events / (0.001)
0
0.5
1
1.5
2
2.5
3
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs


All Events
Chi2/ndf: 0.61
22.0 < Momentum < 25.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
140
160
180
200
220
240
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

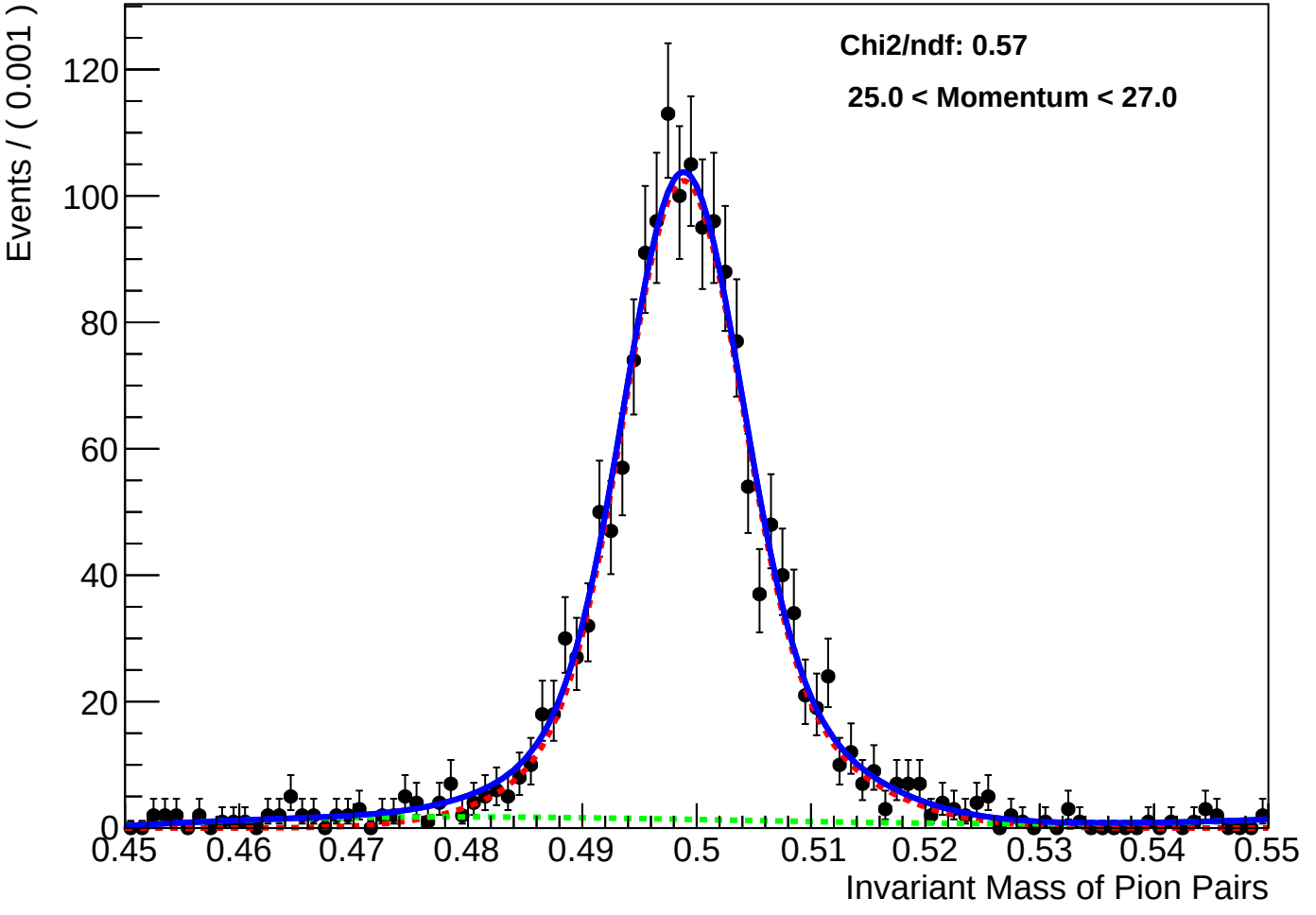

Pi+ as Pi+
Chi2/ndf: 0.57
25.0 < Momentum < 27.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

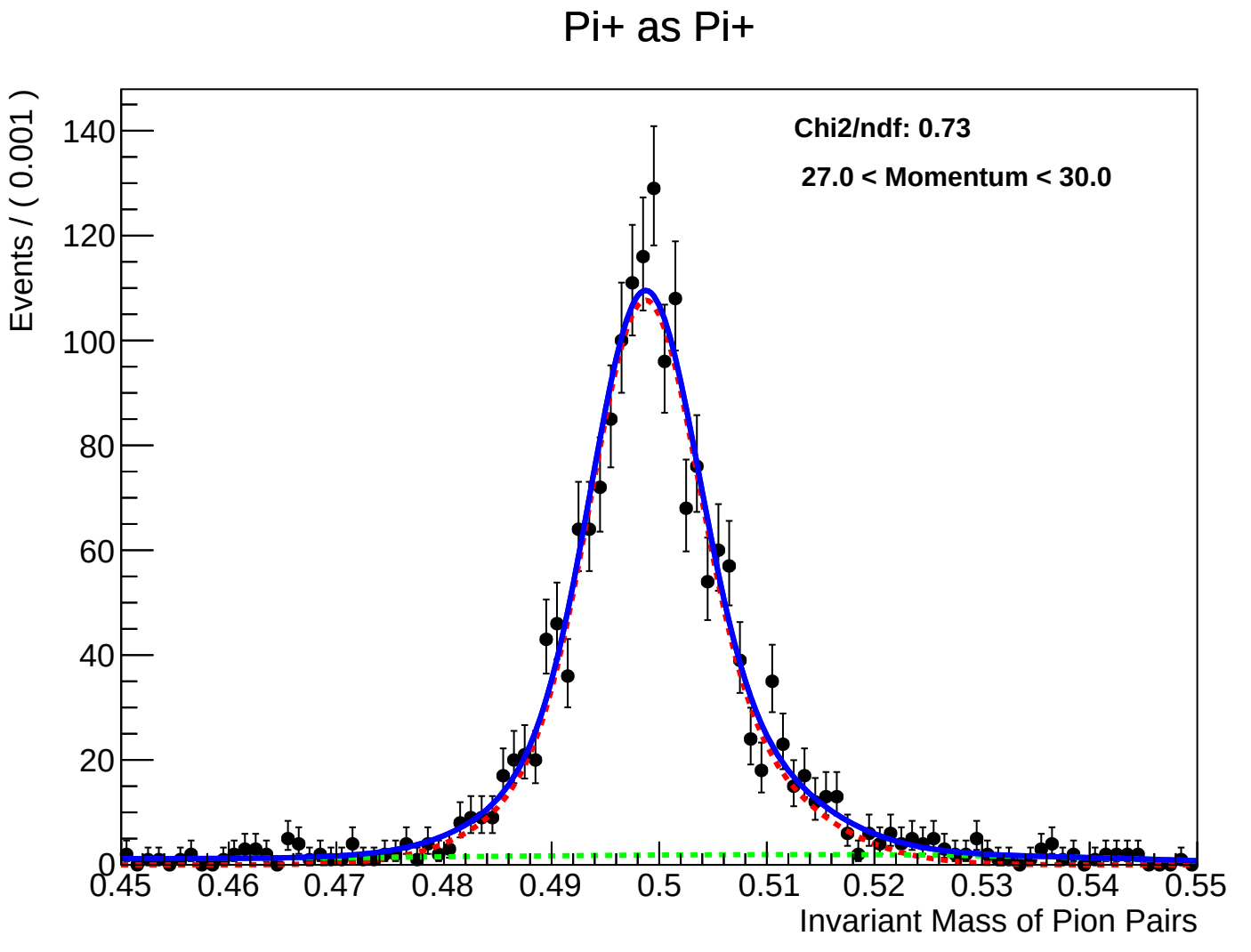

Pi+ as K+
Chi2/ndf: 0.58
25.0 < Momentum < 27.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
1
2
3
4
5
6
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

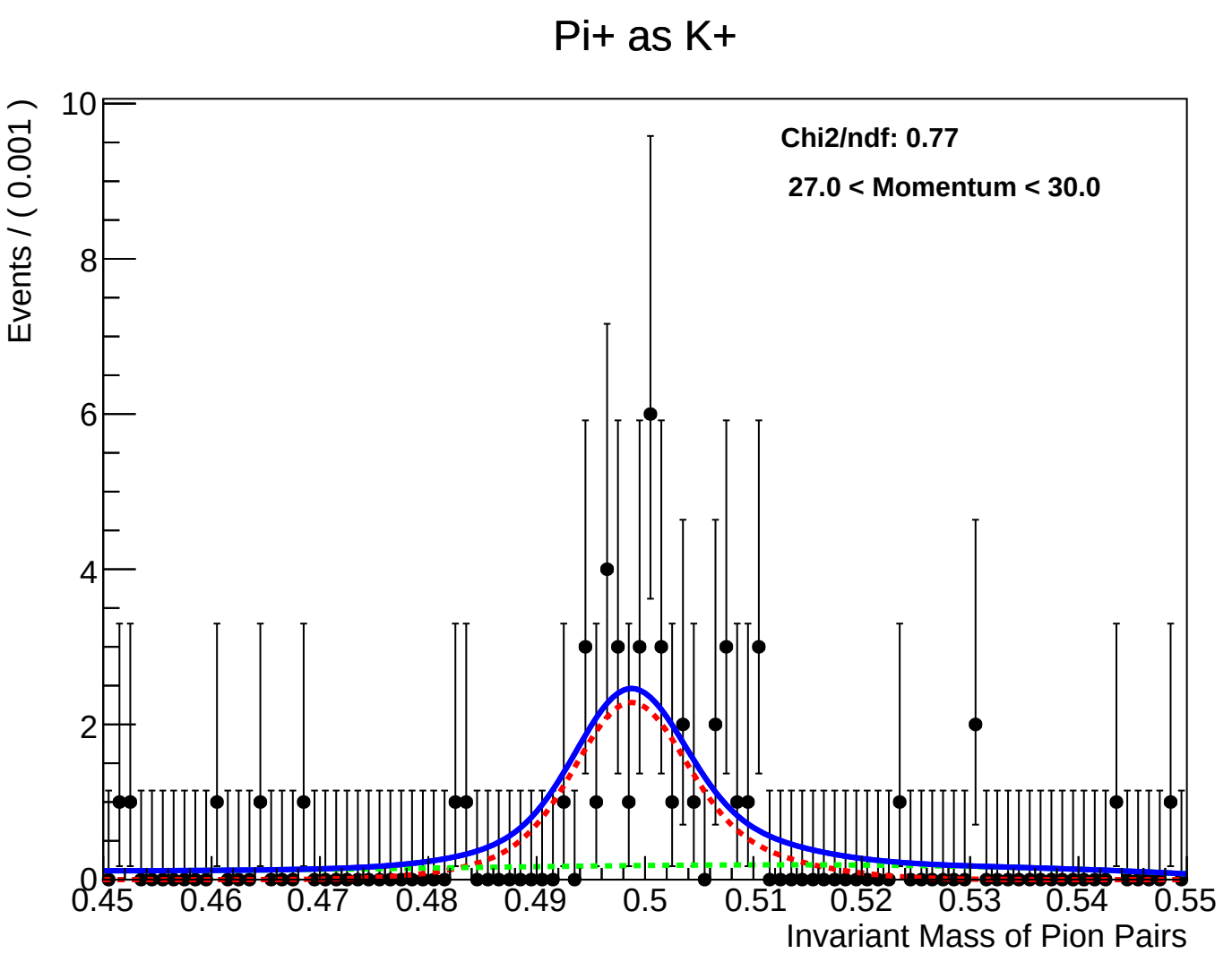

Pi+ as Proton
Chi2/ndf: 0.66
25.0 < Momentum < 27.0
Events / (0.001)
0
1
2
3
4
5
6
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

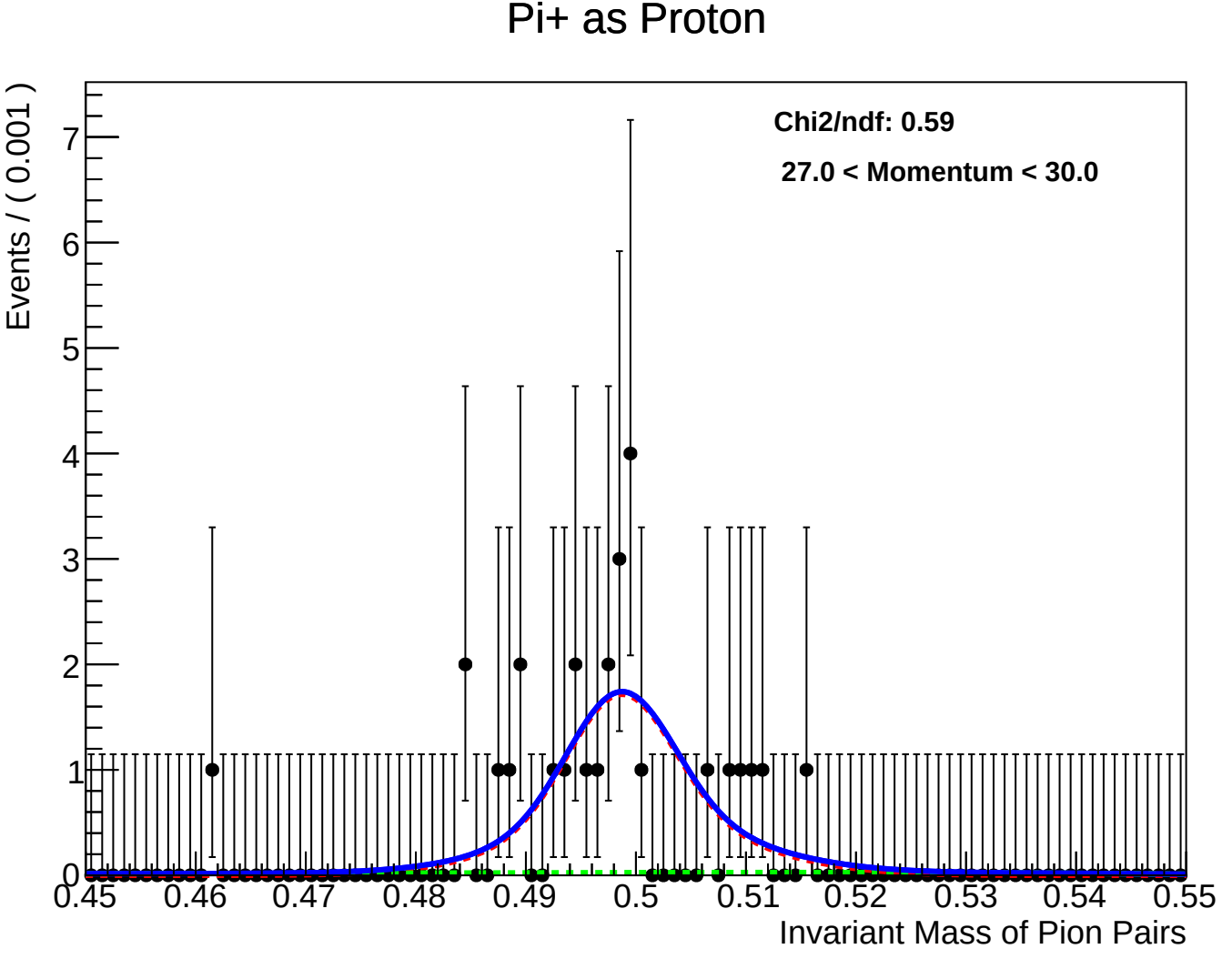

Pi+ not identified
Chi2/ndf: nan
25.0 < Momentum < 27.0
Events / (0.001)
1.2
1
0.8
0.6
0.4
0.2
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

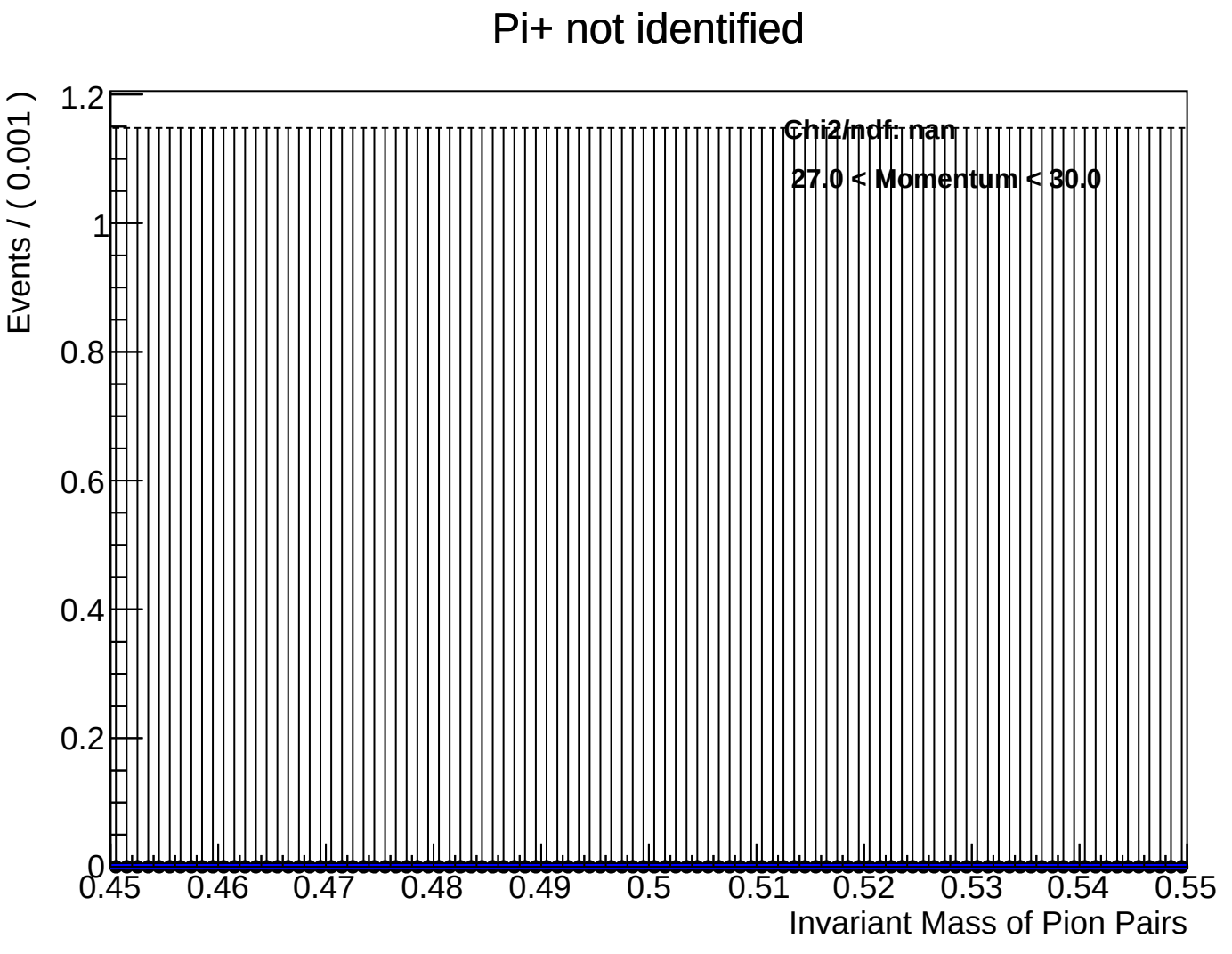
All Events

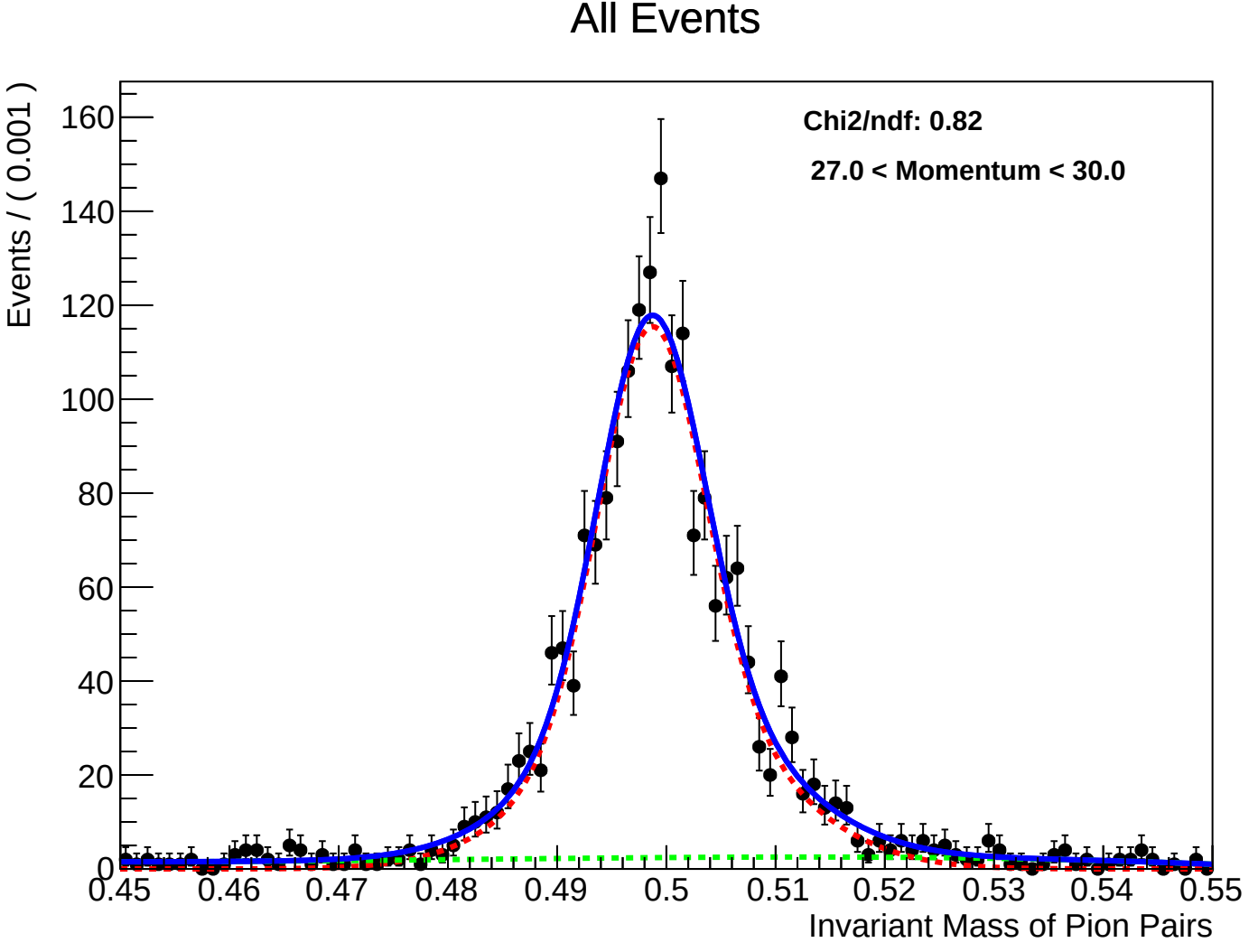

Chi2/ndf: 0.57
25.0 < Momentum < 27.0
Events / (0.001)
120
100
80
60
40
20
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

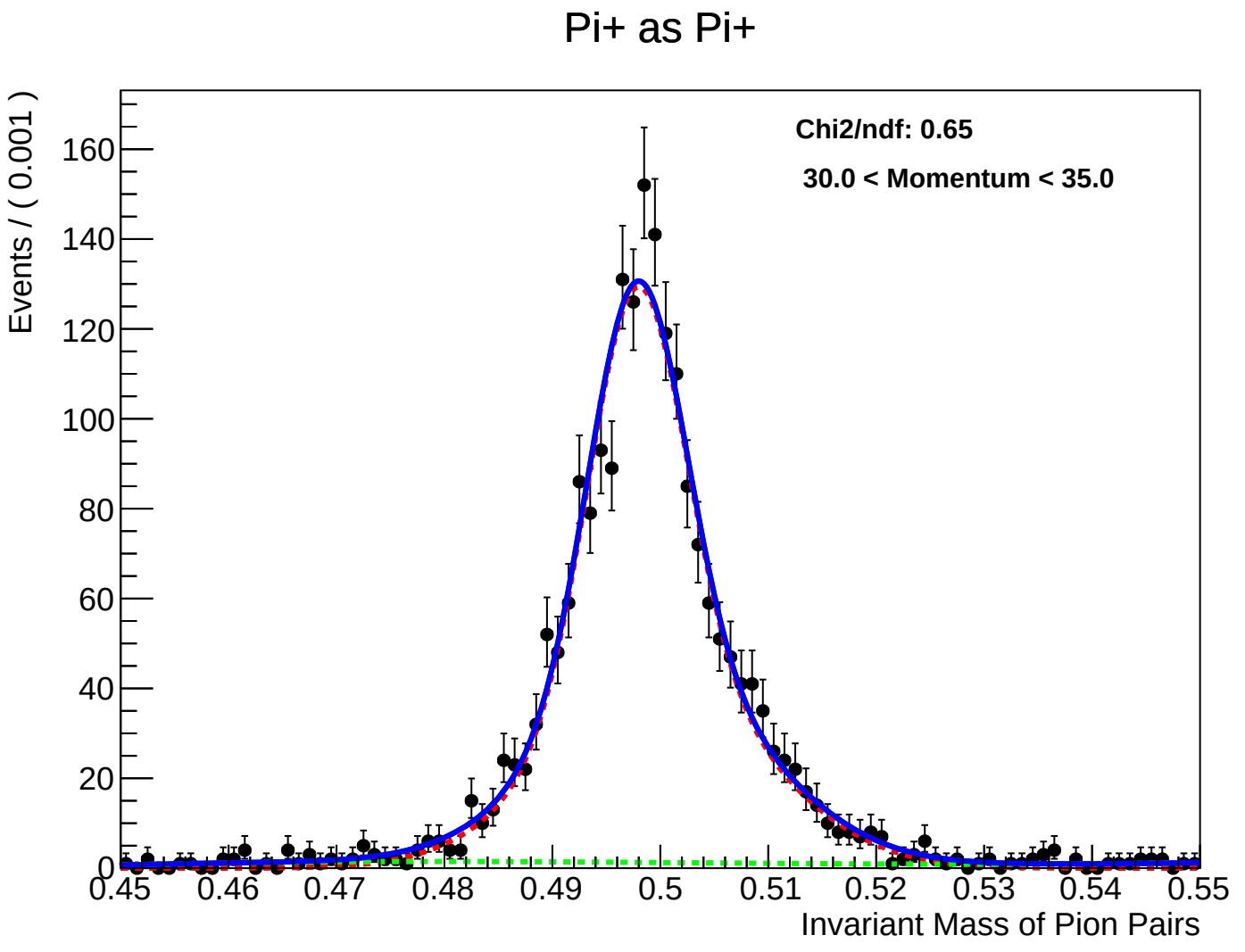

Pi+ as Pi+
Chi2/ndf: 0.73
27.0 < Momentum < 30.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
140
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

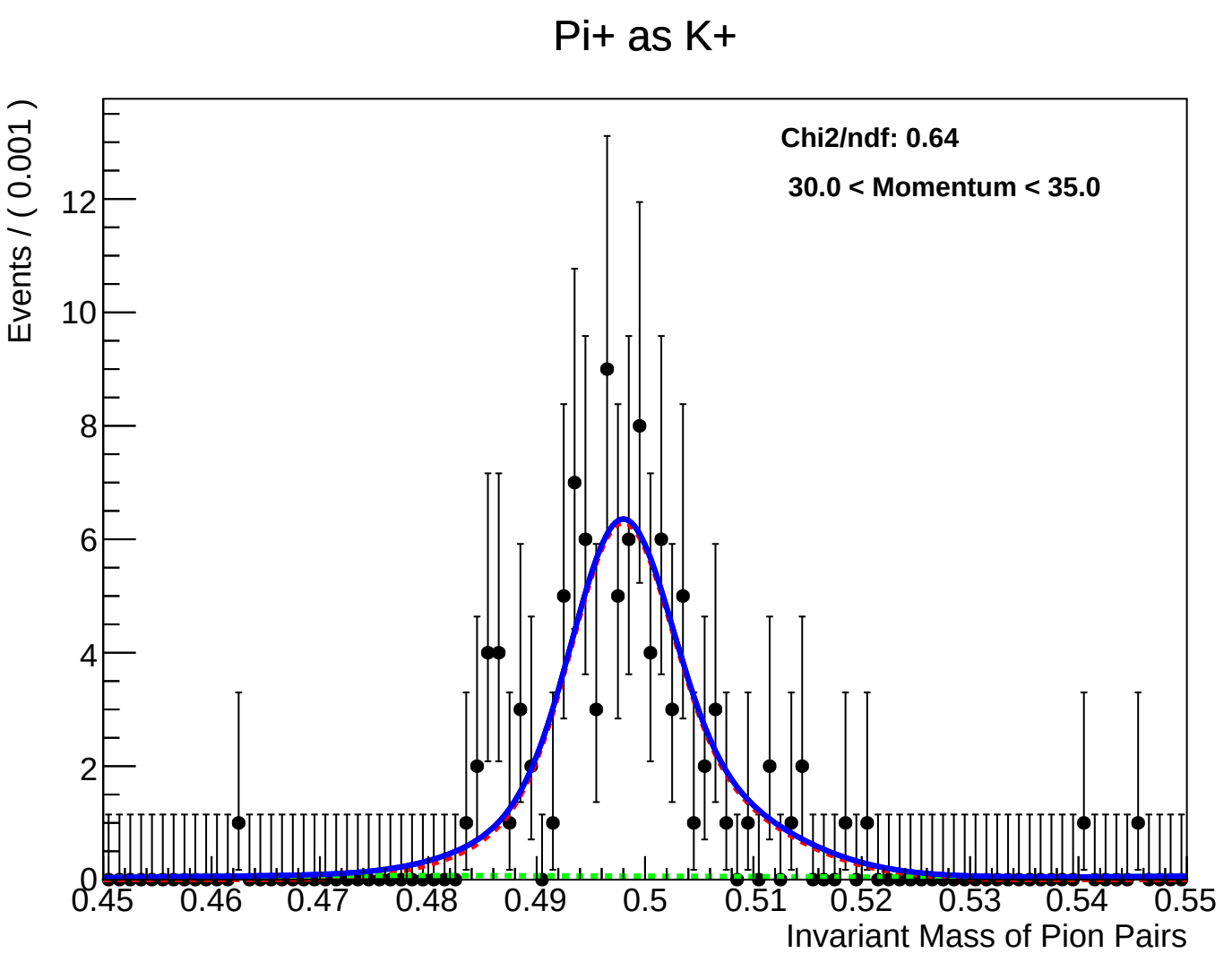

Pi+ as K+
Chi2/ndf: 0.77
27.0 < Momentum < 30.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
2
4
6
8
10
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

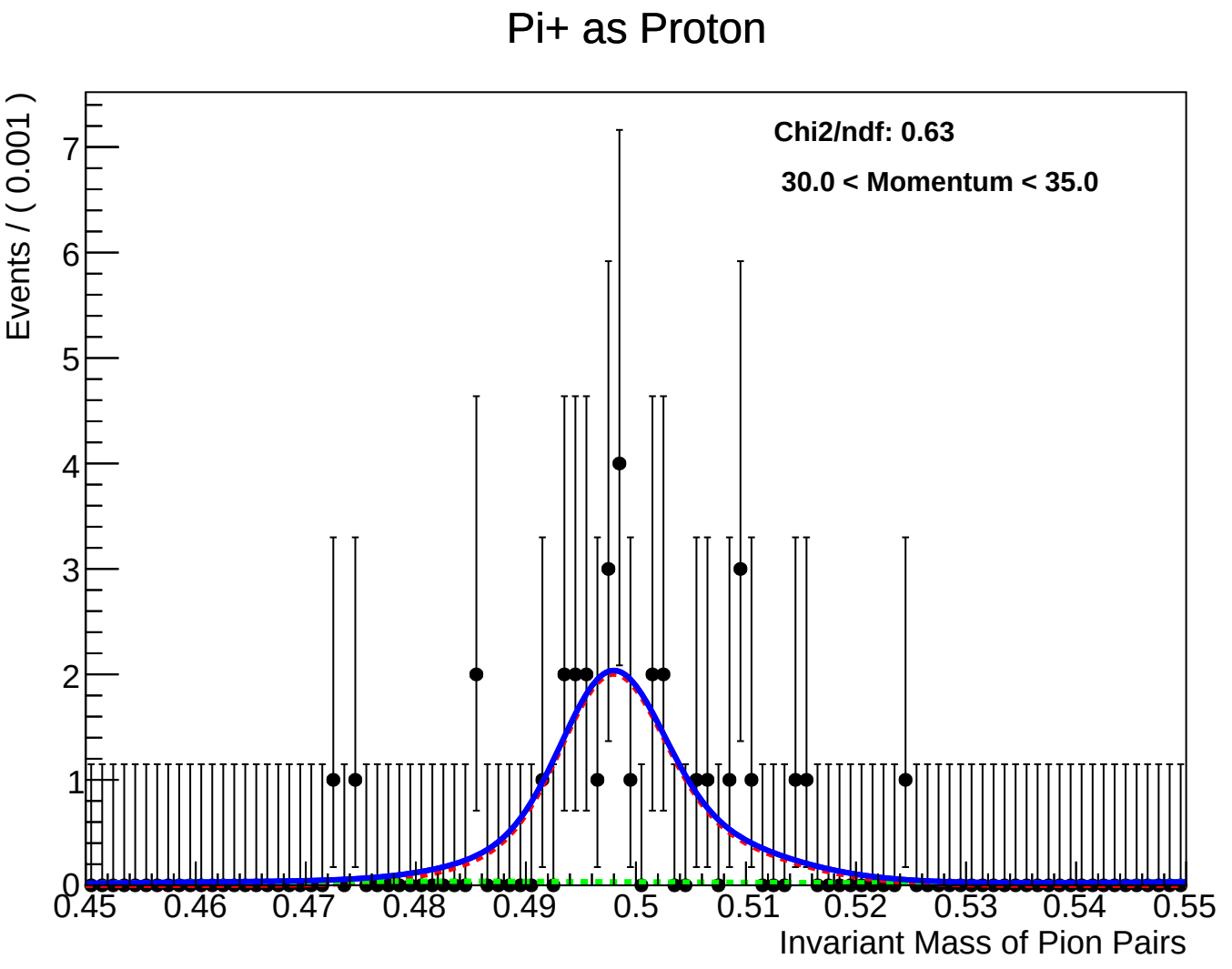

Pi+ as Proton
Chi2/ndf: 0.59
27.0 < Momentum < 30.0
Events / (0.001)
0
1
2
3
4
5
6
7
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

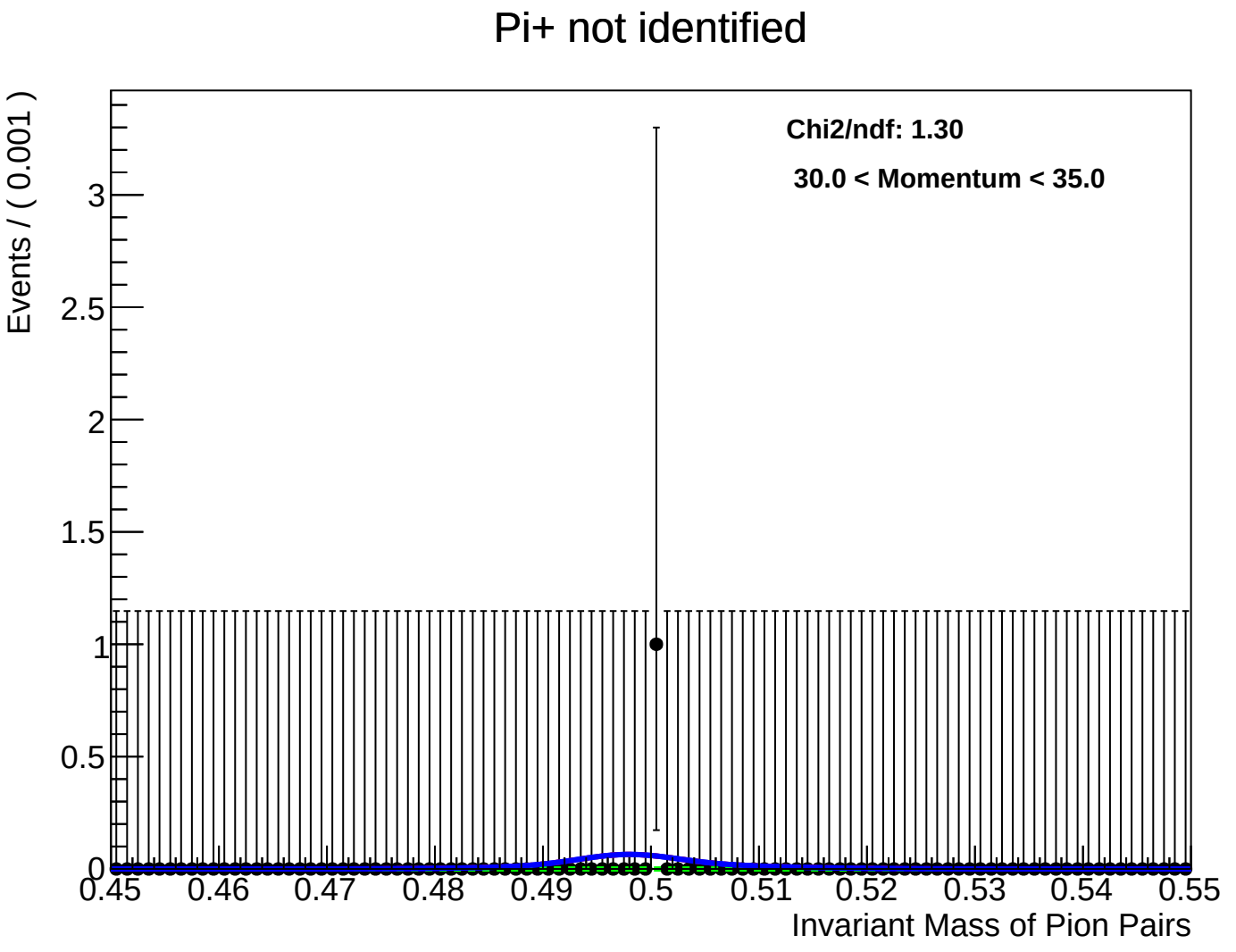

Pi+ not identified
Chi2/ndf: nan
27.0 < Momentum < 30.0
Events / (0.001)
1.2
1
0.8
0.6
0.4
0.2
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

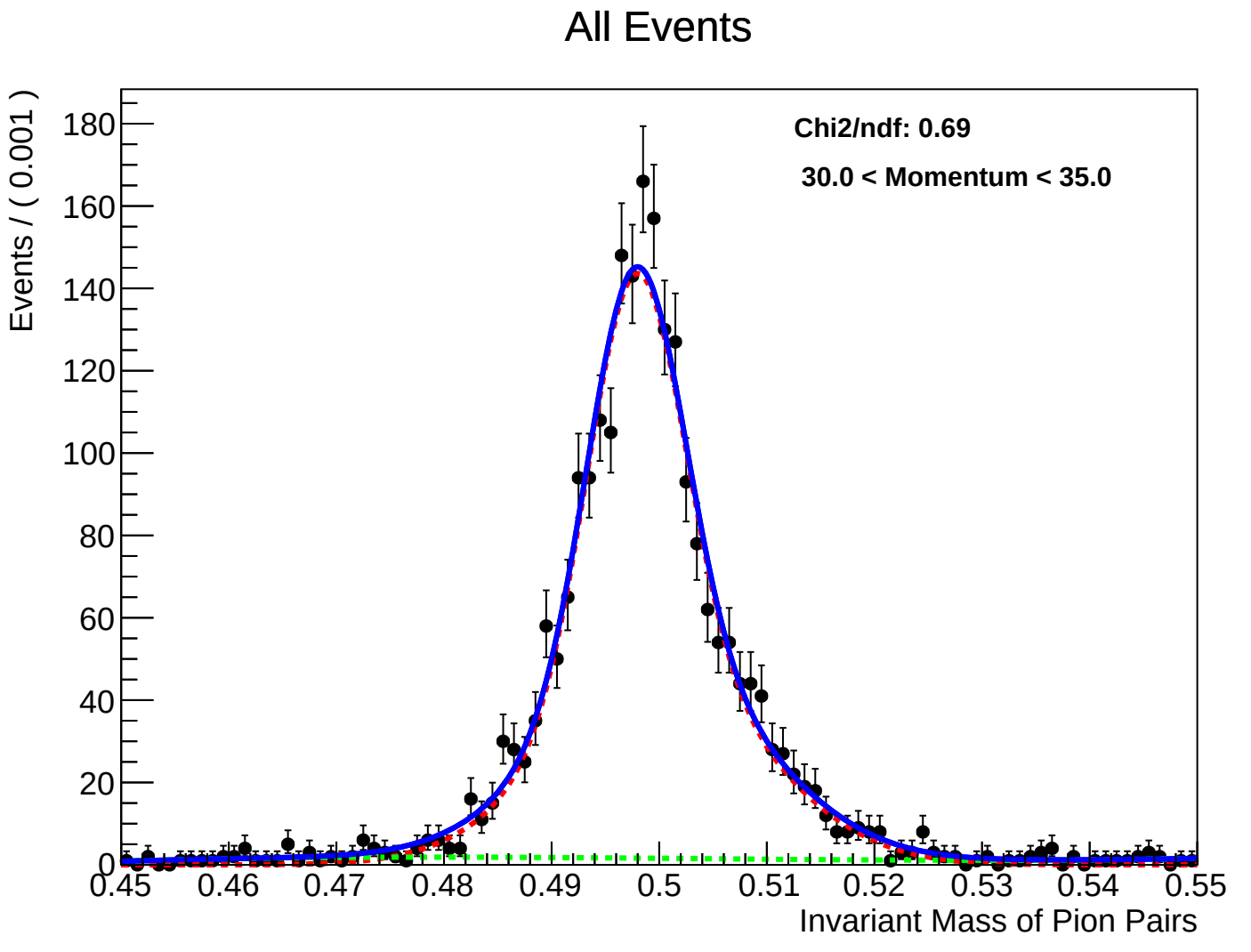

All Events
Chi2/ndf: 0.82
27.0 < Momentum < 30.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
140
160
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

