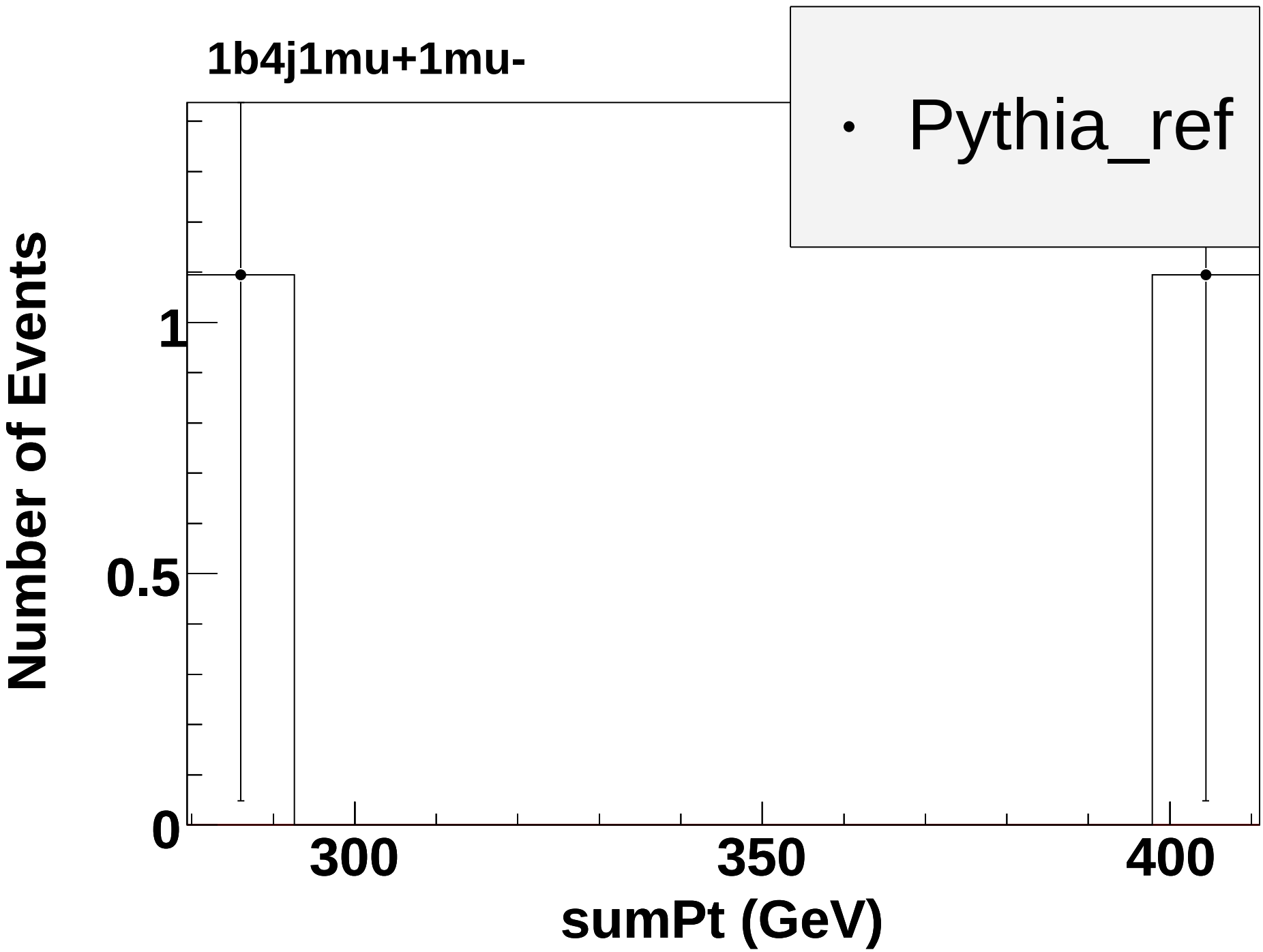
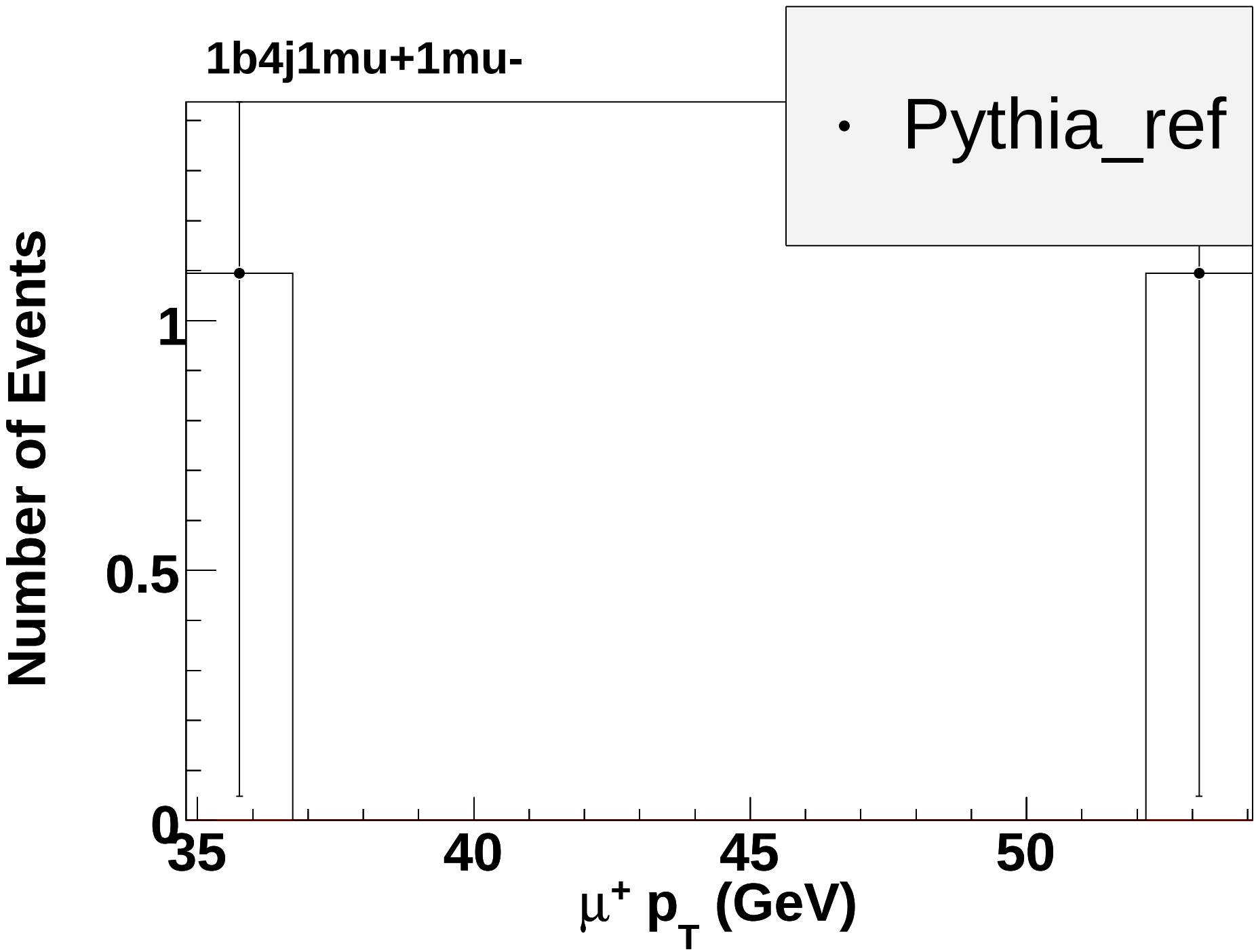
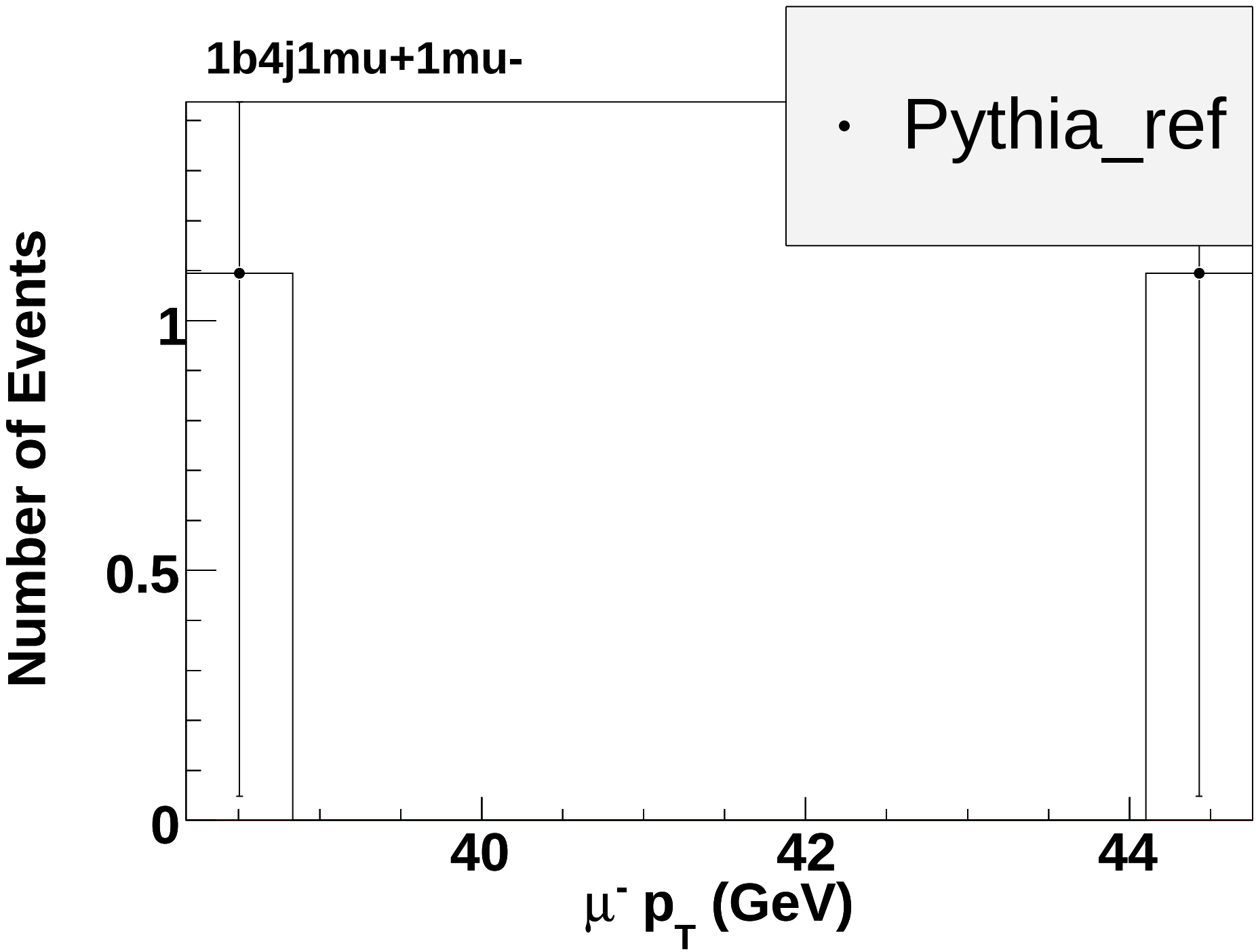
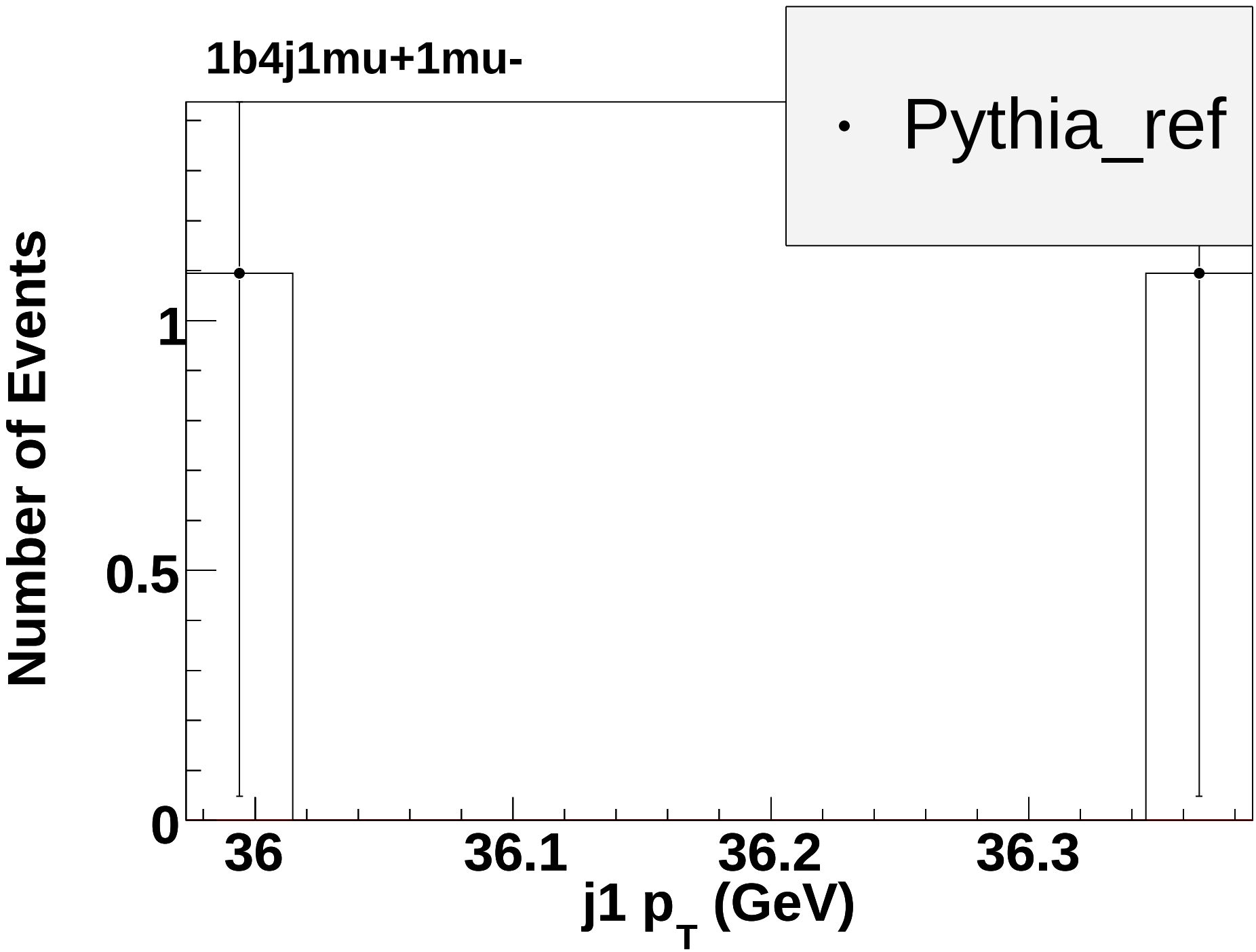
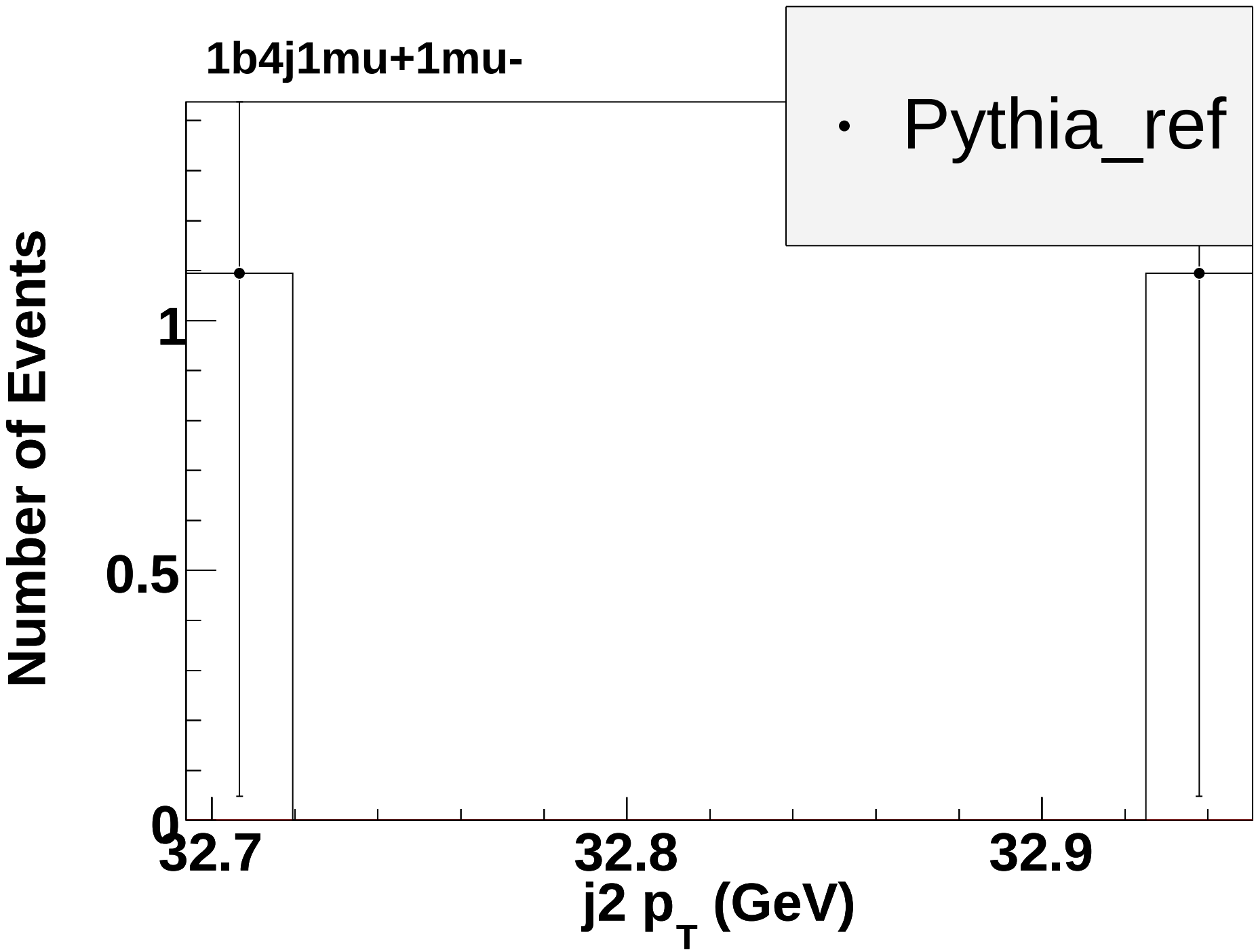
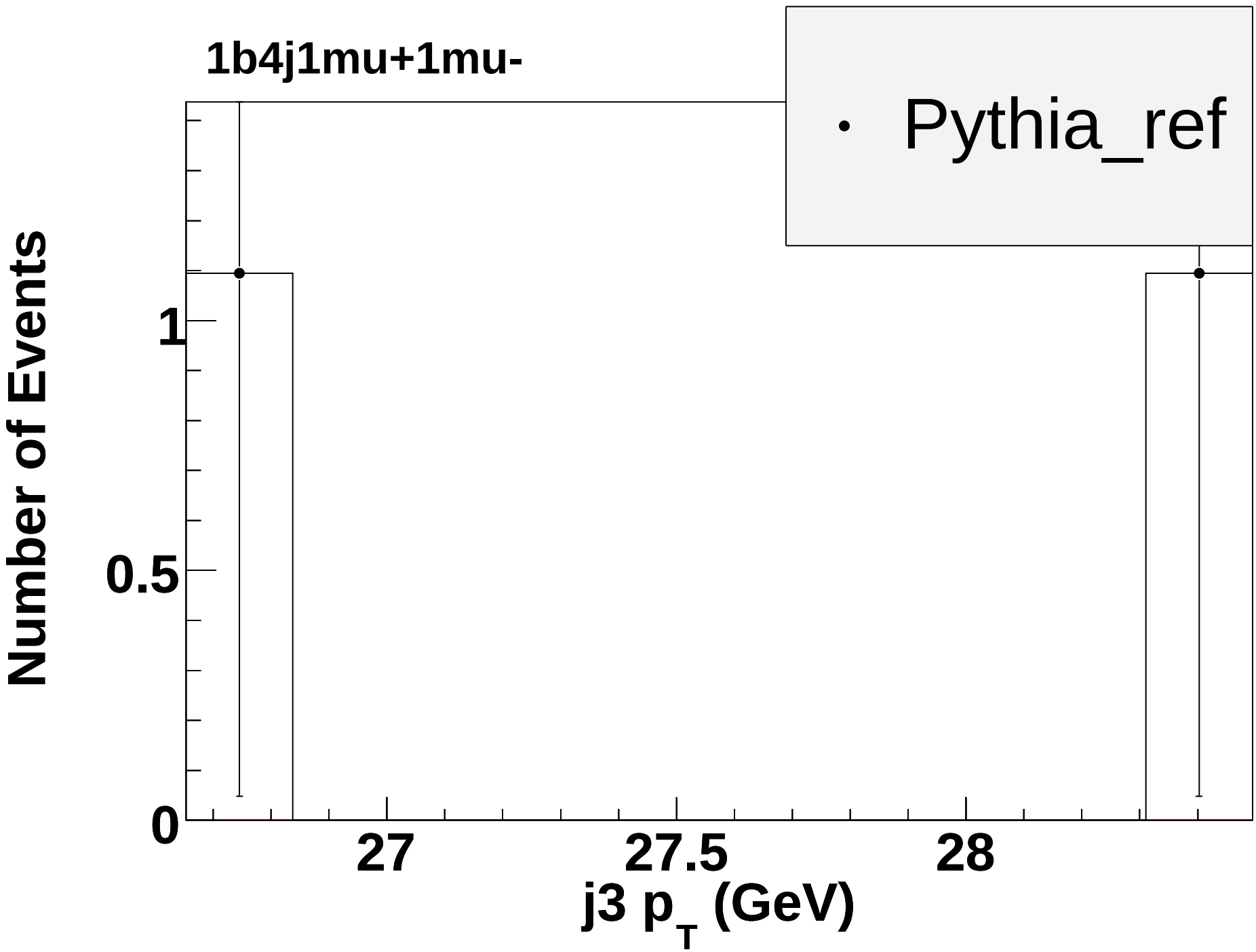