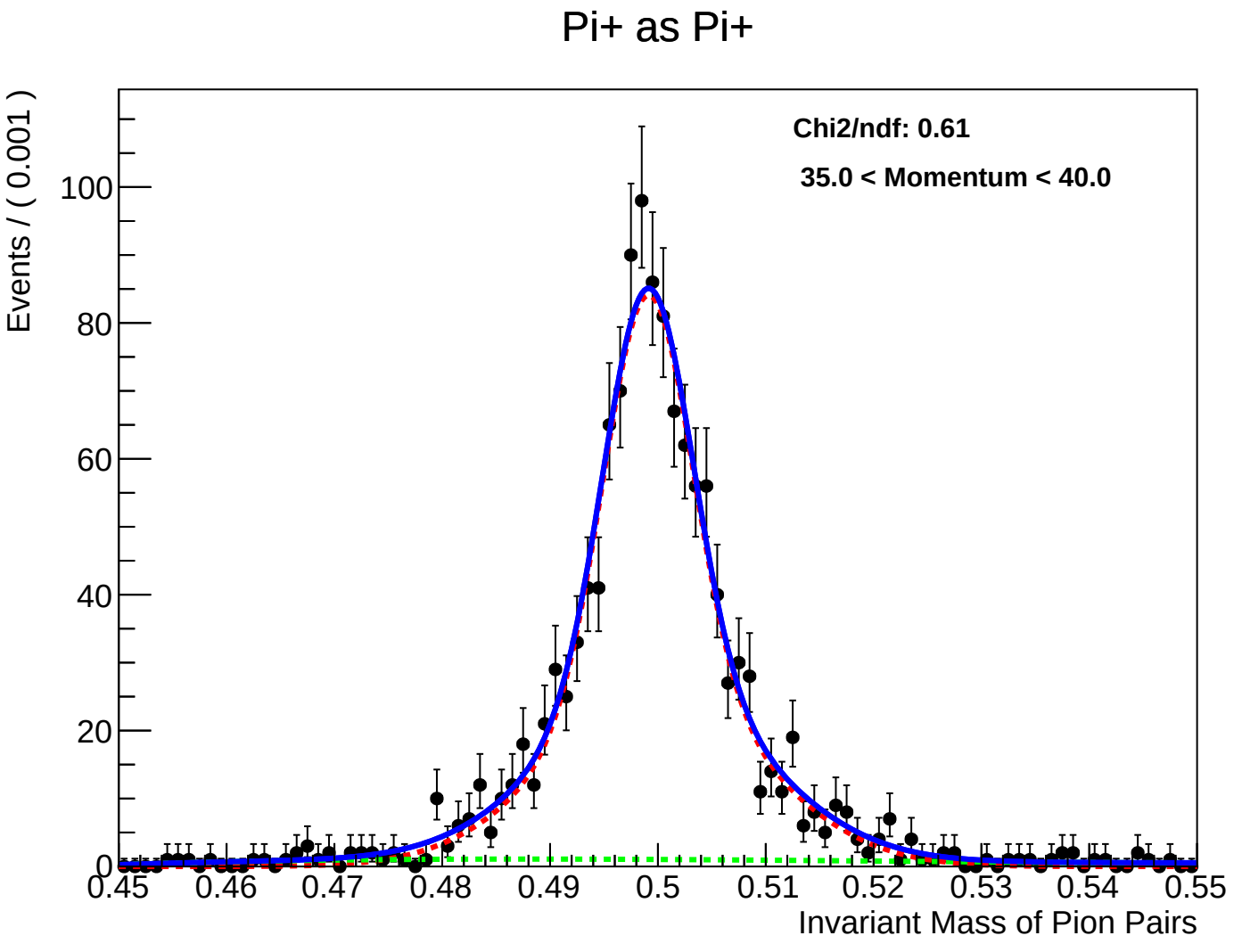

Pi+ as Pi+
Chi2/ndf: 0.65
30.0 < Momentum < 35.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
140
160
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

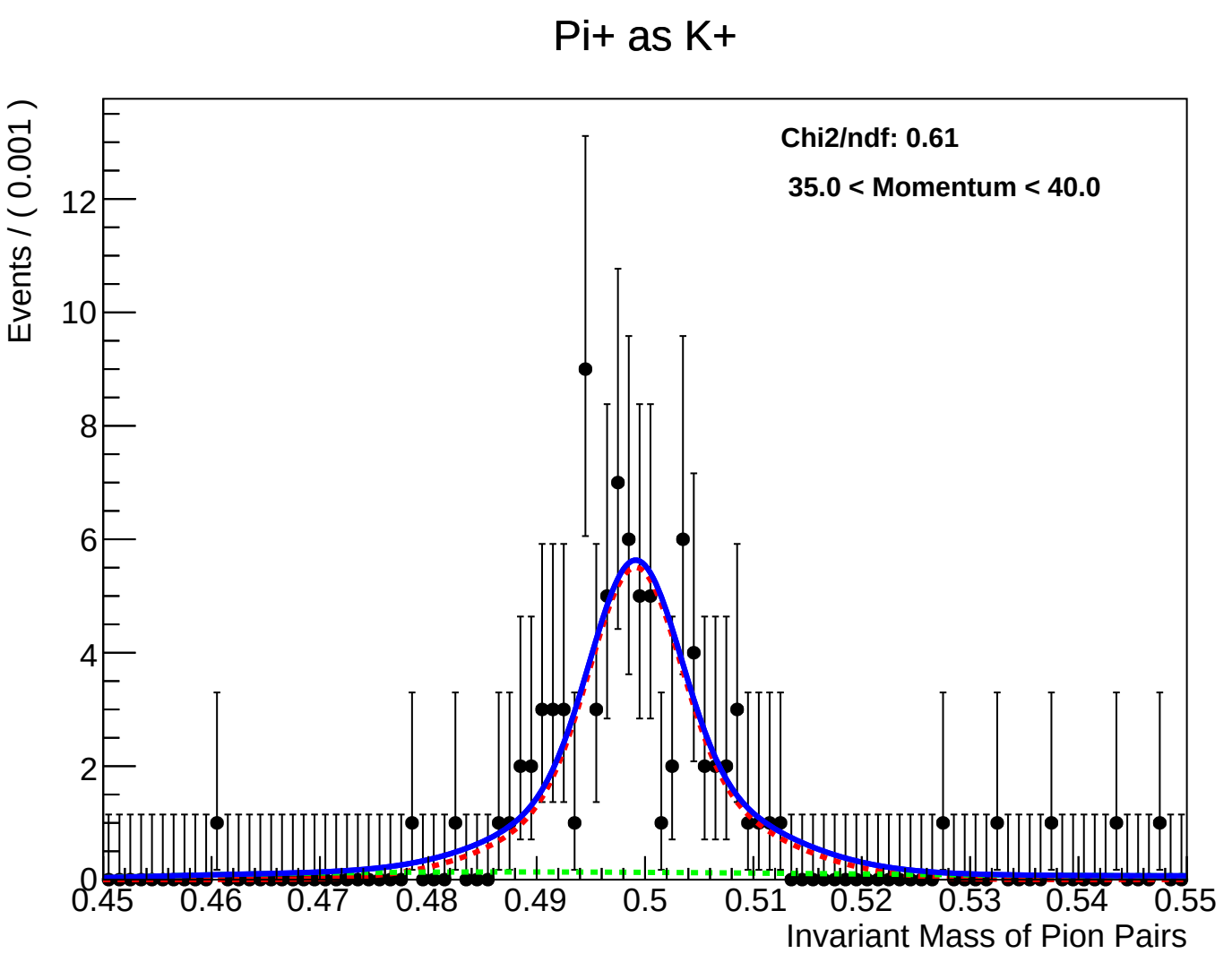

Pi+ as K+
Chi2/ndf: 0.64
30.0 < Momentum < 35.0
Events / (0.001)
0
2
4
6
8
10
12
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

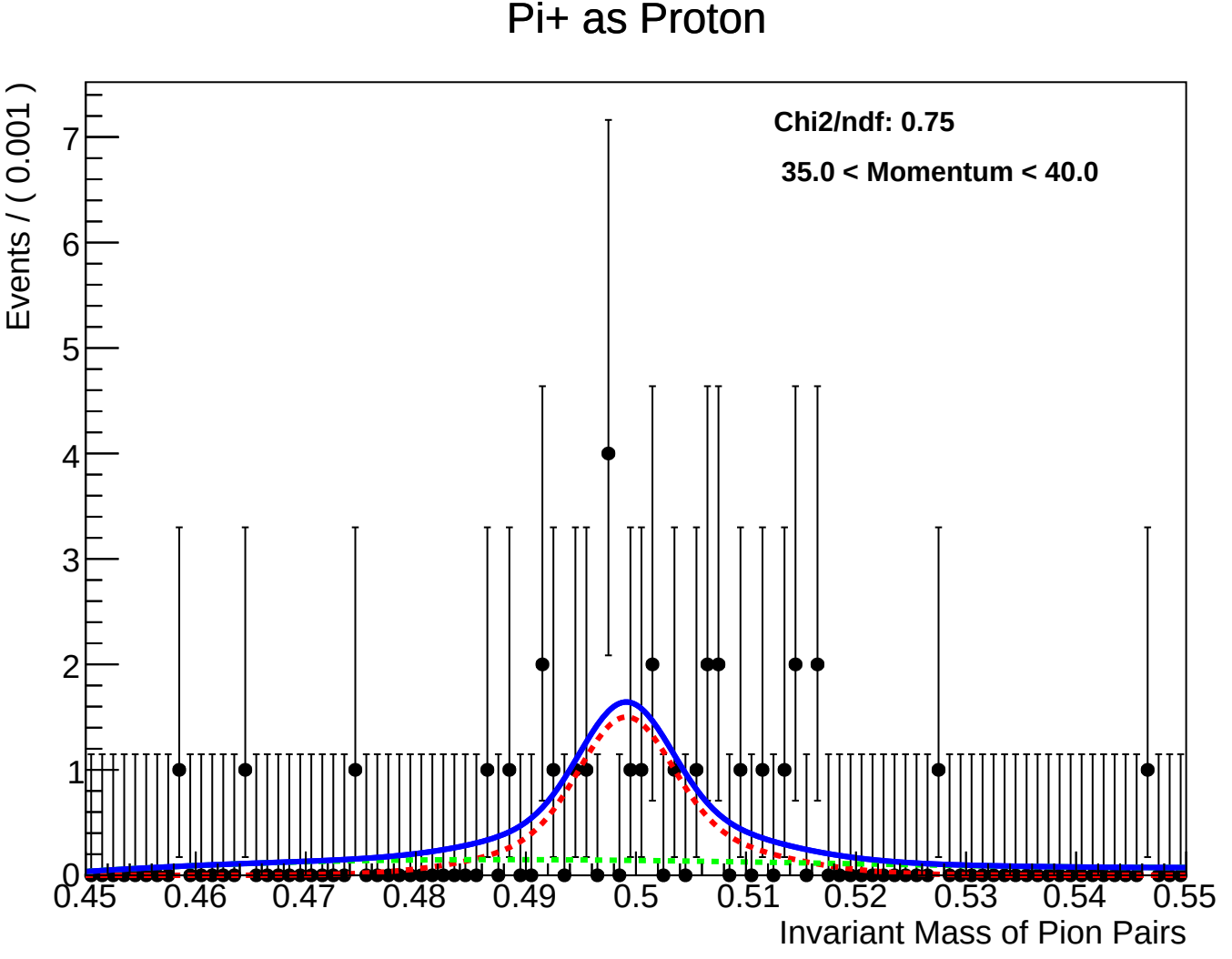

Pi+ as Proton
Chi2/ndf: 0.63
30.0 < Momentum < 35.0
Events / (0.001)
0
1
2
3
4
5
6
7
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

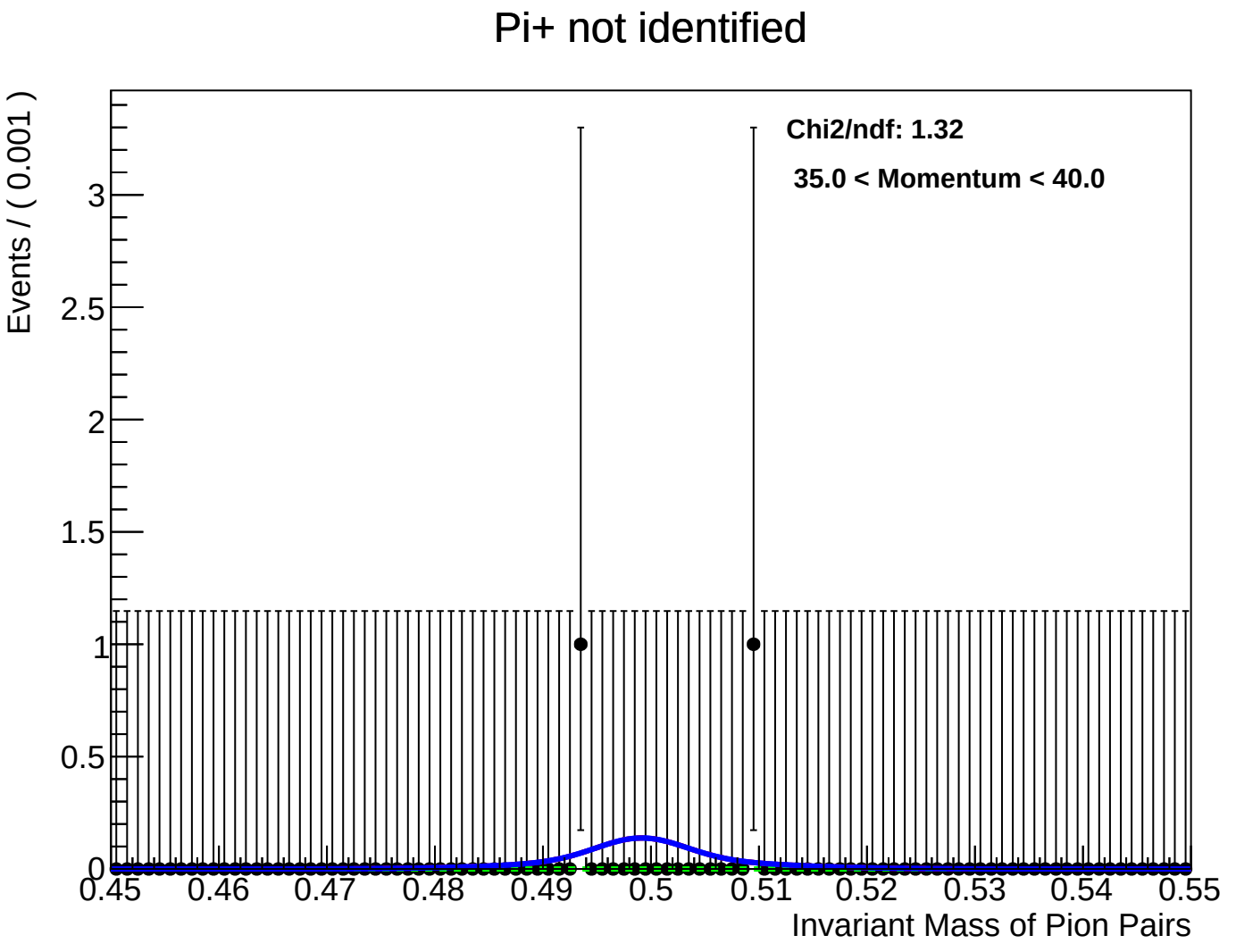

Pi+ not identified
Chi2/ndf: 1.30
30.0 < Momentum < 35.0
Events / (0.001)
0
0.5
1
1.5
2
2.5
3
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

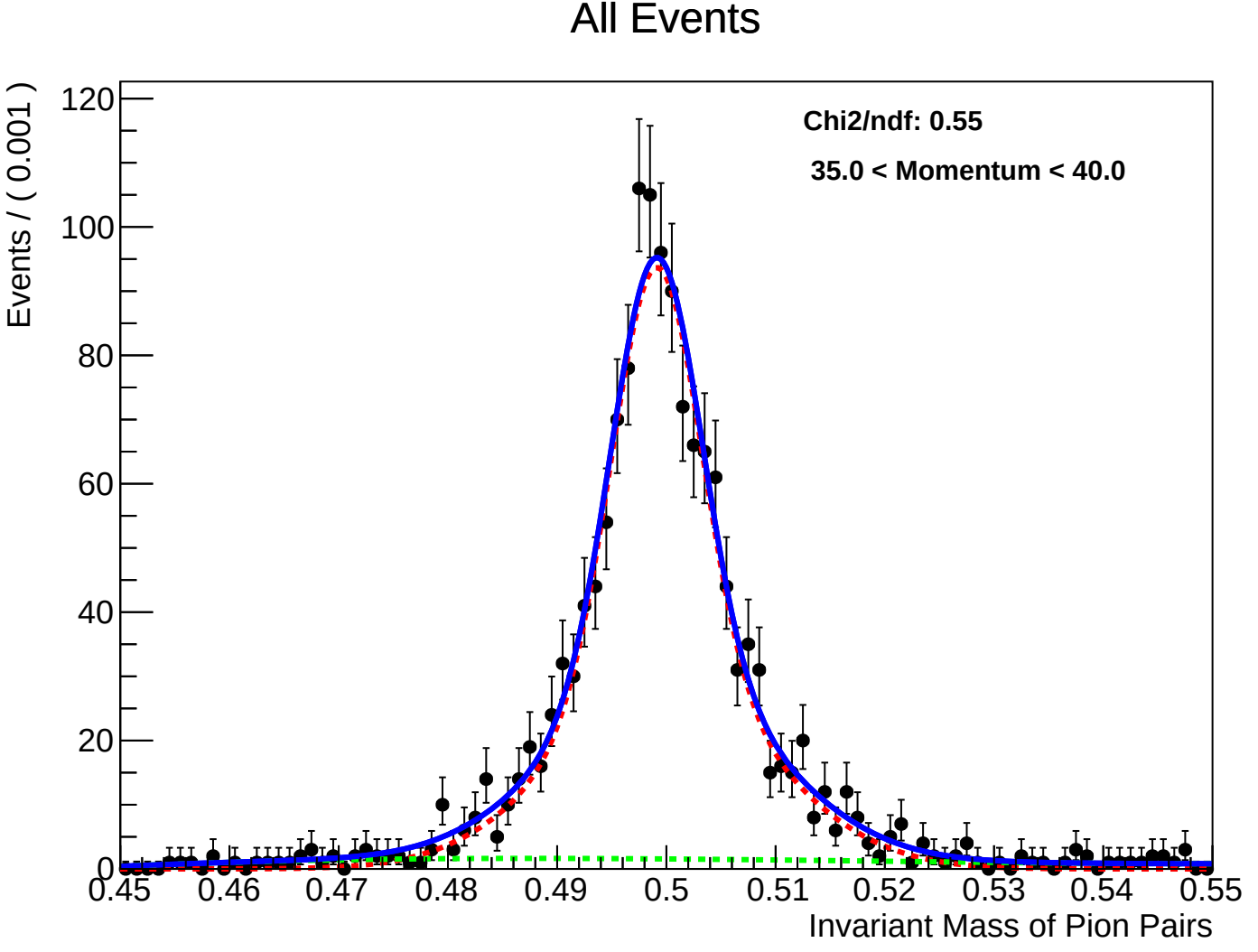

All Events
Chi2/ndf: 0.69
30.0 < Momentum < 35.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
140
160
180
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

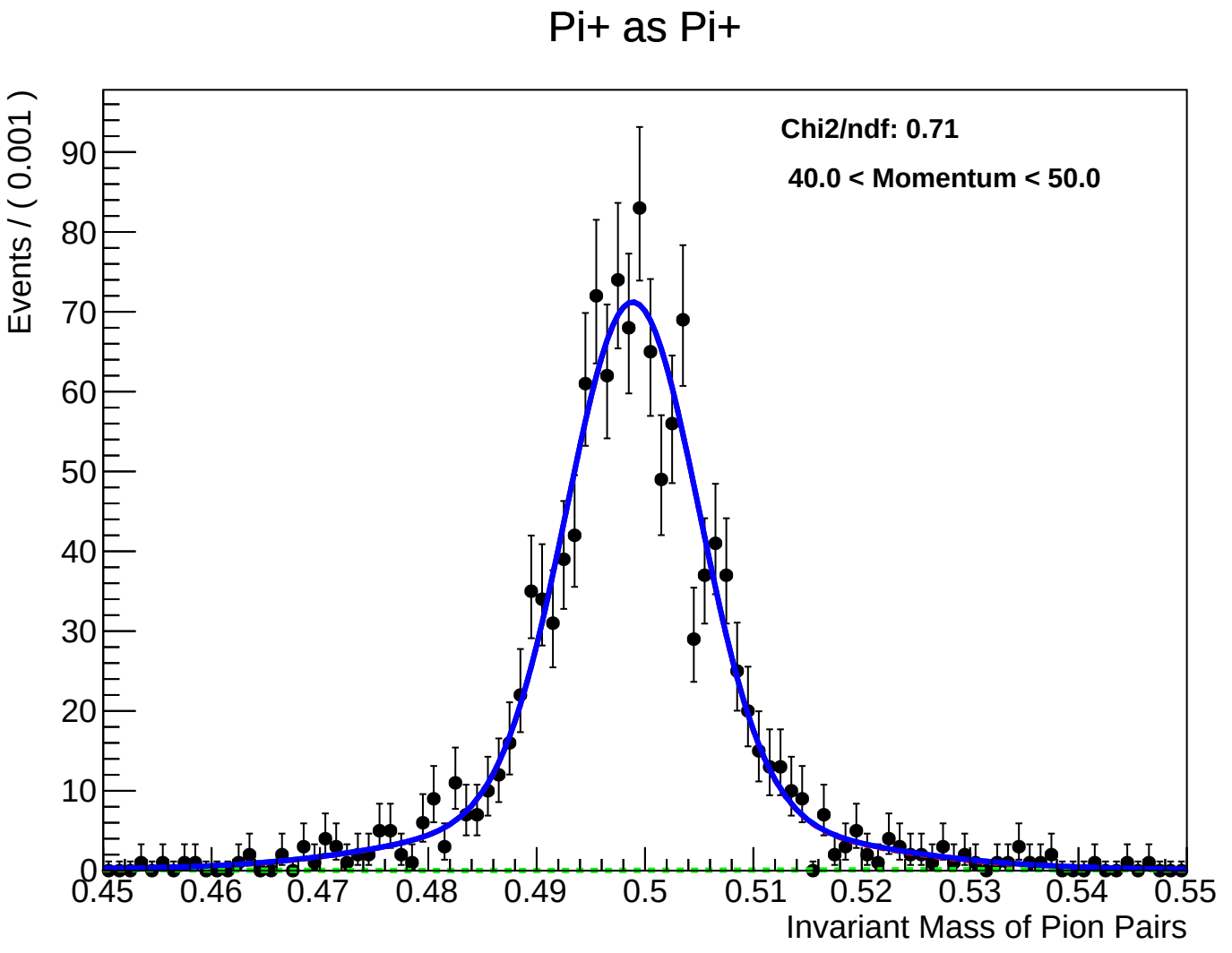

Pi+ as Pi+
Chi2/ndf: 0.61
35.0 < Momentum < 40.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

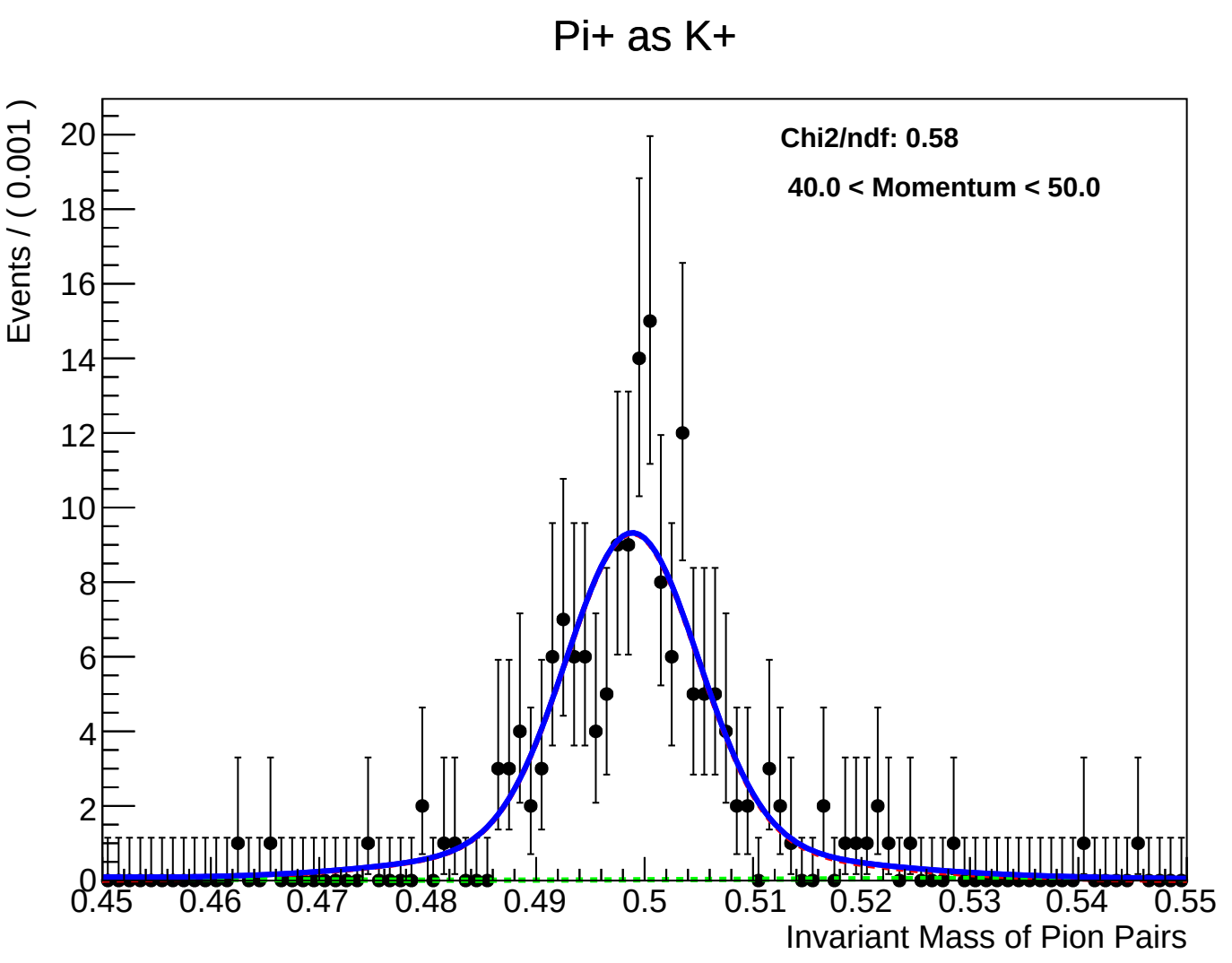

Pi+ as K+
Chi2/ndf: 0.61
35.0 < Momentum < 40.0
Events / (0.001)
0
2
4
6
8
10
12
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

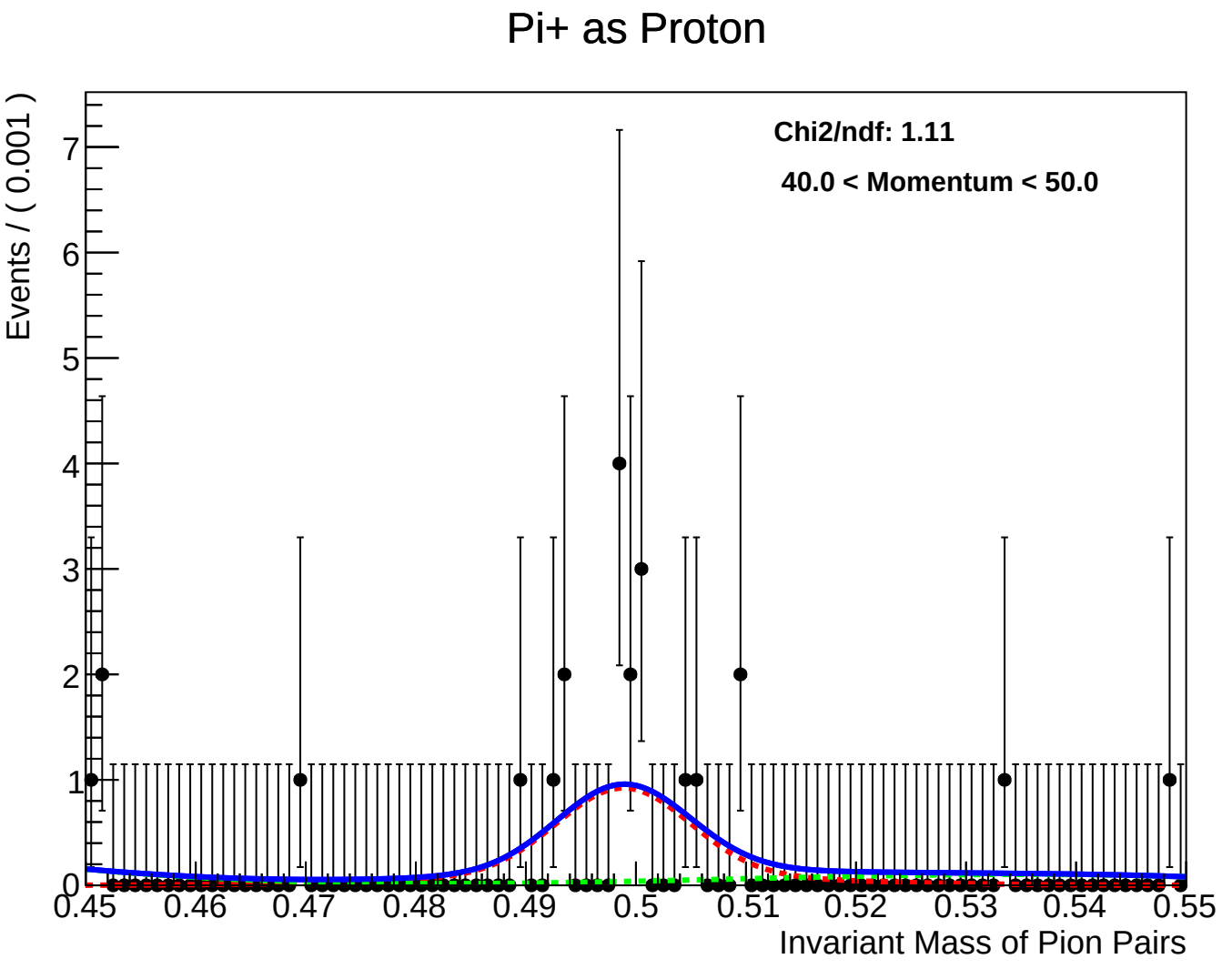

Pi+ as Proton
Chi2/ndf: 0.75
35.0 < Momentum < 40.0
Events / (0.001)
0
1
2
3
4
5
6
7
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

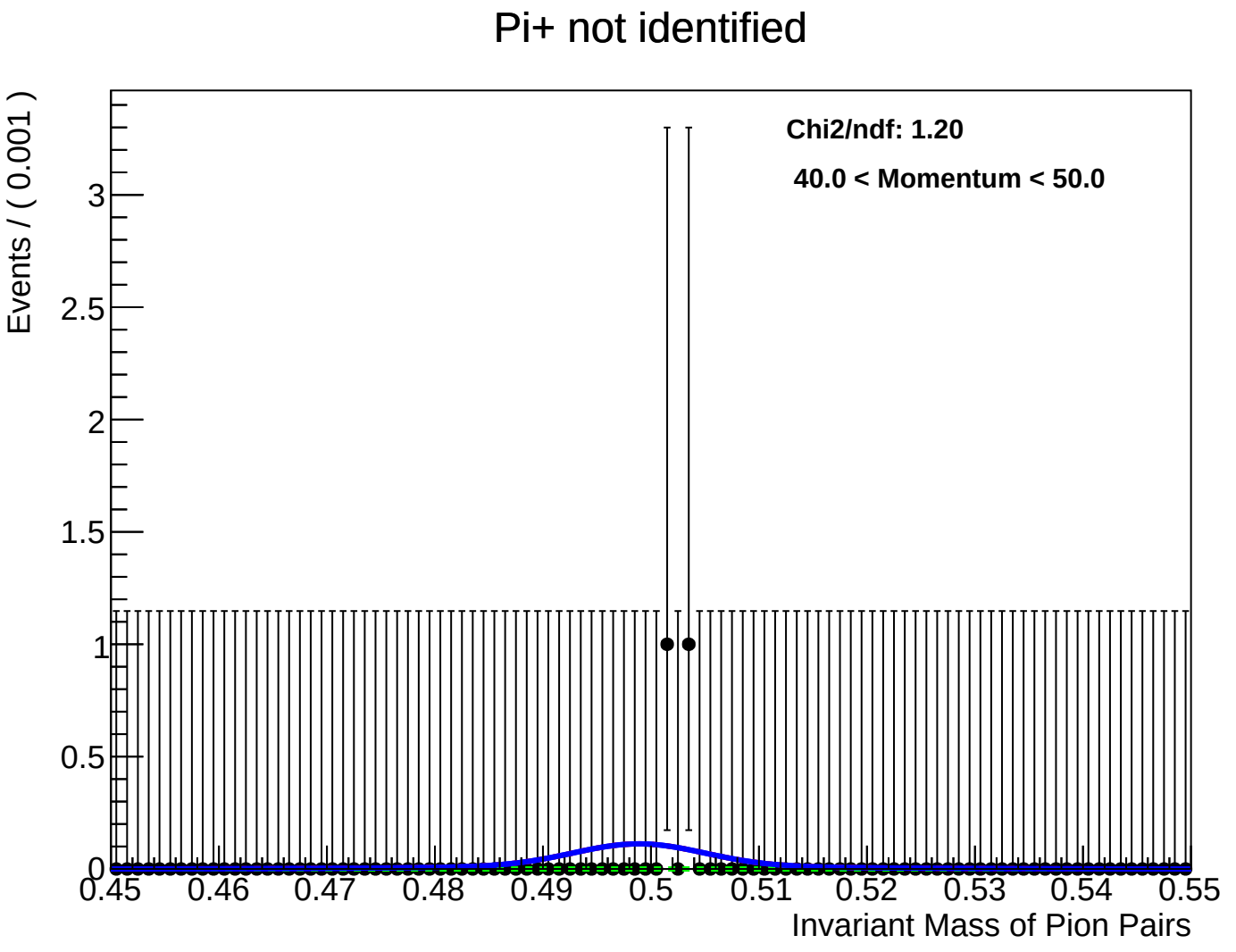

Pi+ not identified
Chi2/ndf: 1.32
35.0 < Momentum < 40.0
Events / (0.001)
0
0.5
1
1.5
2
2.5
3
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

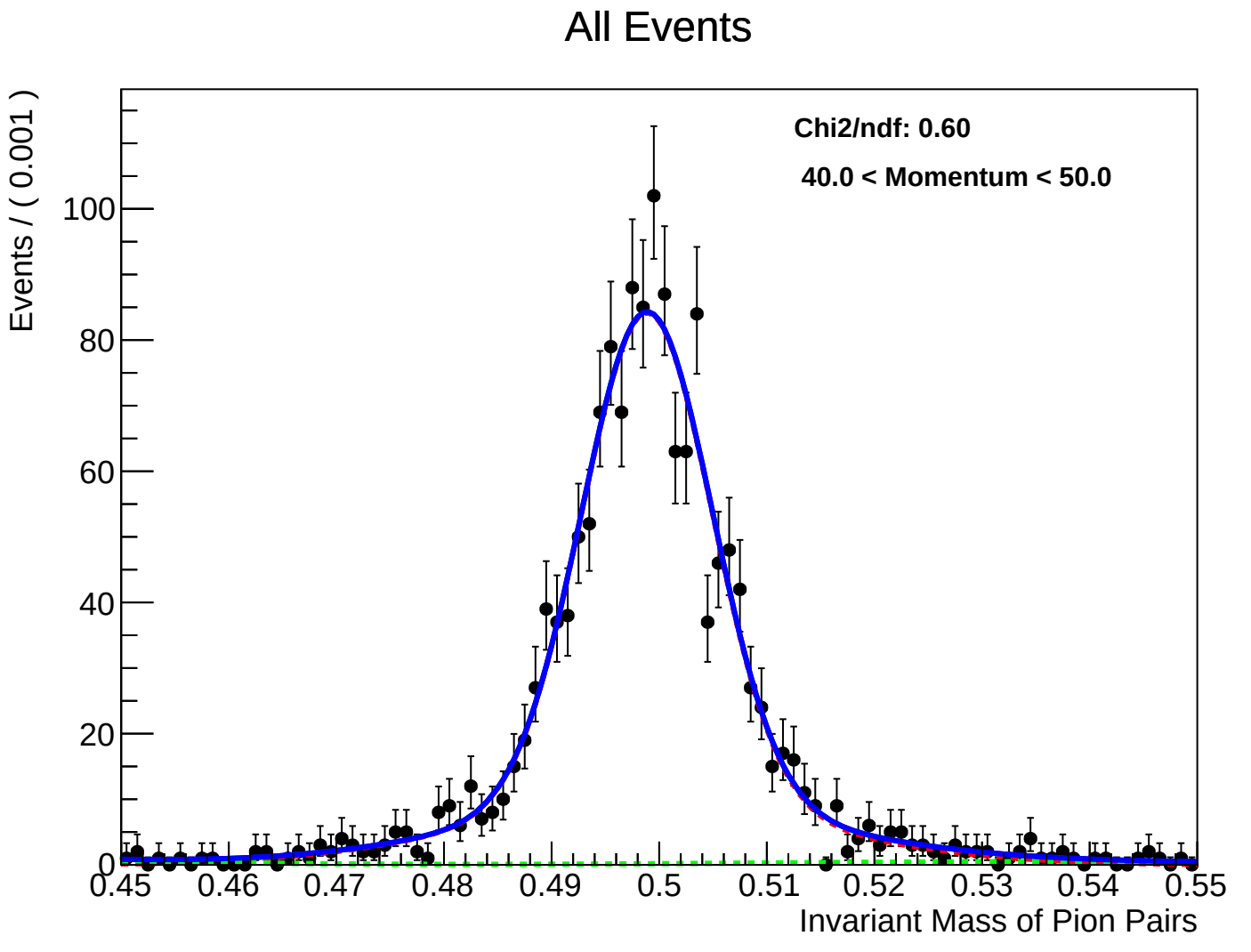

All Events
Chi2/ndf: 0.55
35.0 < Momentum < 40.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

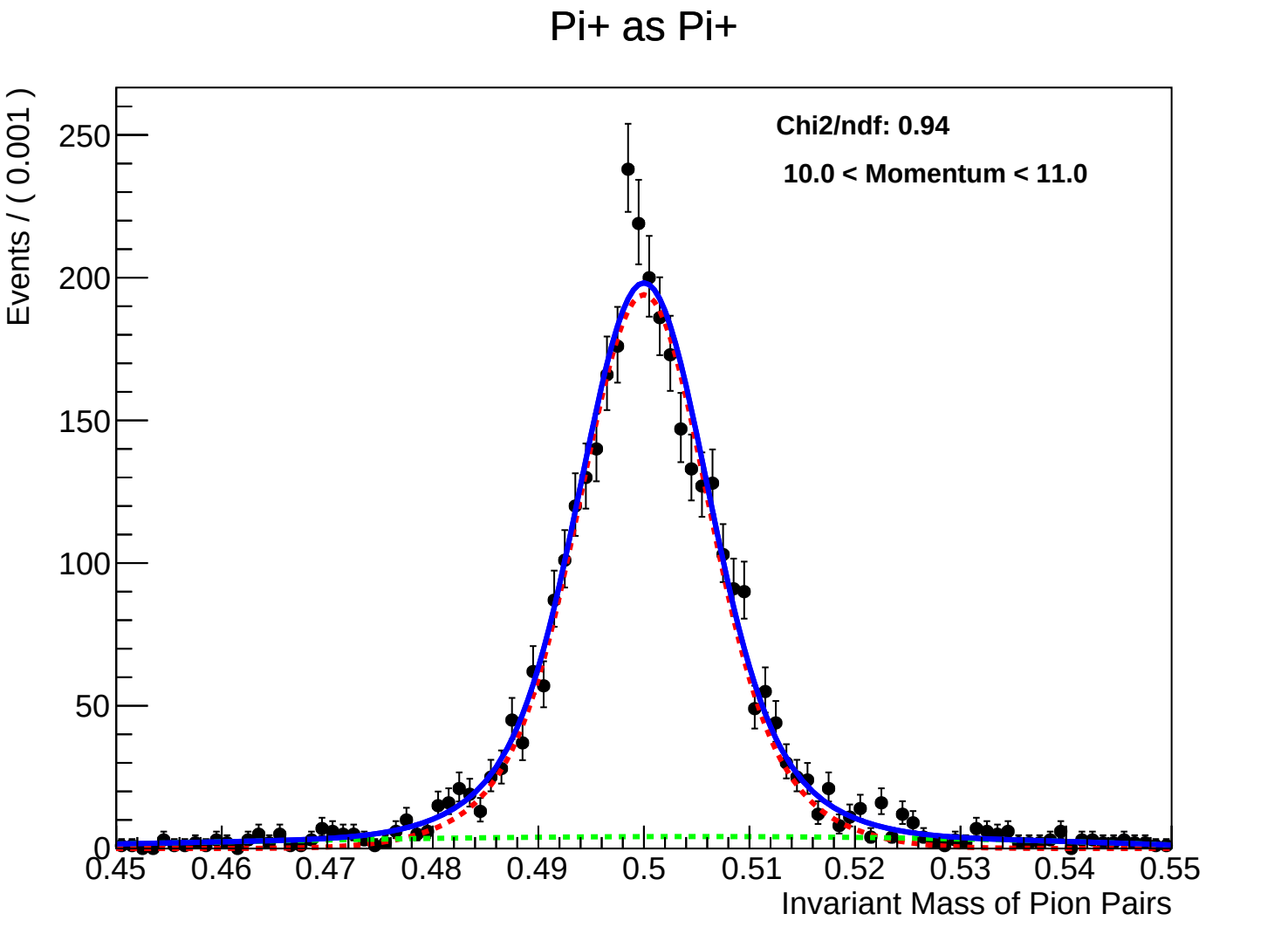

Pi+ as Pi+
Chi2/ndf: 0.71
40.0 < Momentum < 50.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
10
20
30
40
50
60
70
80
90
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