1b4j1mu+1mu-
Pythia_ref
Number of Events
1
0.5
0
300
350
400
sumPt (GeV)

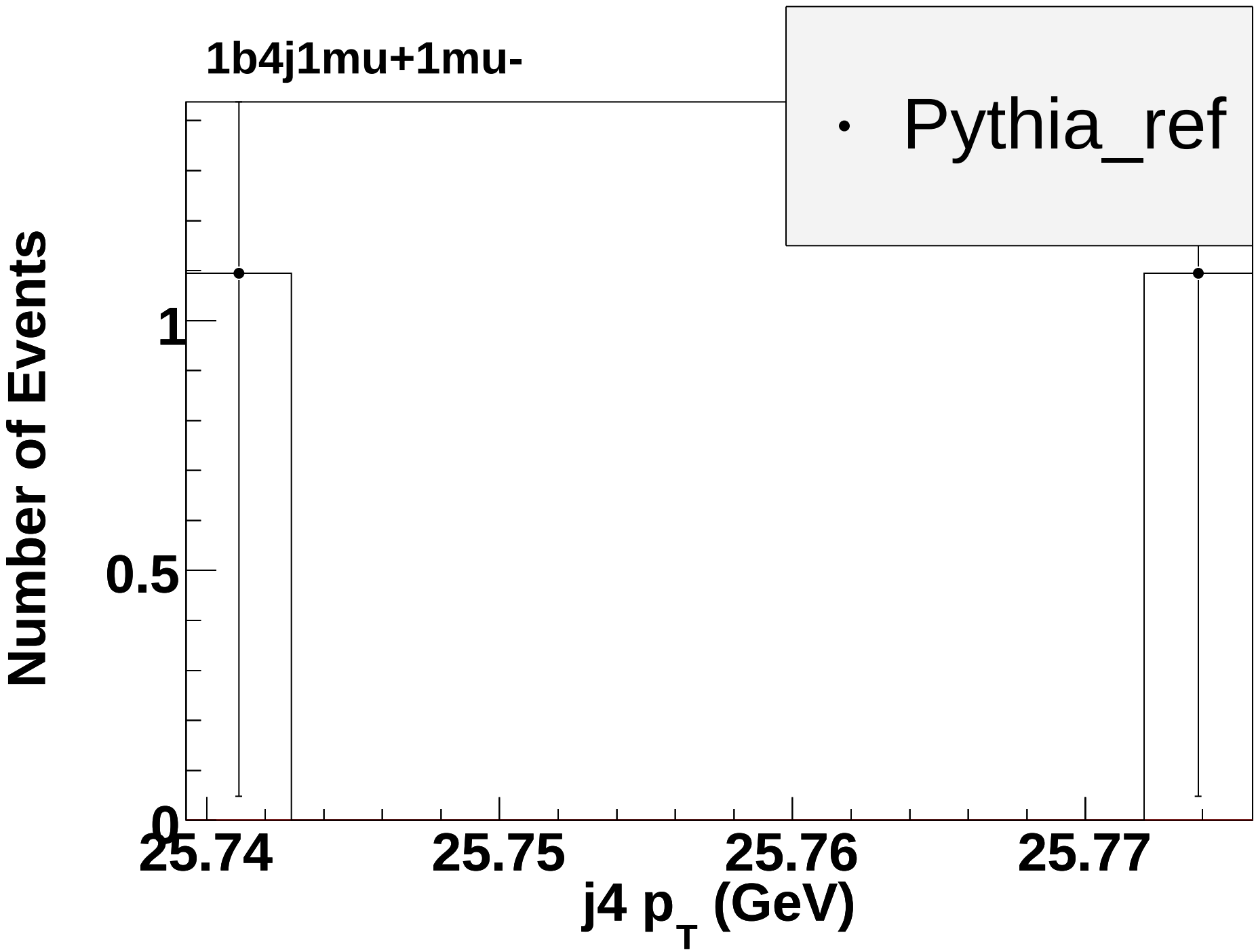

1b4j1mu+1mu-
Pythia_ref
Number of Events
1
0.5
0
35
40
45
50
μ+ pT (GeV)

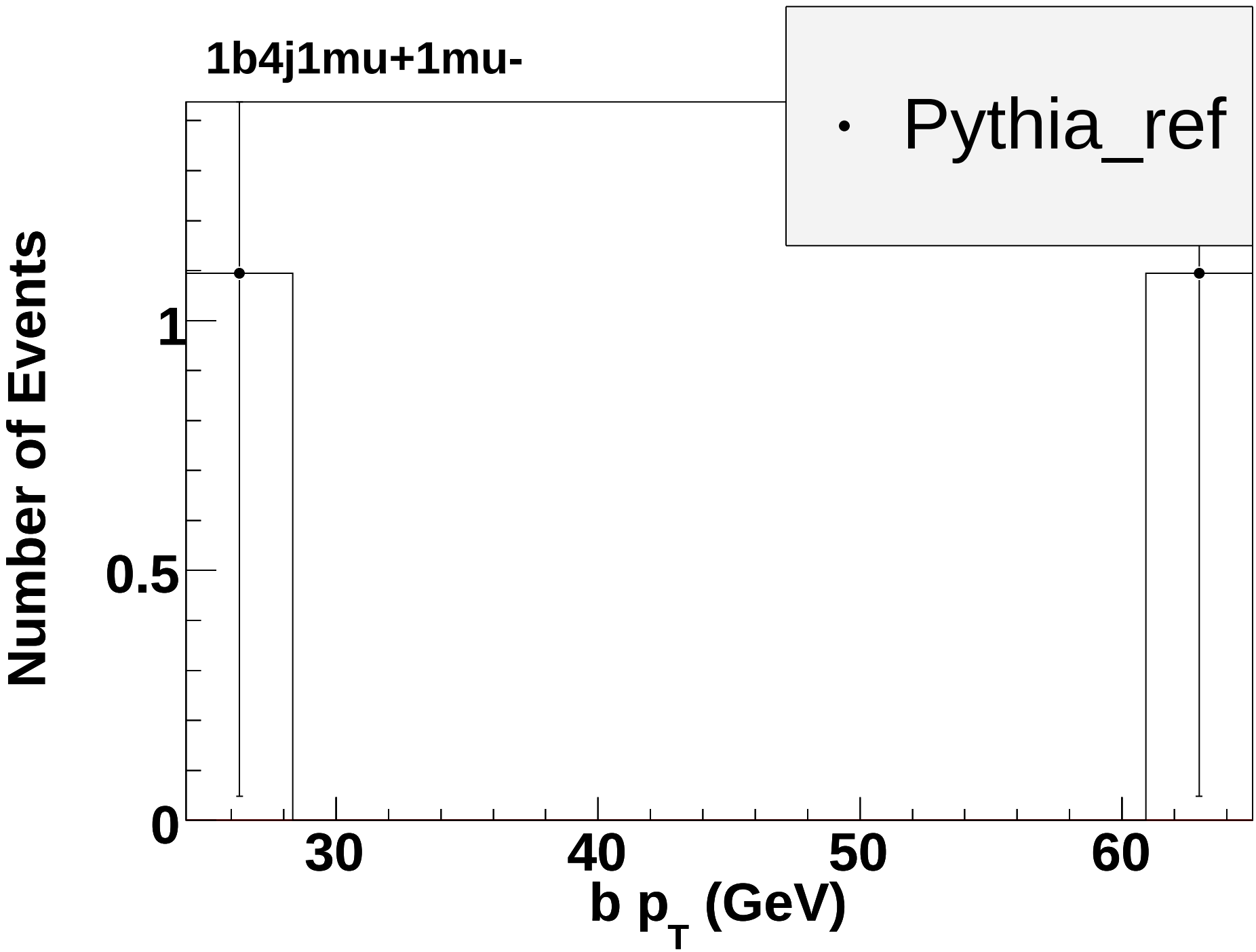

1b4j1mu+1mu-
Pythia_ref
Number of Events
0
0.5
1
40
42
44
μ- pT (GeV)

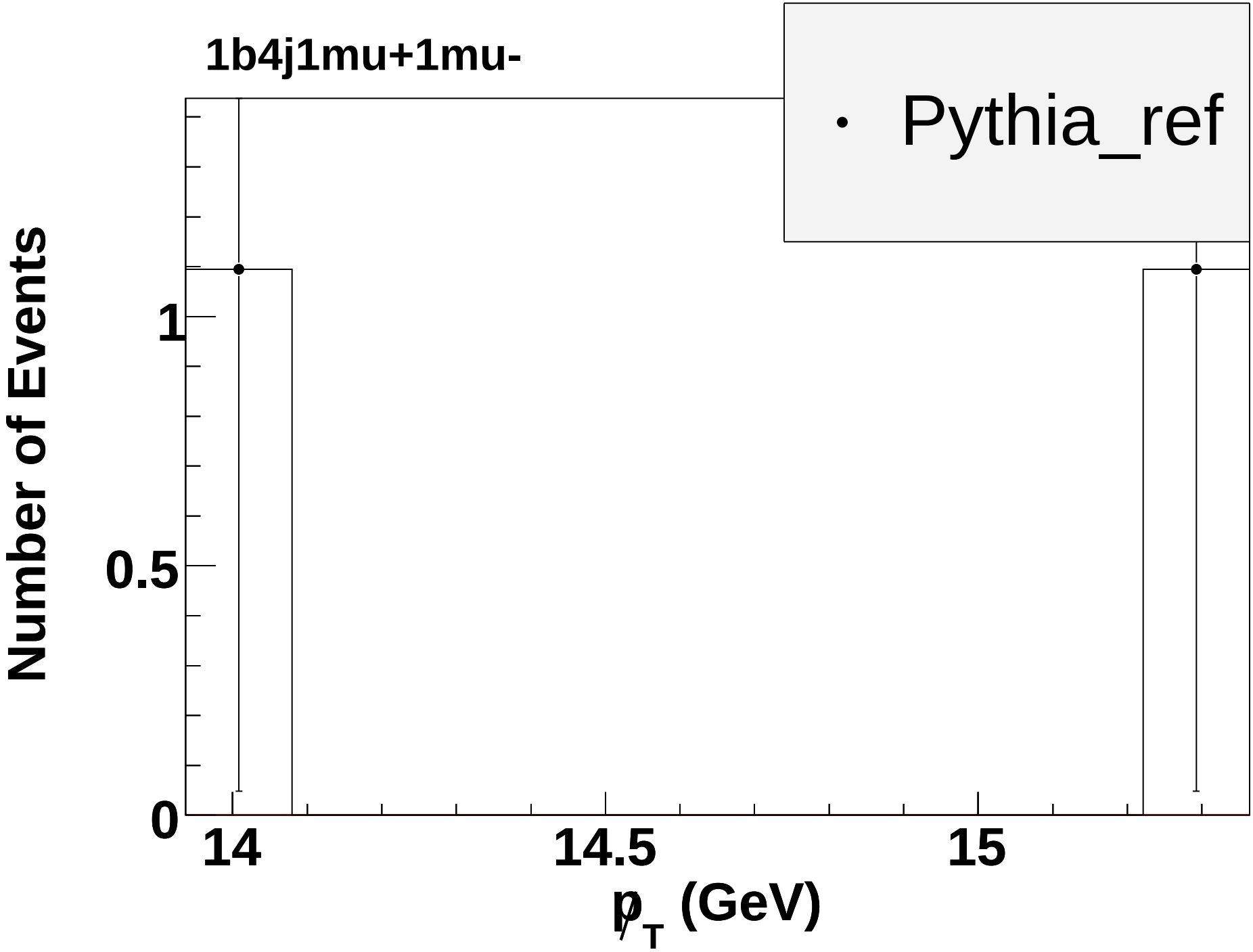

1b4j1mu+1mu-
Pythia_ref
Number of Events
1
0.5
0
36
36.1
36.2
36.3
j1 p_T (GeV)

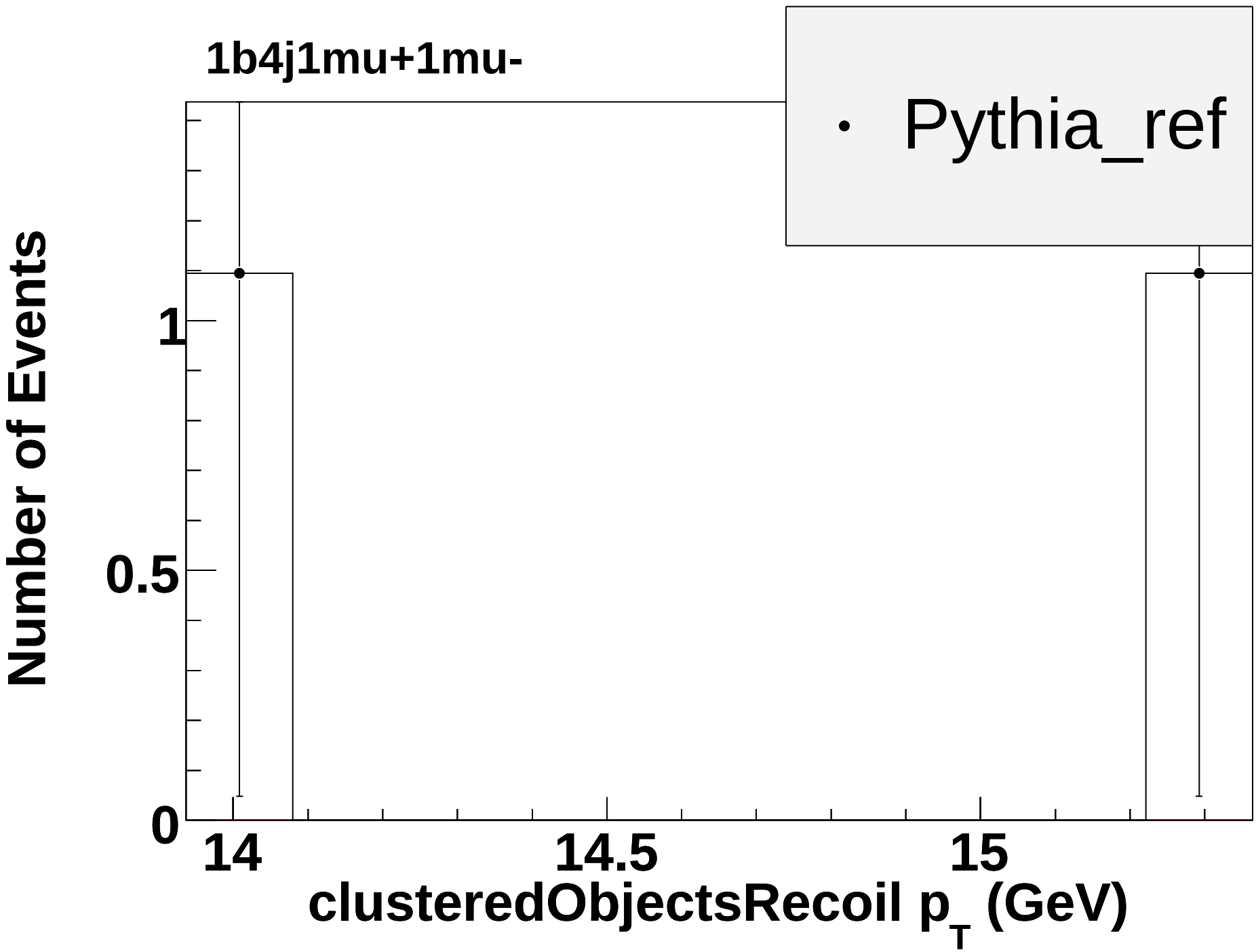

1b4j1mu+1mu-
Pythia_ref
Number of Events
1
0.5
0
32.7
32.8
32.9
j2 p_T (GeV)

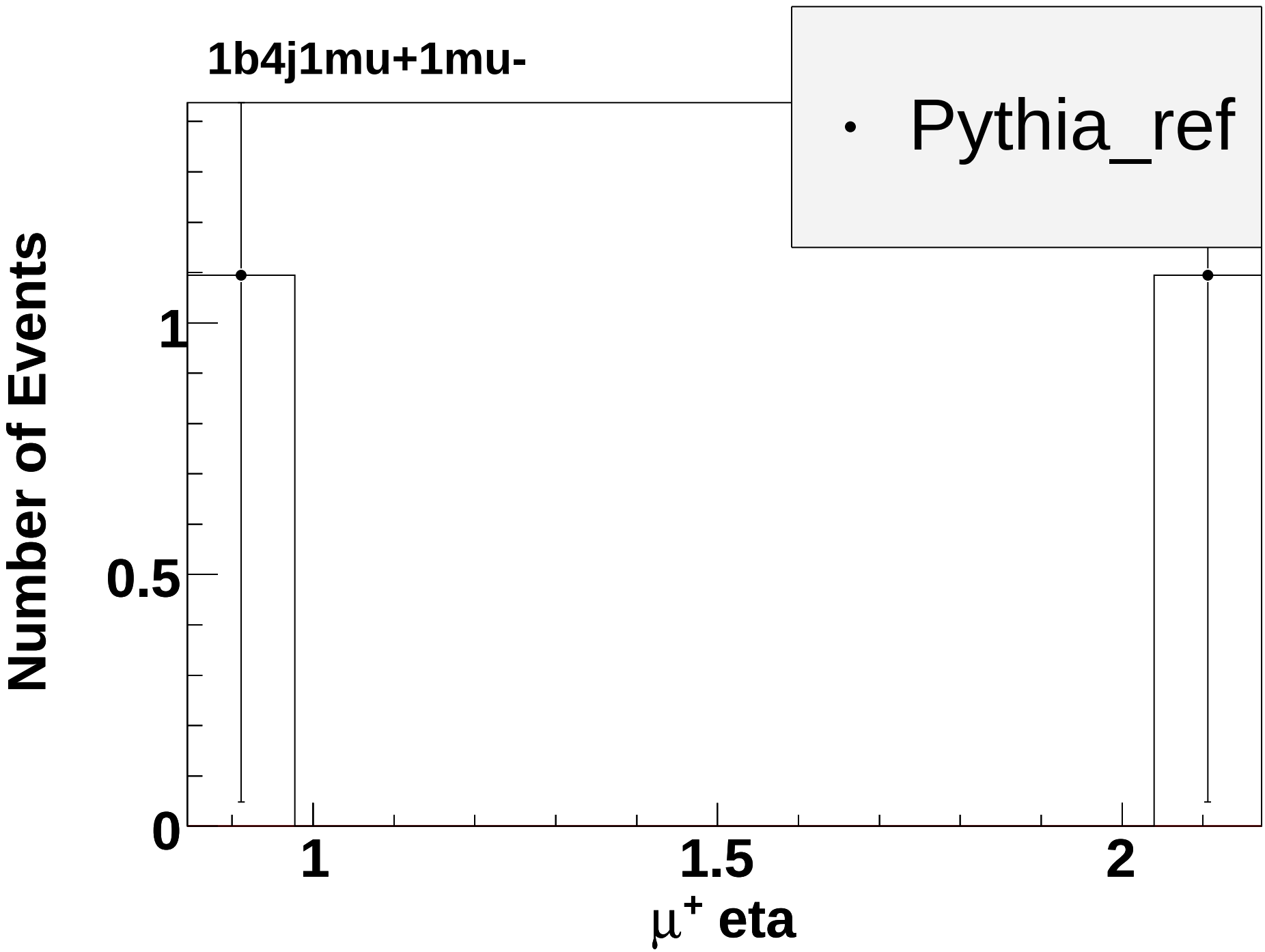

1b4j1mu+1mu-
Pythia_ref
Number of Events
1
0.5
0
27
27.5
28
j3 p_T (GeV)

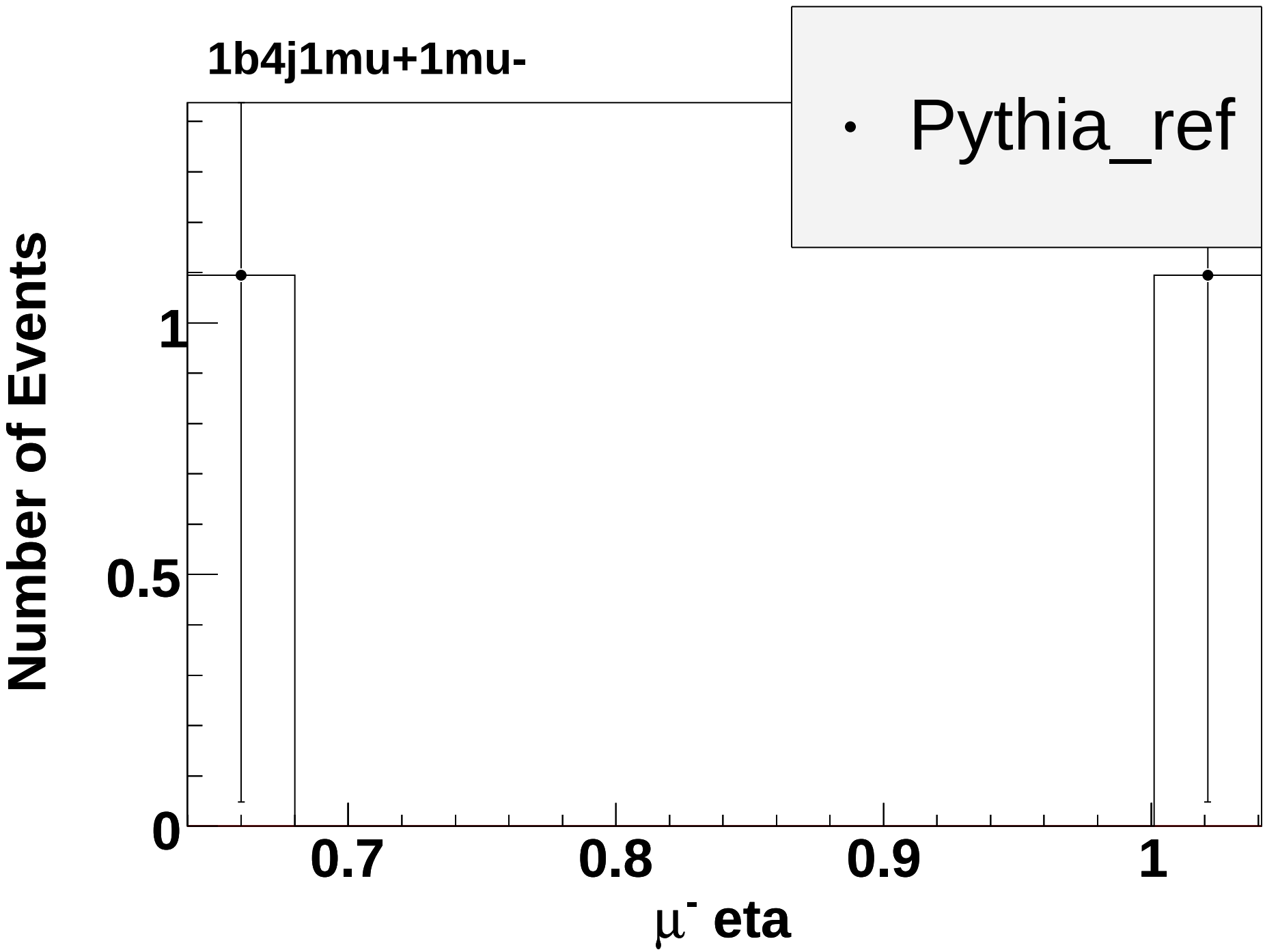

1b4j1mu+1mu-
Pythia_ref
Number of Events
1
0.5
0
25.74
25.75
25.76
25.77
j4 p_T (GeV)