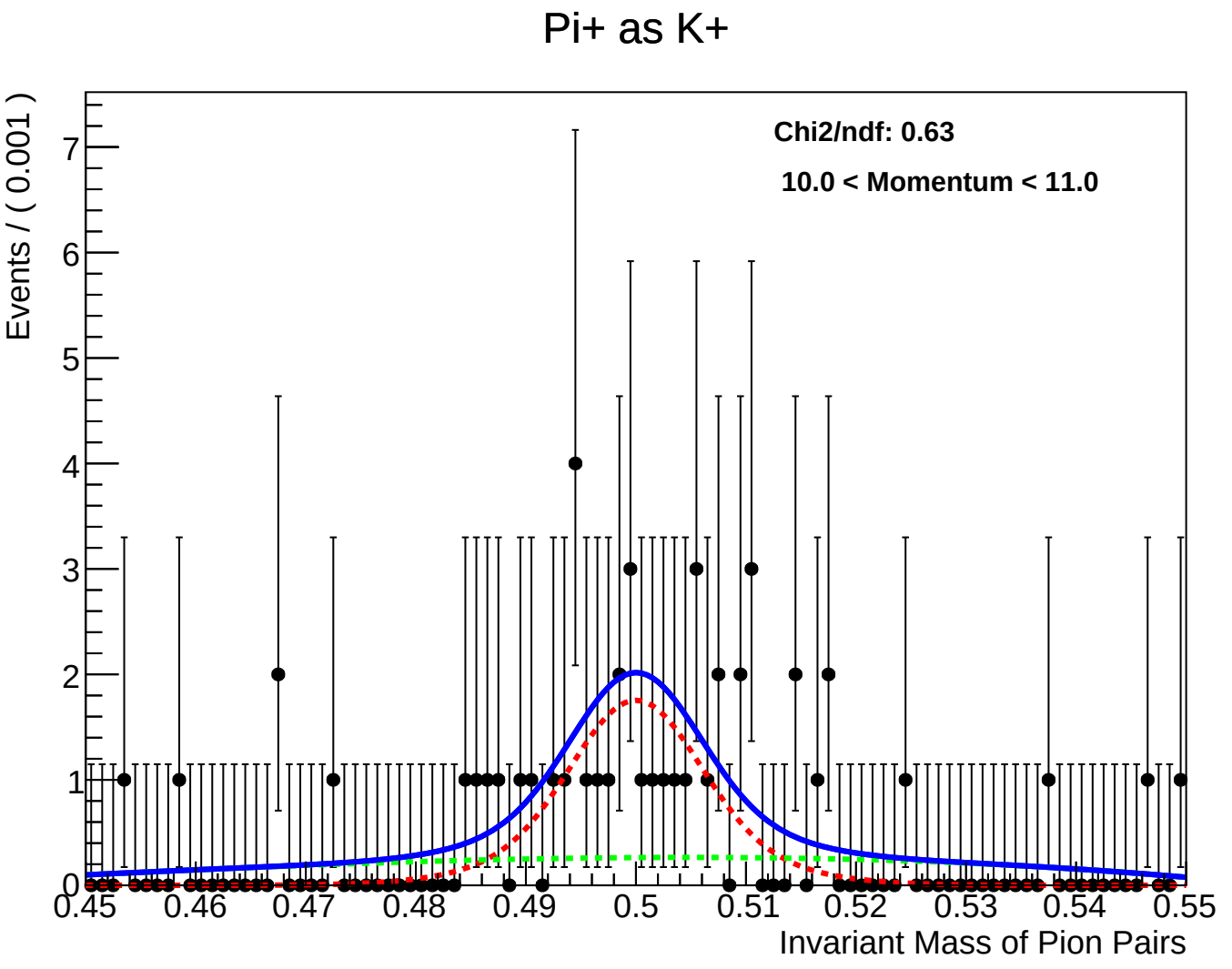

Pi+ as K+
Chi2/ndf: 0.58
40.0 < Momentum < 50.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
2
4
6
8
10
12
14
16
18
20
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

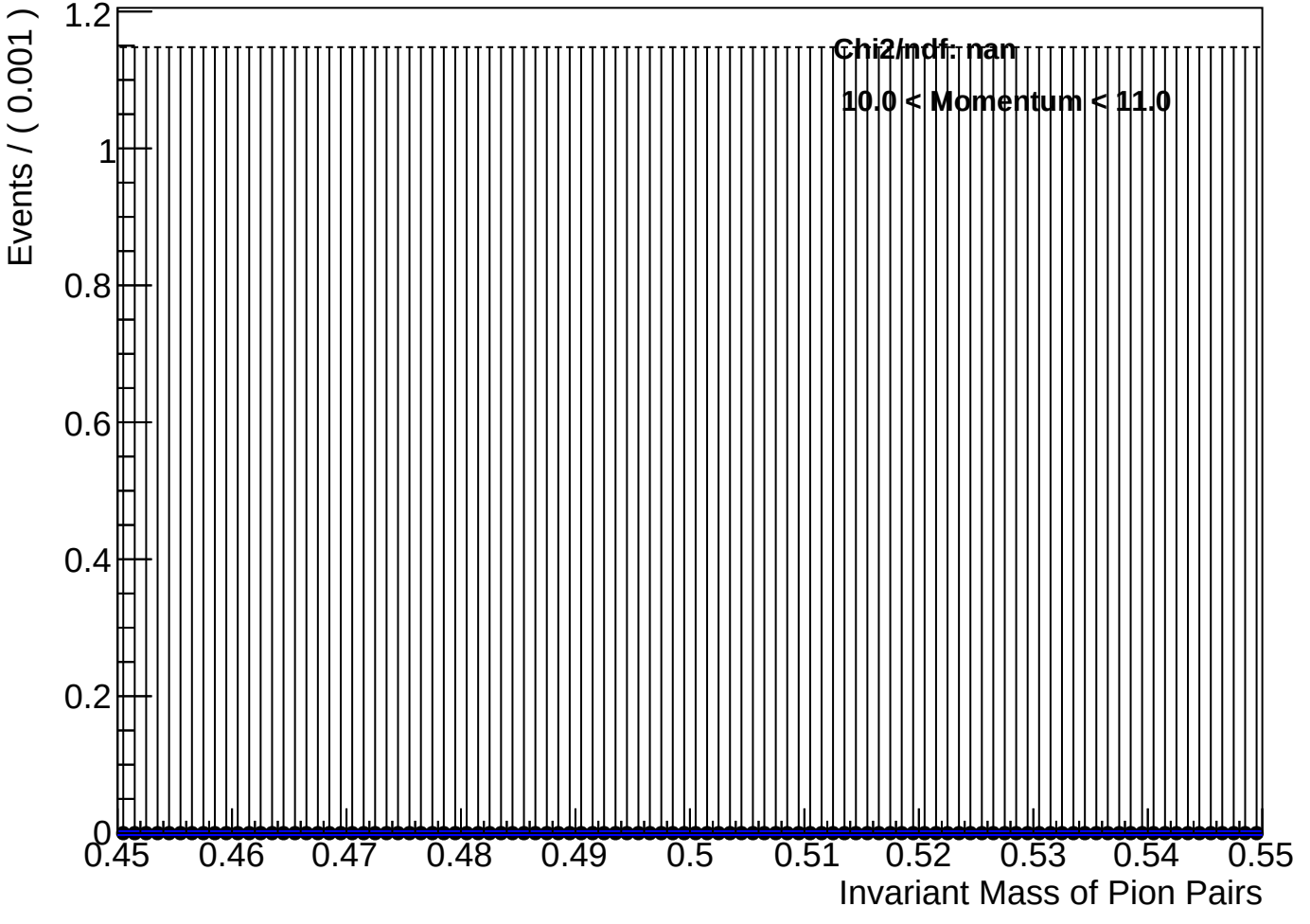

Pi+ as Proton
Chi2/ndf: 1.11
40.0 < Momentum < 50.0
Events / (0.001)
0
1
2
3
4
5
6
7
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

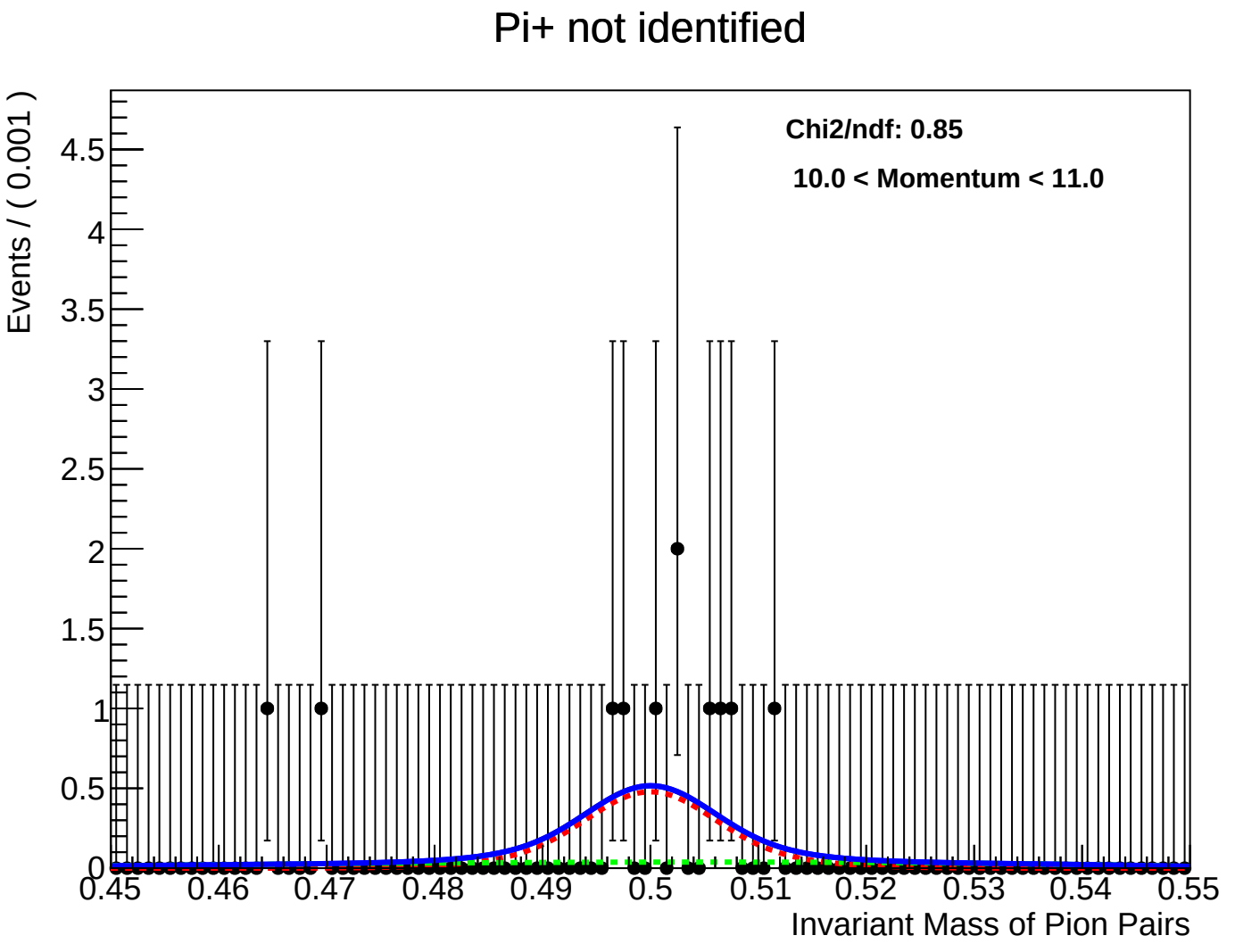

Pi+ not identified
Chi2/ndf: 1.20
40.0 < Momentum < 50.0
Events / (0.001)
0
0.5
1
1.5
2
2.5
3
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

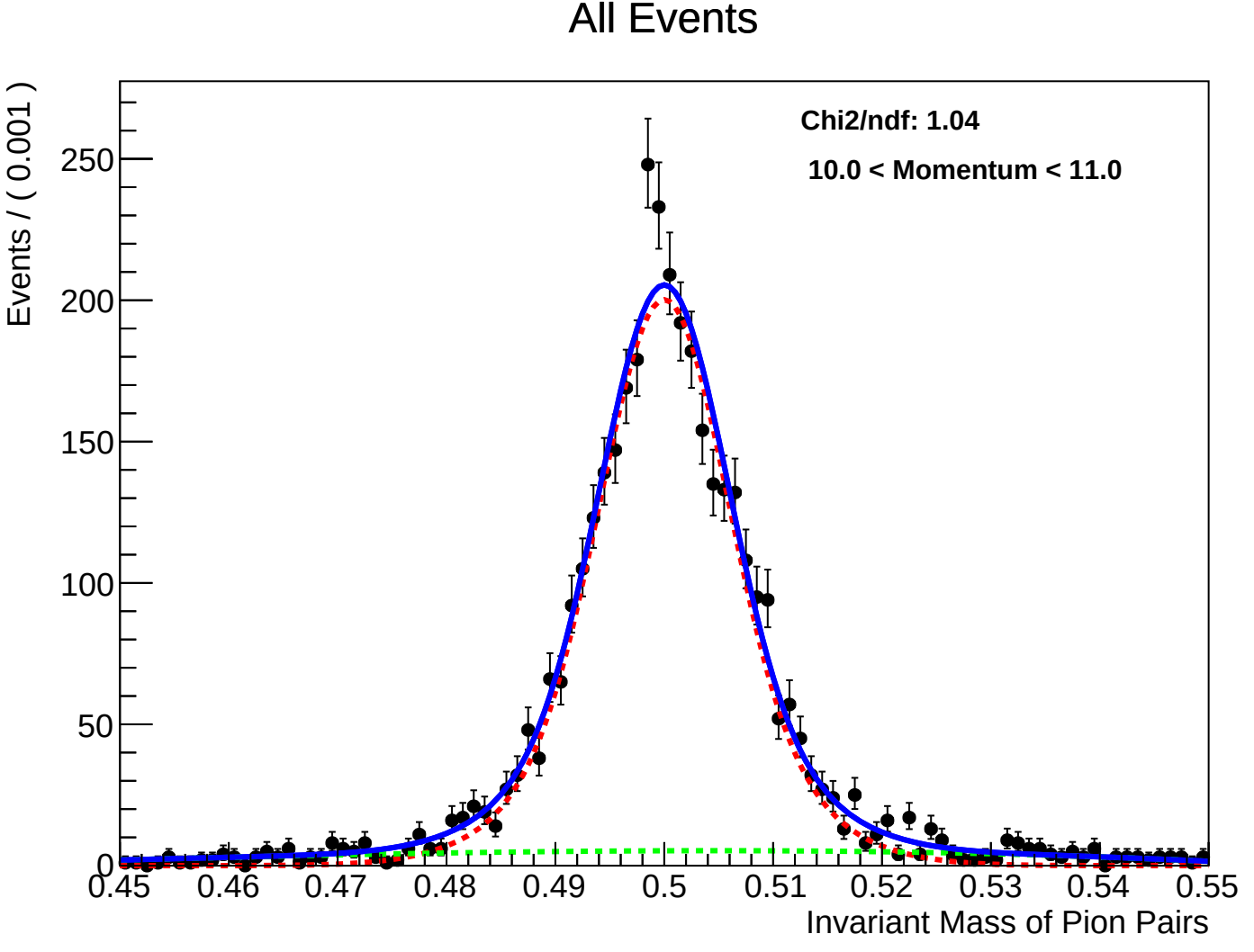

All Events
Chi2/ndf: 0.60
40.0 < Momentum < 50.0
Events / (0.001)
0
20
40
60
80
100
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

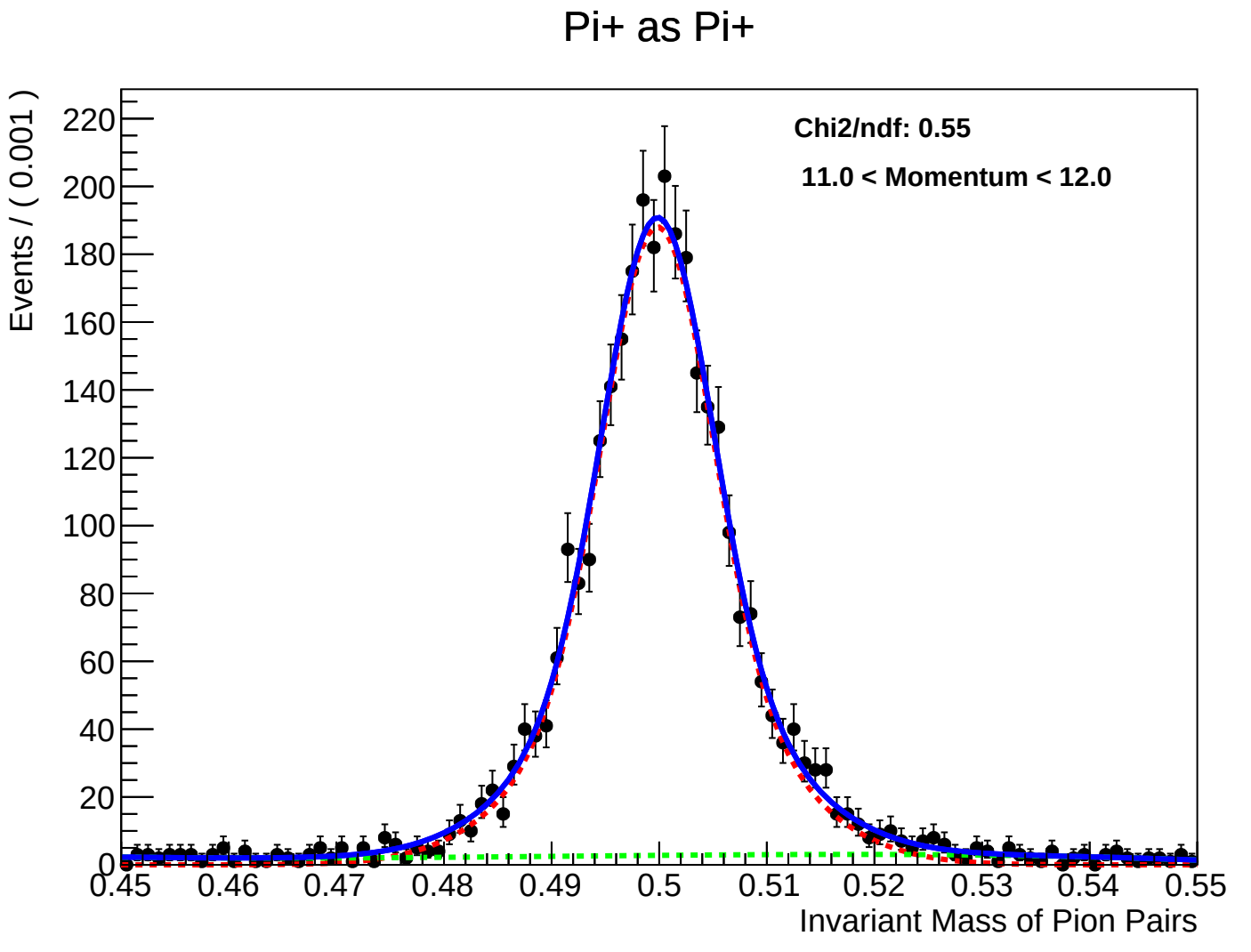

Pi+ as Pi+
Chi2/ndf: 0.94
10.0 < Momentum < 11.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
50
100
150
200
250
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

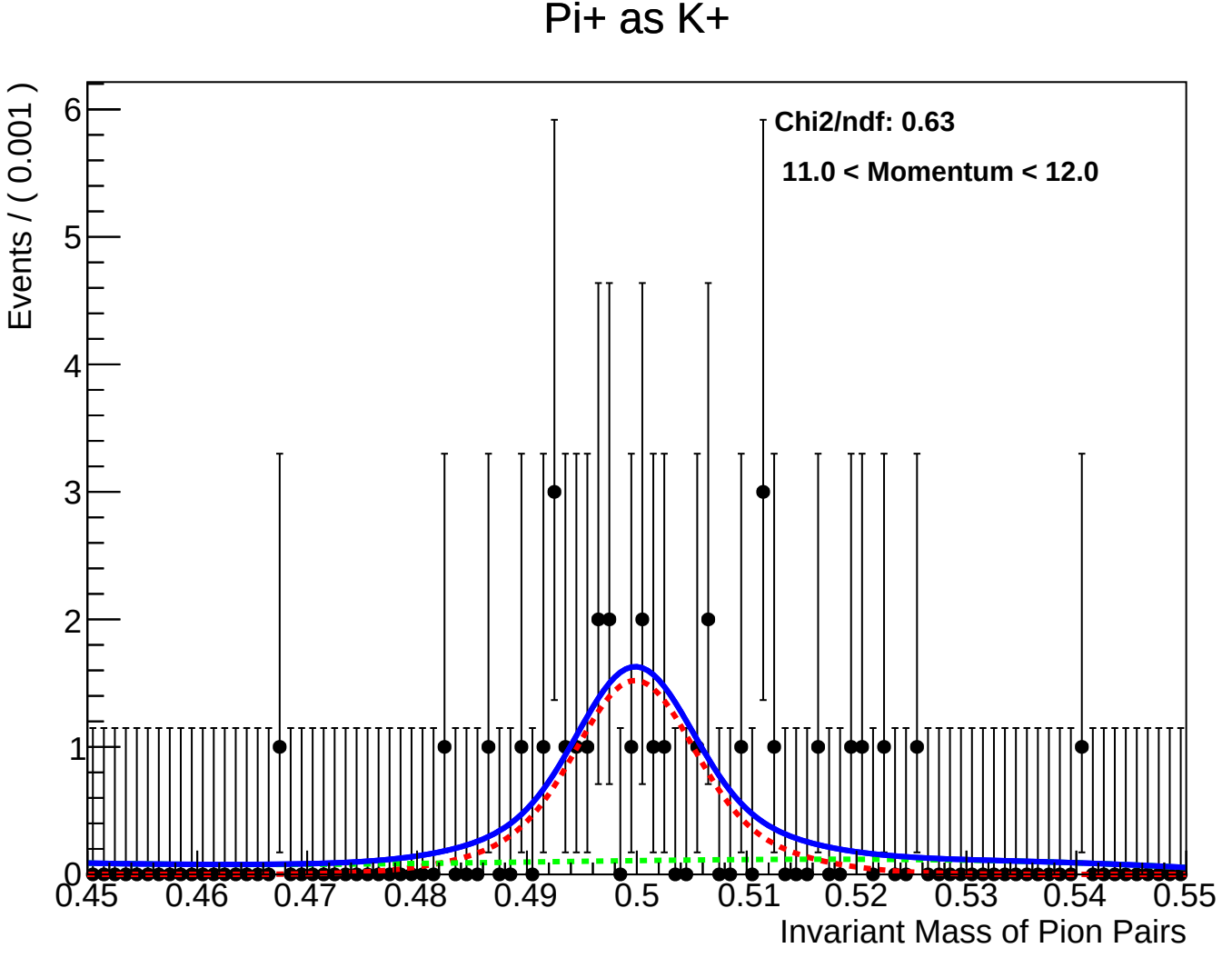

Pi+ as K+
Chi2/ndf: 0.63
10.0 < Momentum < 11.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
1
2
3
4
5
6
7
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

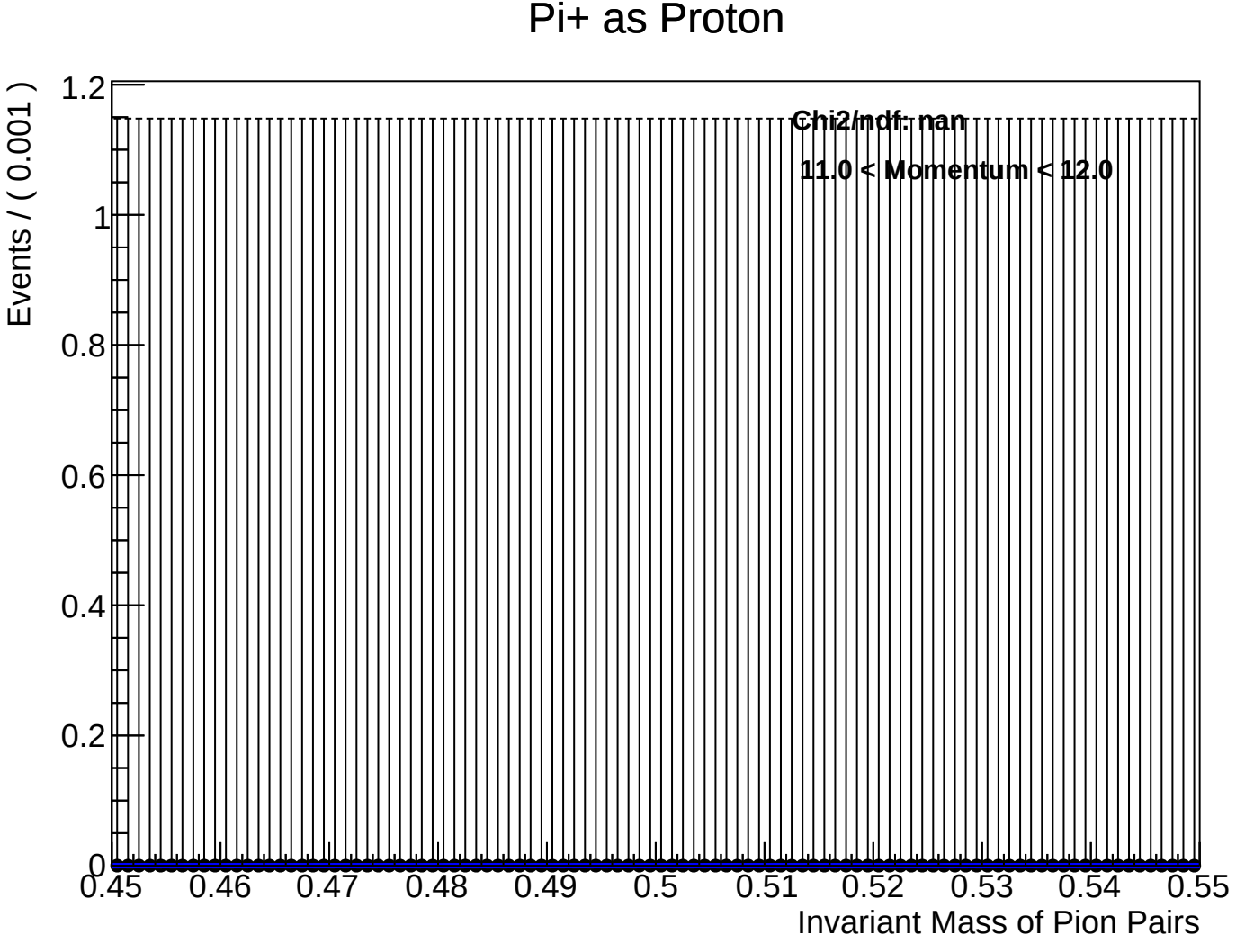

Pi+ as Proton
Chi2/ndf: nan
10.0 < Momentum < 11.0
Events / (0.001)
1.2
1
0.8
0.6
0.4
0.2
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

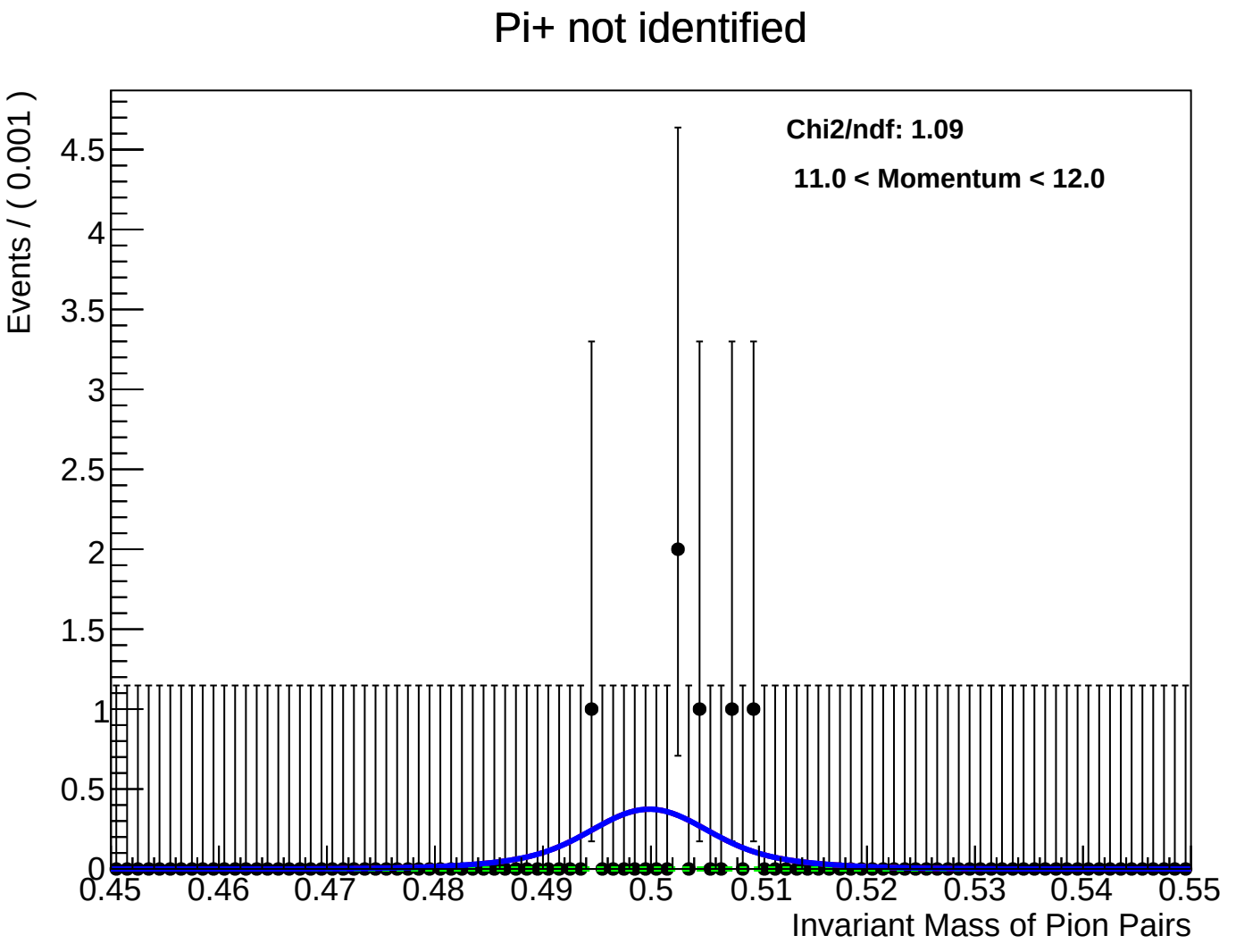

Pi+ not identified
Chi2/ndf: 0.85
10.0 < Momentum < 11.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

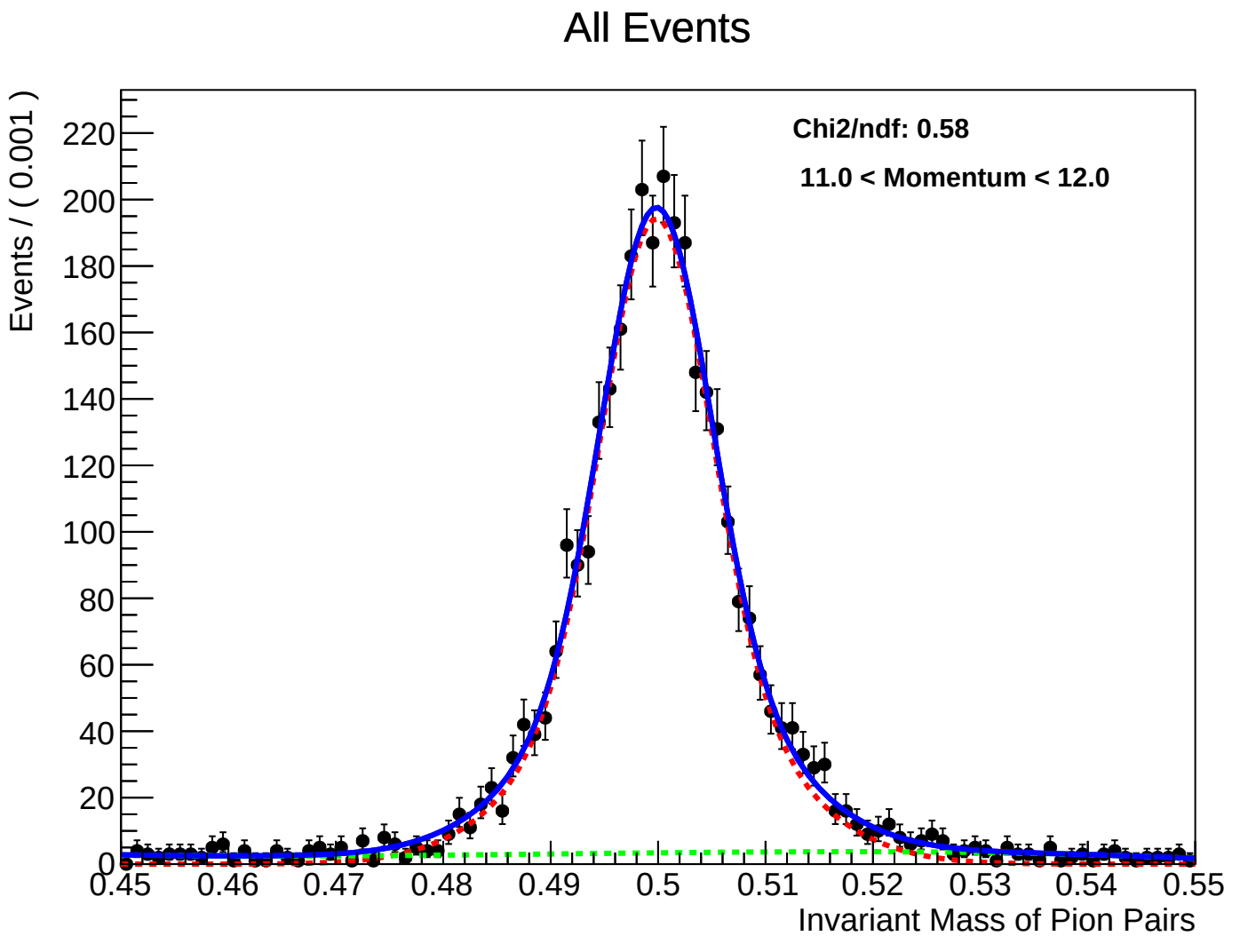

All Events
Chi2/ndf: 1.04
10.0 < Momentum < 11.0
Events / (0.001)
0
50
100
150
200
250
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

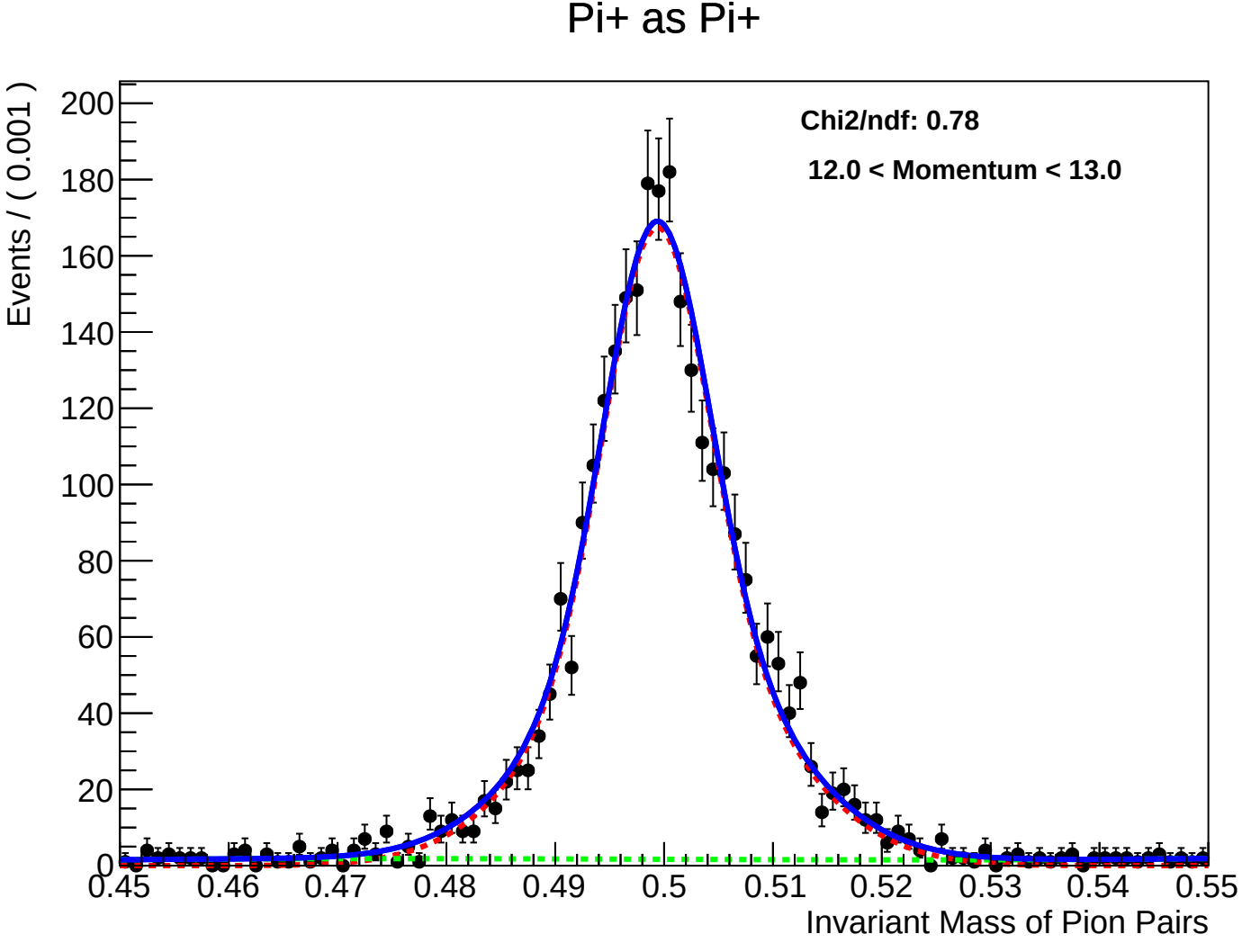

Pi+ as Pi+
Chi2/ndf: 0.55
11.0 < Momentum < 12.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
140
160
180
200
220
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