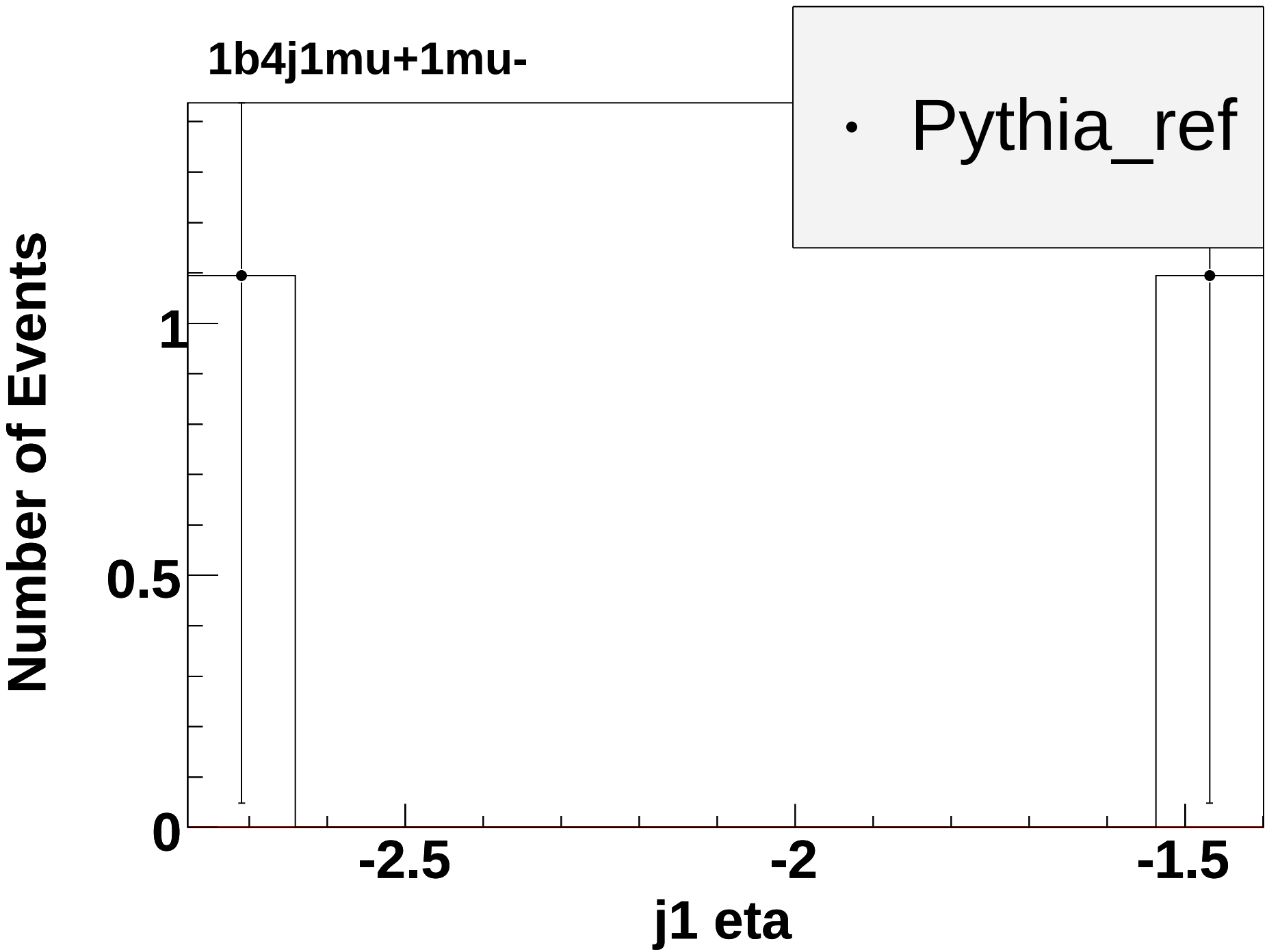

1b4j1mu+1mu-
Pythia_ref
Number of Events
0
0.5
1
30
40
50
60
b $p_T$ (GeV)

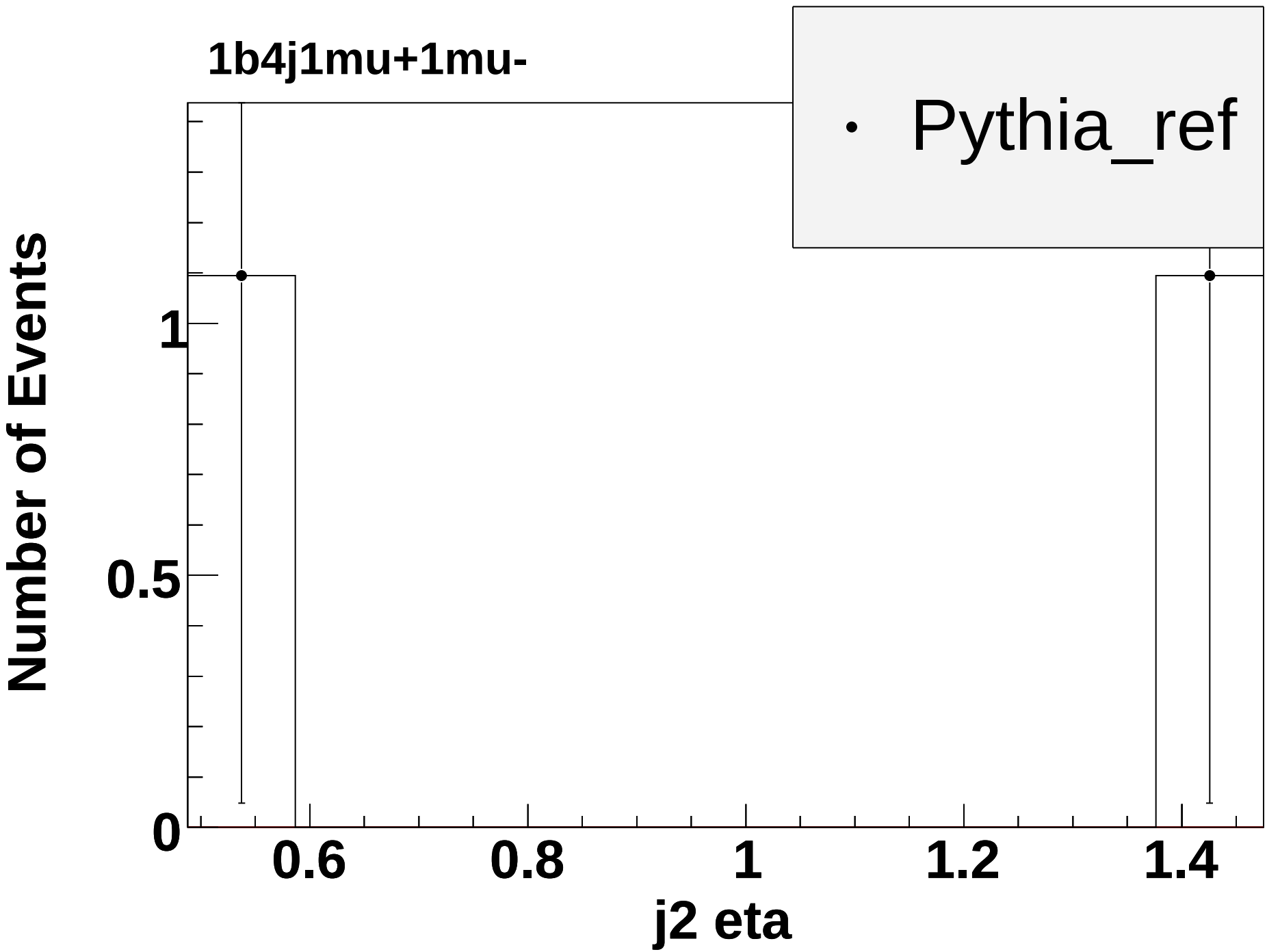

1b4j1mu+1mu-
Pythia_ref
Number of Events
1
0.5
0
14
14.5
15
p_T (GeV)

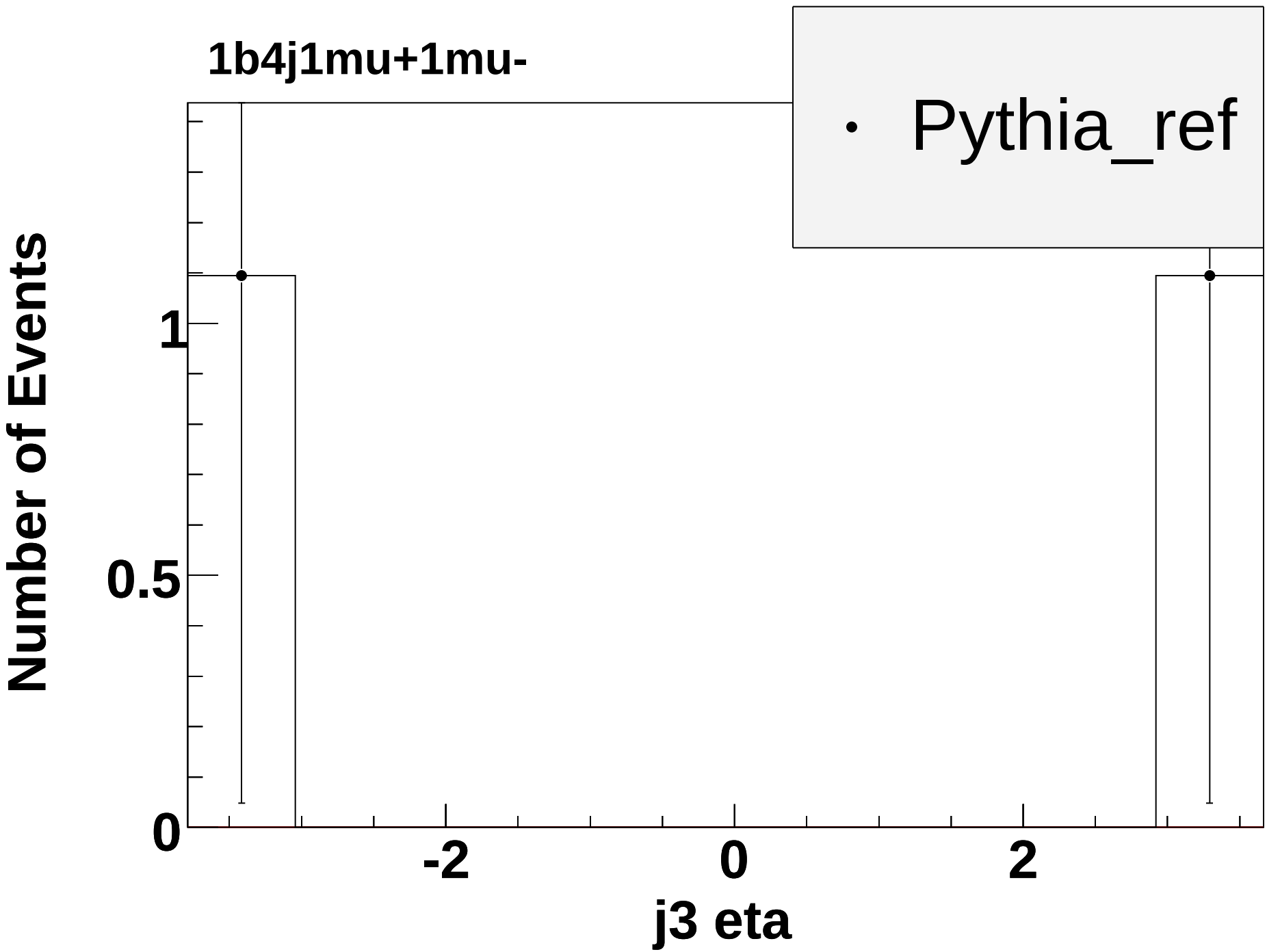

1b4j1mu+1mu-
Pythia_ref
Number of Events
1
0.5
0
14
14.5
15
clusteredObjectsRecoil $p_T$ (GeV)

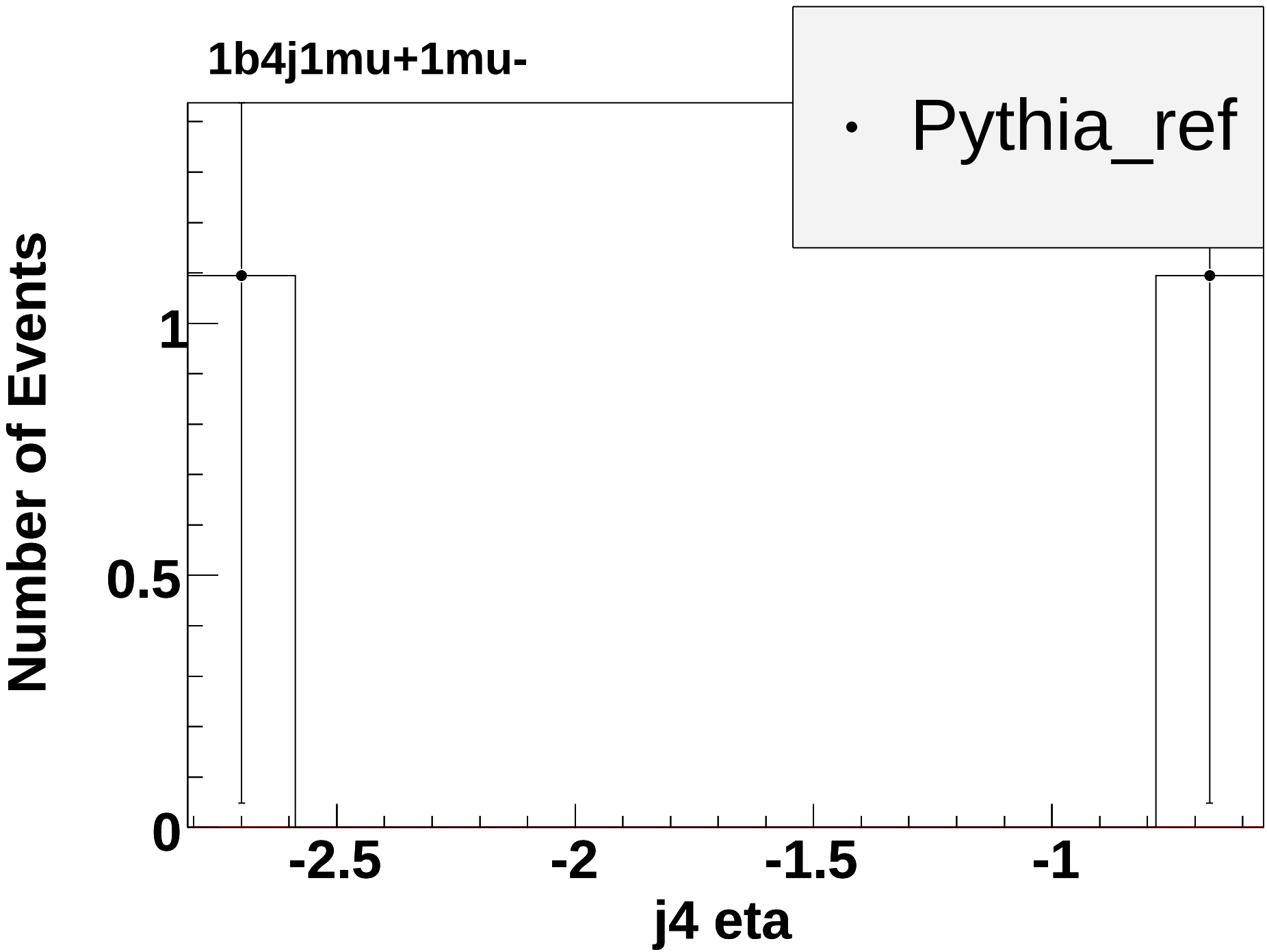

1b4j1mu+1mu-
Pythia_ref
Number of Events
0
0.5
1
1
1.5
2
μ+ eta

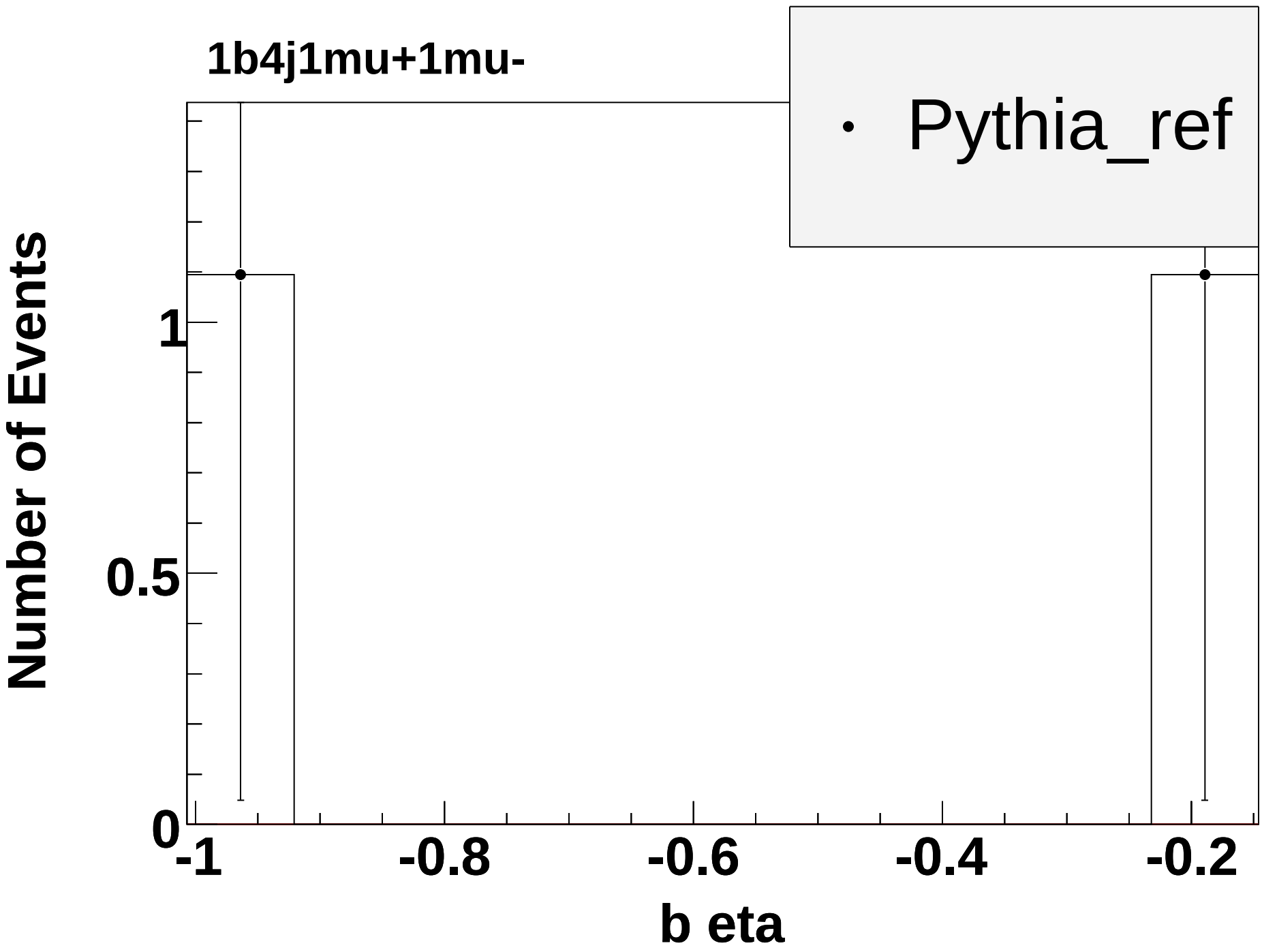

1b4j1mu+1mu-
Pythia_ref
Number of Events
1
0.5
0
0.7
0.8
0.9
1
μ- eta

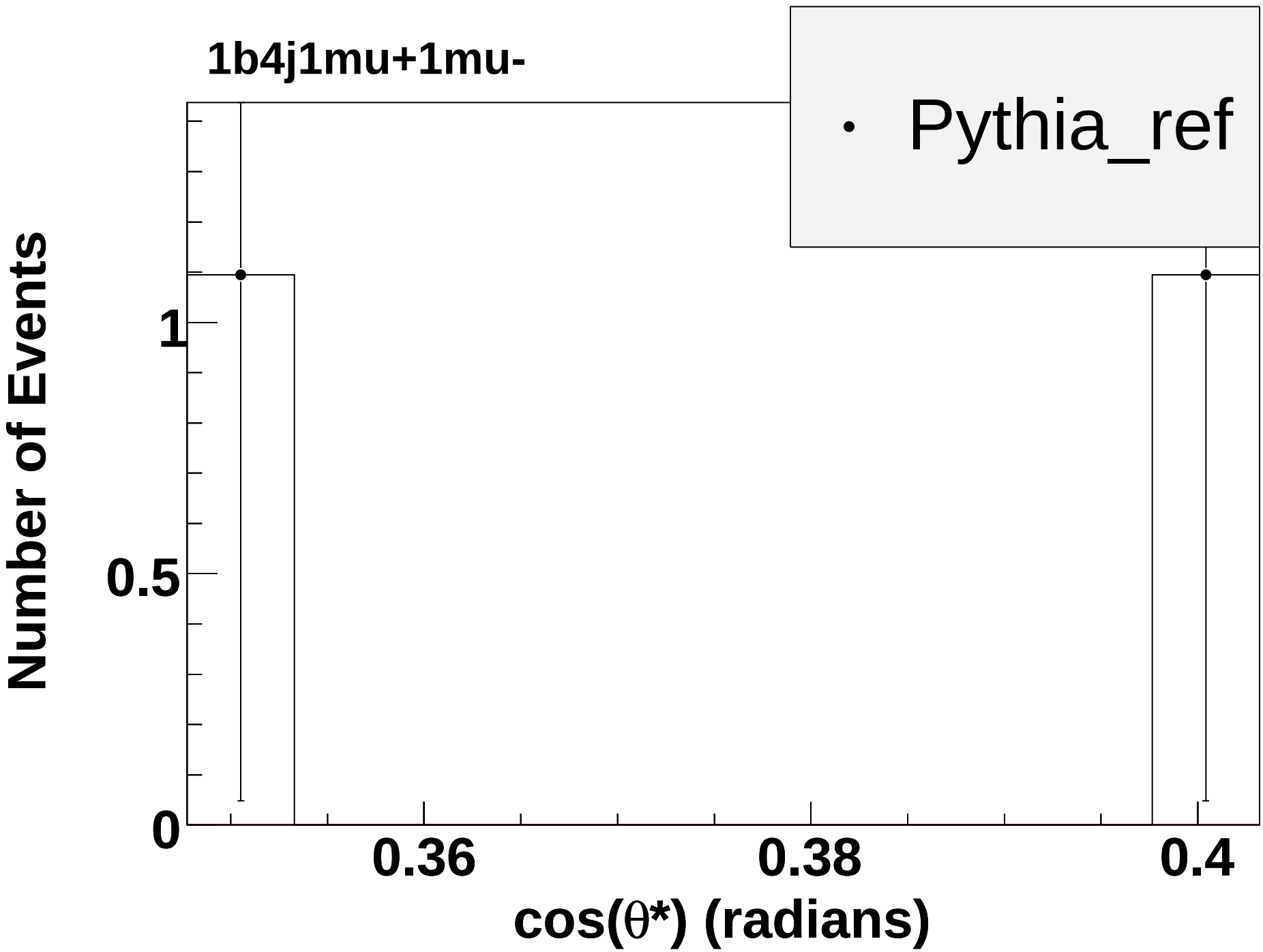

1b4j1mu+1mu-
Pythia_ref
Number of Events
1
0.5
0
-2.5
-2
-1.5
j1 eta

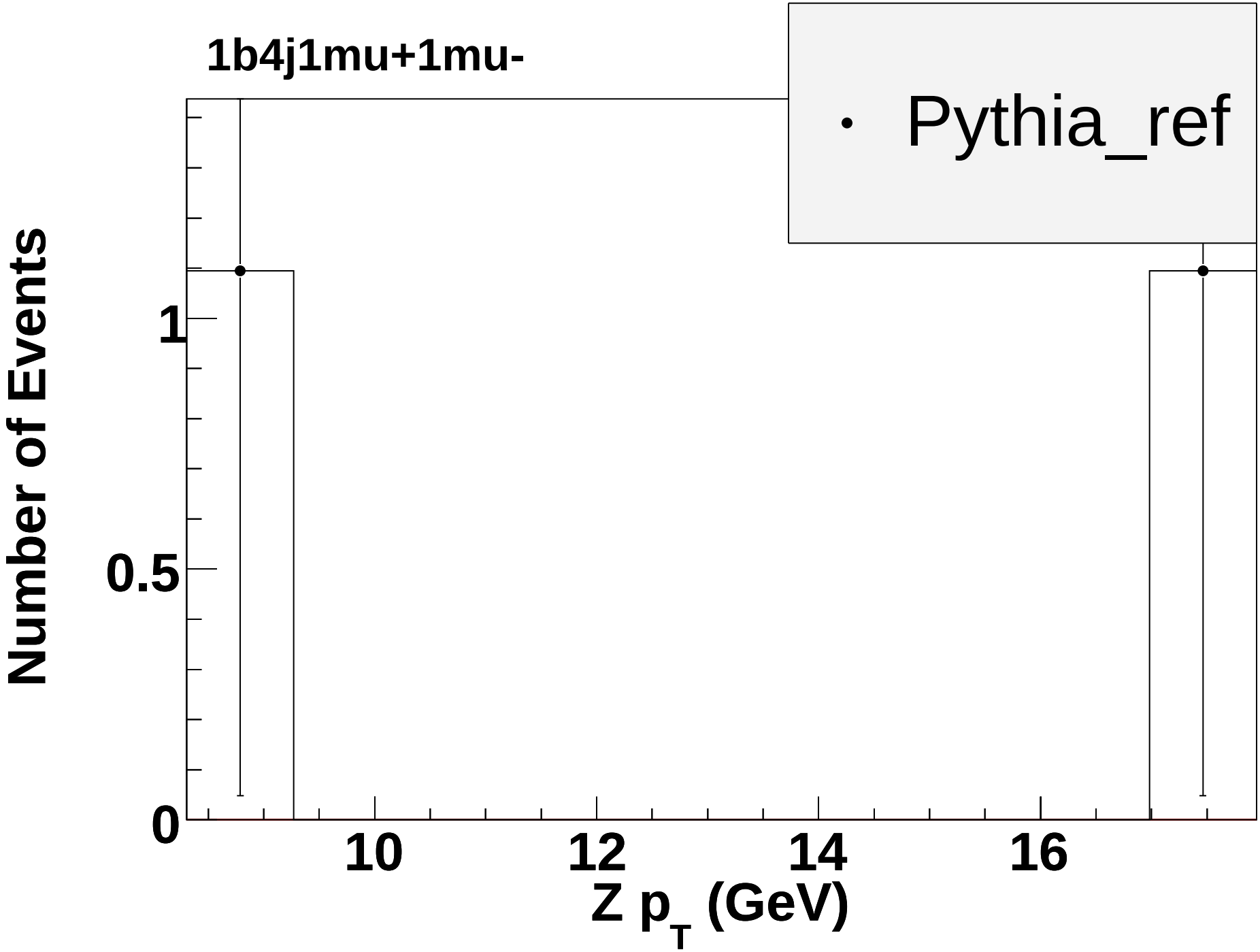

1b4j1mu+1mu-
Pythia_ref
Number of Events
0
0.5
1
0.6
0.8
1
1.2
1.4
j2 eta

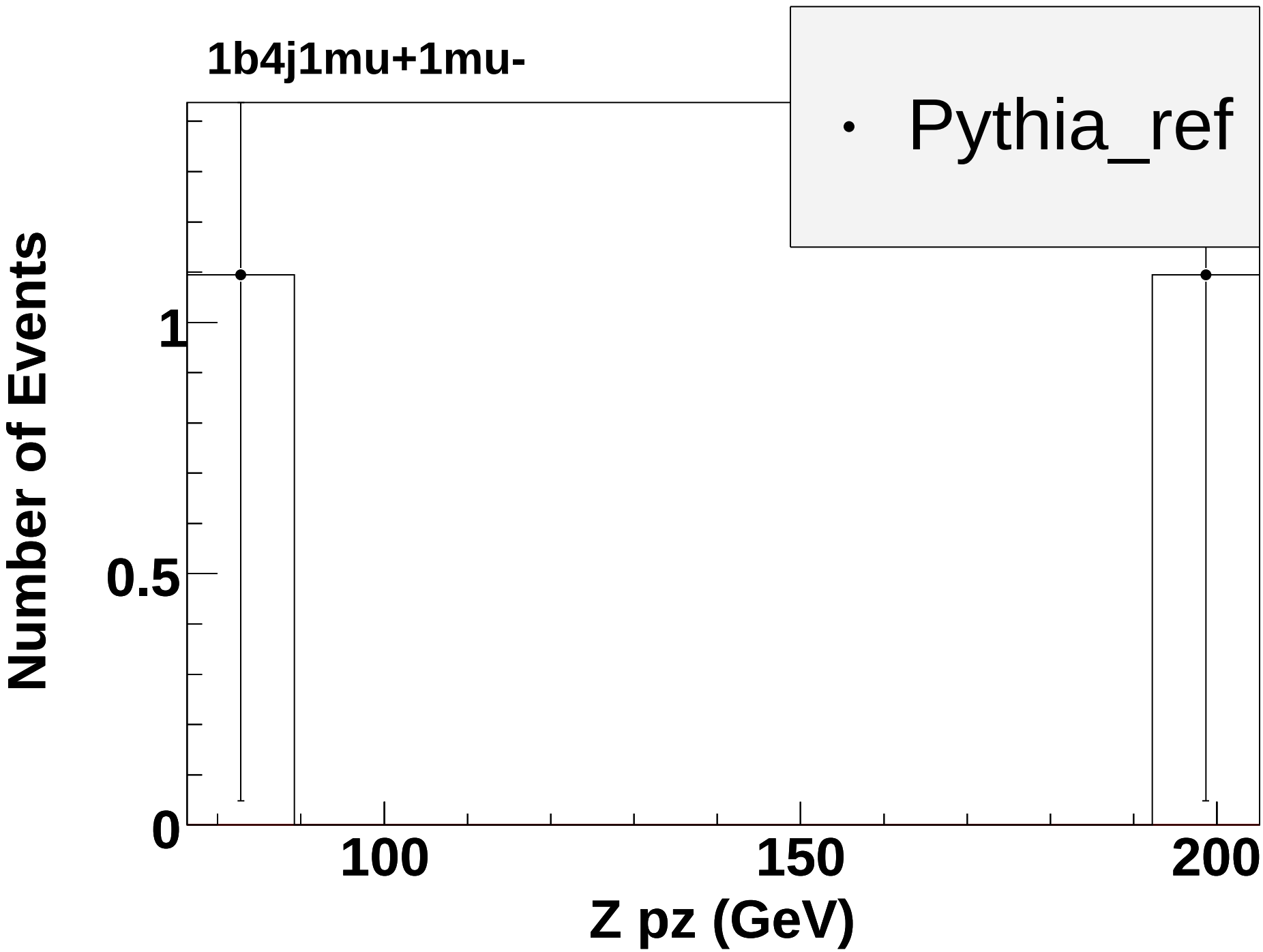

1b4j1mu+1mu-
Pythia_ref