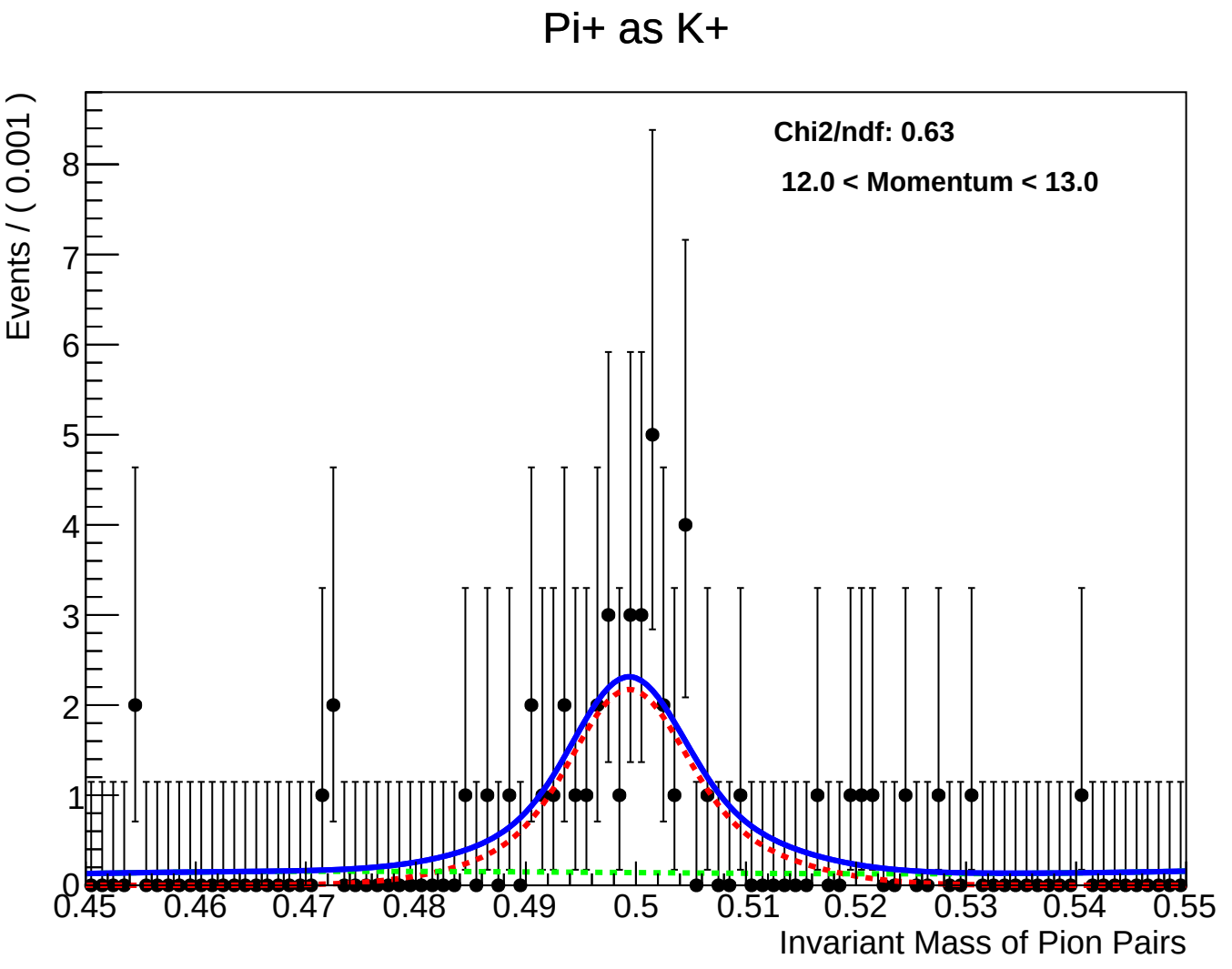

Pi+ as K+
Chi2/ndf: 0.63
11.0 < Momentum < 12.0
Events / (0.001)
0
1
2
3
4
5
6
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

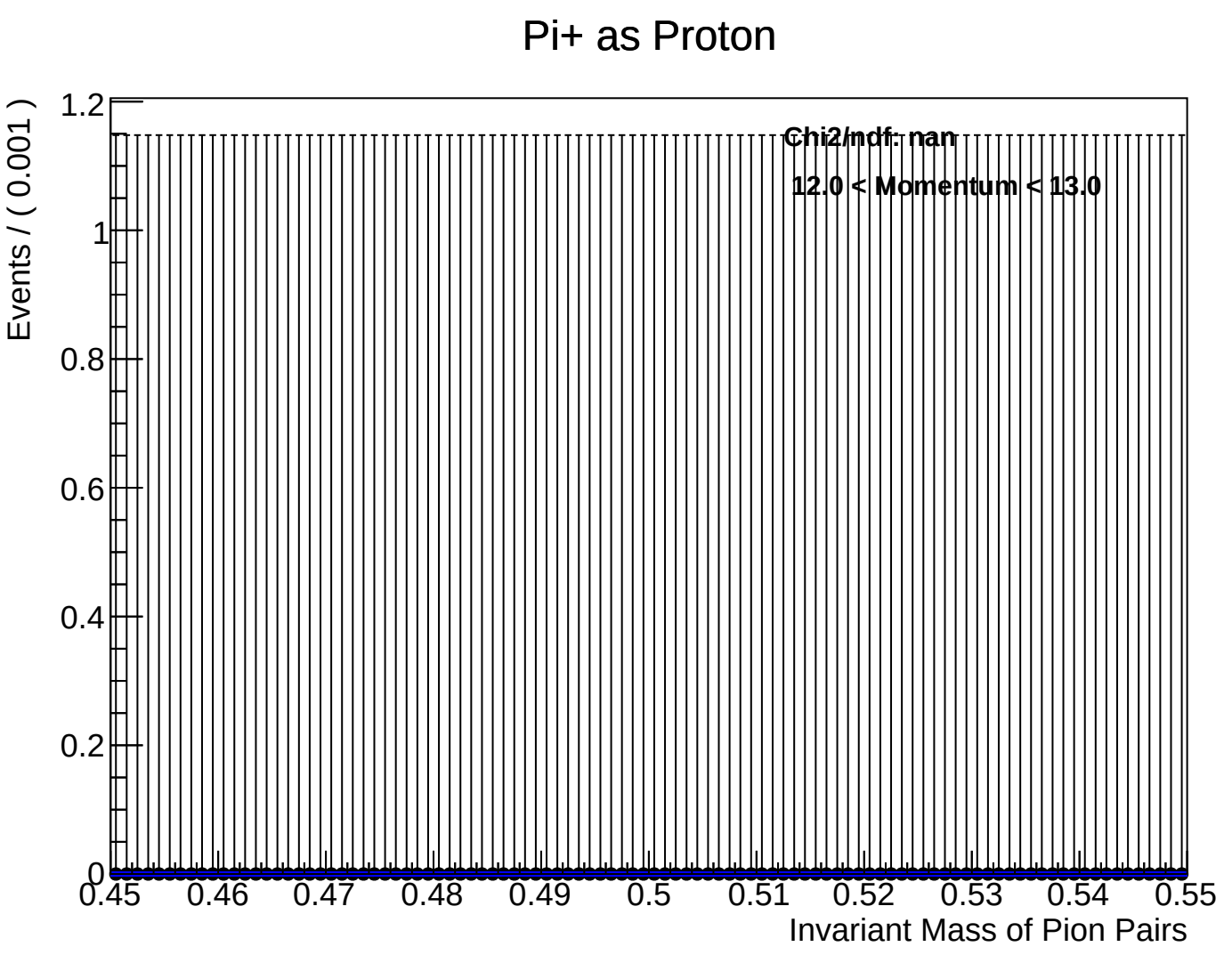

Pi+ as Proton
Chi2/ndf: nan
11.0 < Momentum < 12.0
Events / (0.001)
1.2
1
0.8
0.6
0.4
0.2
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

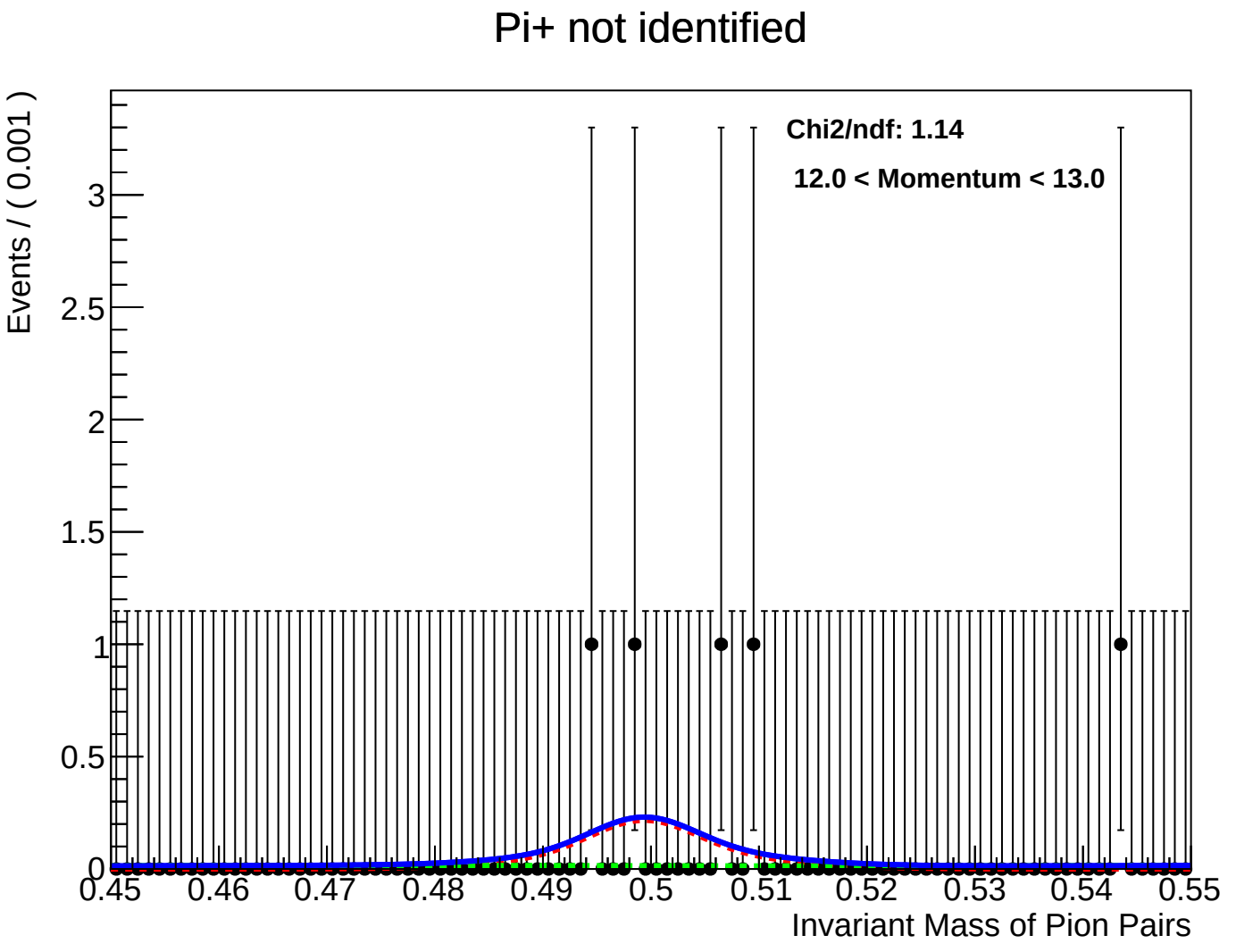

Pi+ not identified
Chi2/ndf: 1.09
11.0 < Momentum < 12.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55


All Events
Chi2/ndf: 0.58
11.0 < Momentum < 12.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
140
160
180
200
220
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

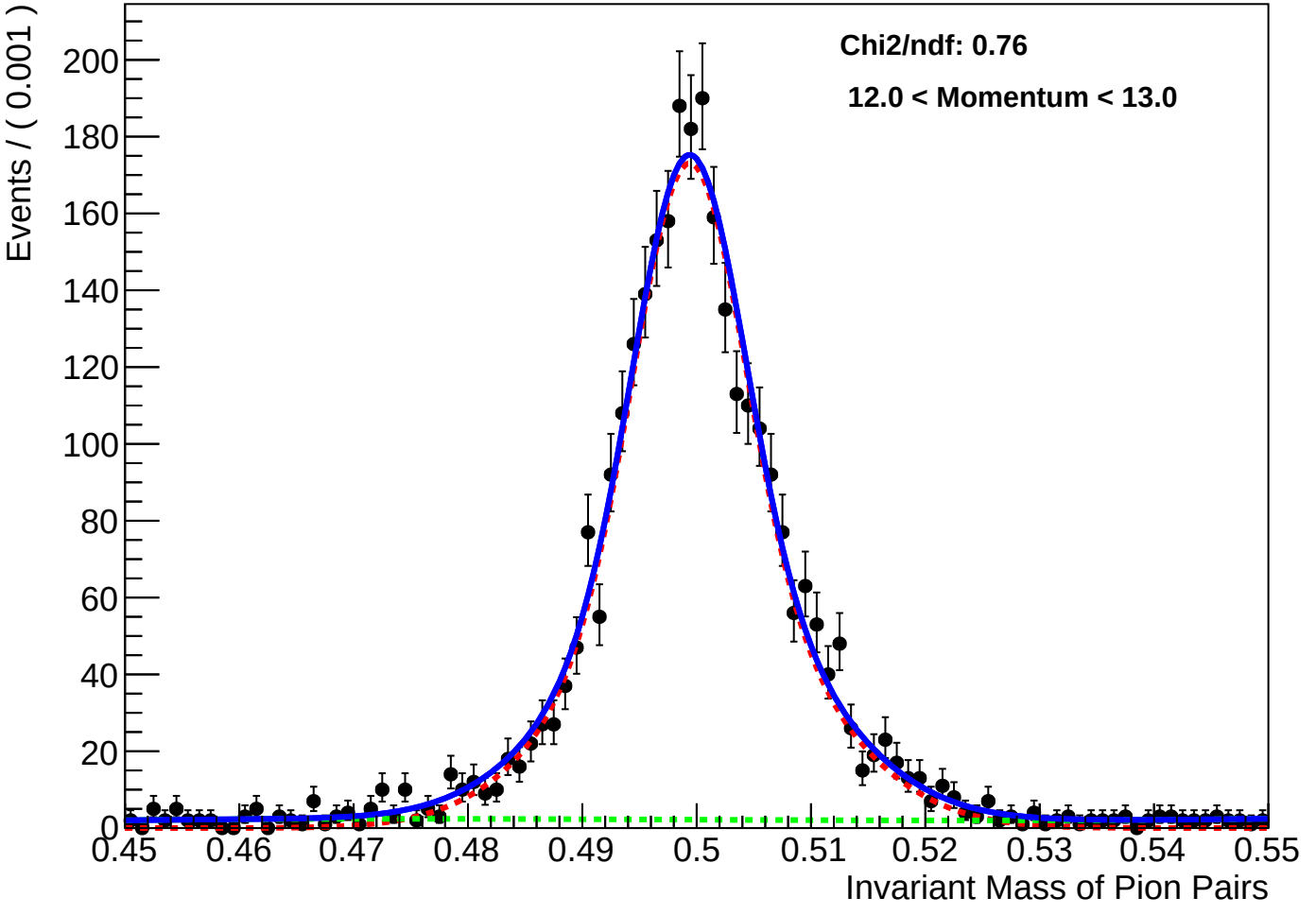

Pi+ as Pi+
Chi2/ndf: 0.78
12.0 < Momentum < 13.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
140
160
180
200
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

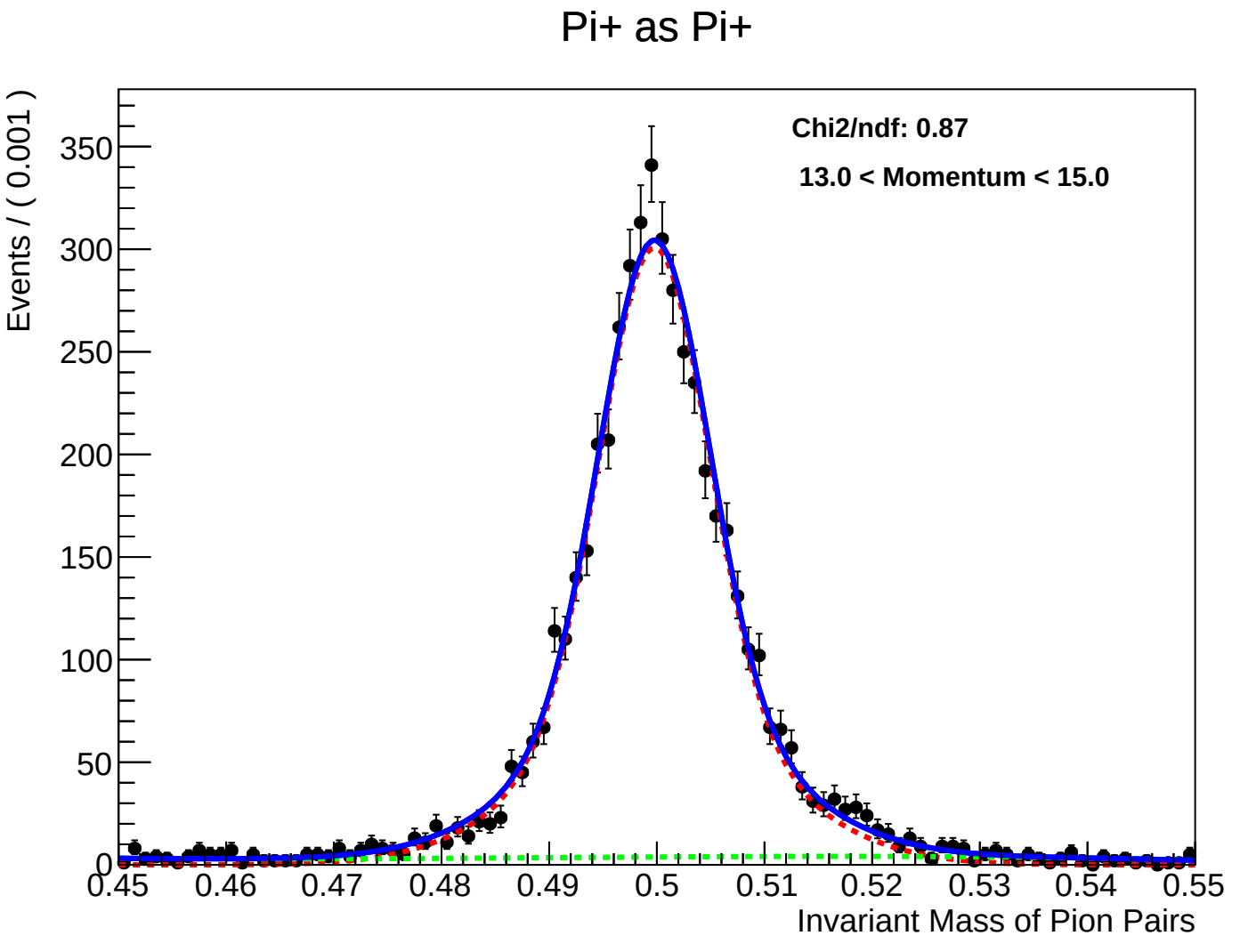

Pi+ as K+
Chi2/ndf: 0.63
12.0 < Momentum < 13.0
Events / (0.001)
0
1
2
3
4
5
6
7
8
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

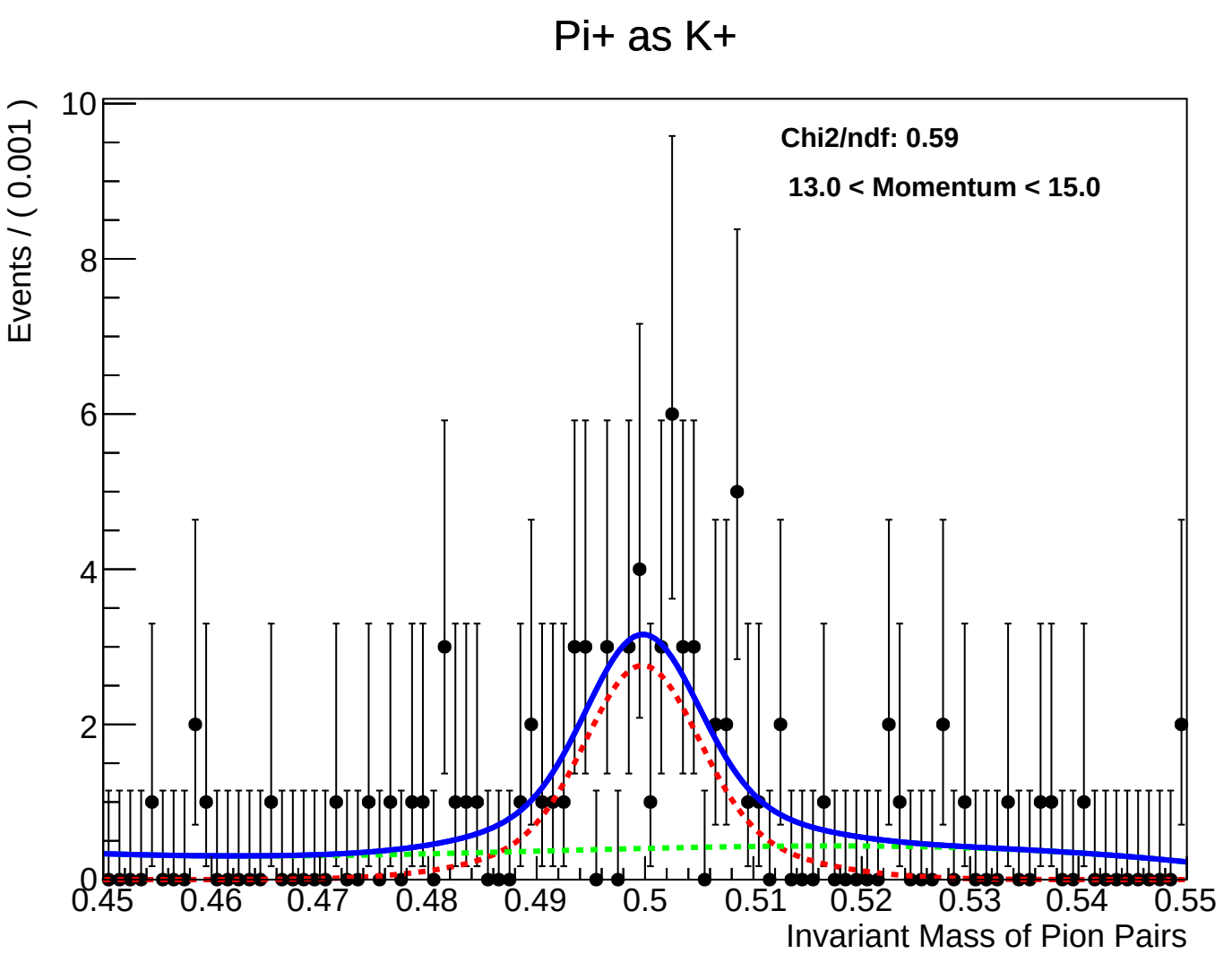

Pi+ as Proton
Chi2/ndf: nan
12.0 < Momentum < 13.0
Events / (0.001)
1.2
1
0.8
0.6
0.4
0.2
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

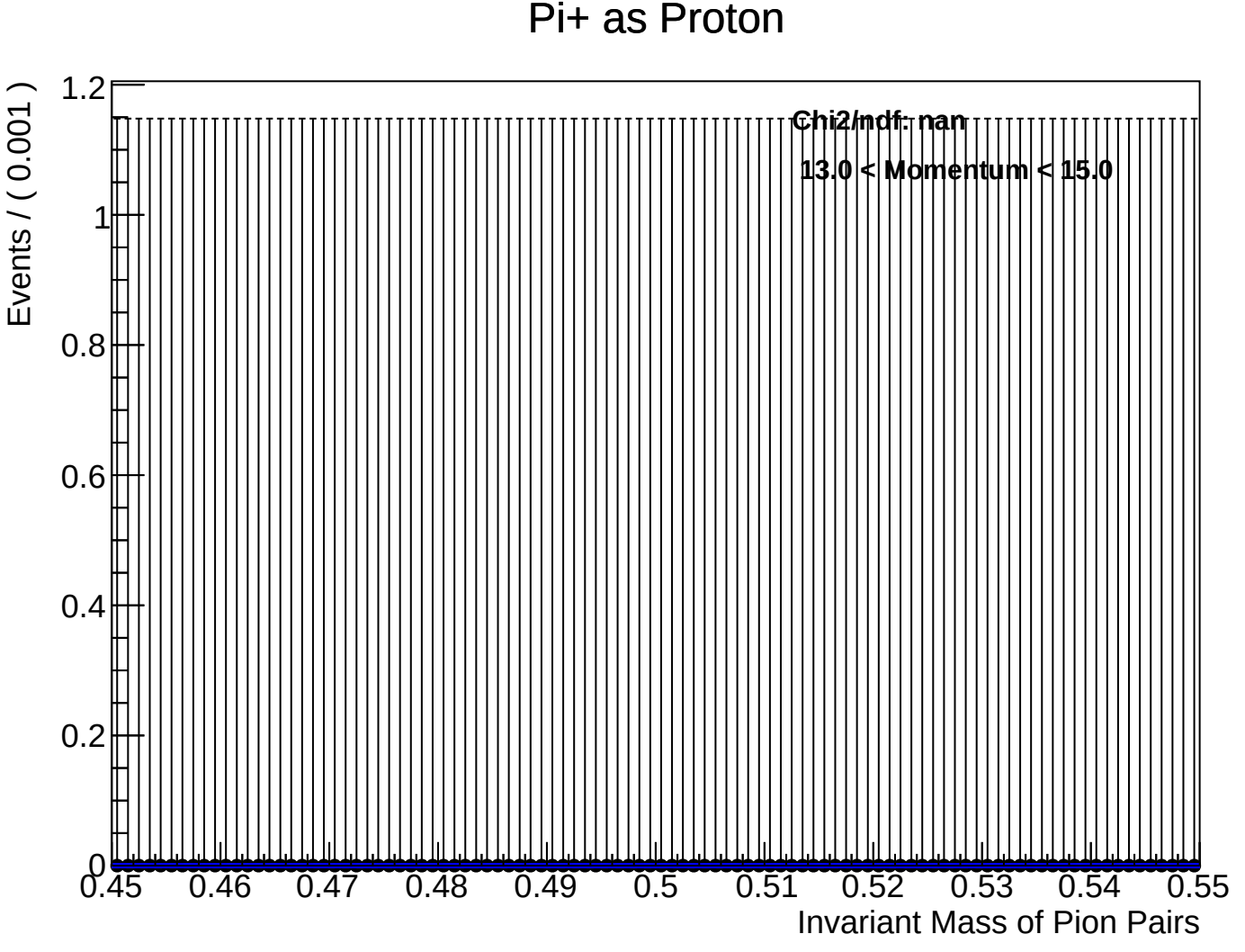

Pi+ not identified
Chi2/ndf: 1.14
12.0 < Momentum < 13.0
Events / (0.001)
0
0.5
1
1.5
2
2.5
3
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

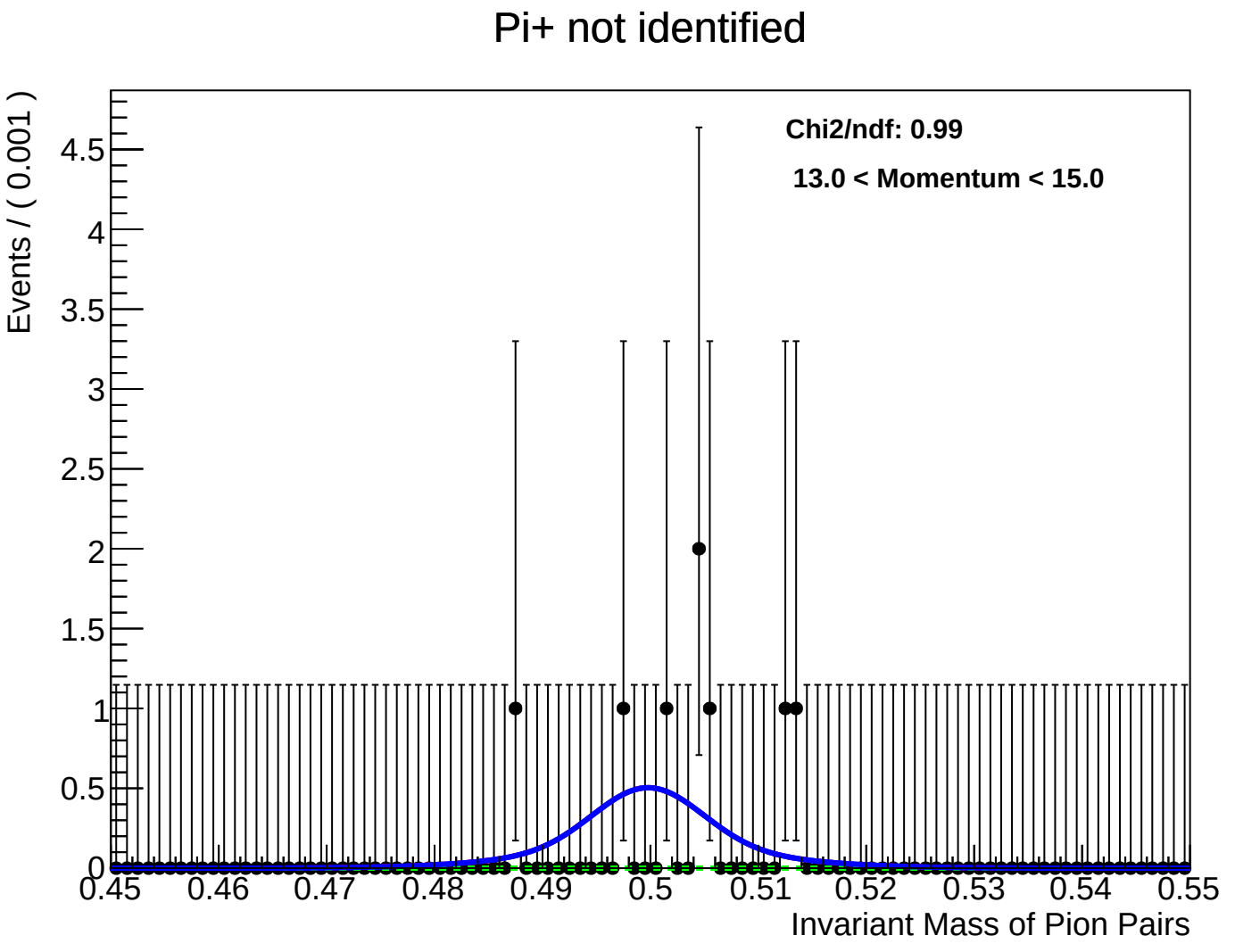
All Events

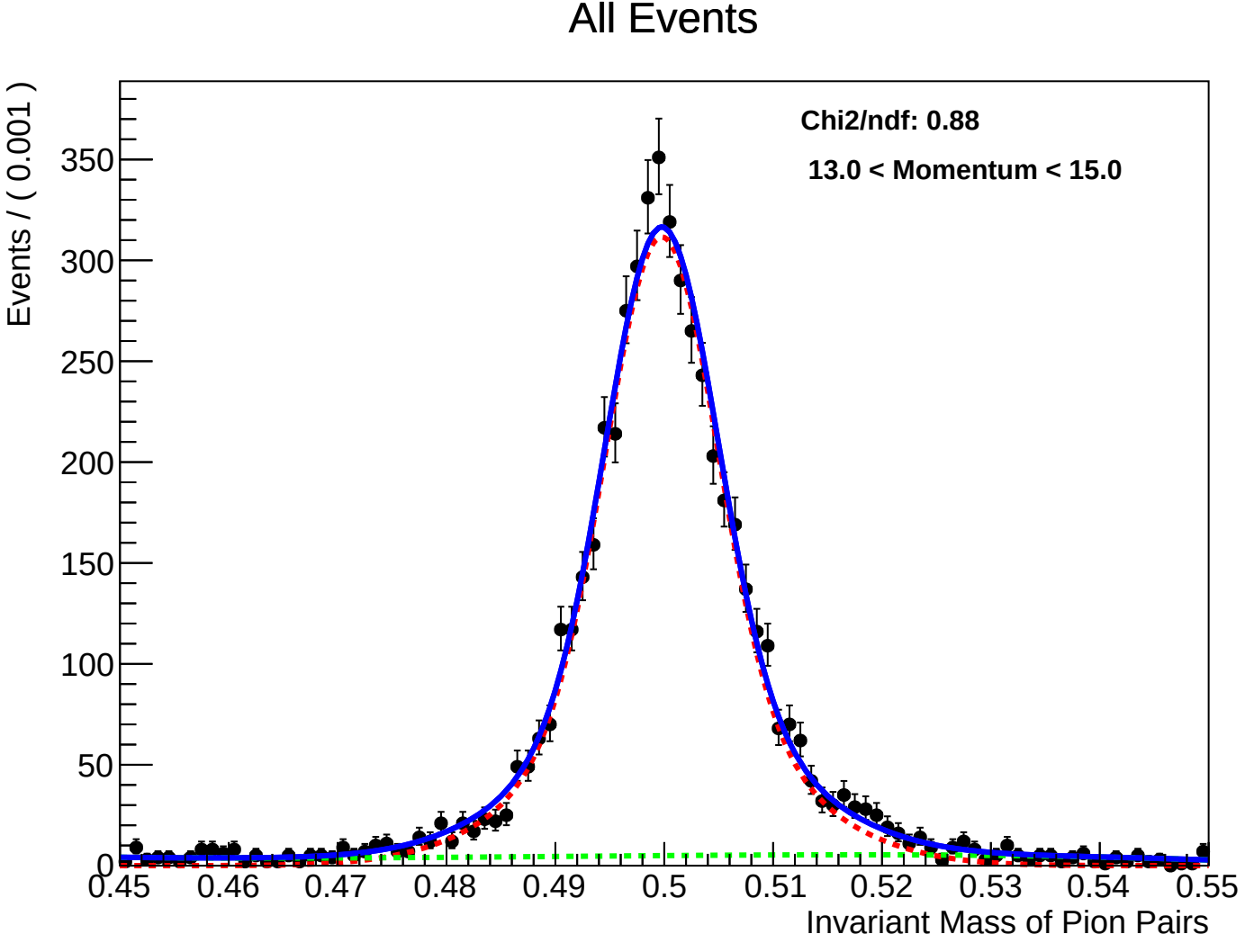

Chi2/ndf: 0.76
12.0 < Momentum < 13.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
140
160
180
200
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

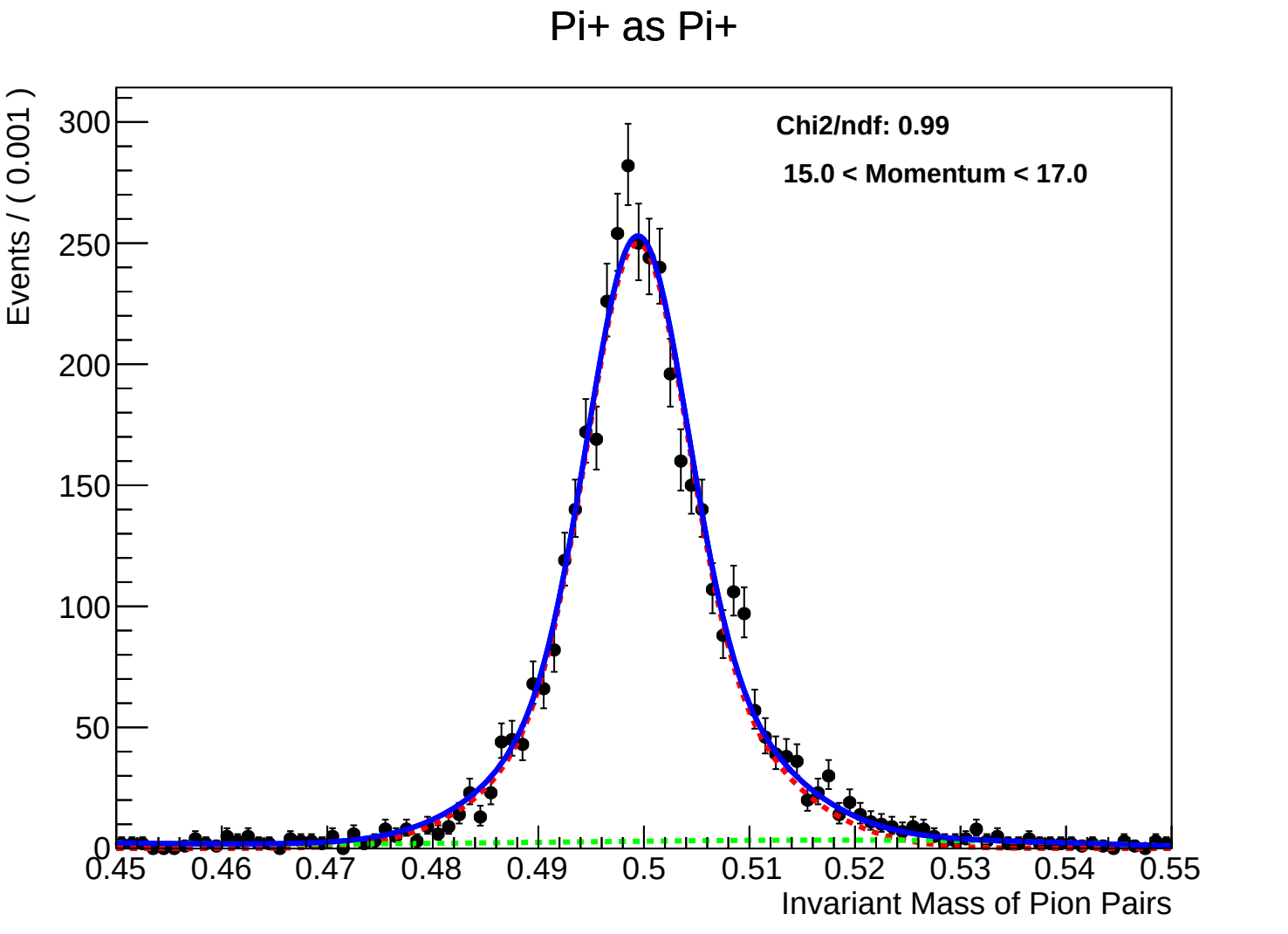

Pi+ as Pi+
Chi2/ndf: 0.87
13.0 < Momentum < 15.0
Events / (0.001)
0
50
100
150
200
250
300
350
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

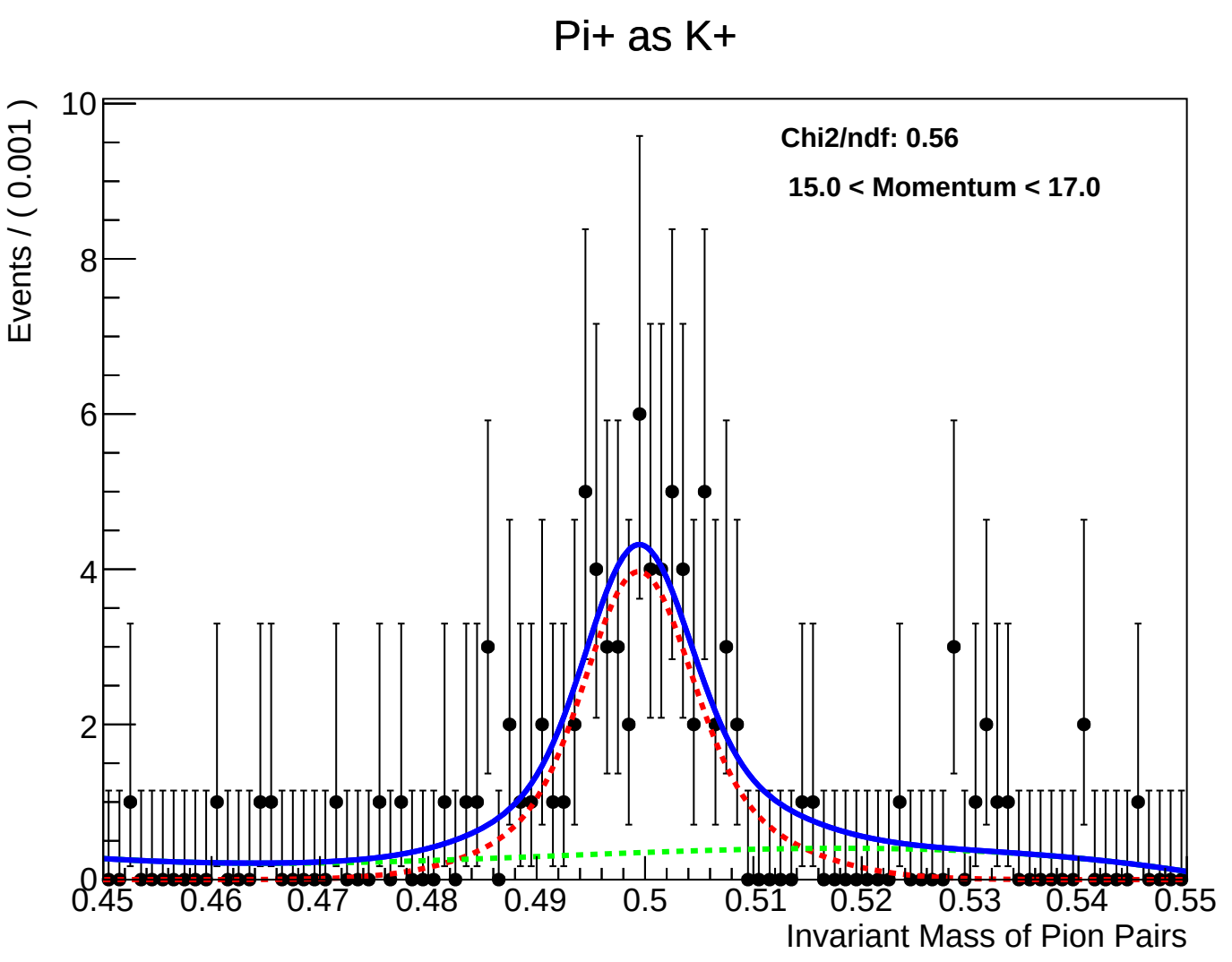

Pi+ as K+
Chi2/ndf: 0.59
13.0 < Momentum < 15.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
2
4
6
8
10
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