Number of Events
1
0.5
0
-2
0
2
j3 eta

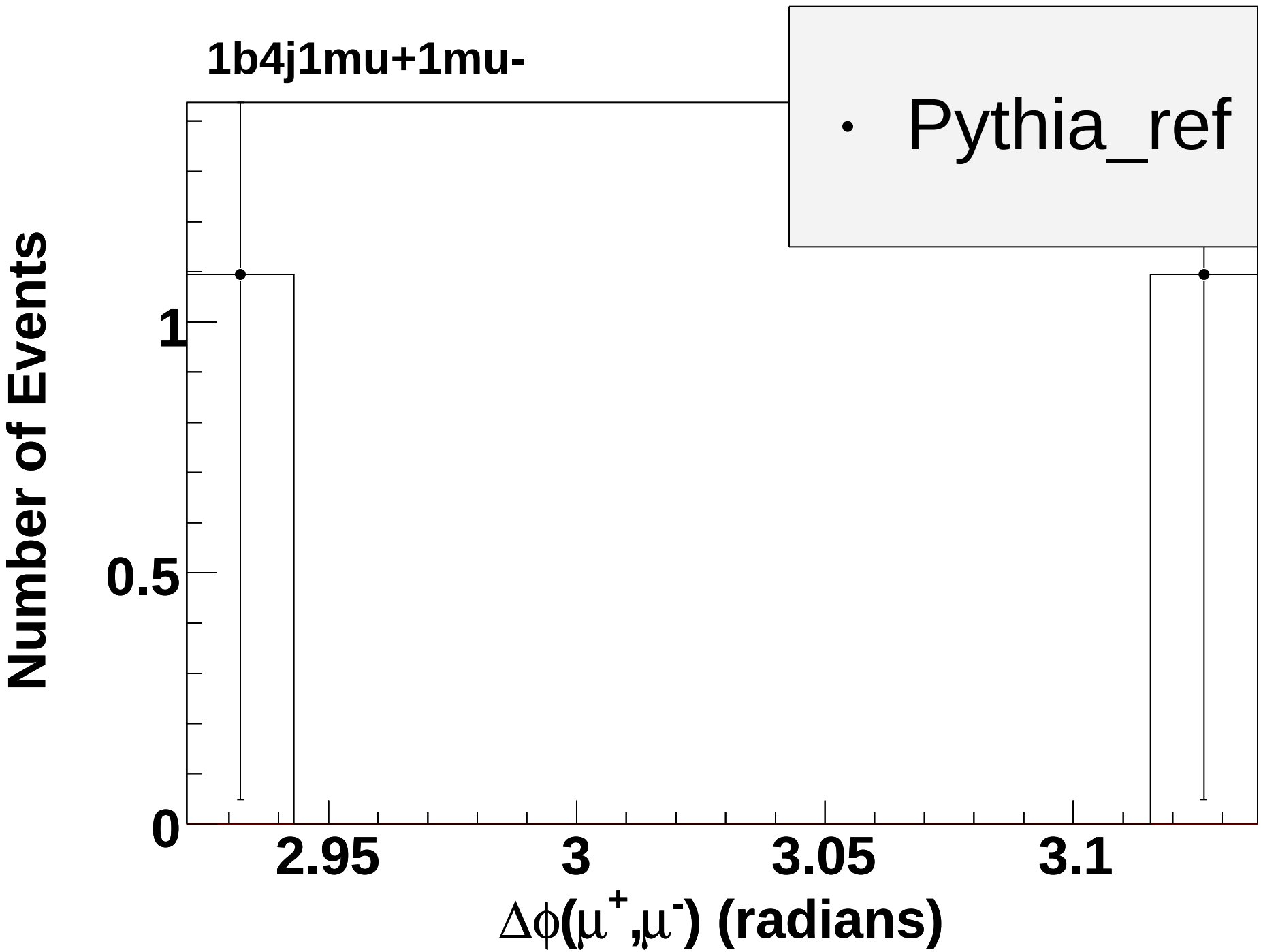

1b4j1mu+1mu-
Pythia_ref
Number of Events
1
0.5
0
-2.5
-2
-1.5
-1
j4 eta

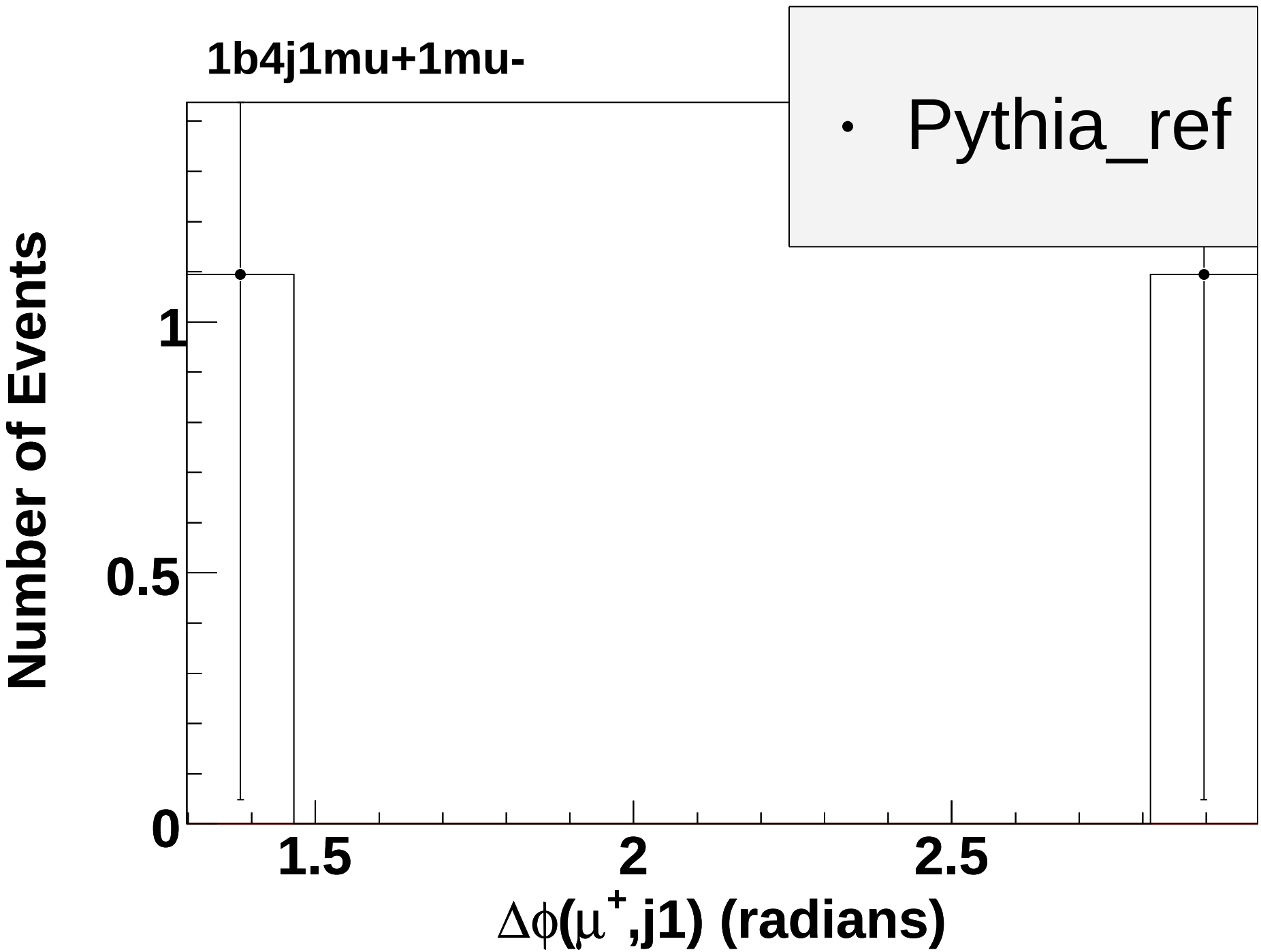

1b4j1mu+1mu-
Pythia_ref
Number of Events
1
0.5
0
-1
-0.8
-0.6
-0.4
-0.2
b eta

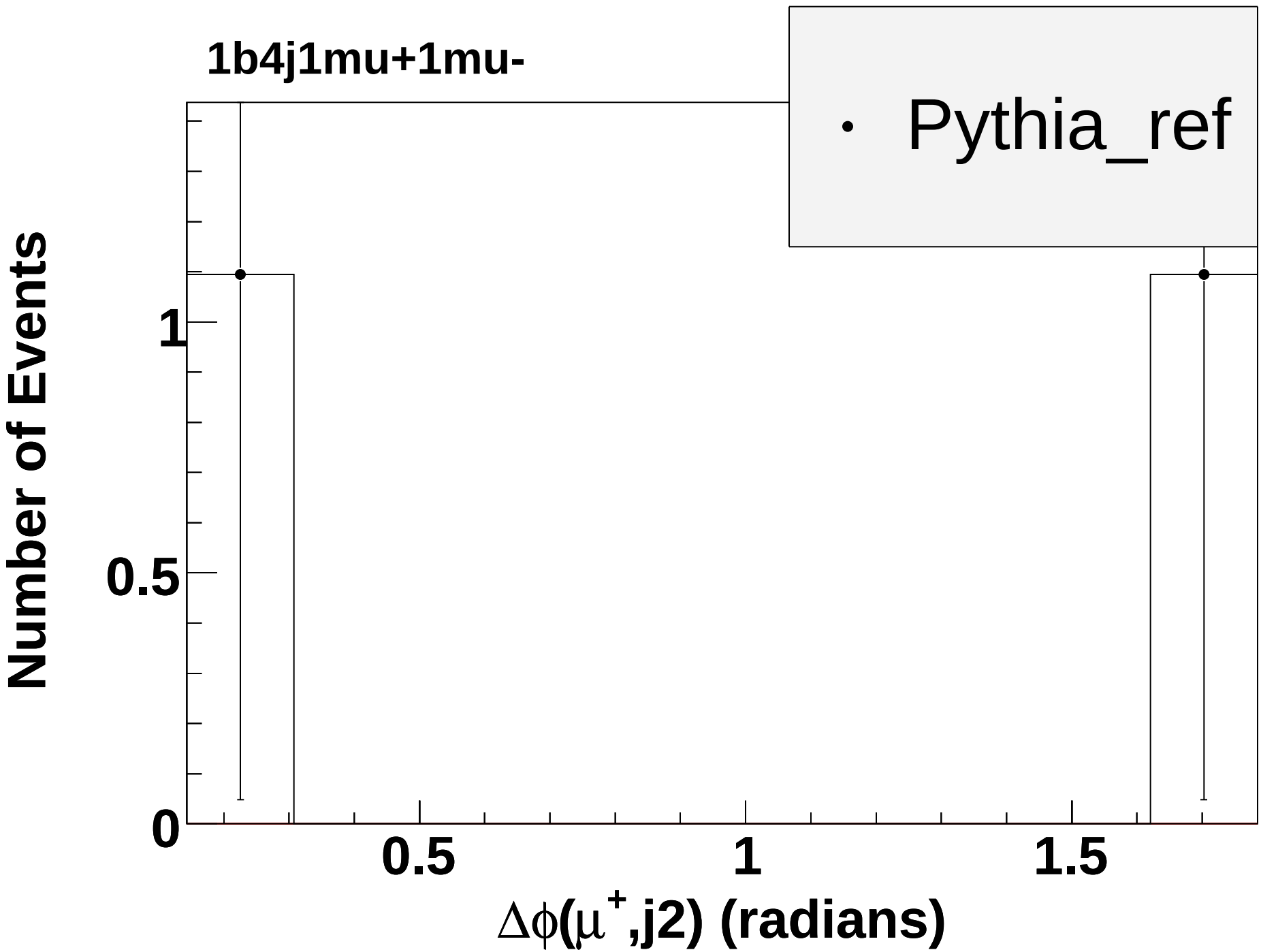

1b4j1mu+1mu-
Pythia_ref
Number of Events
1
0.5
0
0.36
0.38
0.4
cos(θ*) (radians)

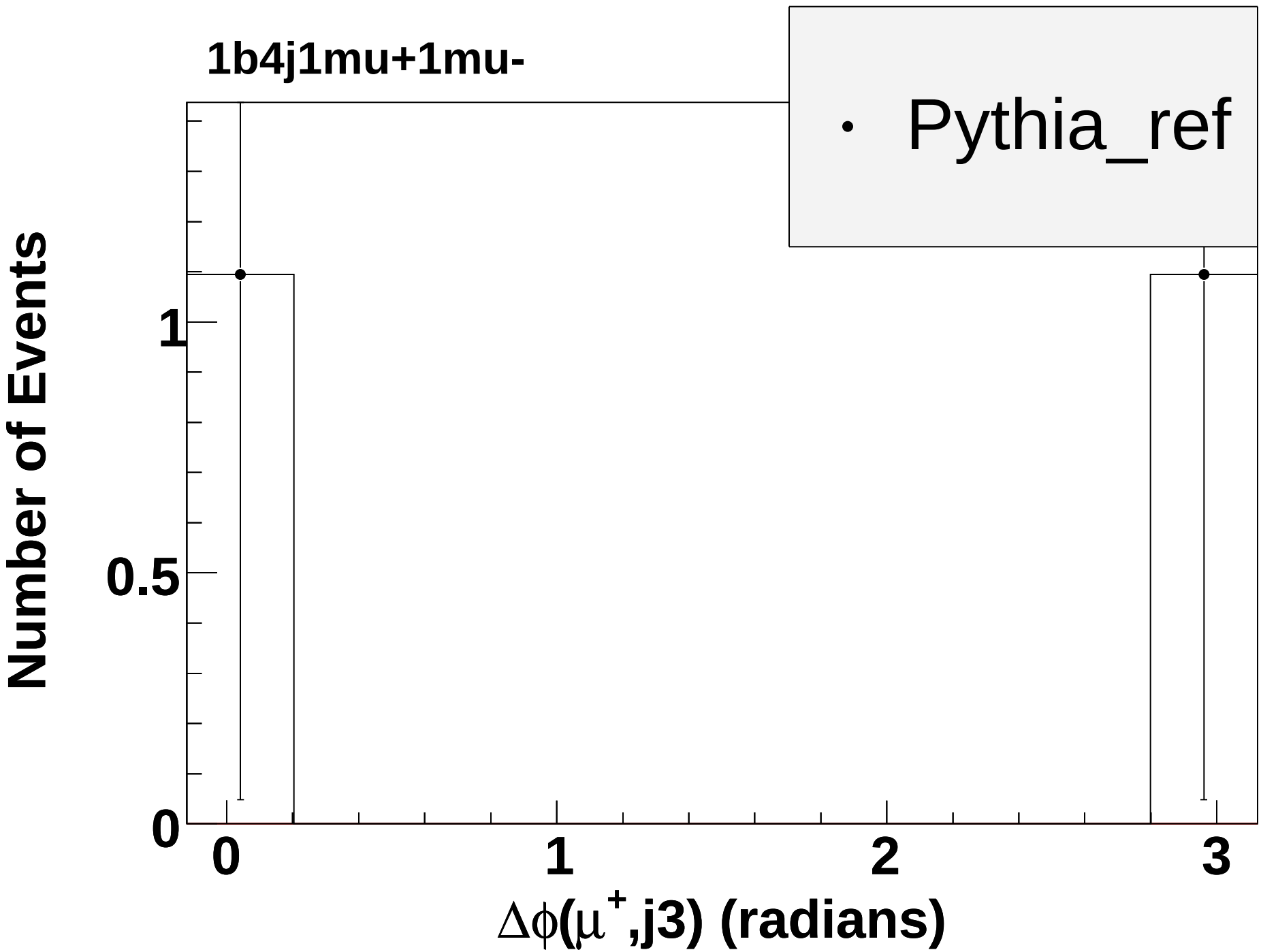

1b4j1mu+1mu-
Pythia_ref
Number of Events
0
0.5
1
10
12
14
16
Z $p_T$ (GeV)