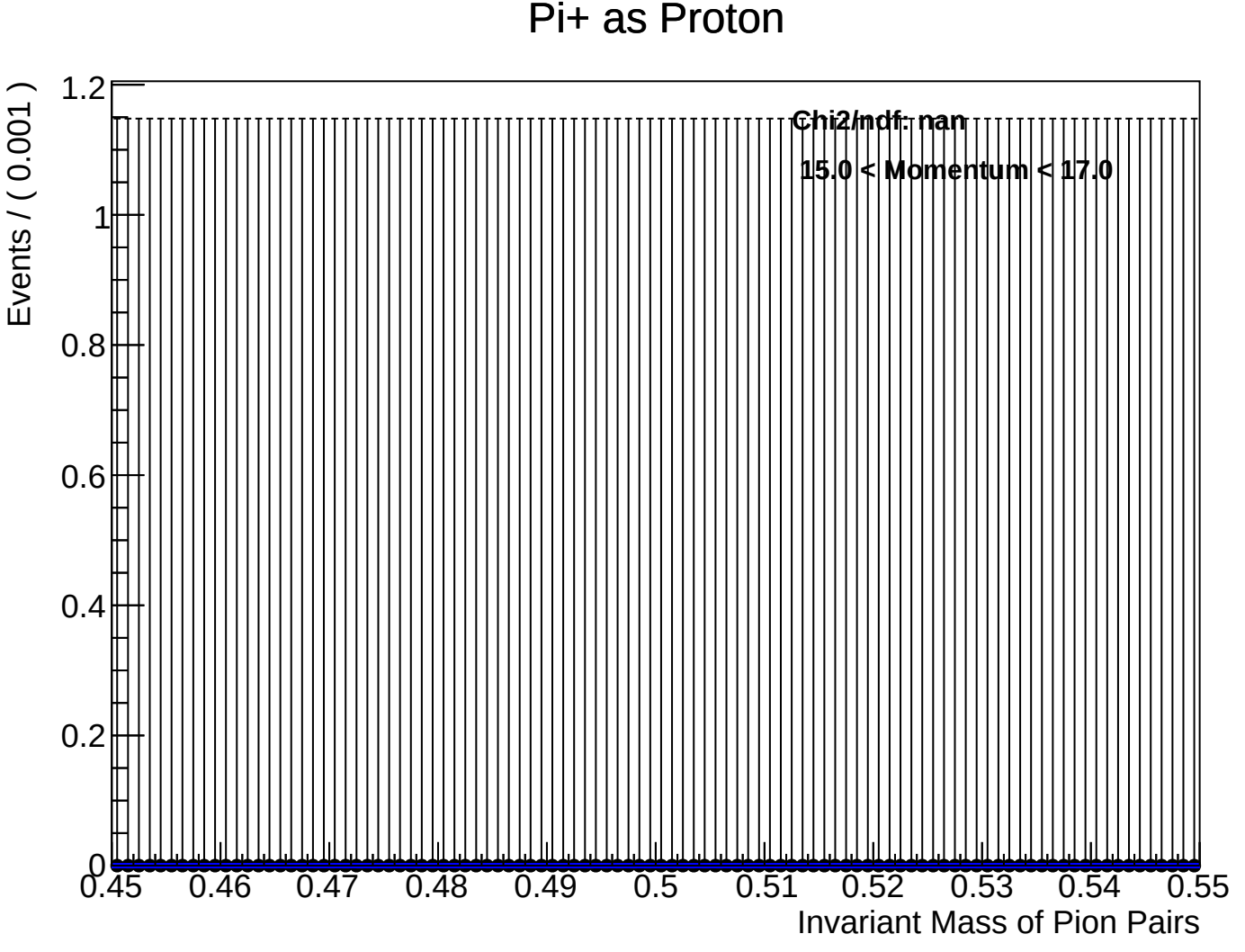

Pi+ as Proton
Chi2/ndf: nan
13.0 < Momentum < 15.0
Events / (0.001)
1.2
1
0.8
0.6
0.4
0.2
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

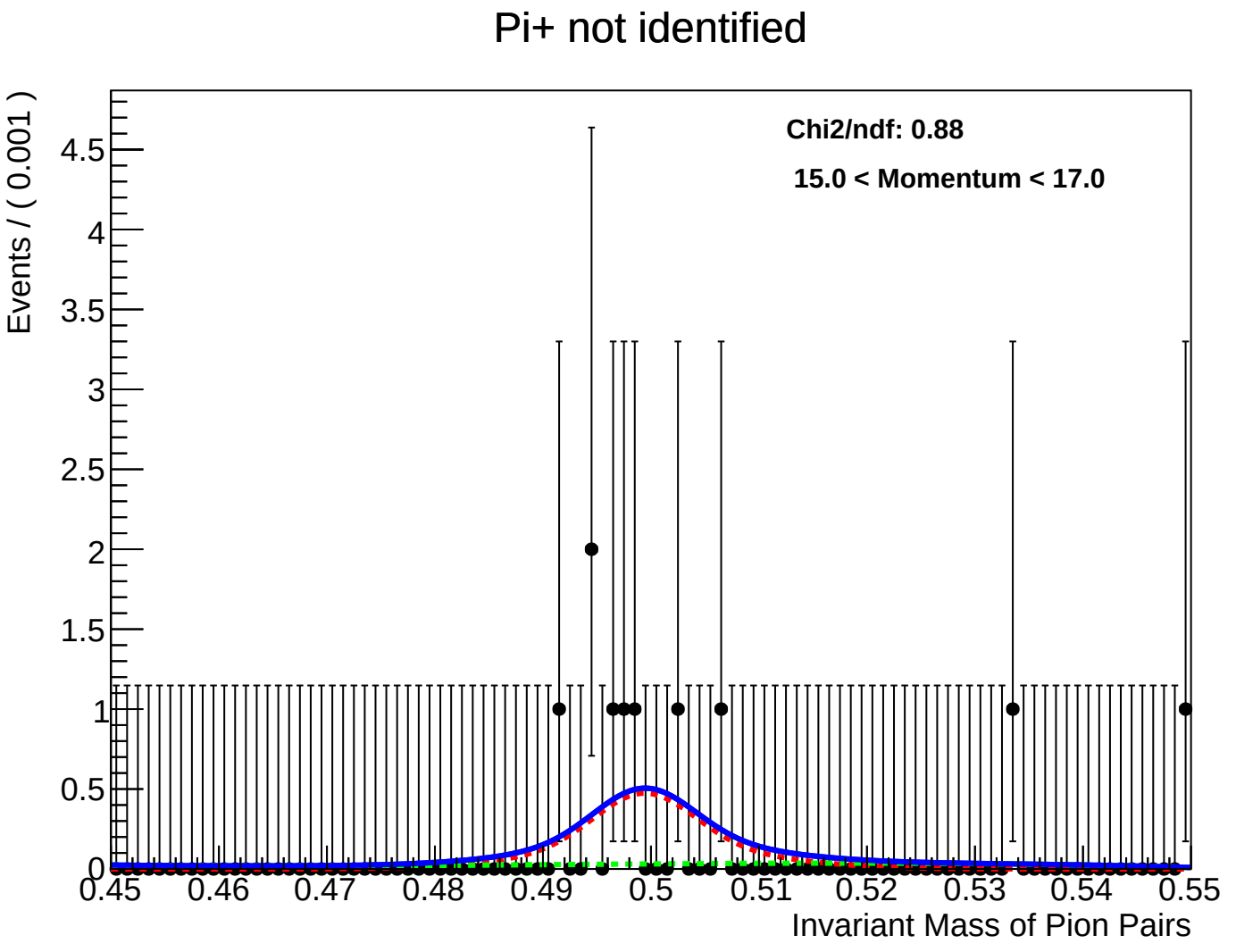

Pi+ not identified
Chi2/ndf: 0.99
13.0 < Momentum < 15.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

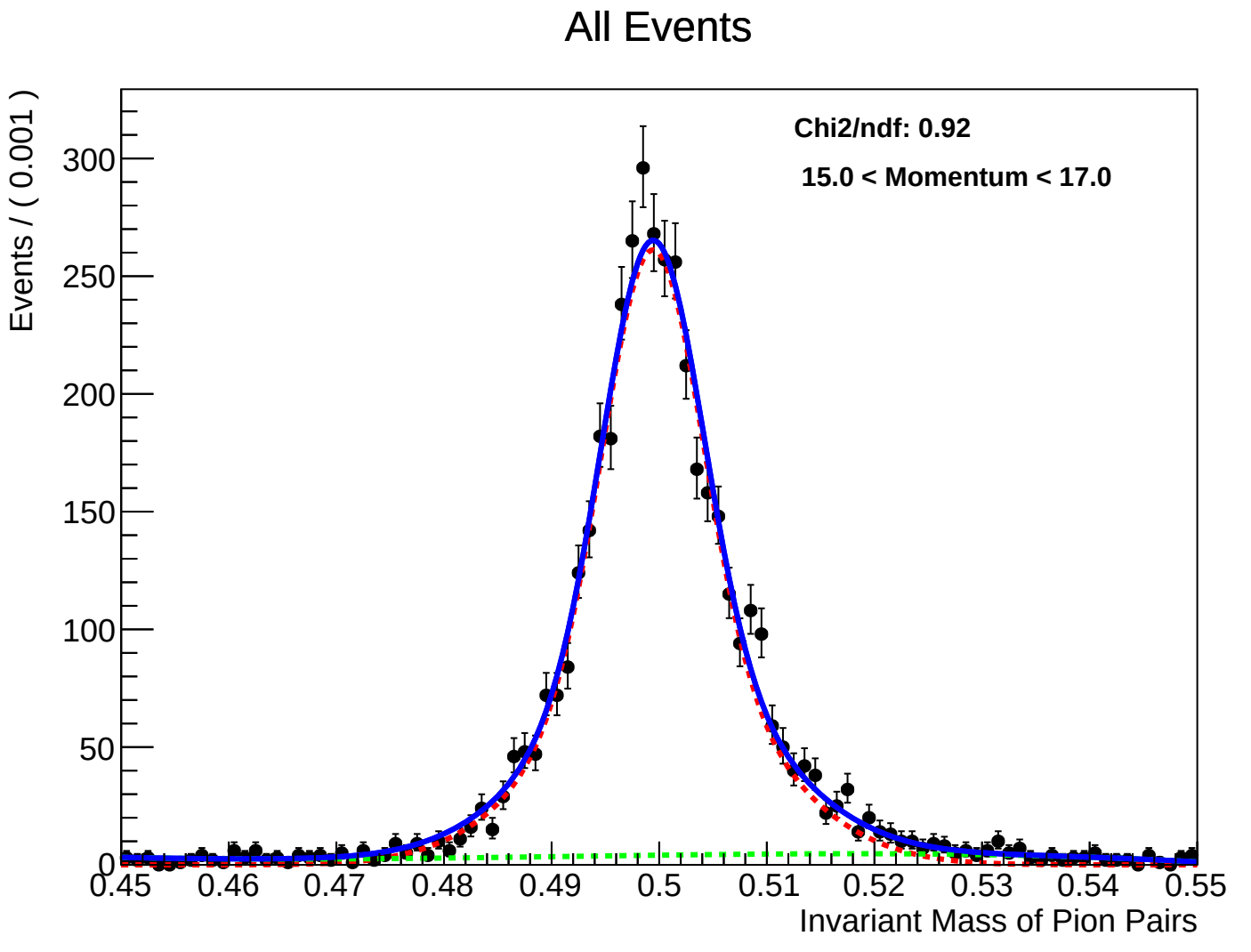

All Events
Chi2/ndf: 0.88
13.0 < Momentum < 15.0
Events / (0.001)
0
50
100
150
200
250
300
350
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

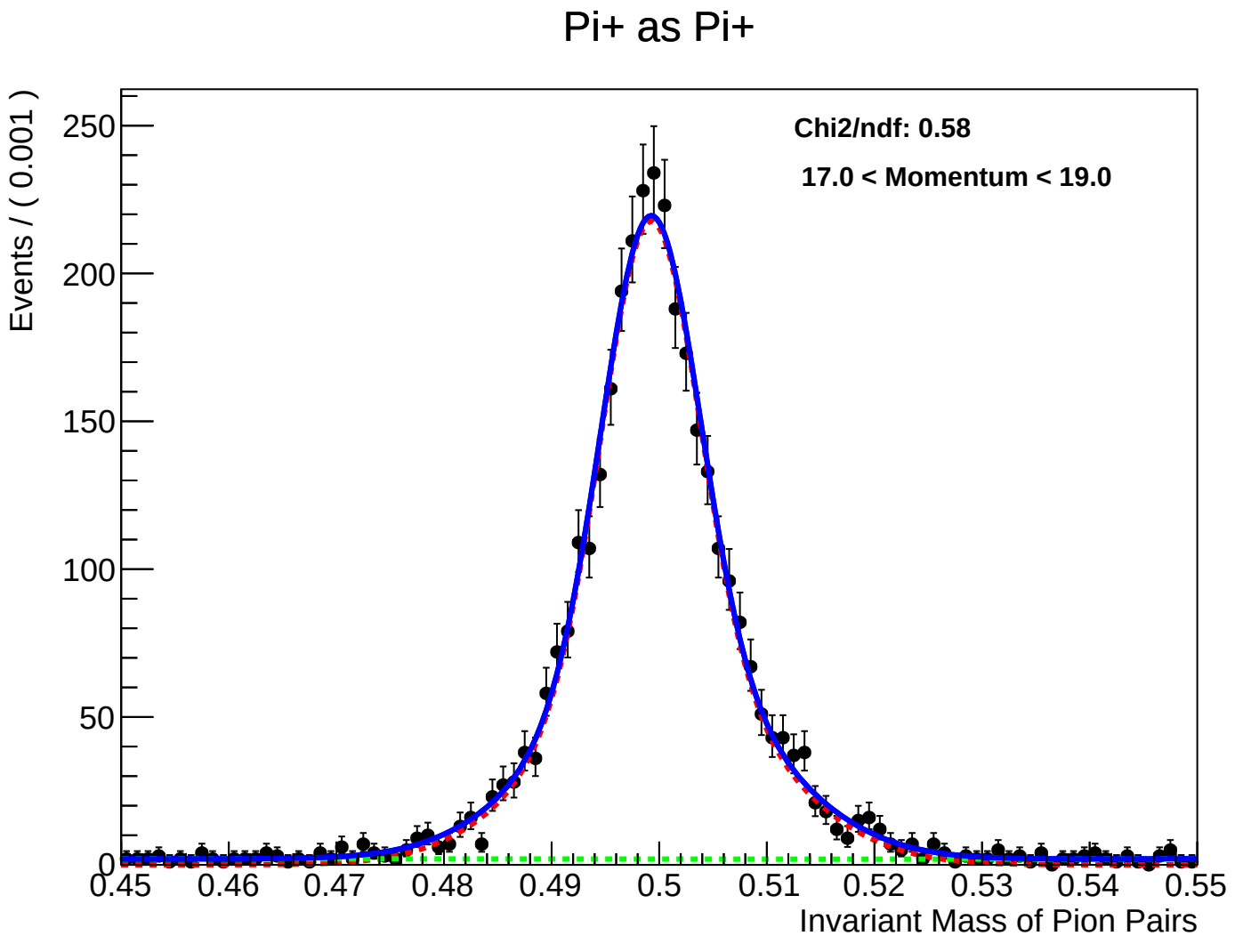

Pi+ as Pi+
Chi2/ndf: 0.99
15.0 < Momentum < 17.0
Events / (0.001)
300
250
200
150
100
50
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

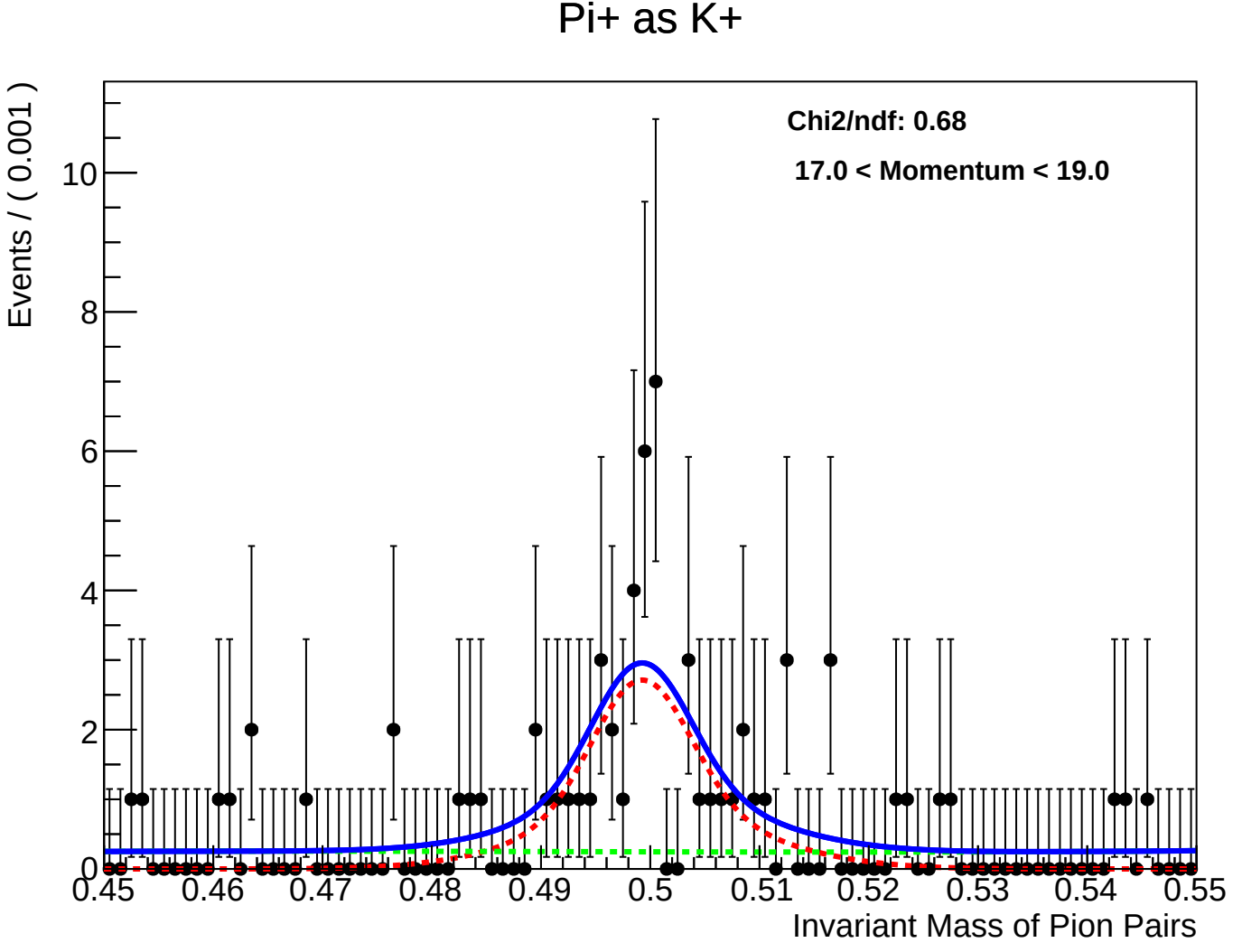

Pi+ as K+
Chi2/ndf: 0.56
15.0 < Momentum < 17.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
2
4
6
8
10
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

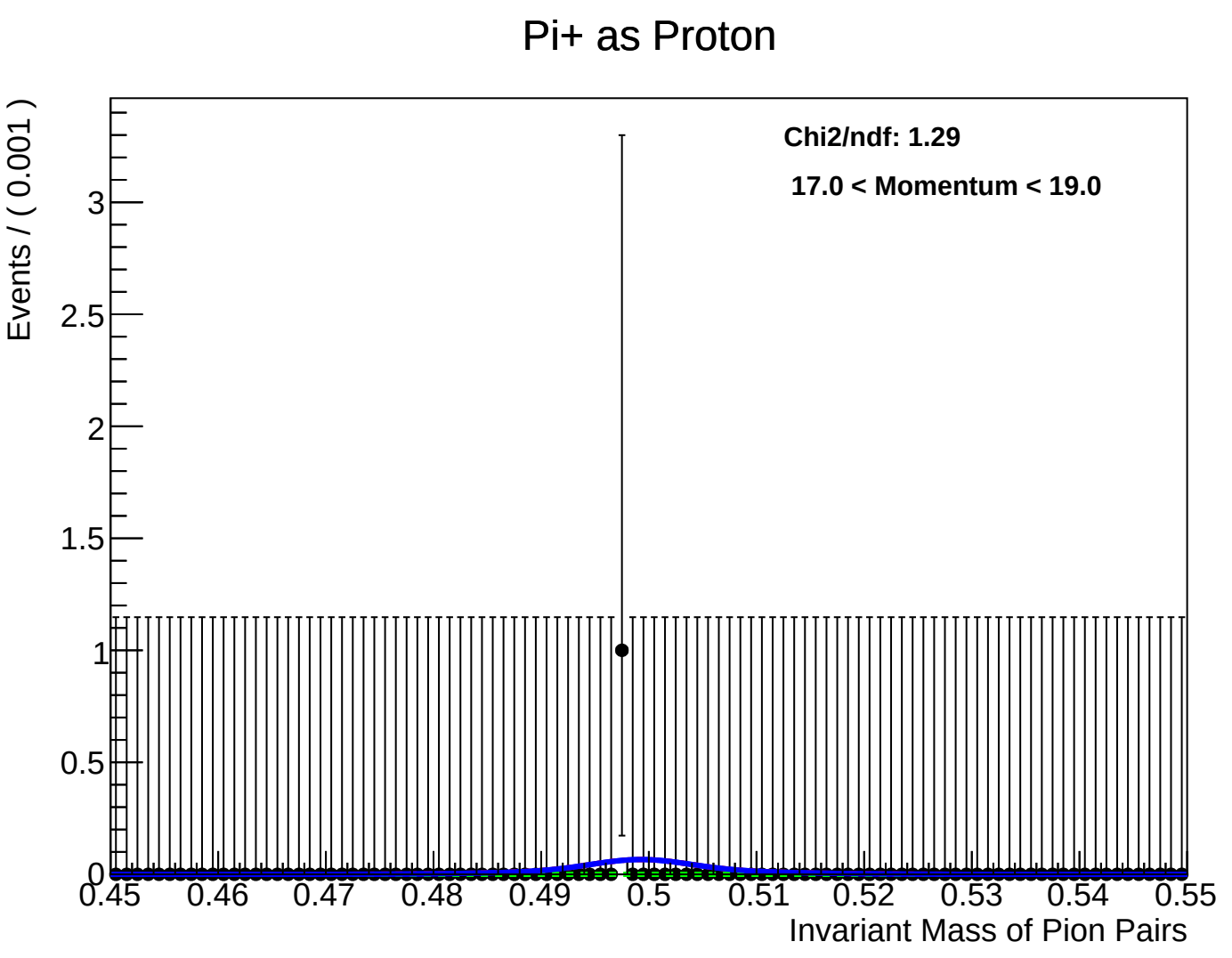

Pi+ as Proton
Chi2/ndf: nan
15.0 < Momentum < 17.0
Events / (0.001)
1.2
1
0.8
0.6
0.4
0.2
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

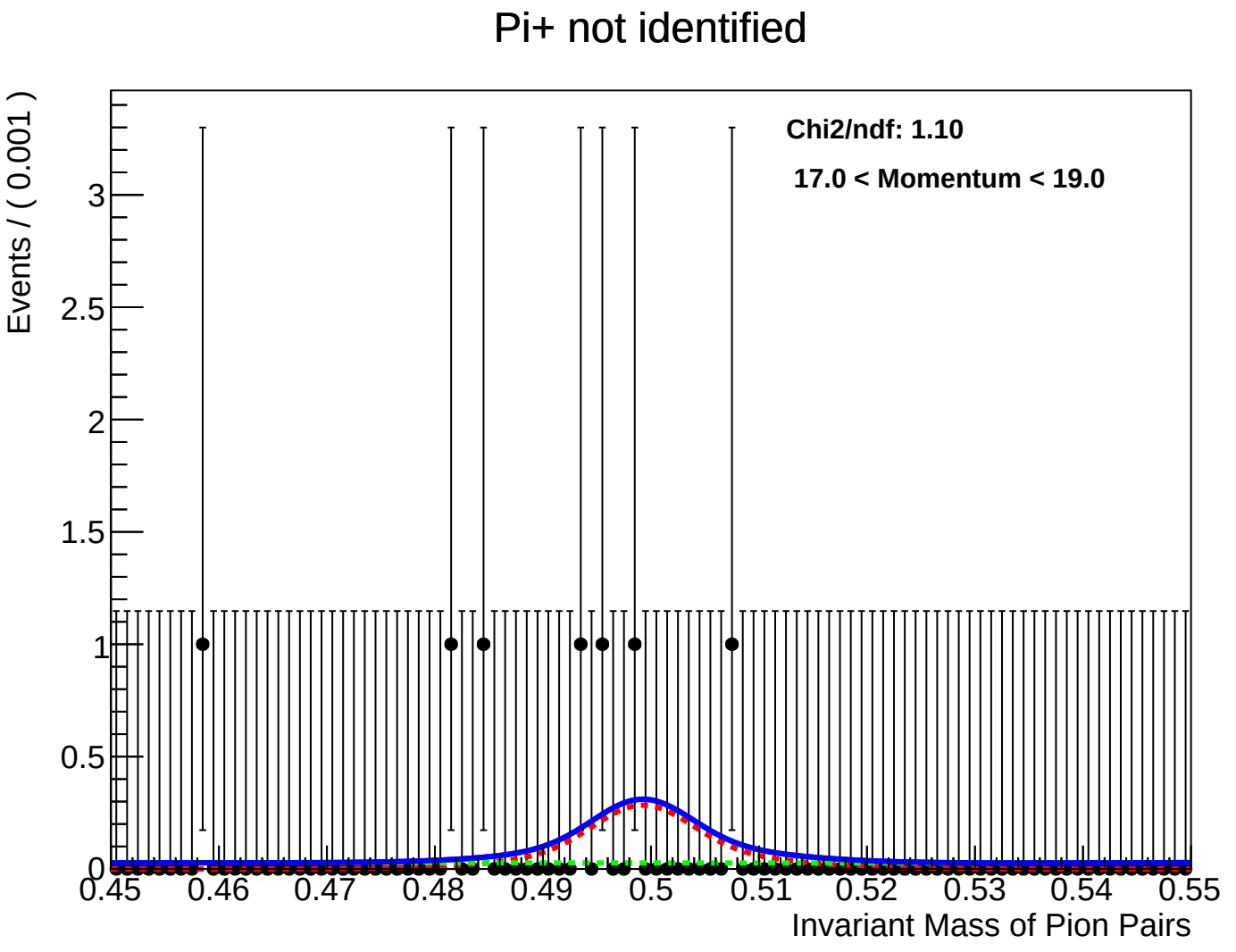

Pi+ not identified
Chi2/ndf: 0.88
15.0 < Momentum < 17.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

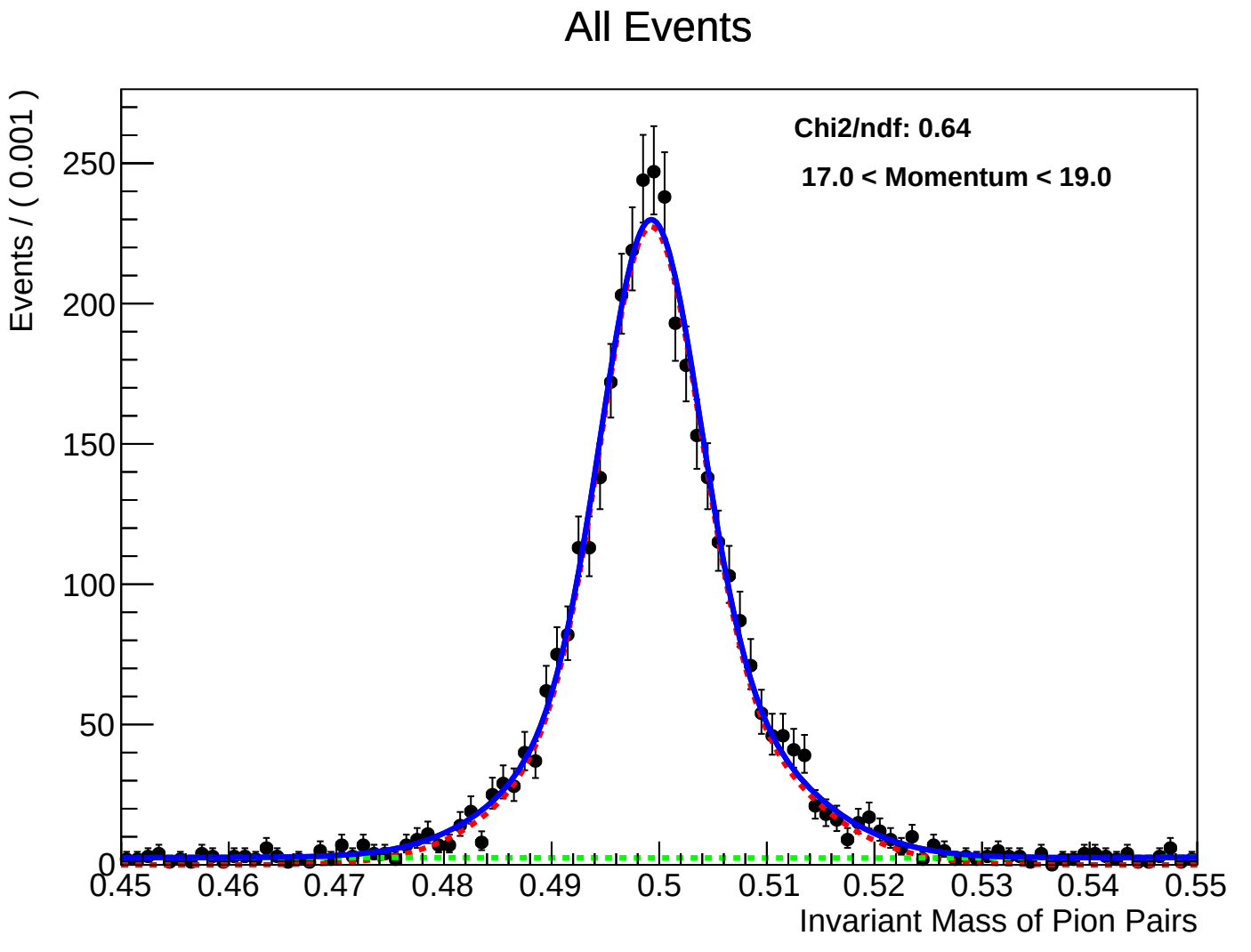

All Events
Chi2/ndf: 0.92
15.0 < Momentum < 17.0
Events / (0.001)
0
50
100
150
200
250
300
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

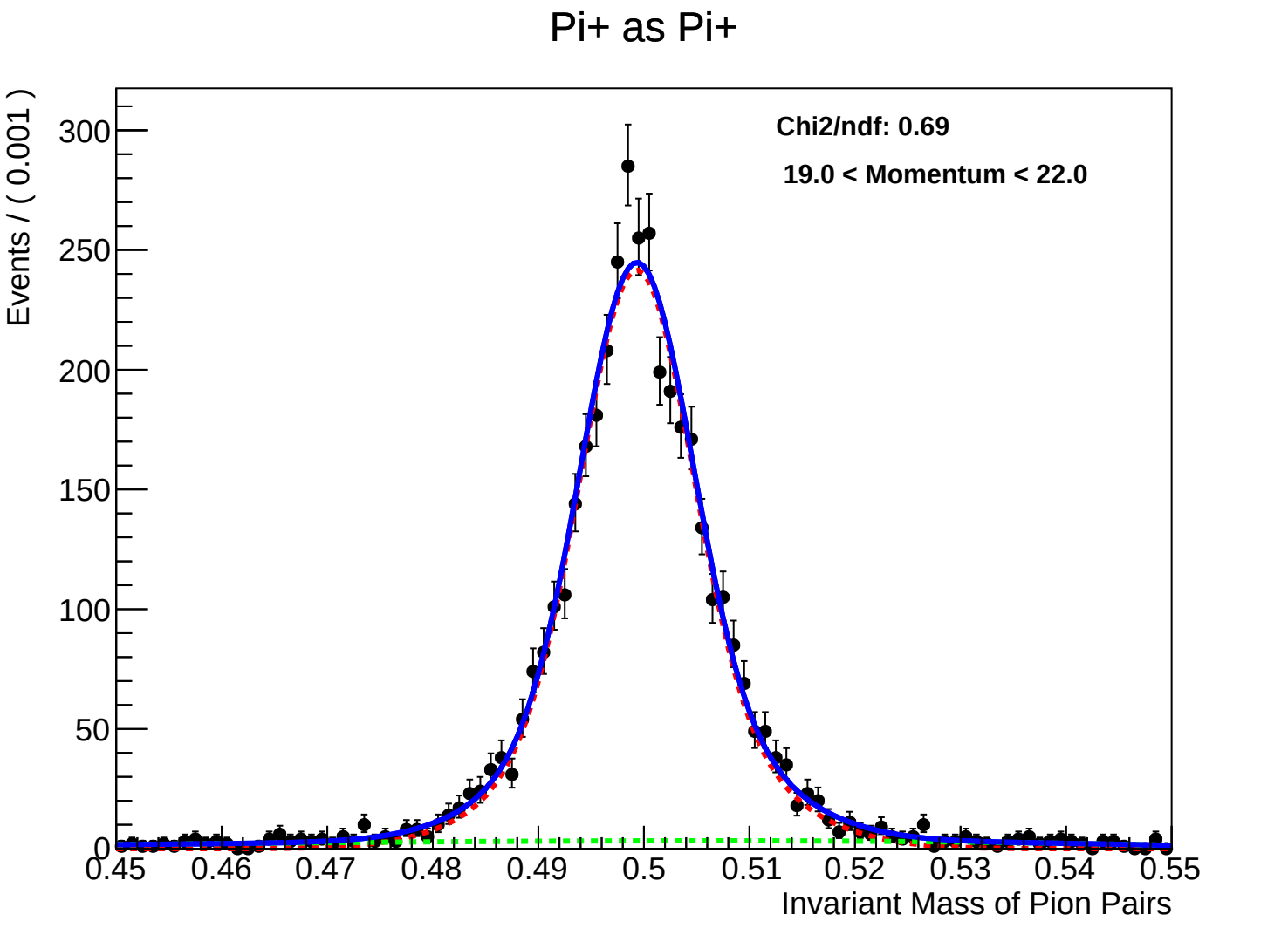

Pi+ as Pi+
Chi2/ndf: 0.58
17.0 < Momentum < 19.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
50
100
150
200
250
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

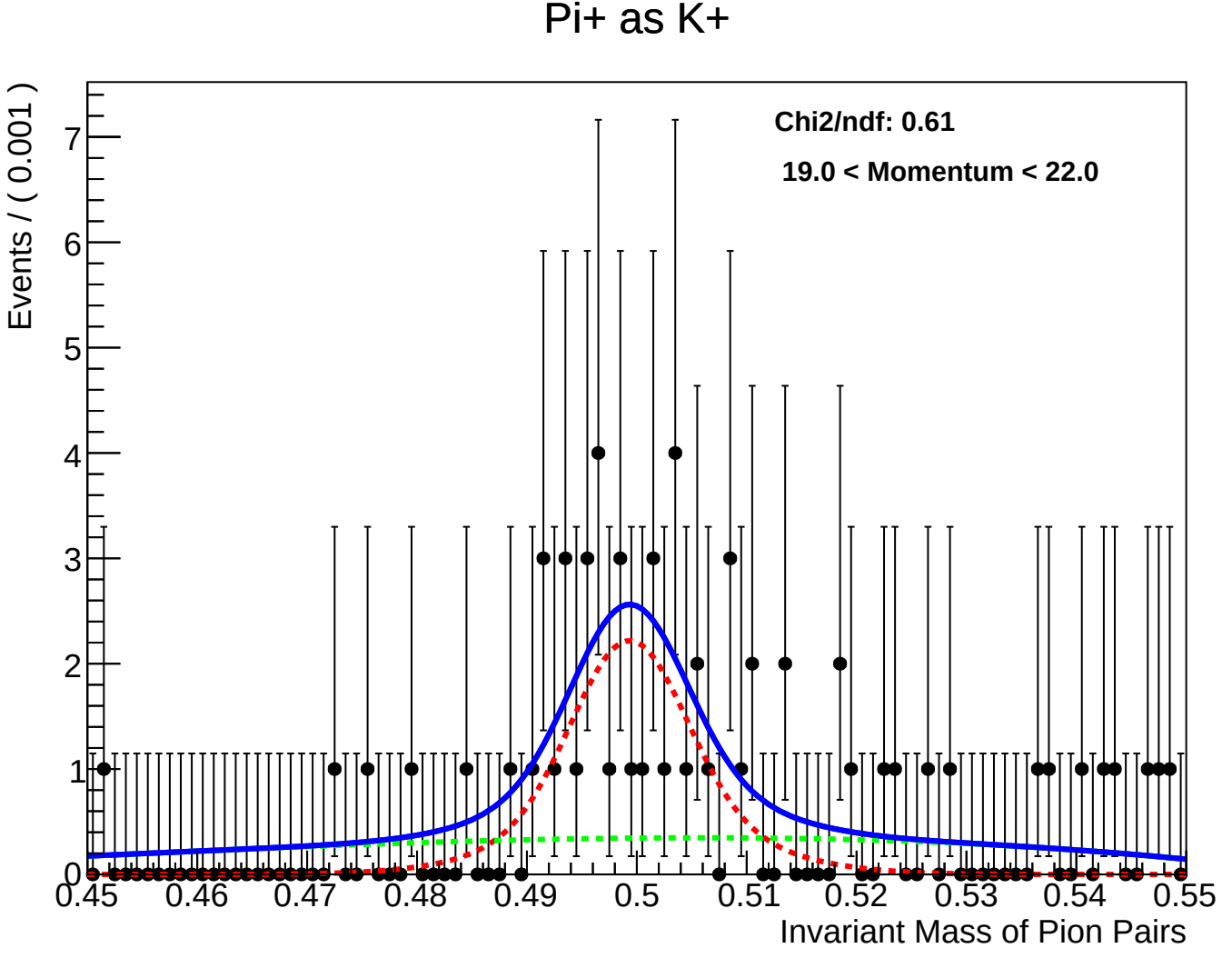

Pi+ as K+
Chi2/ndf: 0.68
17.0 < Momentum < 19.0
Events / (0.001)
0
2
4
6
8
10
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

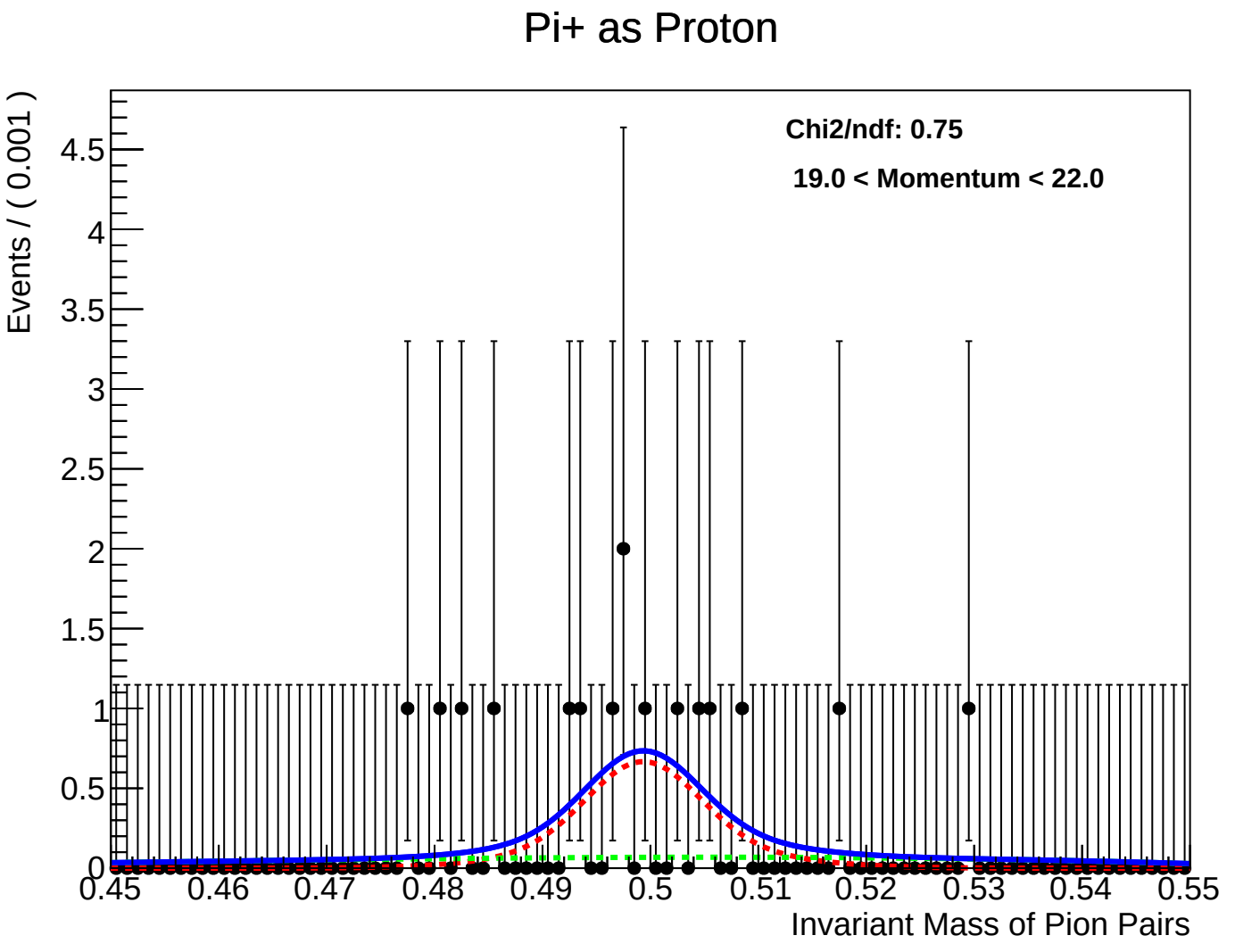

Pi+ as Proton
Chi2/ndf: 1.29
17.0 < Momentum < 19.0
Events / (0.001)
0
0.5
1
1.5
2
2.5
3
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