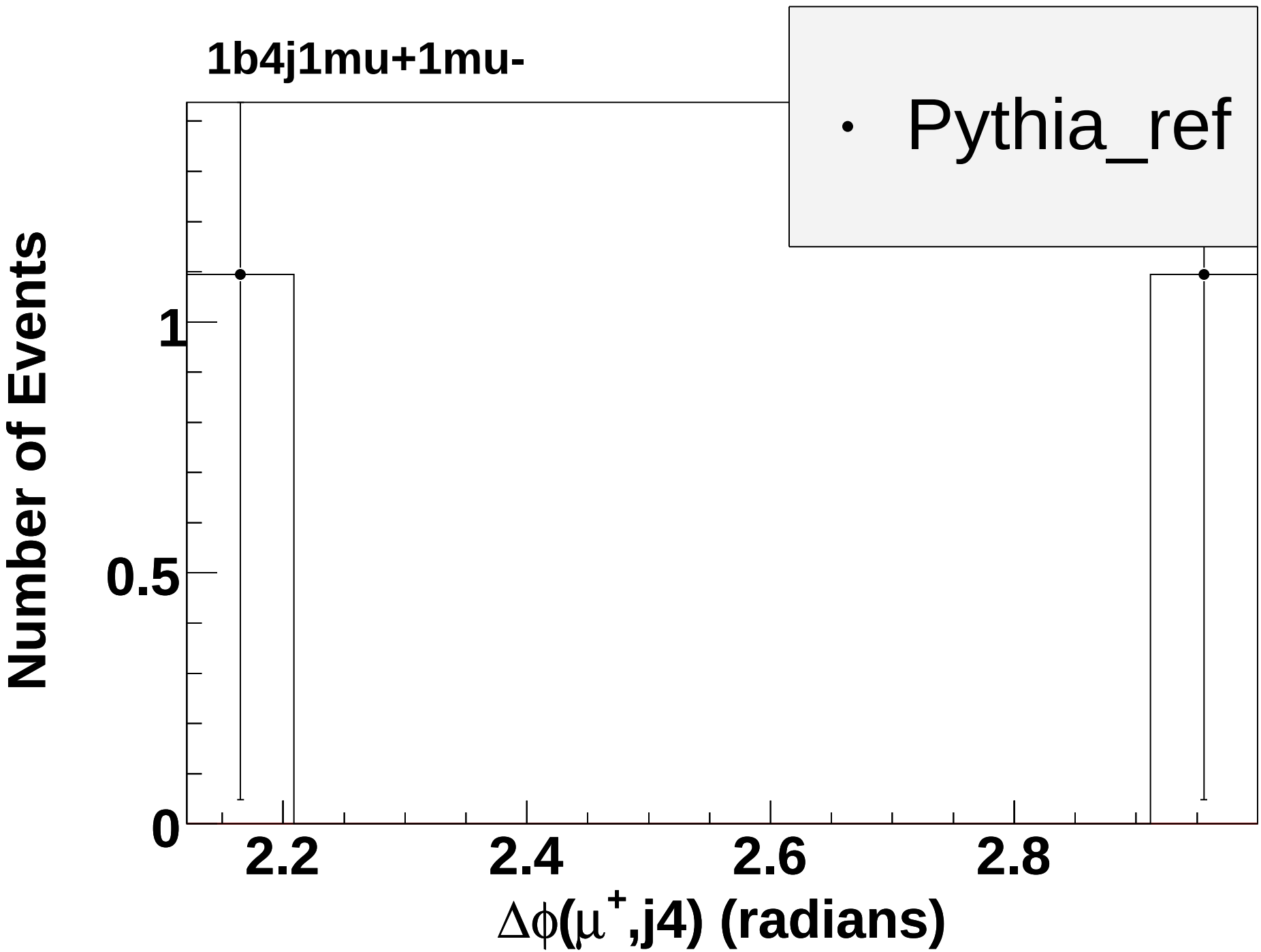

1b4j1mu+1mu-
Pythia_ref
Number of Events
1
0.5
0
100
150
200
Z pz (GeV)

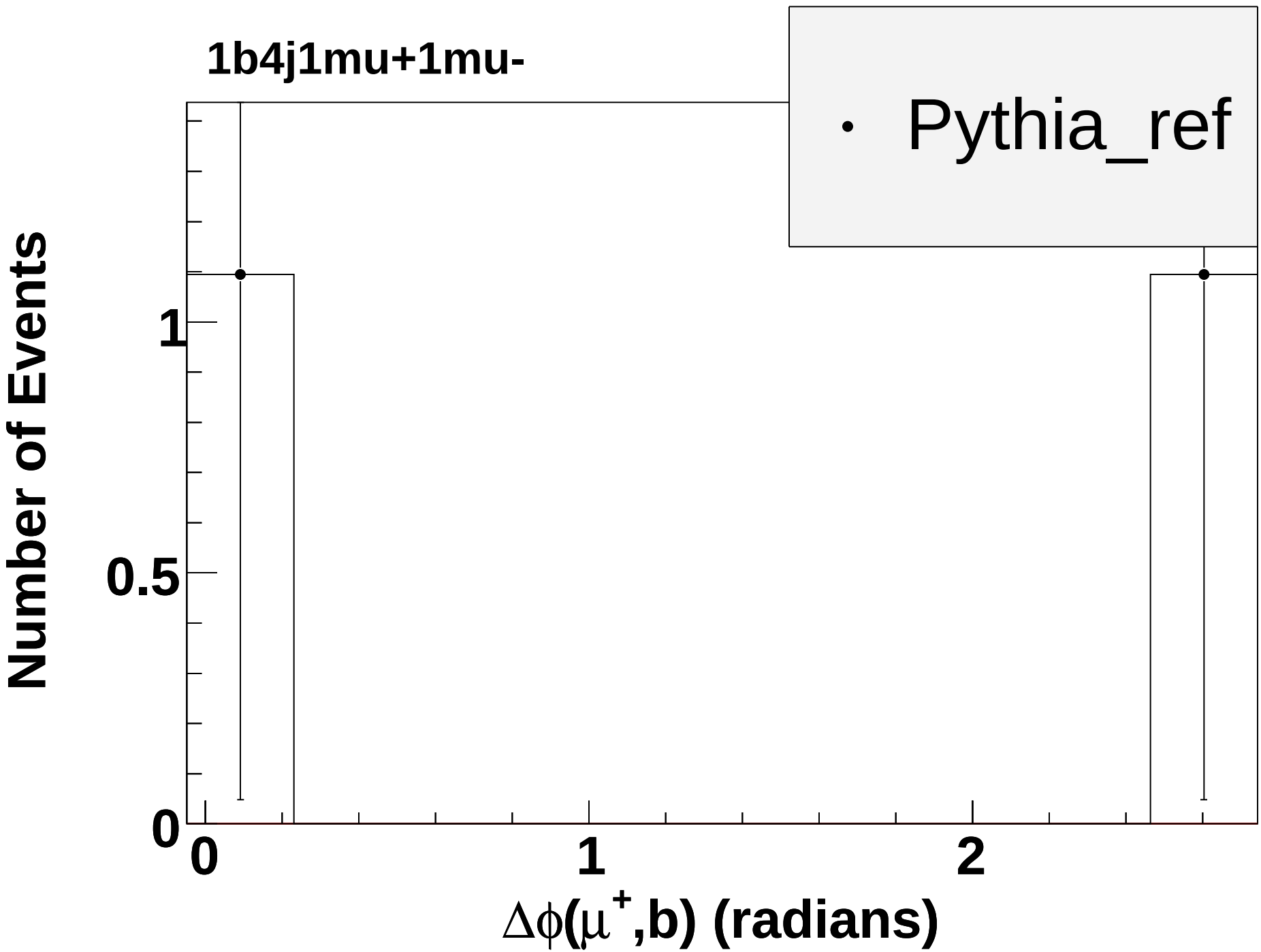

1b4j1mu+1mu-
Pythia_ref
Number of Events
0
0.5
1
2.95
3
3.05
3.1
Δφ(μ+,μ-) (radians)

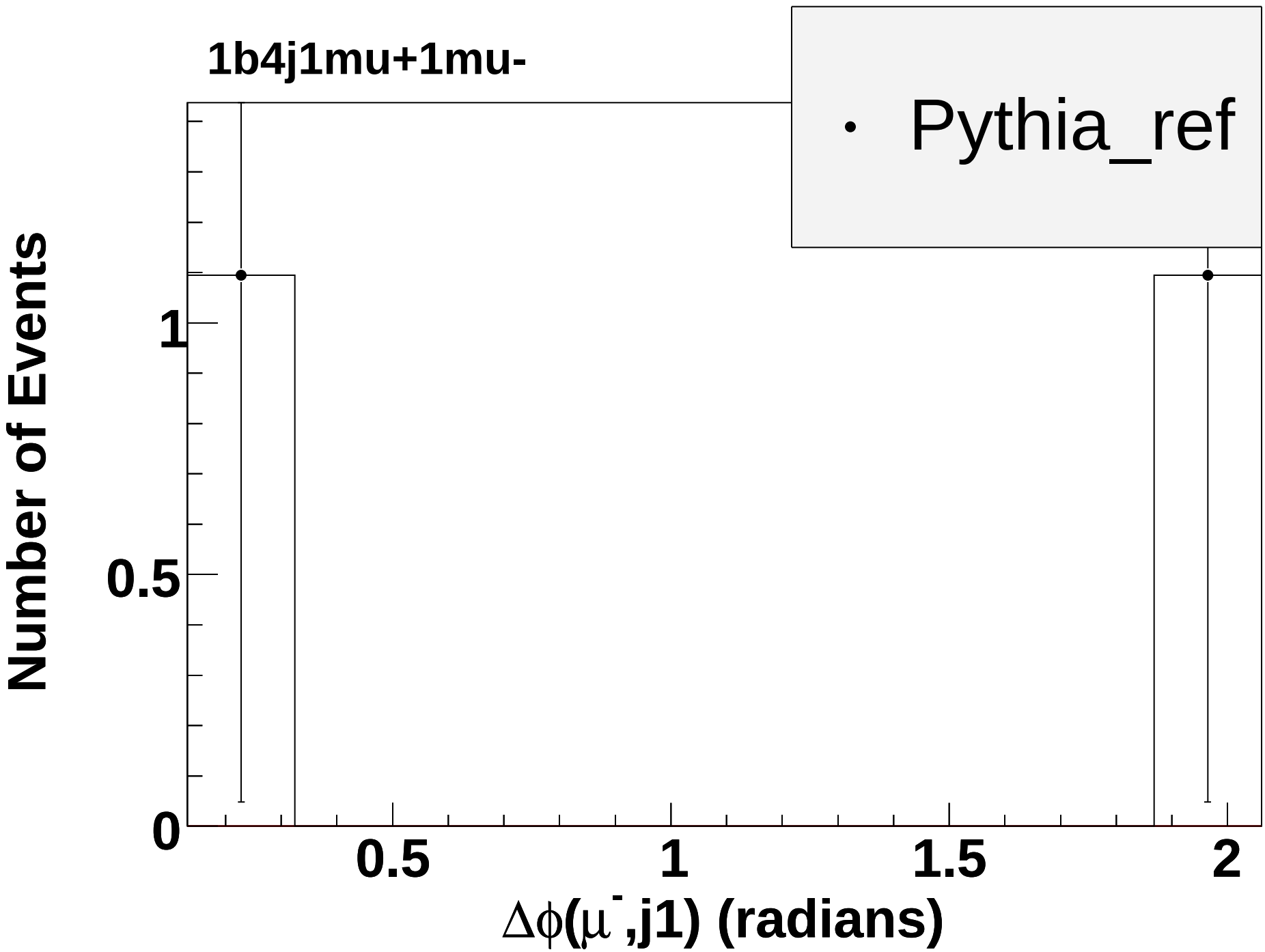

1b4j1mu+1mu-
Pythia_ref
Number of Events
0
0.5
1
1.5
2
2.5
Δφ(μ+,j1) (radians)

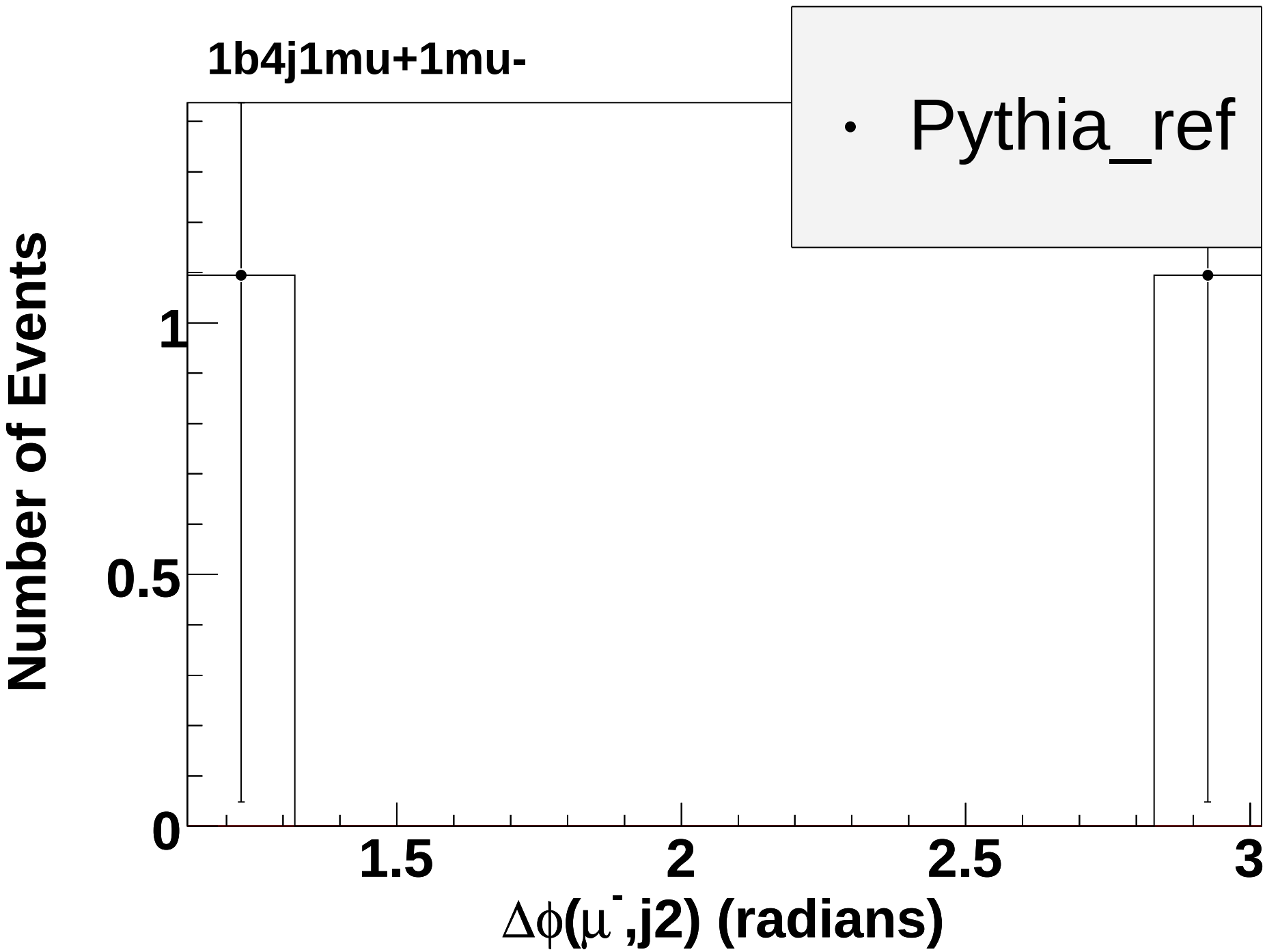

1b4j1mu+1mu-
Pythia_ref
Number of Events
0
0.5
1
0.5
1
1.5
Δφ(μ+,j2) (radians)