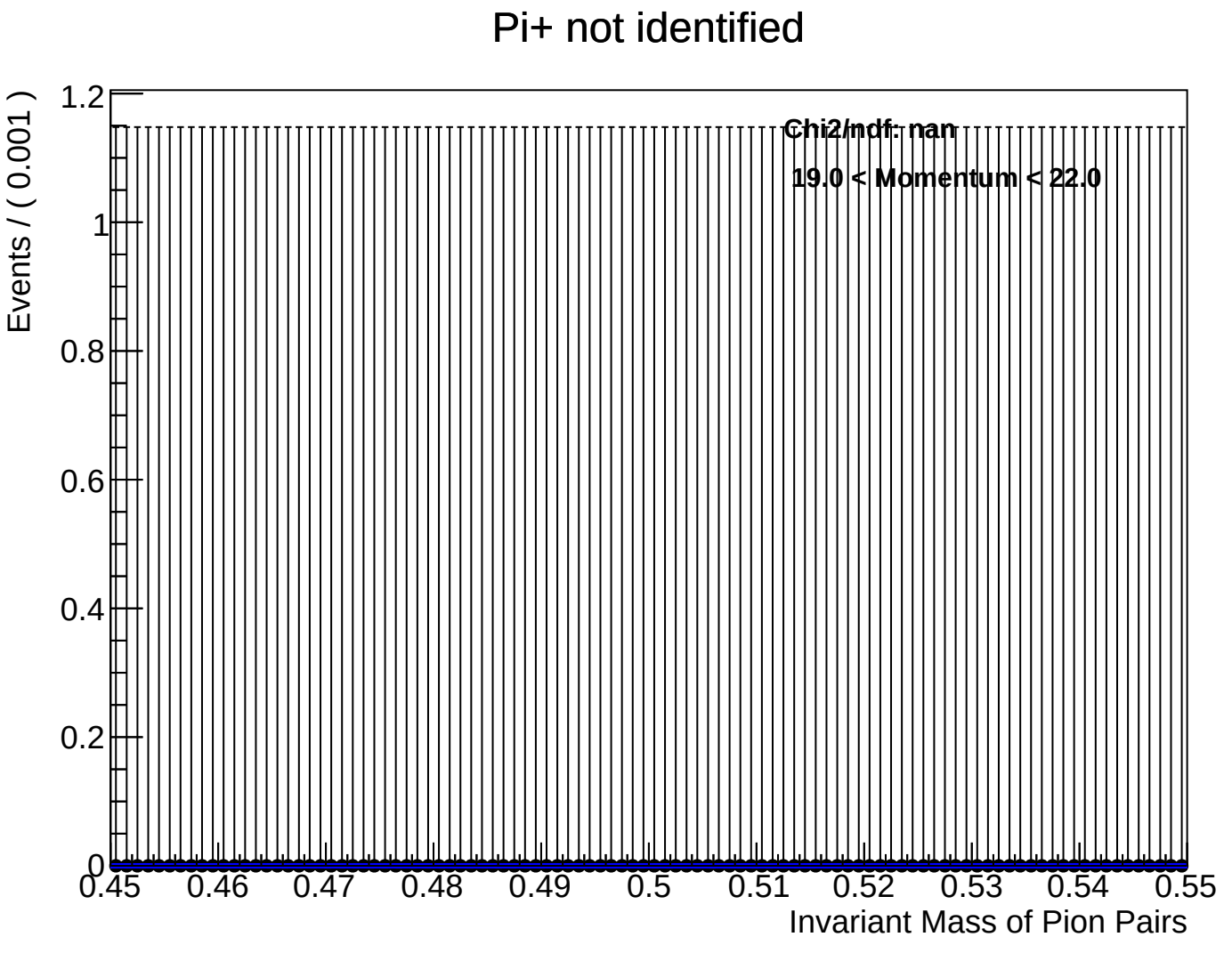

Pi+ not identified
Chi2/ndf: 1.10
17.0 < Momentum < 19.0
Events / (0.001)
0
0.5
1
1.5
2
2.5
3
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

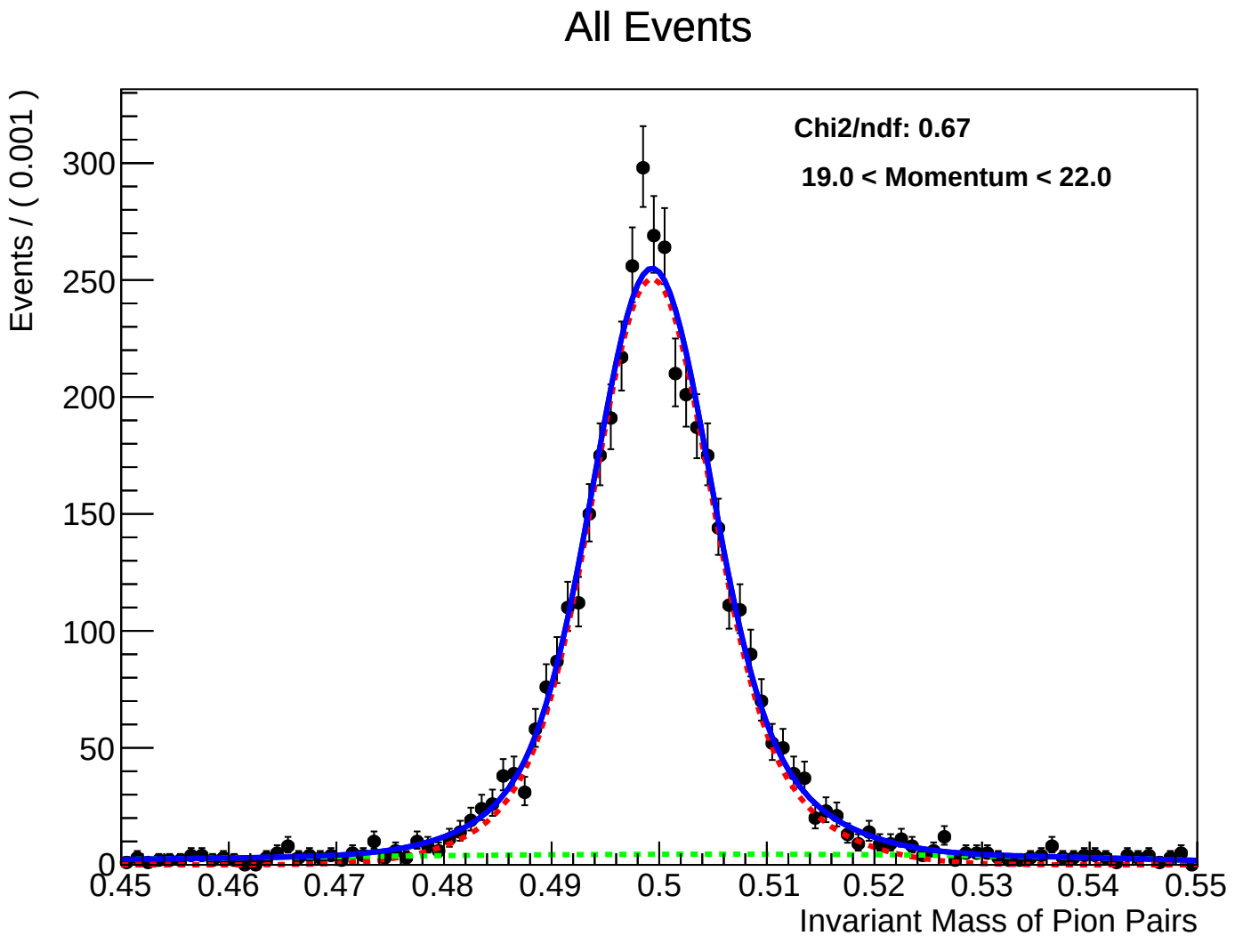

All Events
Chi2/ndf: 0.64
17.0 < Momentum < 19.0
Events / (0.001)
0
50
100
150
200
250
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

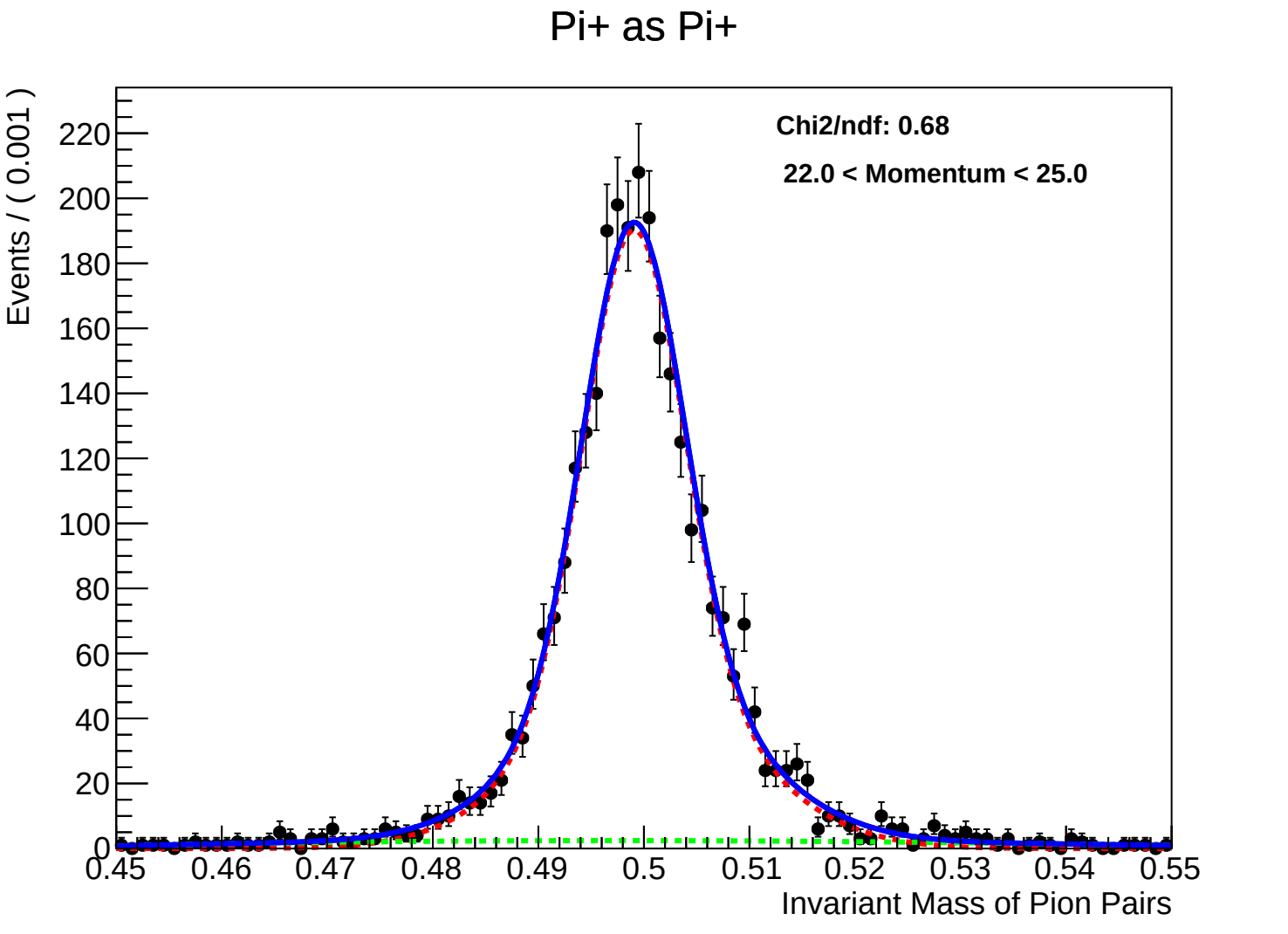

Pi+ as Pi+
Chi2/ndf: 0.69
19.0 < Momentum < 22.0
Events / (0.001)
300
250
200
150
100
50
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

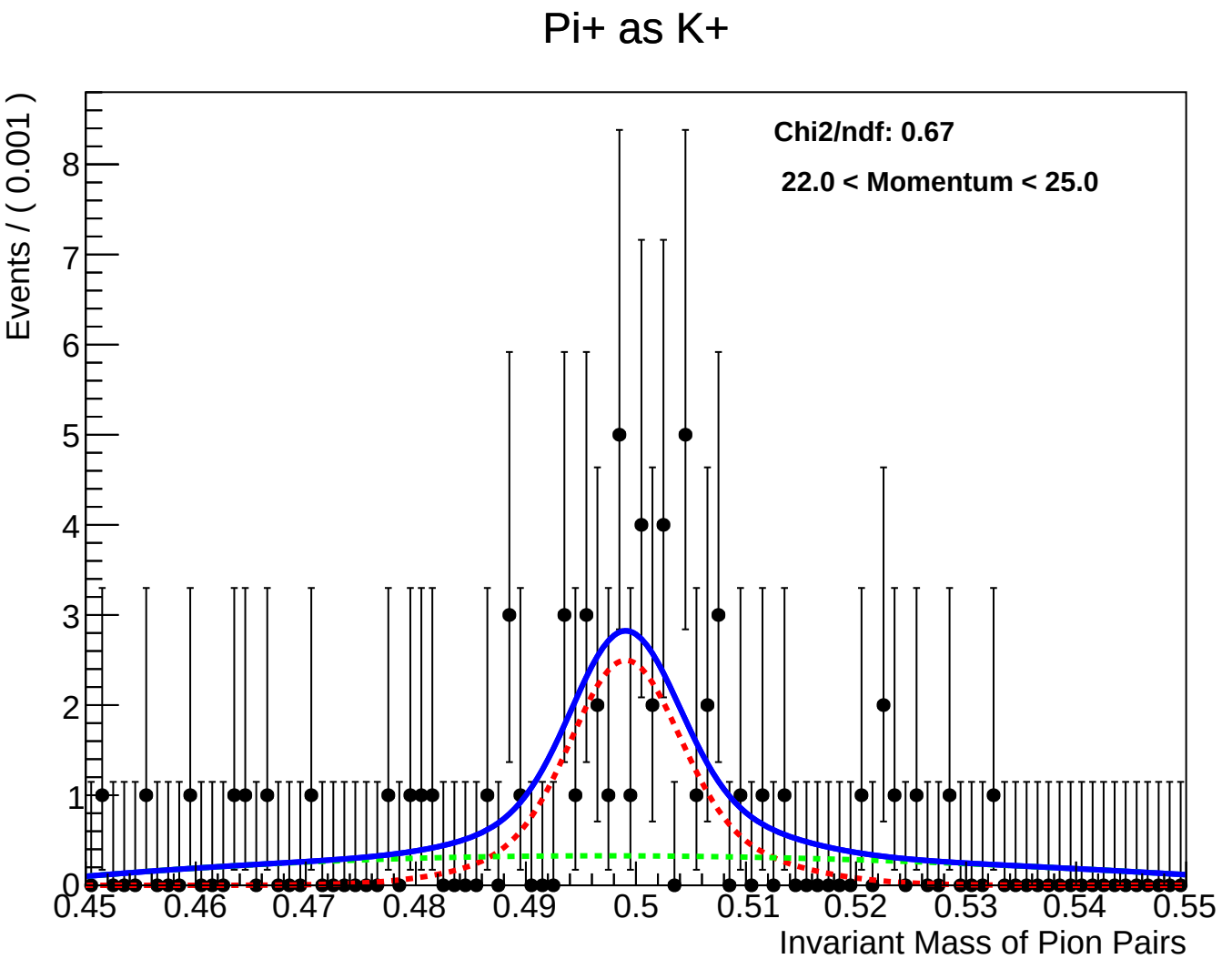

Pi+ as K+
Chi2/ndf: 0.61
19.0 < Momentum < 22.0
Events / (0.001)
0
1
2
3
4
5
6
7
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

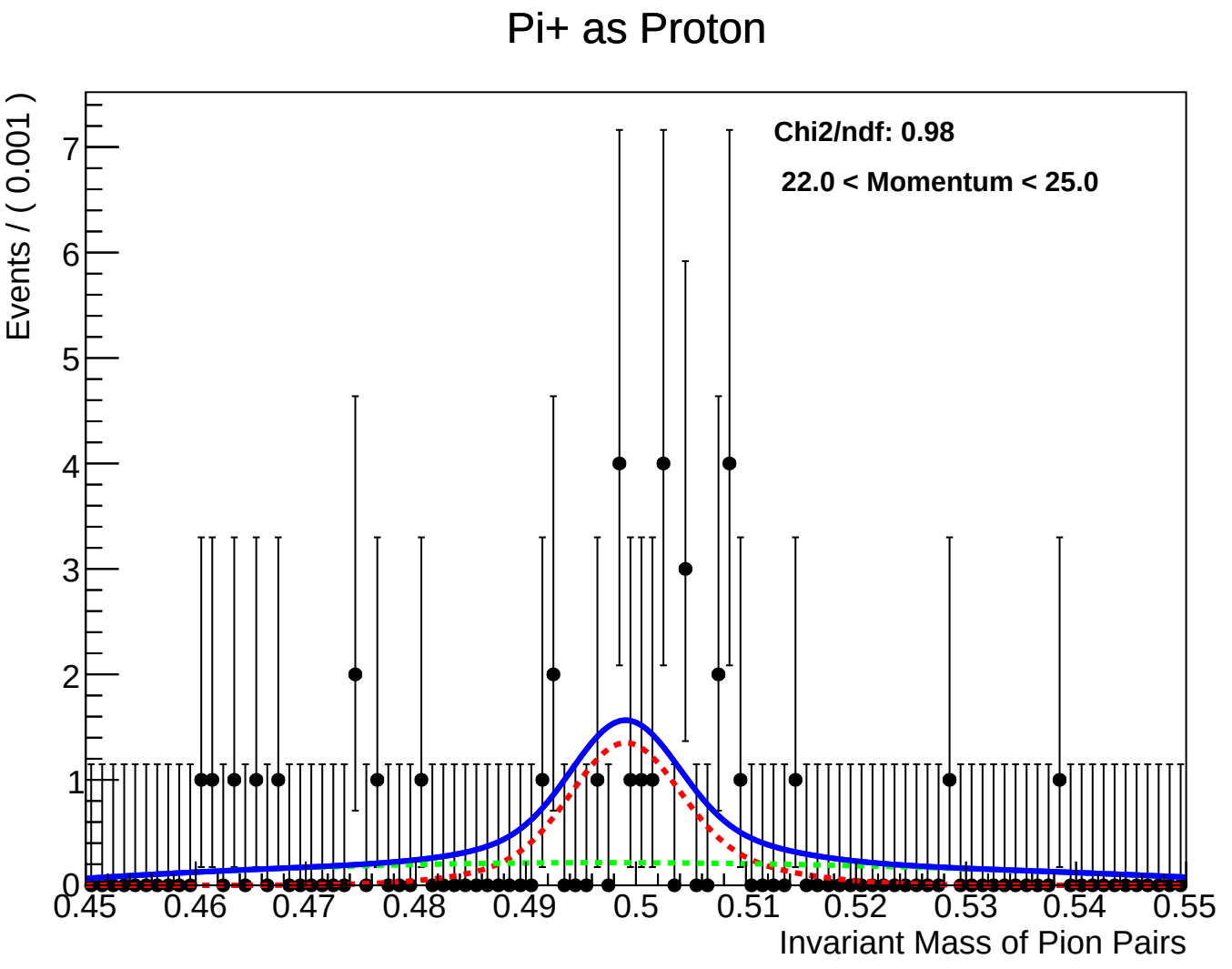

Pi+ as Proton
Chi2/ndf: 0.75
19.0 < Momentum < 22.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

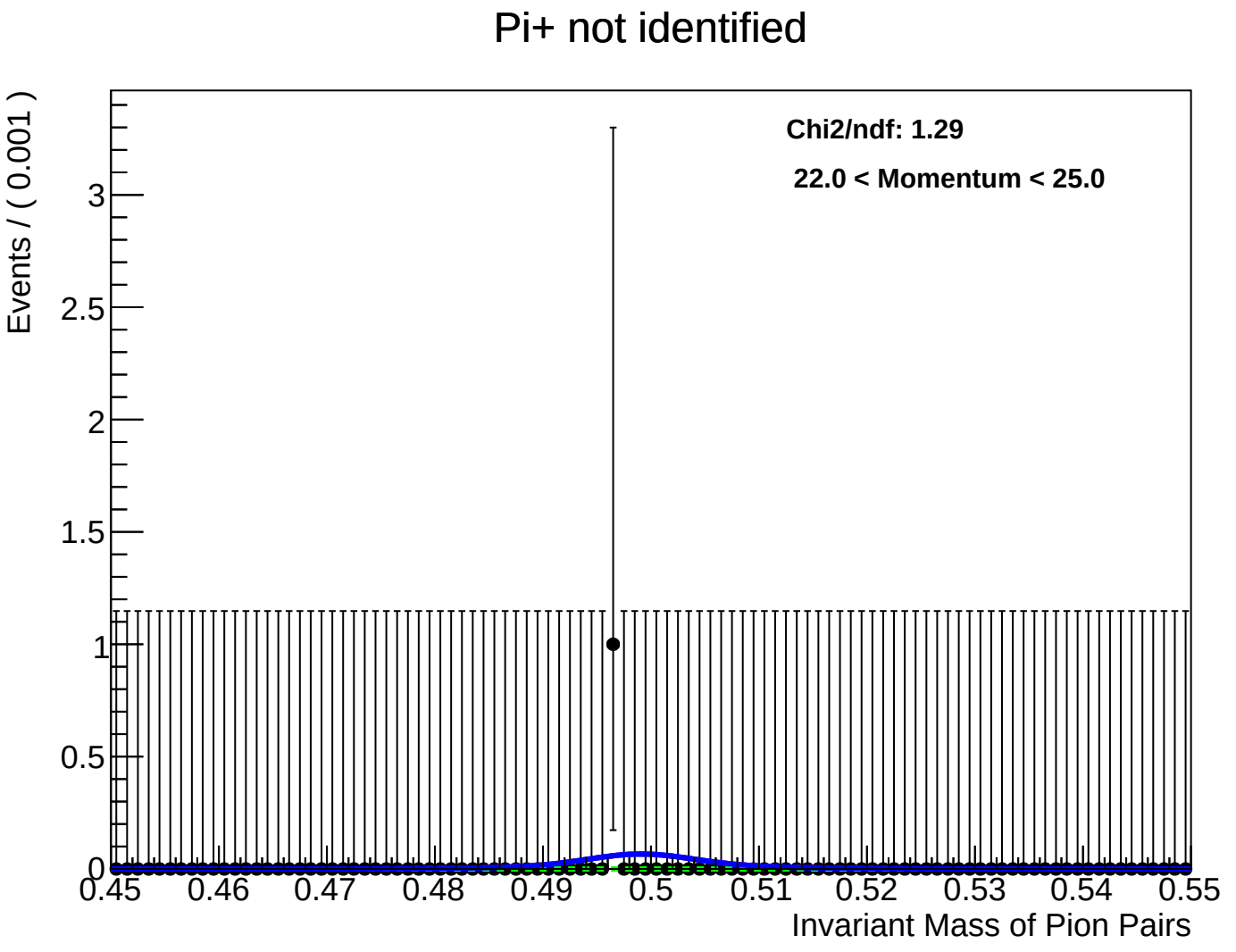

Pi+ not identified
Chi2/ndf: nan
19.0 < Momentum < 22.0
Events / (0.001)
1.2
1
0.8
0.6
0.4
0.2
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

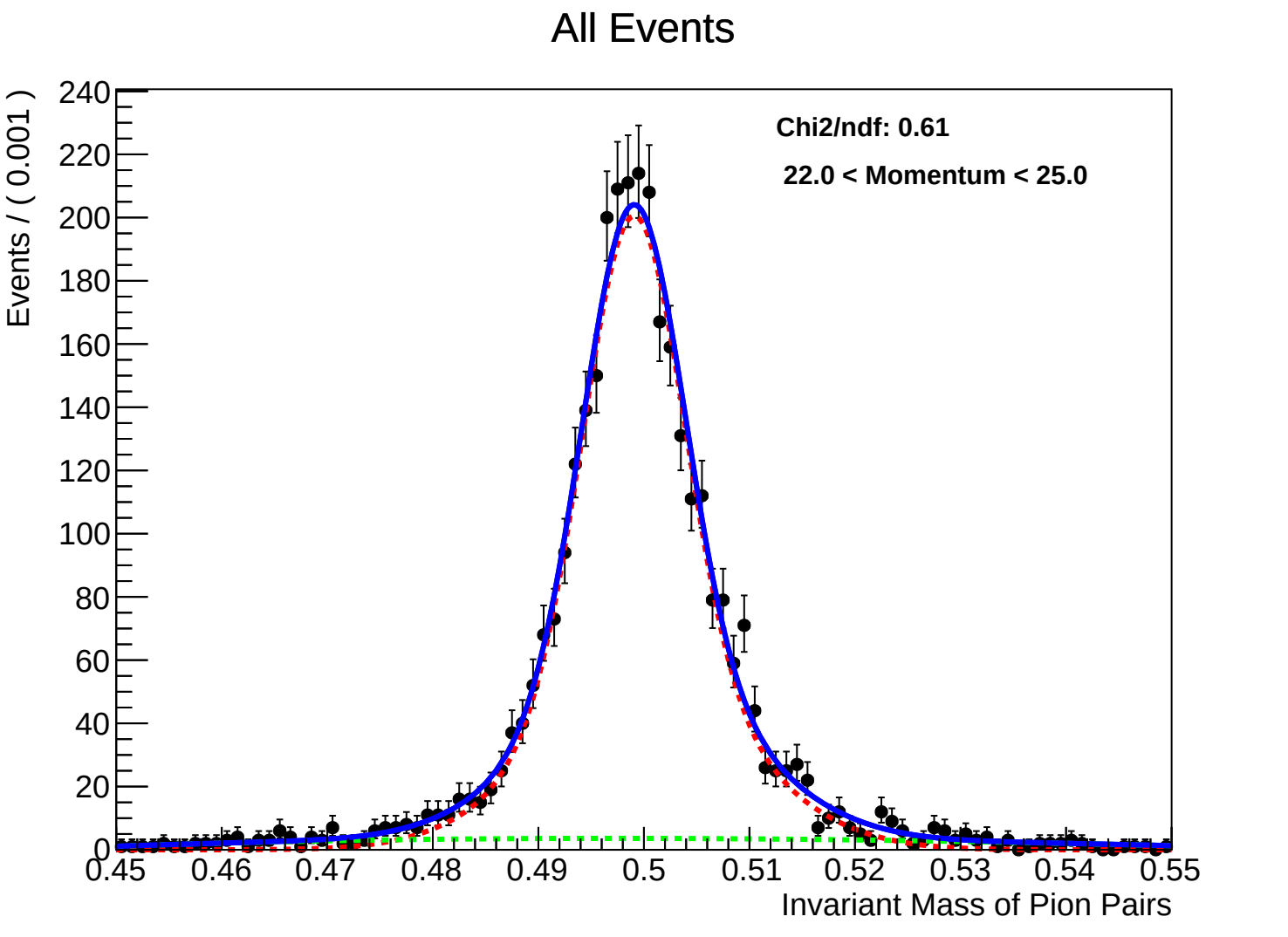

All Events
Chi2/ndf: 0.67
19.0 < Momentum < 22.0
Events / (0.001)
0
50
100
150
200
250
300
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

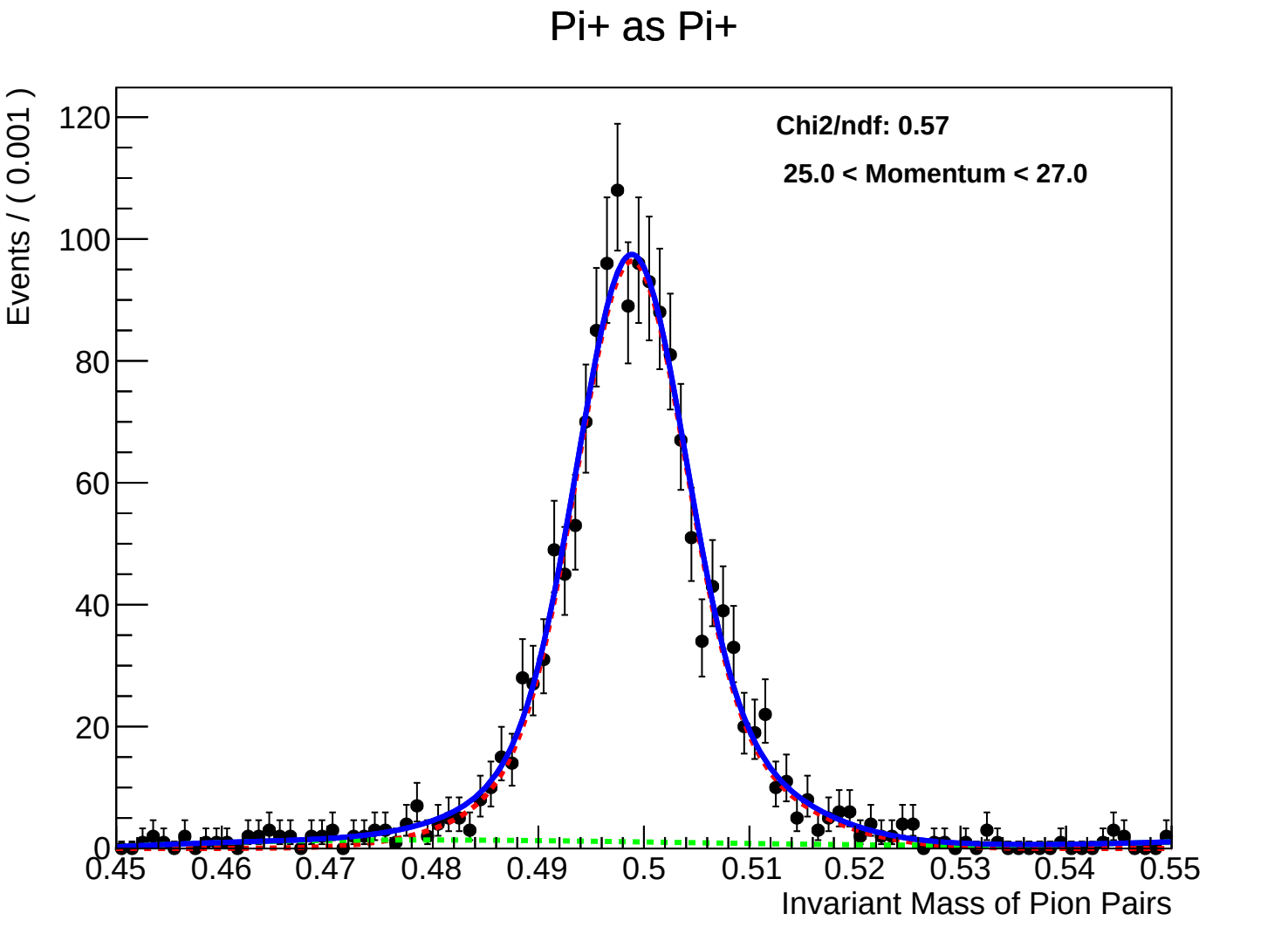

Pi+ as Pi+
Chi2/ndf: 0.68
22.0 < Momentum < 25.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
140
160
180
200
220
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

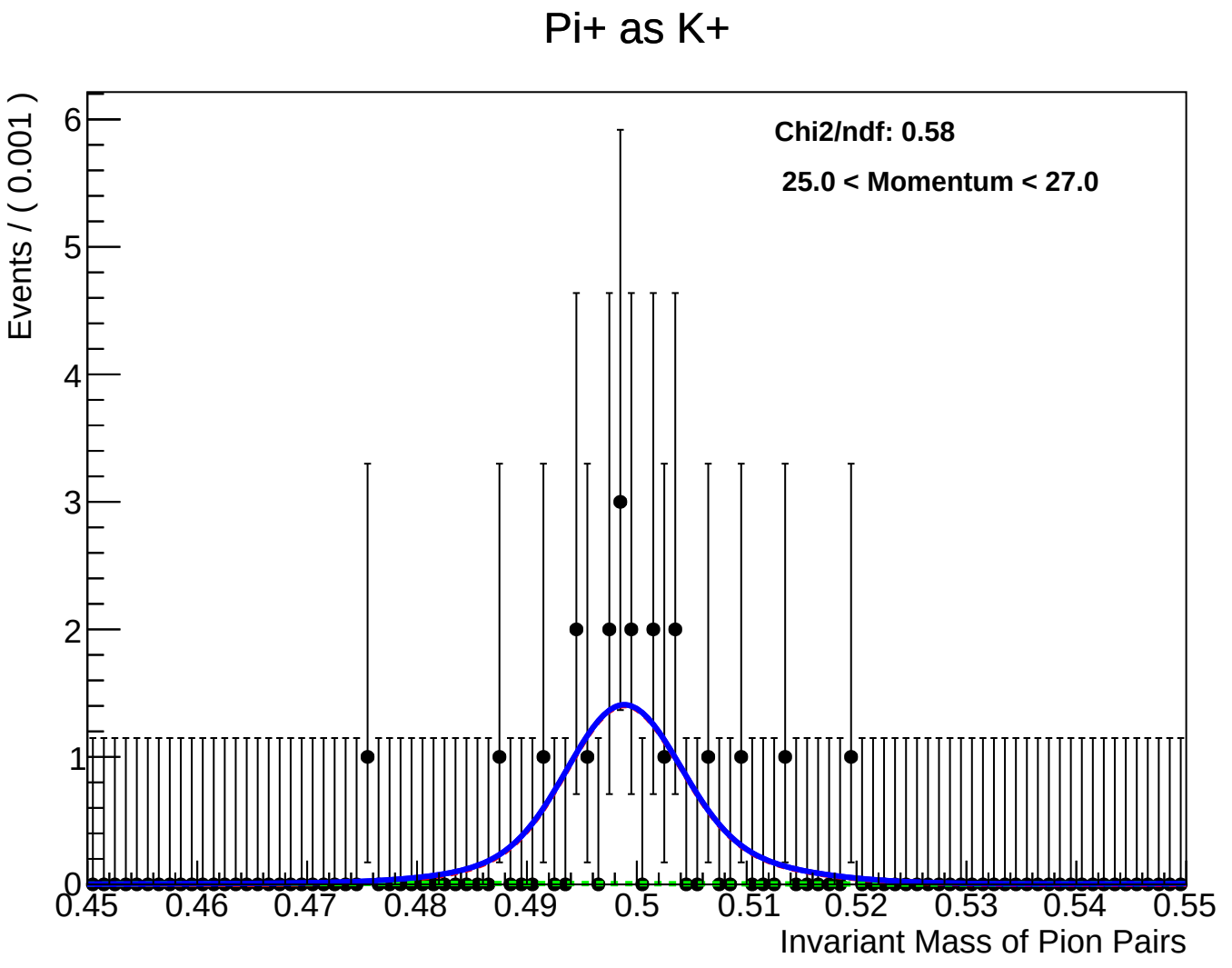

Pi+ as K+
Chi2/ndf: 0.67
22.0 < Momentum < 25.0
Events / (0.001)
0
1
2
3
4
5
6
7
8
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

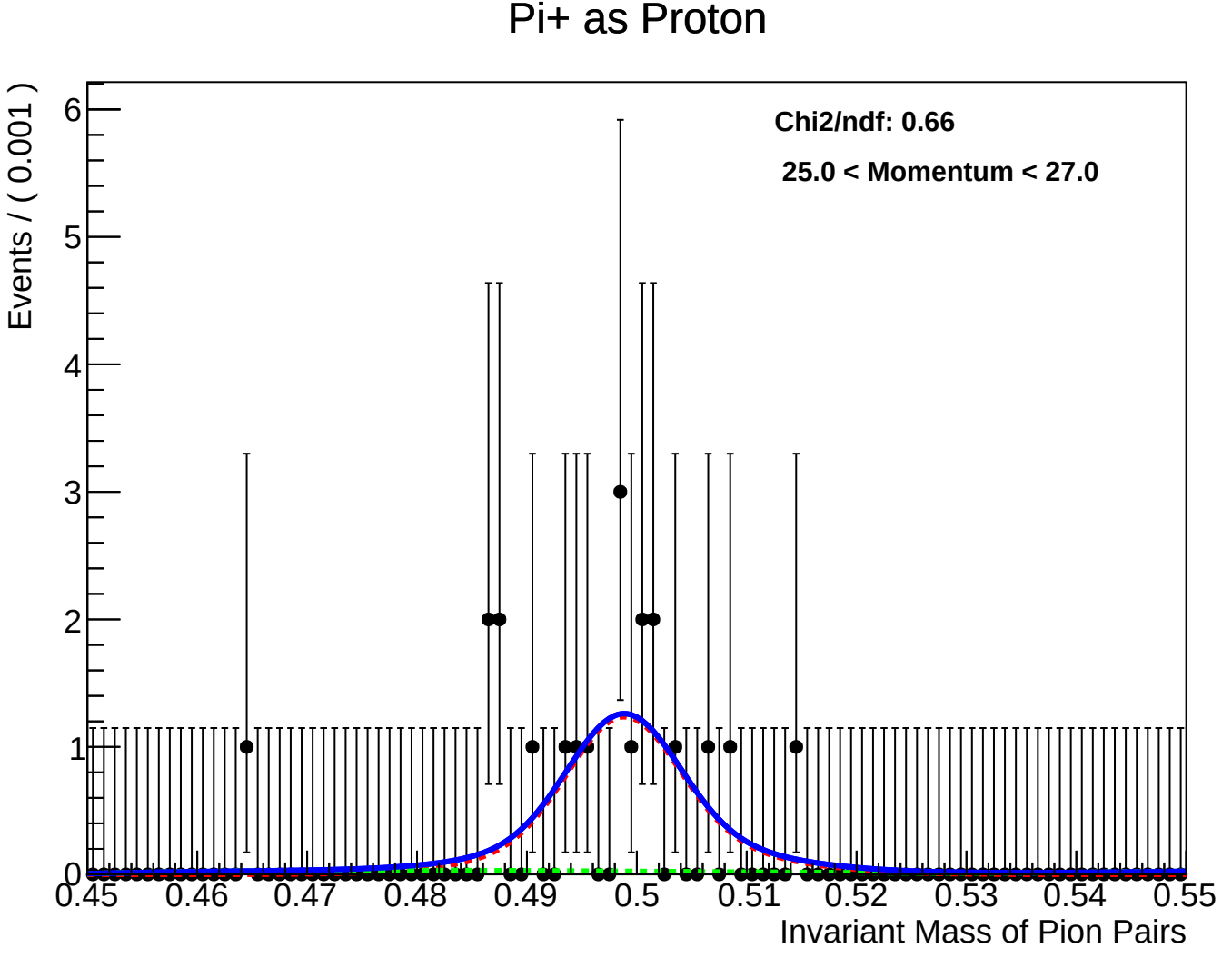

Pi+ as Proton
Chi2/ndf: 0.98
22.0 < Momentum < 25.0
Events / (0.001)
0
1
2
3
4
5
6
7
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

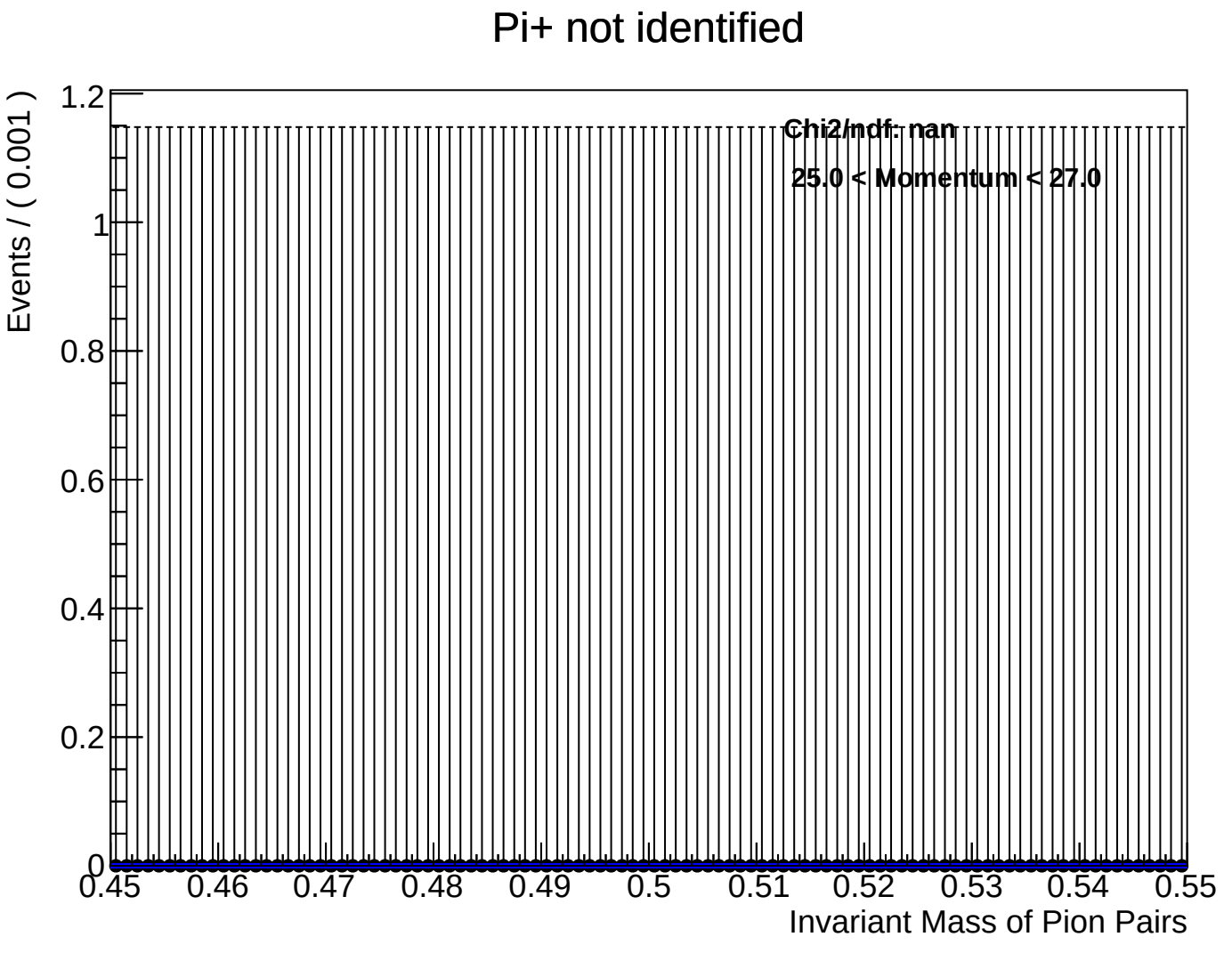

Pi+ not identified
Chi2/ndf: 1.29
22.0 < Momentum < 25.0
Events / (0.001)
0
0.5
1
1.5
2
2.5
3
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs


All Events
Chi2/ndf: 0.61
22.0 < Momentum < 25.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
140
160
180
200
220
240
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

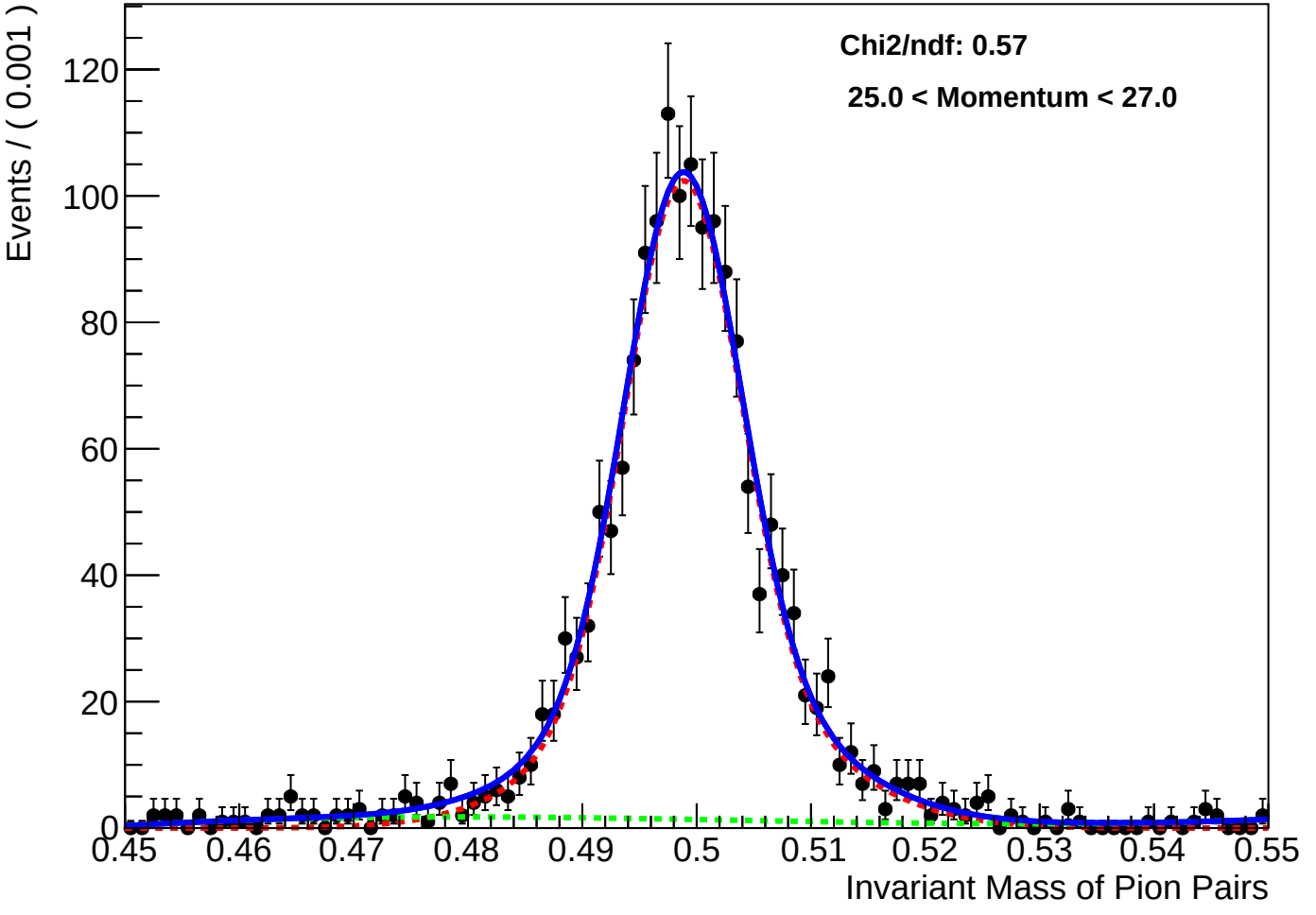

Pi+ as Pi+
Chi2/ndf: 0.57
25.0 < Momentum < 27.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

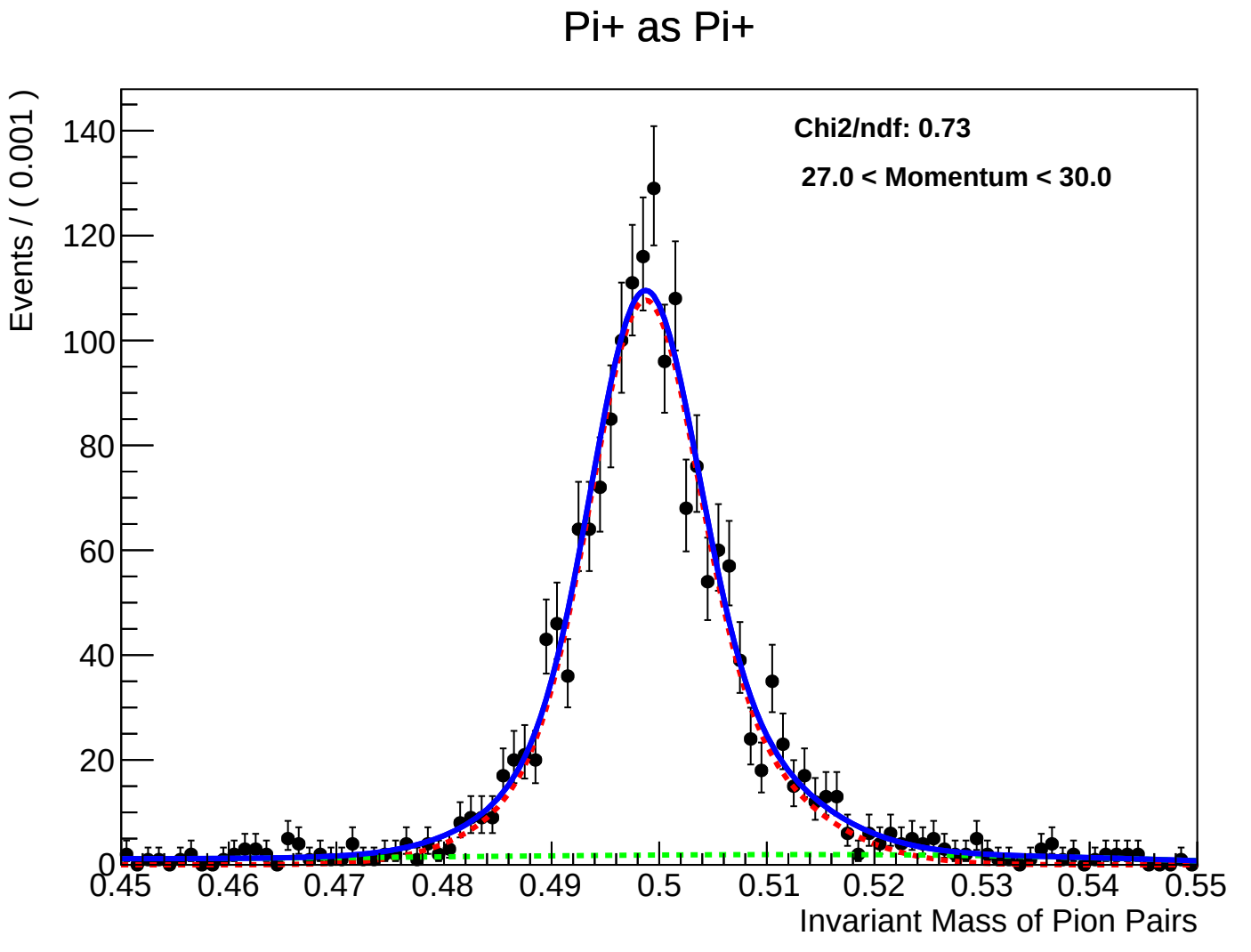

Pi+ as K+
Chi2/ndf: 0.58
25.0 < Momentum < 27.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
1
2
3
4
5
6
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

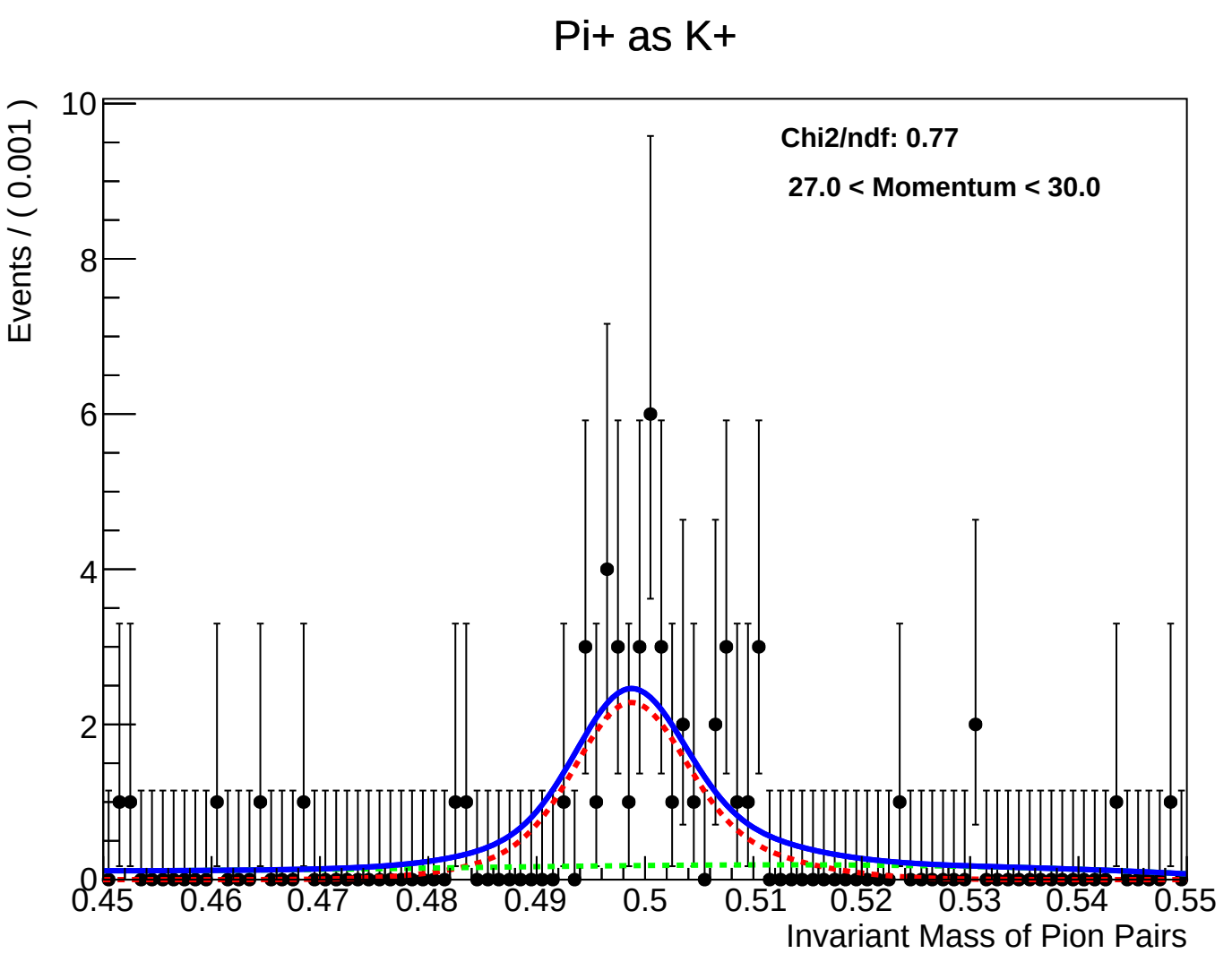

Pi+ as Proton
Chi2/ndf: 0.66
25.0 < Momentum < 27.0
Events / (0.001)
0
1
2
3
4
5
6
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

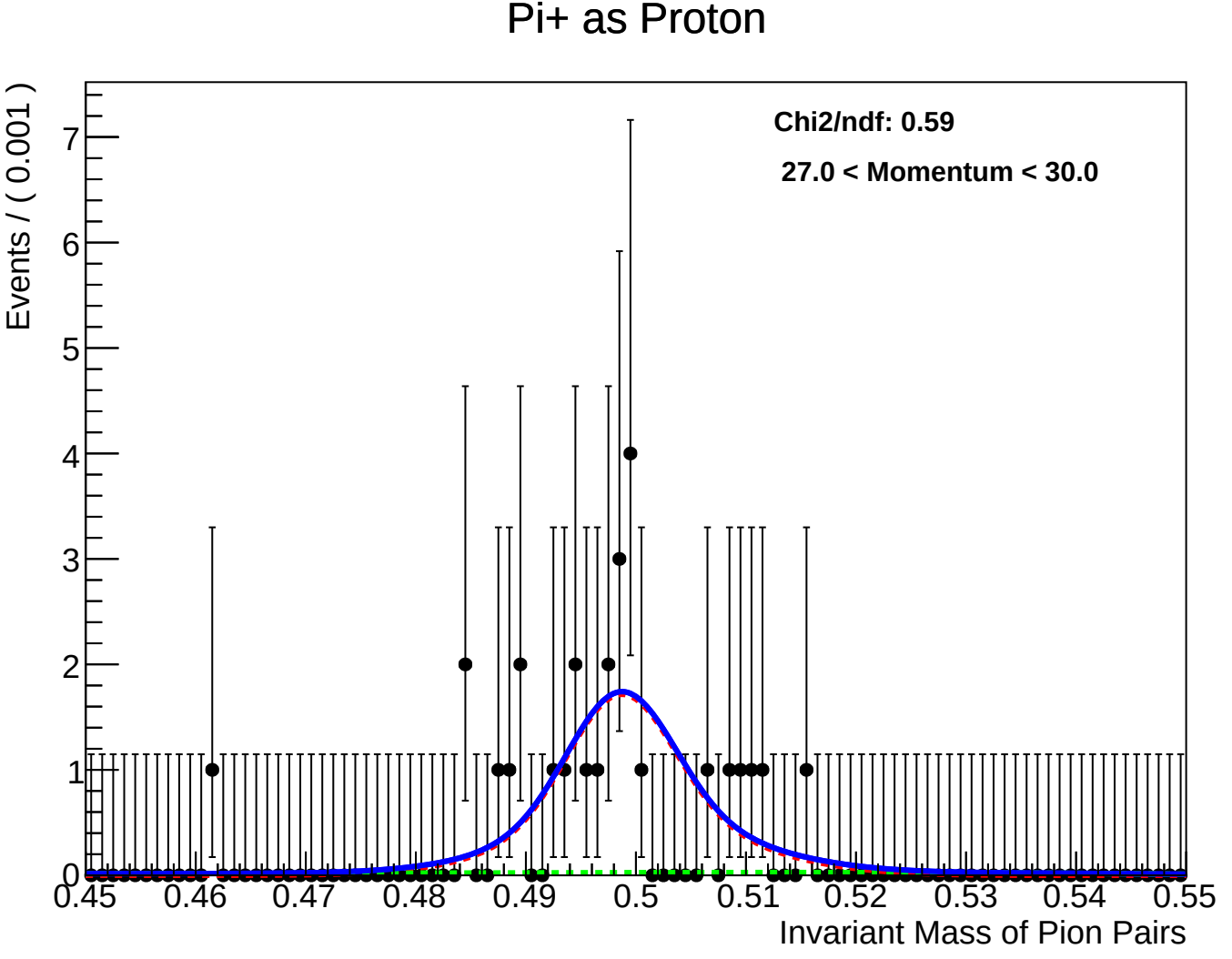

Pi+ not identified
Chi2/ndf: nan
25.0 < Momentum < 27.0
Events / (0.001)
1.2
1
0.8
0.6
0.4
0.2
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

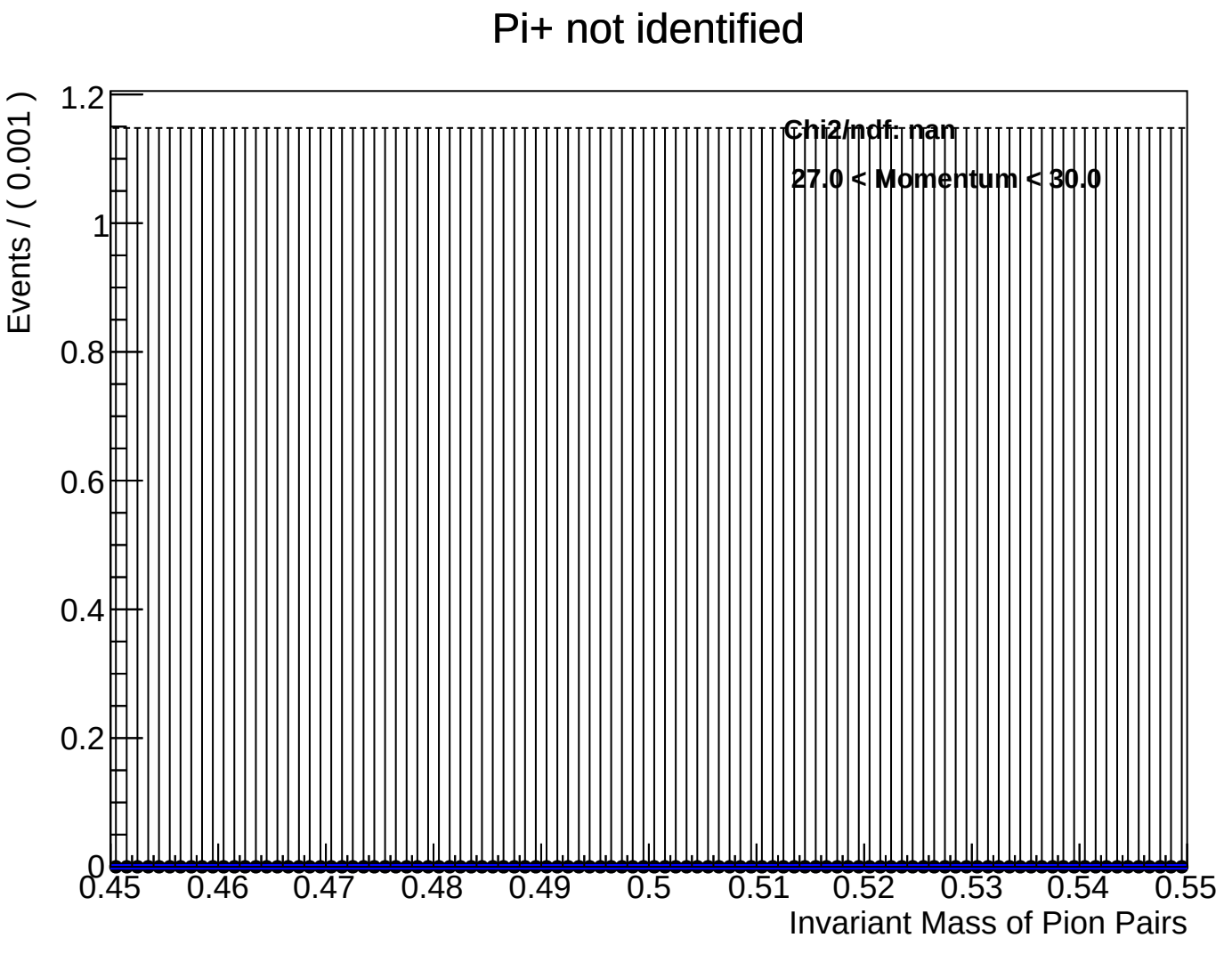
All Events

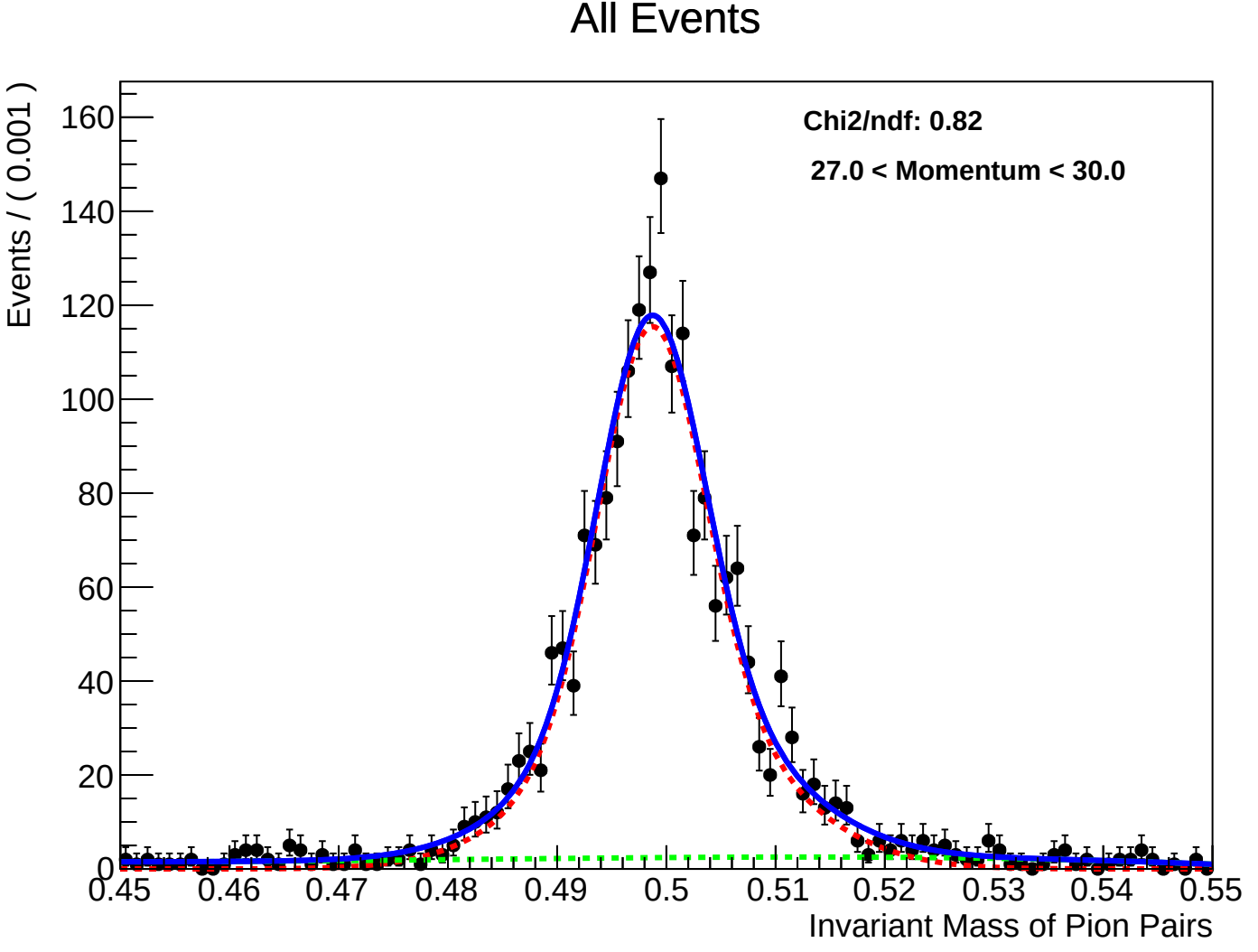

Chi2/ndf: 0.57
25.0 < Momentum < 27.0
Events / (0.001)
120
100
80
60
40
20
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

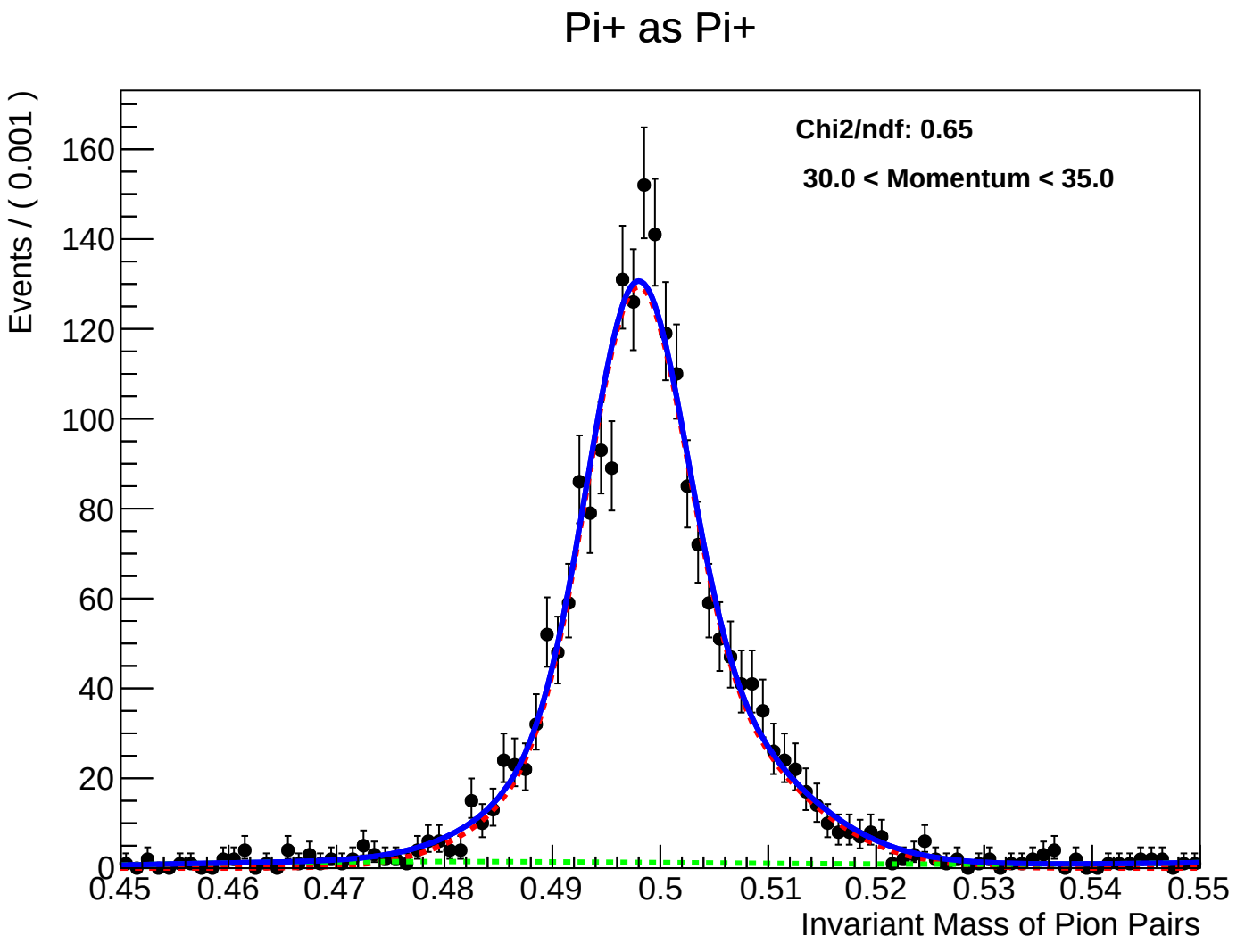

Pi+ as Pi+
Chi2/ndf: 0.73
27.0 < Momentum < 30.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
140
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

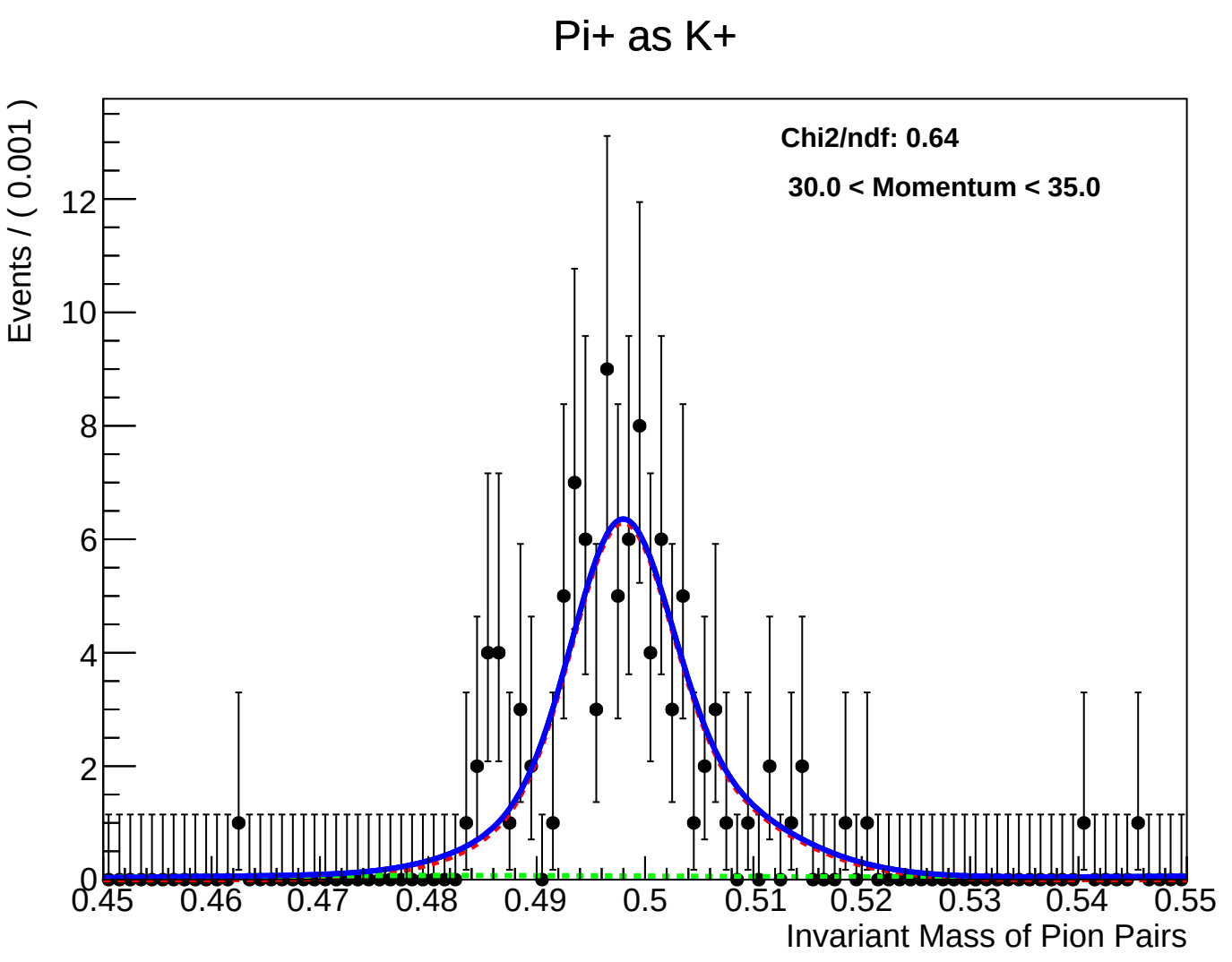

Pi+ as K+
Chi2/ndf: 0.77
27.0 < Momentum < 30.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
2
4
6
8
10
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

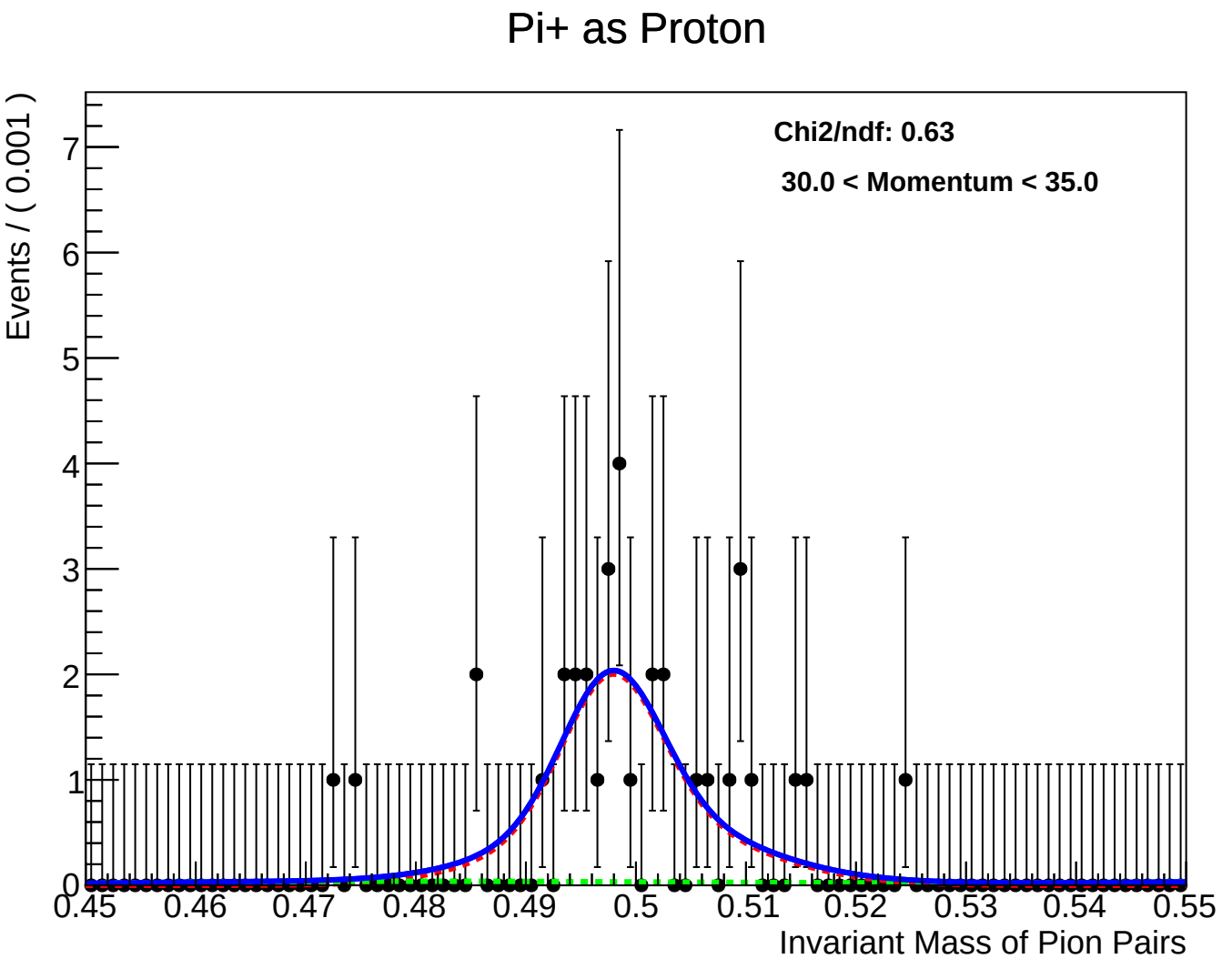

Pi+ as Proton
Chi2/ndf: 0.59
27.0 < Momentum < 30.0
Events / (0.001)
0
1
2
3
4
5
6
7
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

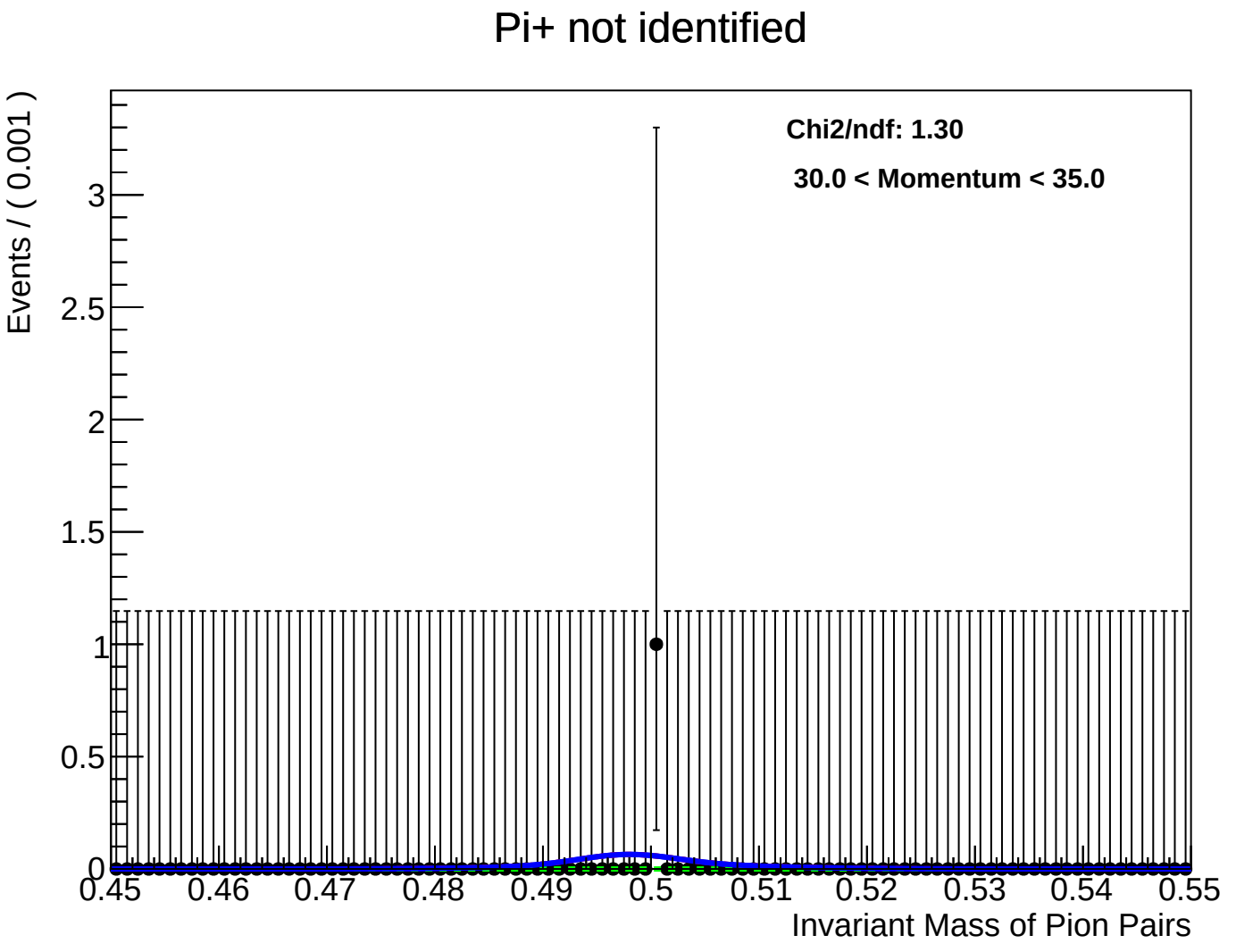

Pi+ not identified
Chi2/ndf: nan
27.0 < Momentum < 30.0
Events / (0.001)
1.2
1
0.8
0.6
0.4
0.2
0
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

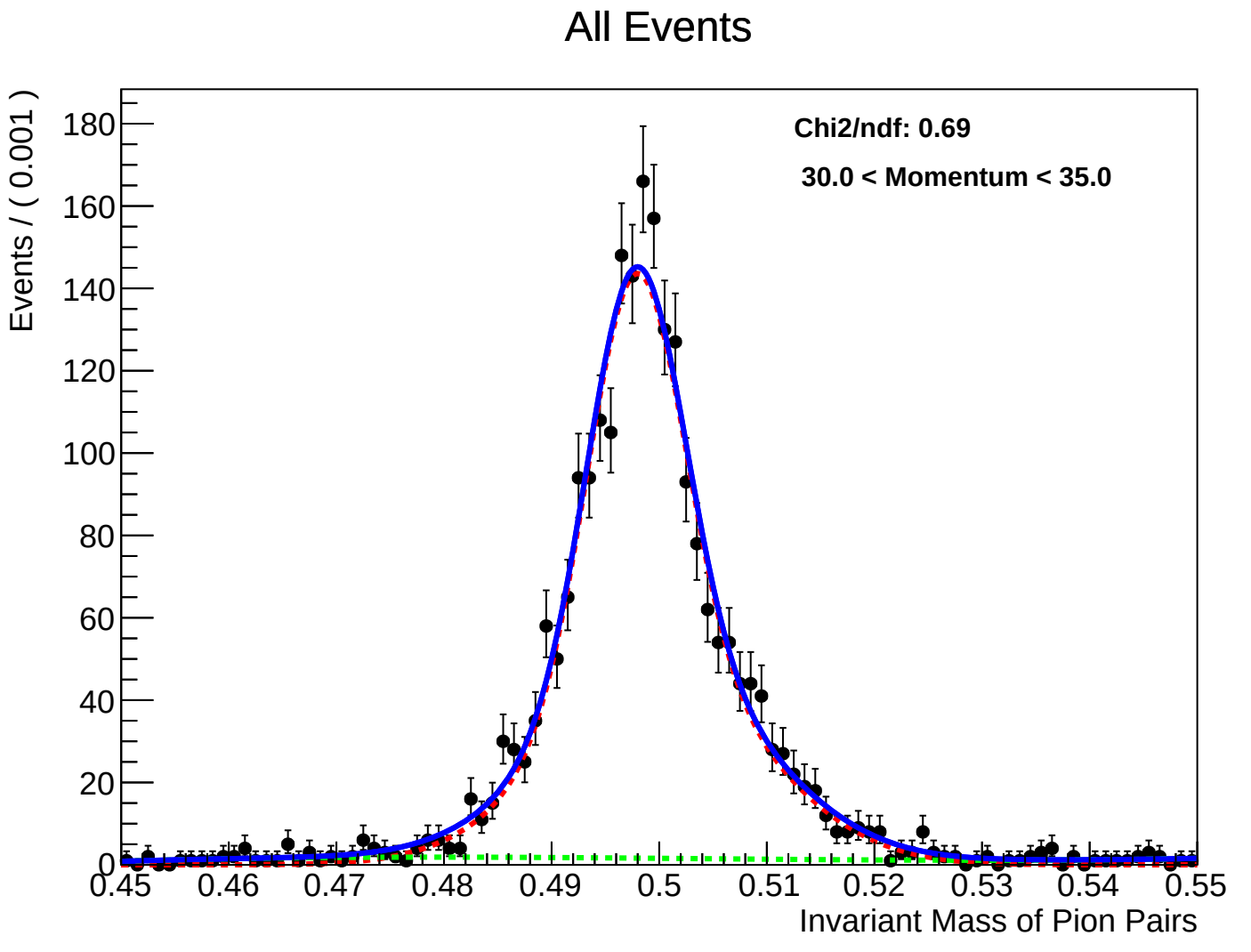

All Events
Chi2/ndf: 0.82
27.0 < Momentum < 30.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
140
160
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

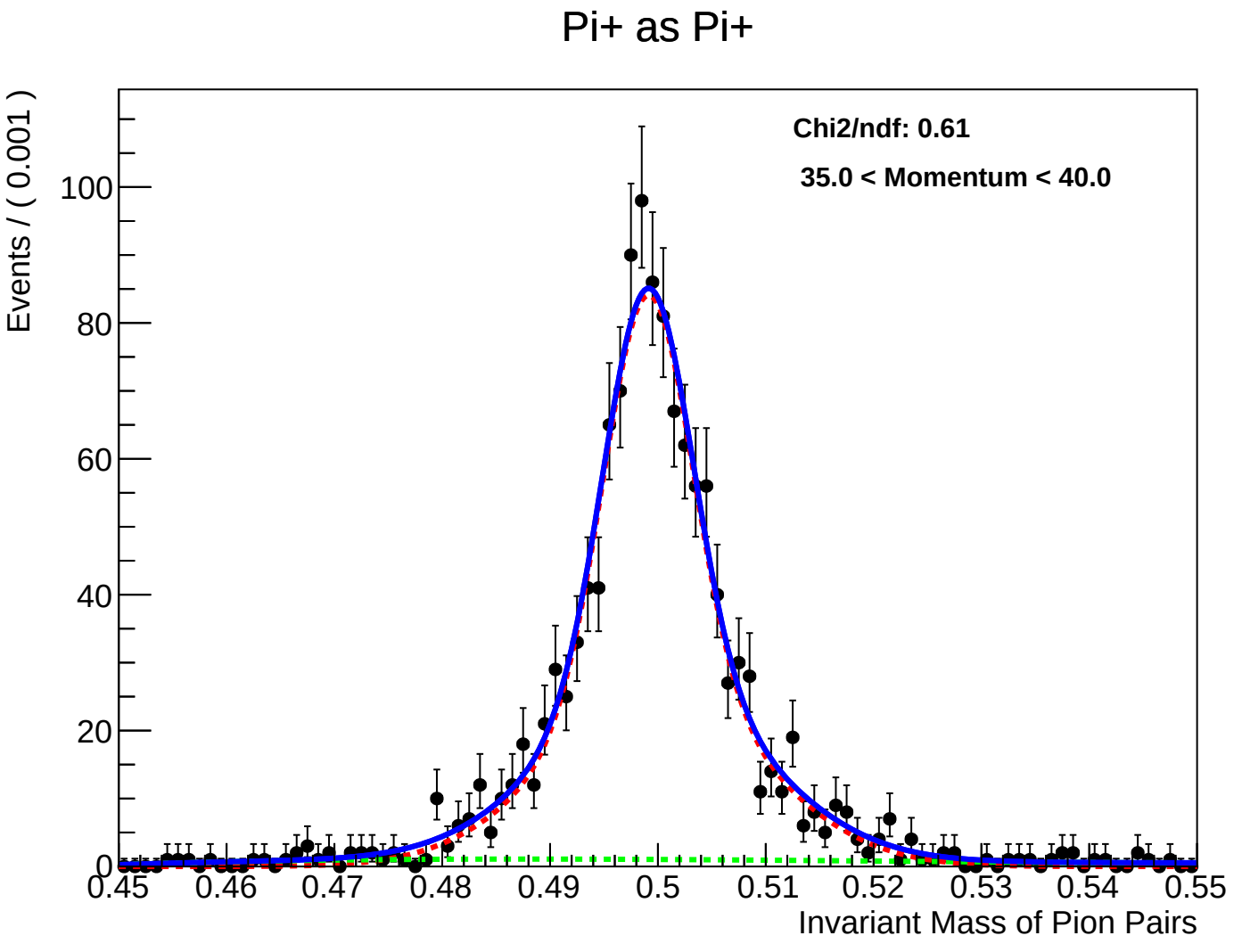

Pi+ as Pi+
Chi2/ndf: 0.65
30.0 < Momentum < 35.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
140
160
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

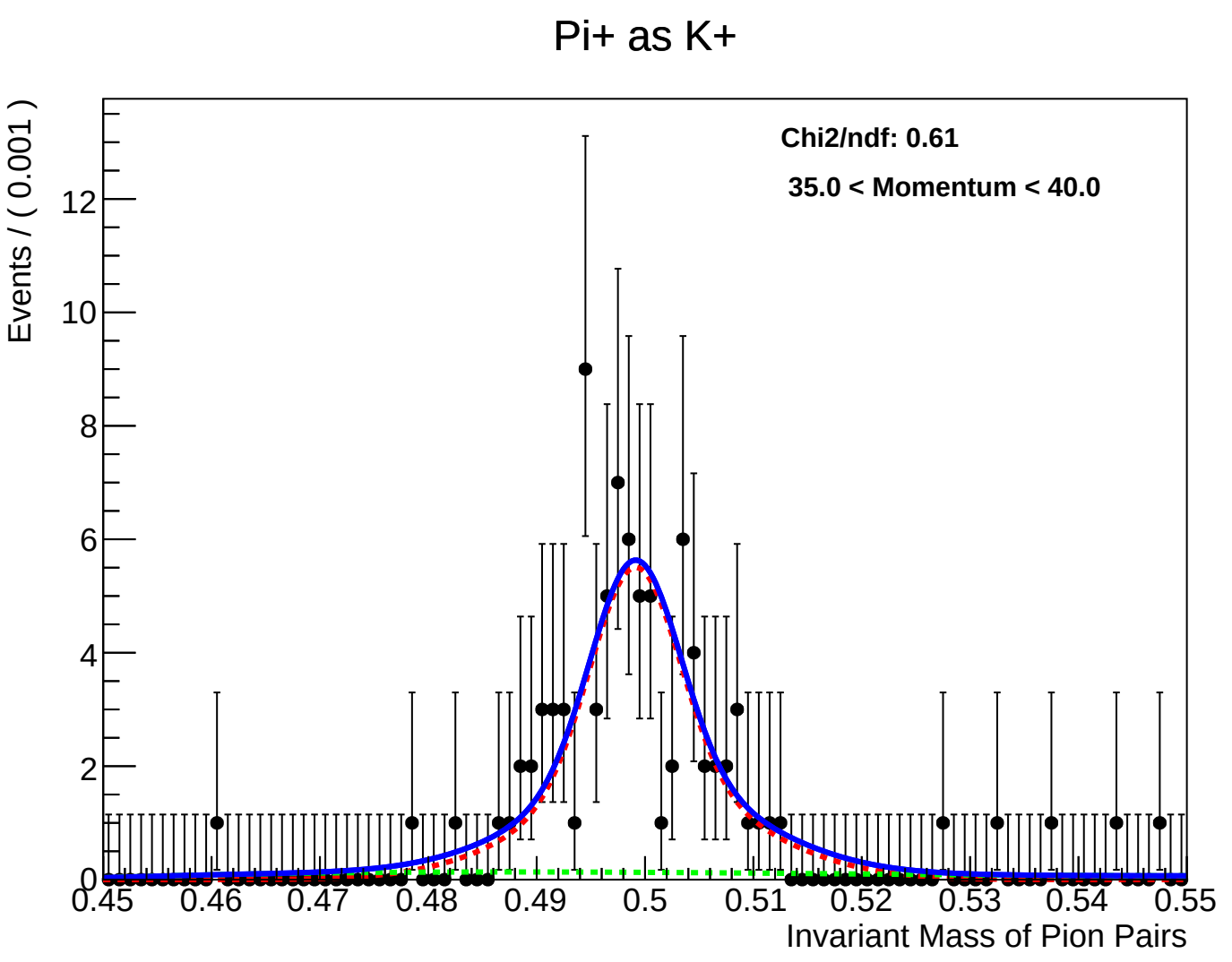

Pi+ as K+
Chi2/ndf: 0.64
30.0 < Momentum < 35.0
Events / (0.001)
0
2
4
6
8
10
12
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

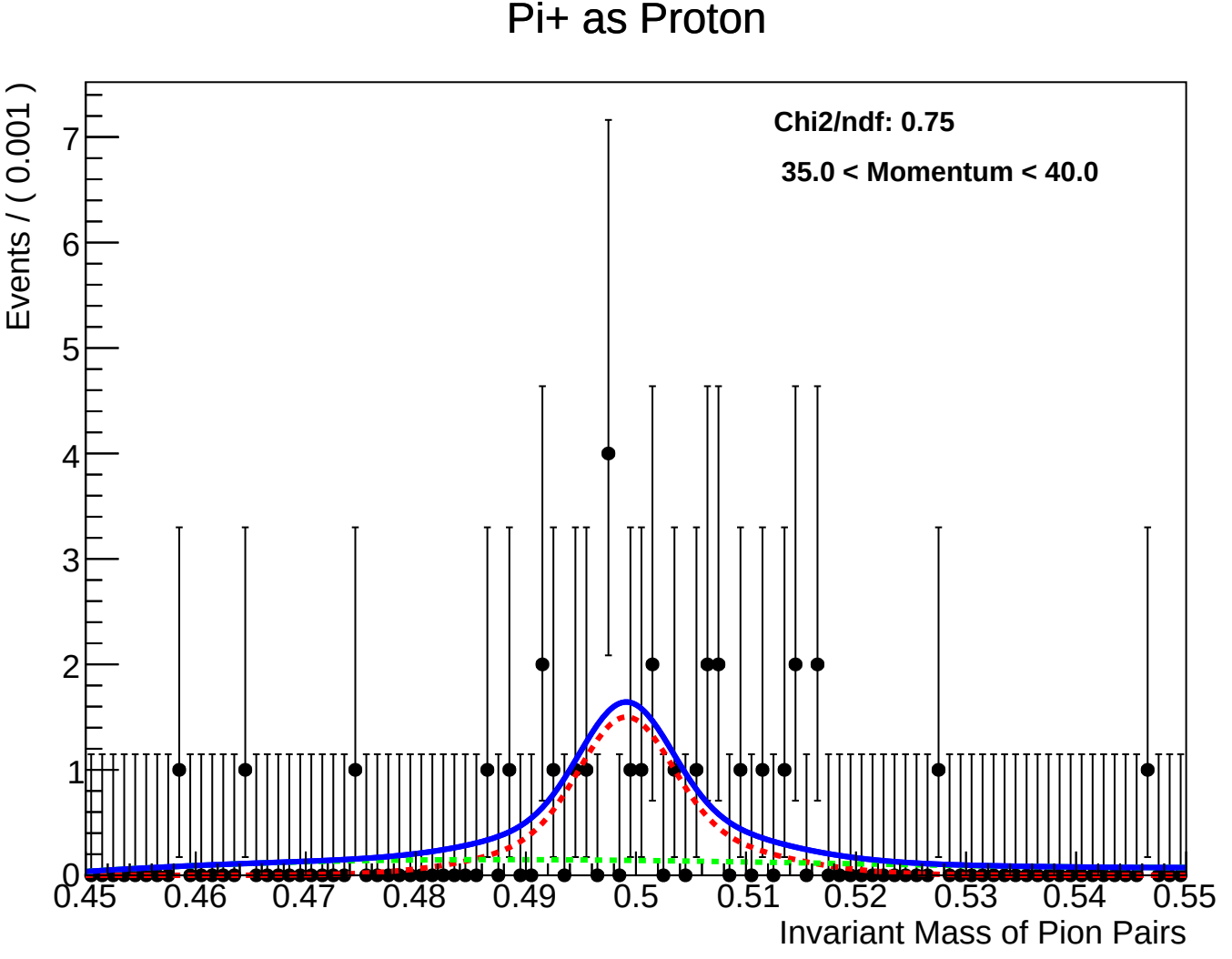

Pi+ as Proton
Chi2/ndf: 0.63
30.0 < Momentum < 35.0
Events / (0.001)
0
1
2
3
4
5
6
7
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

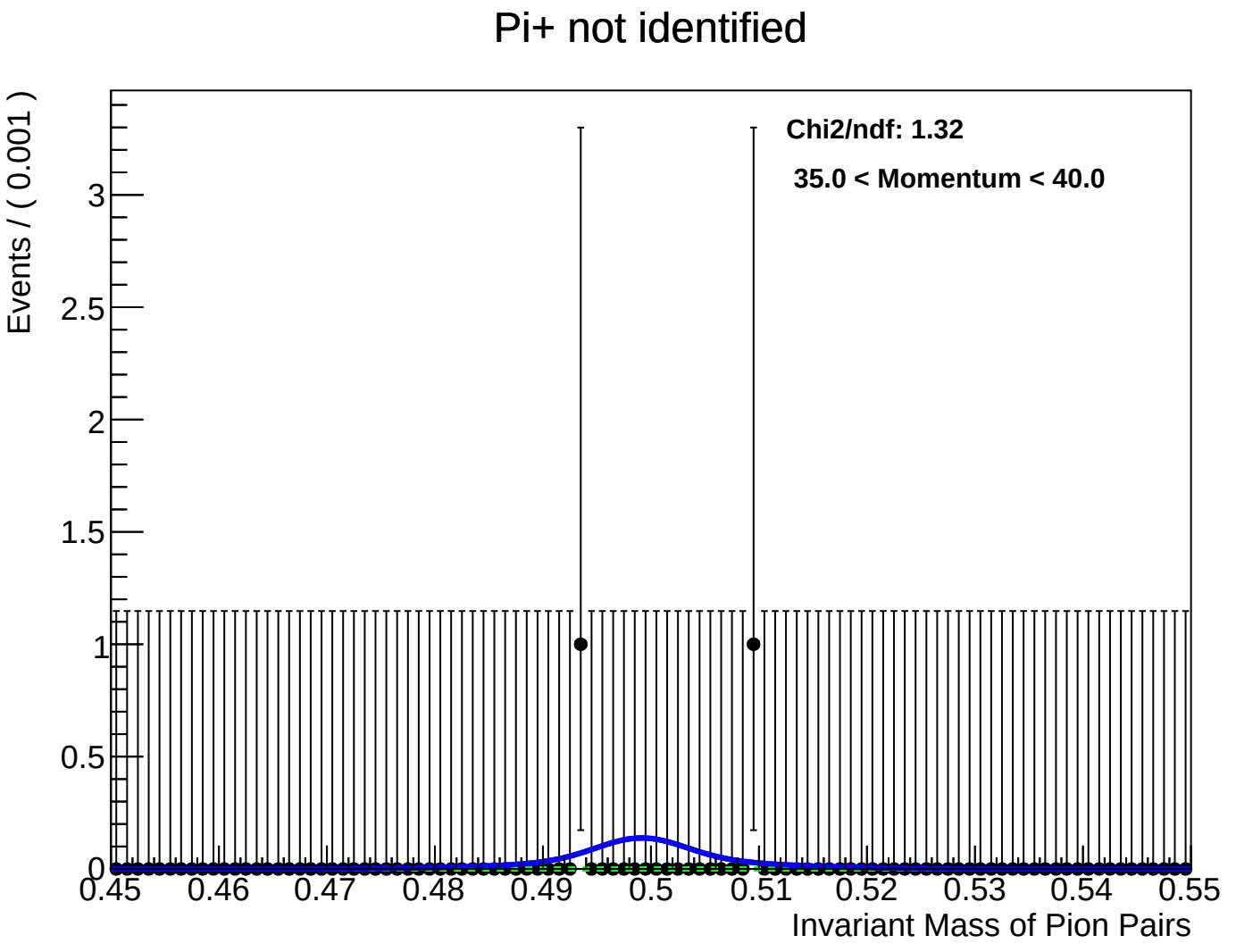

Pi+ not identified
Chi2/ndf: 1.30
30.0 < Momentum < 35.0
Events / (0.001)
0
0.5
1
1.5
2
2.5
3
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

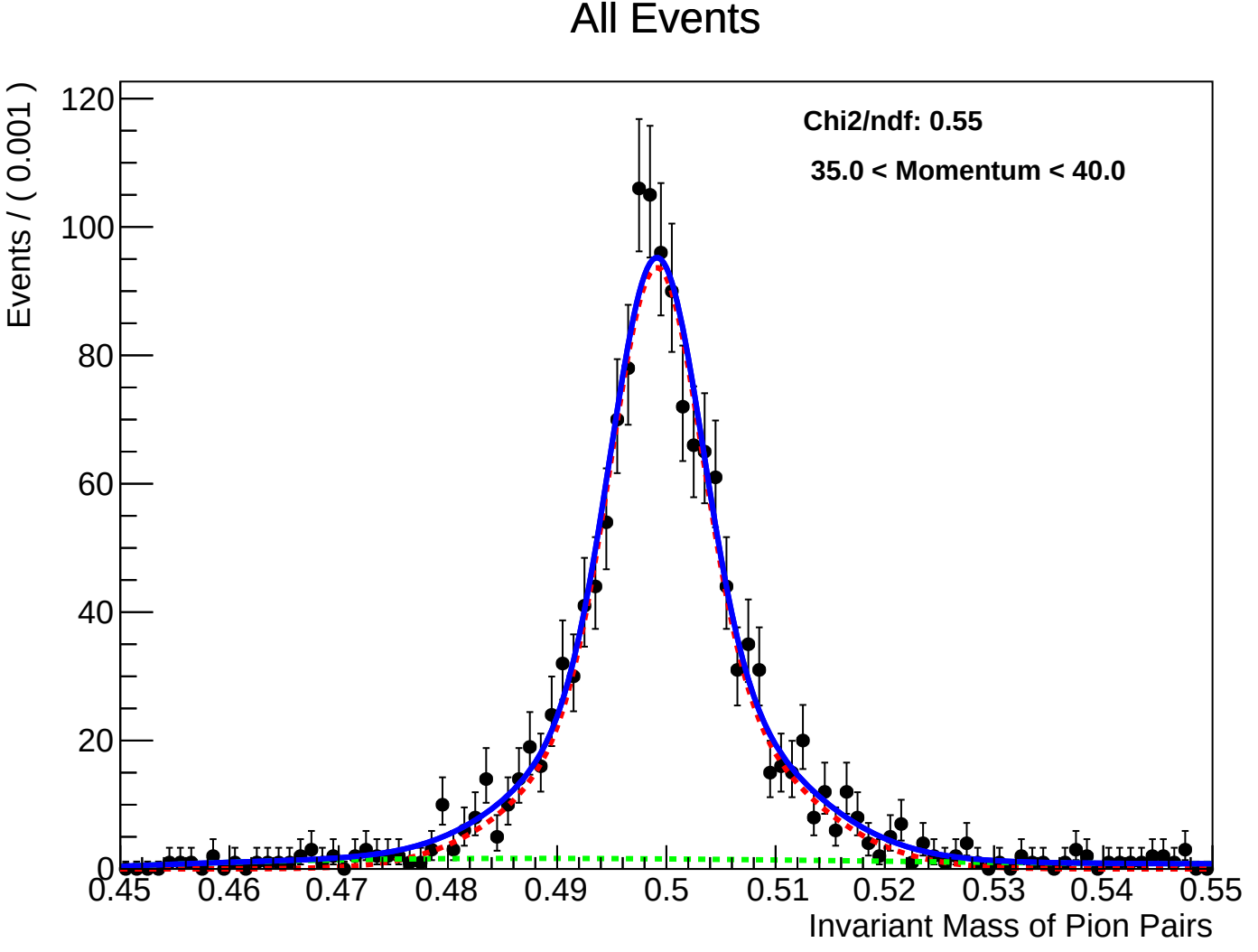

All Events
Chi2/ndf: 0.69
30.0 < Momentum < 35.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
140
160
180
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

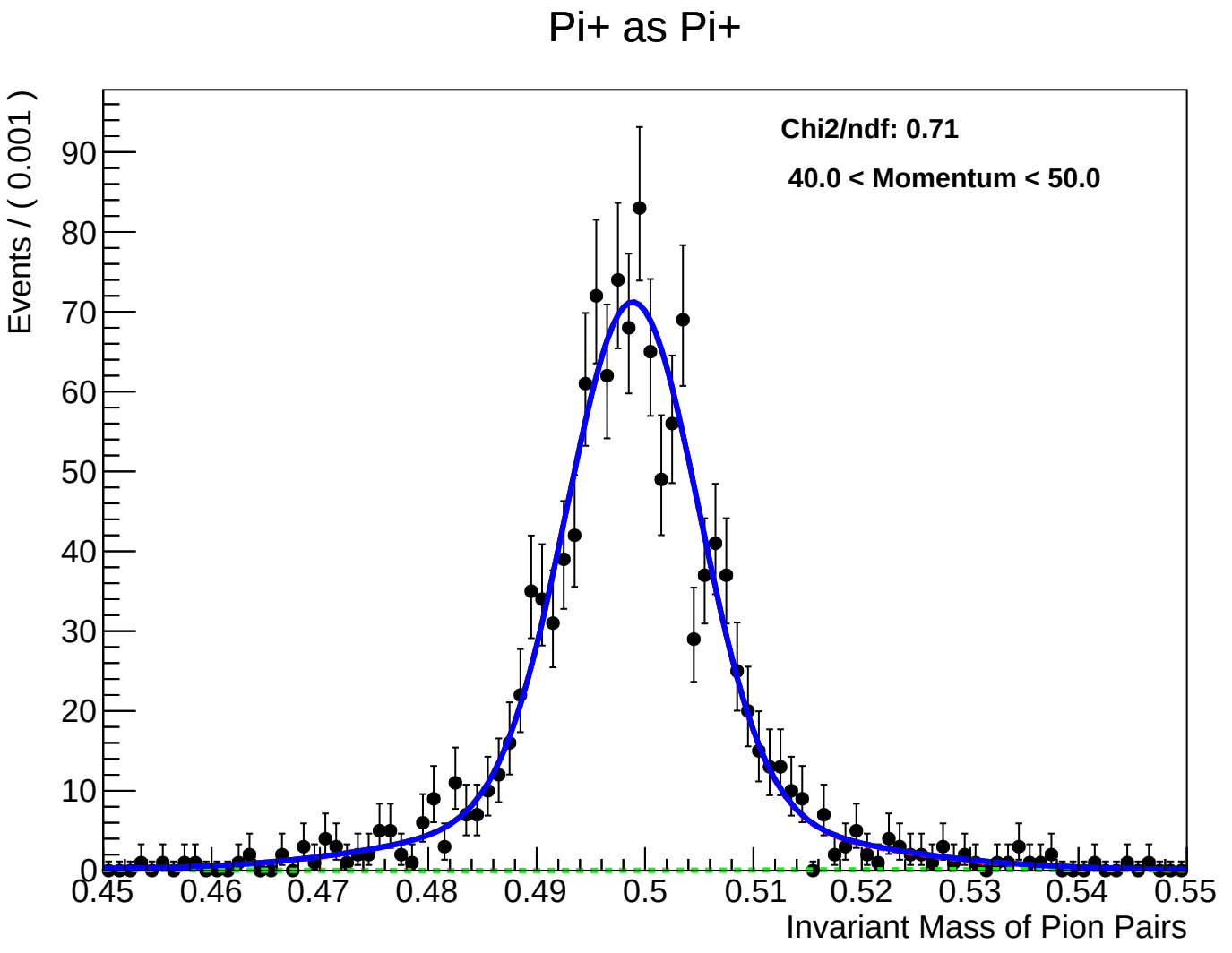

Pi+ as Pi+
Chi2/ndf: 0.61
35.0 < Momentum < 40.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55

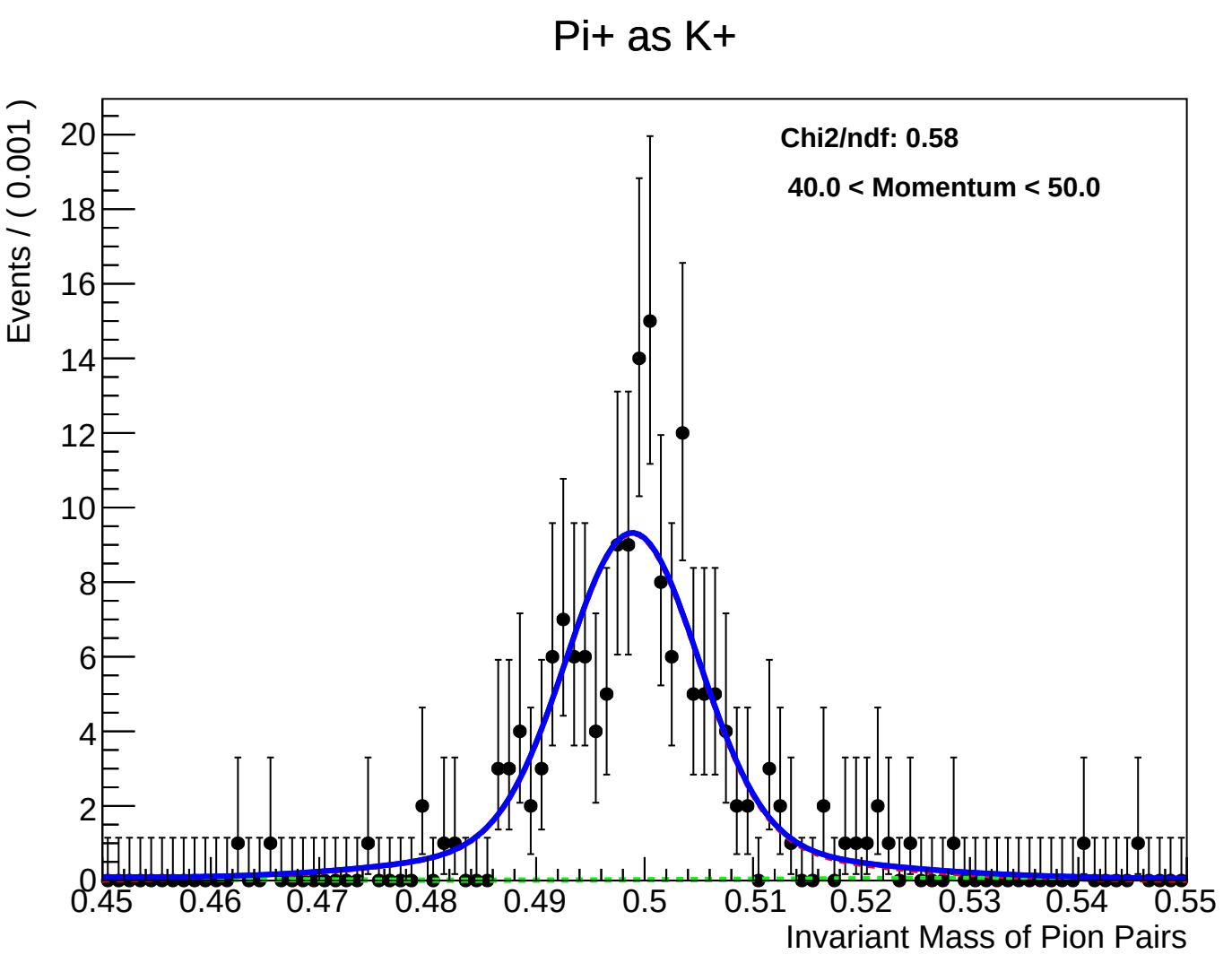

Pi+ as K+
Chi2/ndf: 0.61
35.0 < Momentum < 40.0
Events / (0.001)
0
2
4
6
8
10
12
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

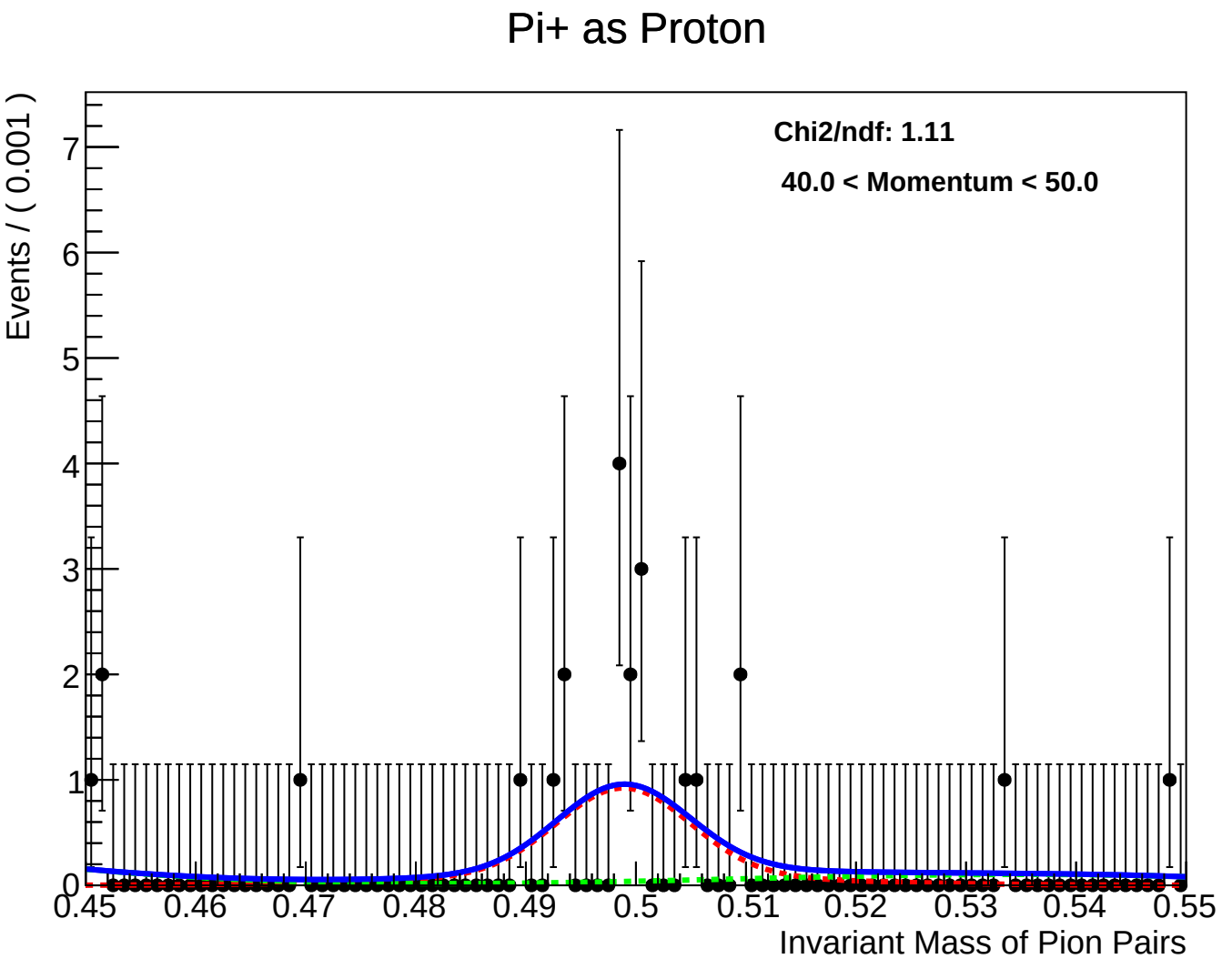

Pi+ as Proton
Chi2/ndf: 0.75
35.0 < Momentum < 40.0
Events / (0.001)
0
1
2
3
4
5
6
7
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

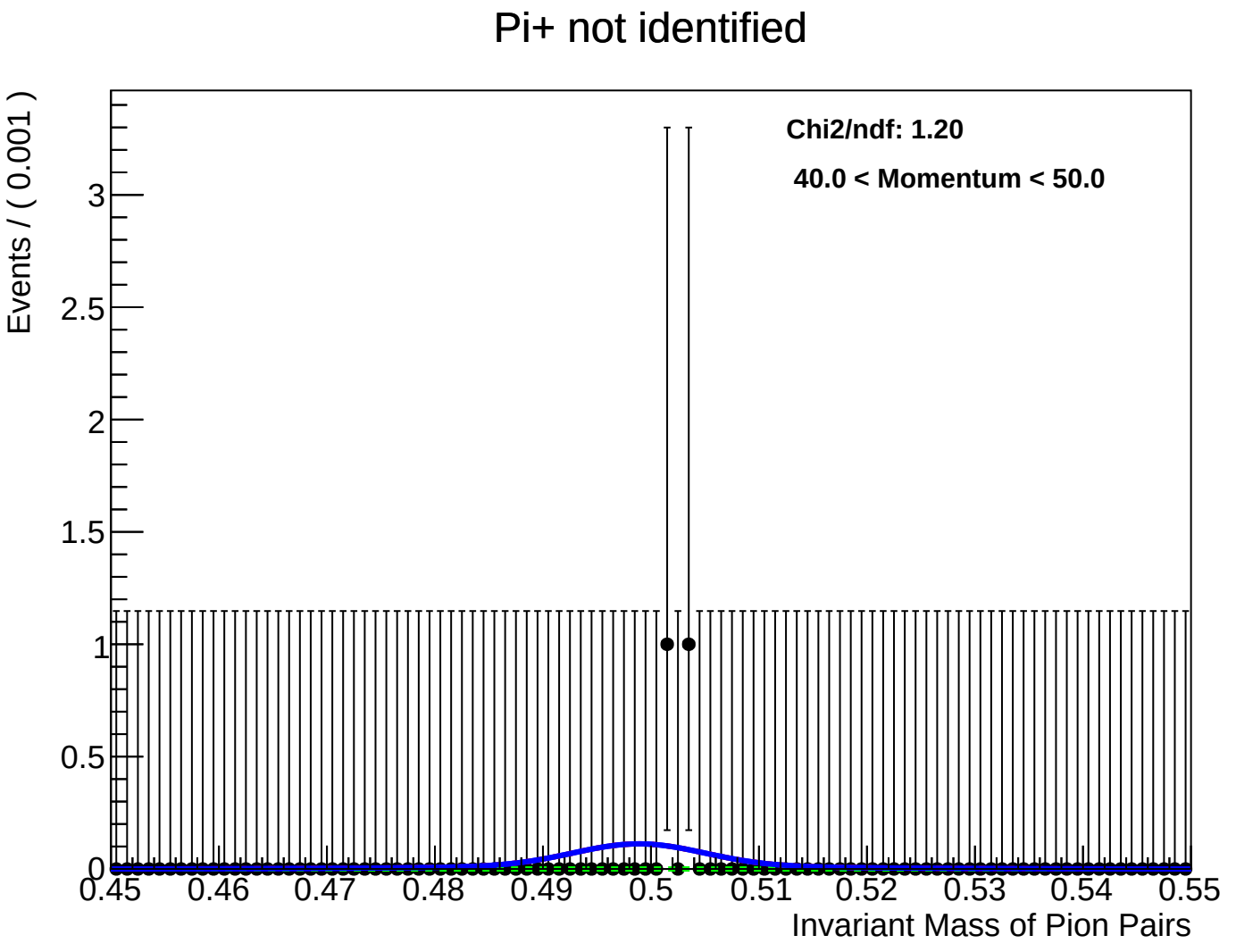

Pi+ not identified
Chi2/ndf: 1.32
35.0 < Momentum < 40.0
Events / (0.001)
0
0.5
1
1.5
2
2.5
3
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs

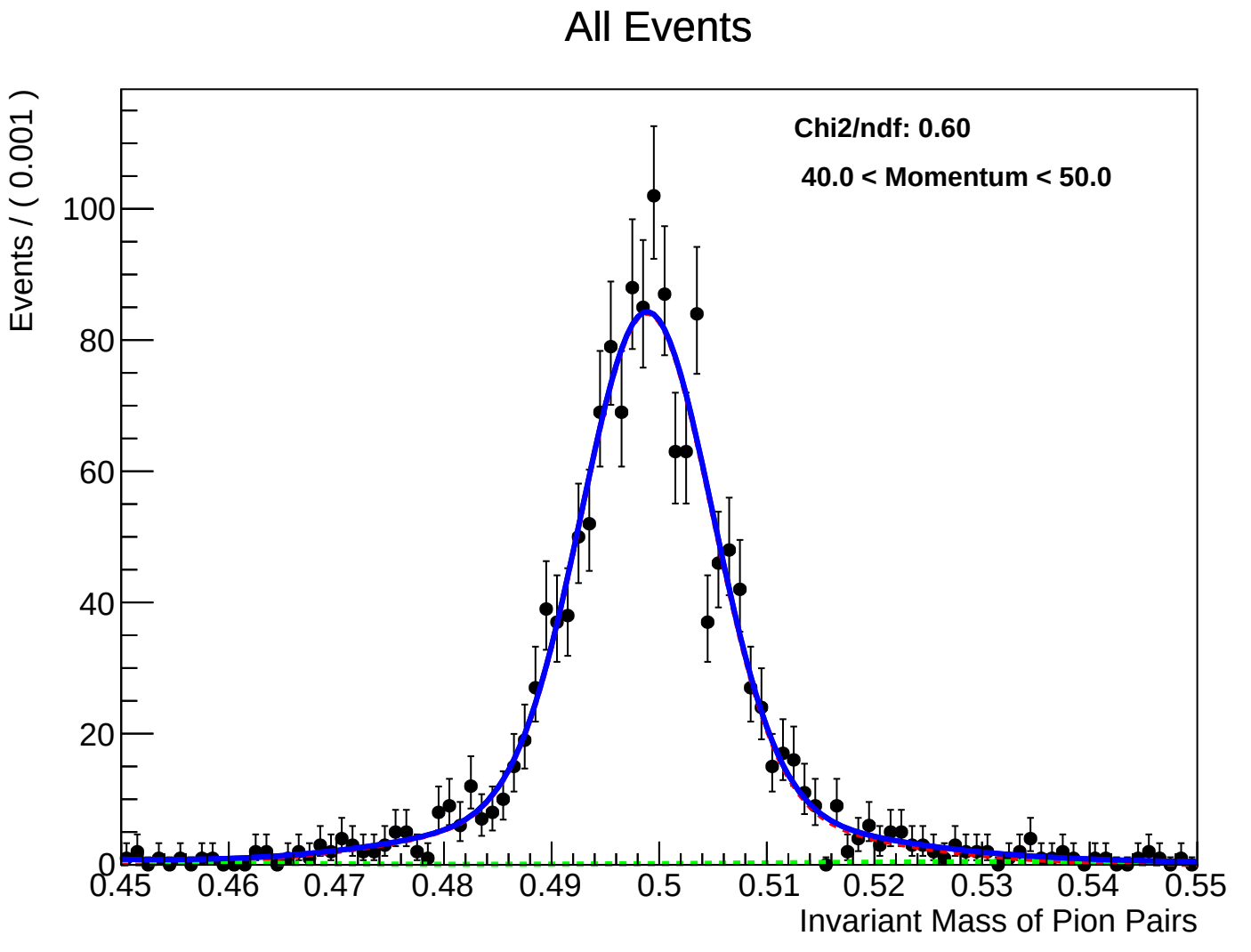

All Events
Chi2/ndf: 0.55
35.0 < Momentum < 40.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
20
40
60
80
100
120
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55


Pi+ as Pi+
Chi2/ndf: 0.71
40.0 < Momentum < 50.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
10
20
30
40
50
60
70
80
90
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55


Pi+ as K+
Chi2/ndf: 0.58
40.0 < Momentum < 50.0
Events / (0.001)
Invariant Mass of Pion Pairs
0
2
4
6
8
10
12
14
16
18
20
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55


Pi+ as Proton
Chi2/ndf: 1.11
40.0 < Momentum < 50.0
Events / (0.001)
0
1
2
3
4
5
6
7
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs


Pi+ not identified
Chi2/ndf: 1.20
40.0 < Momentum < 50.0
Events / (0.001)
0
0.5
1
1.5
2
2.5
3
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs


All Events
Chi2/ndf: 0.60
40.0 < Momentum < 50.0
Events / (0.001)
0
20
40
60
80
100
0.45
0.46
0.47
0.48
0.49
0.5
0.51
0.52
0.53
0.54
0.55
Invariant Mass of Pion Pairs