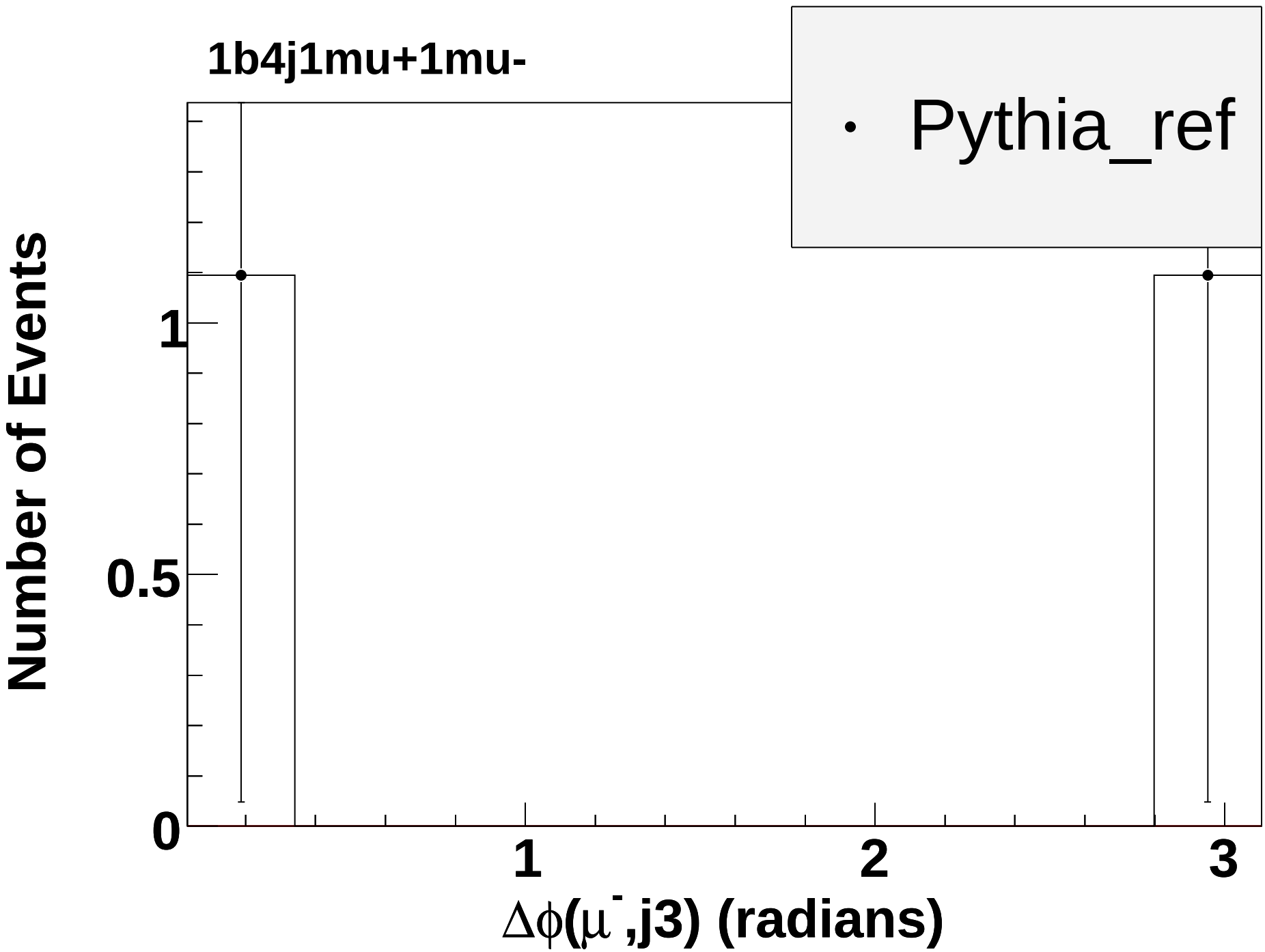

1b4j1mu+1mu-
Pythia_ref
Number of Events
0
0.5
1
0
1
2
3
Δφ(μ+,j3) (radians)

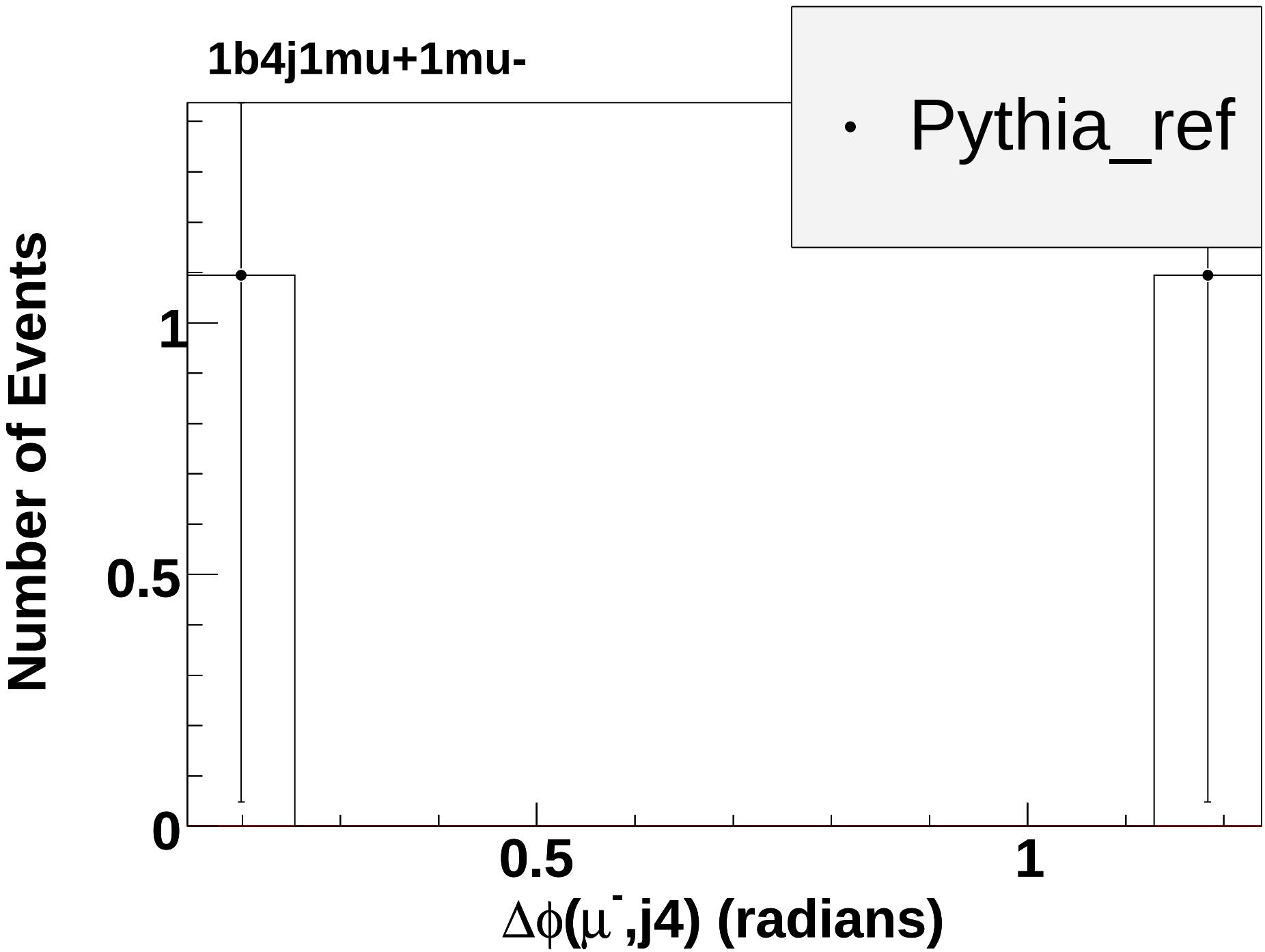

1b4j1mu+1mu-
Pythia_ref
Number of Events
1
0.5
0
2.2
2.4
2.6
2.8
Δφ(μ+,j4) (radians)

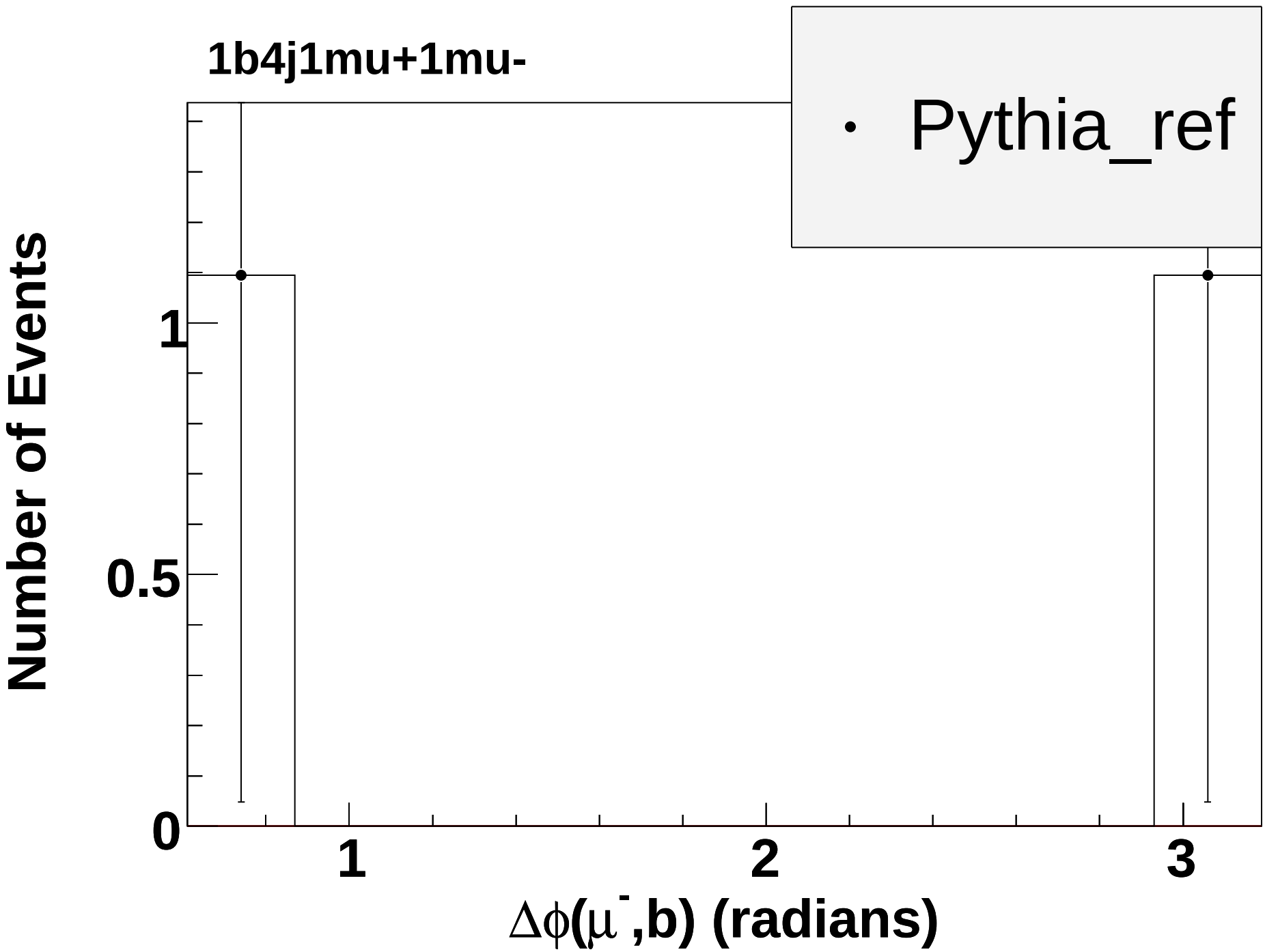

1b4j1mu+1mu-
Pythia_ref
Number of Events
0
0.5
1
0
1
2
Δφ(μ+,b) (radians)

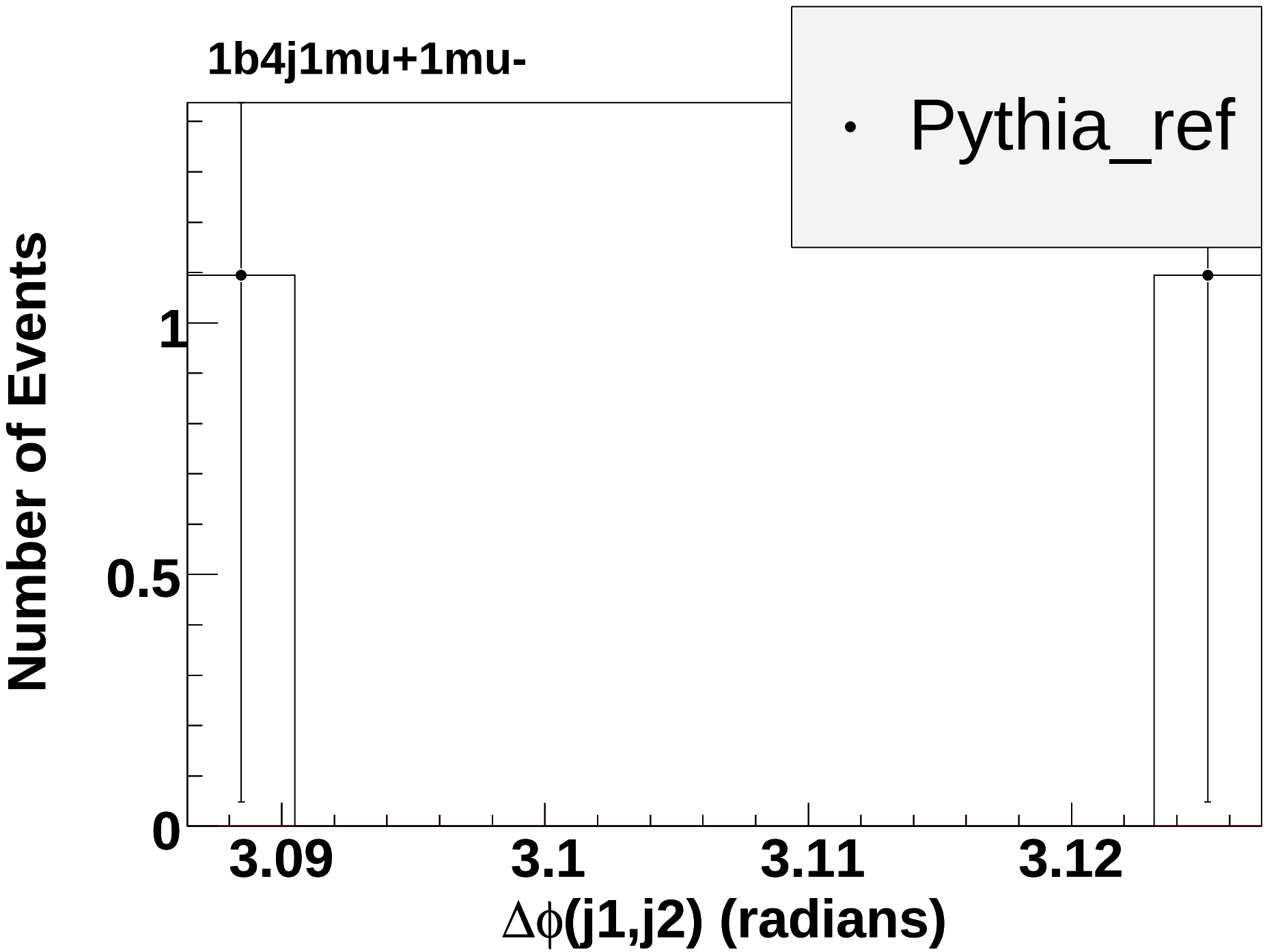

1b4j1mu+1mu-
Pythia_ref
Number of Events
0
0.5
1
0.5
1
1.5
2
Δφ(μ⁻,j1) (radians)

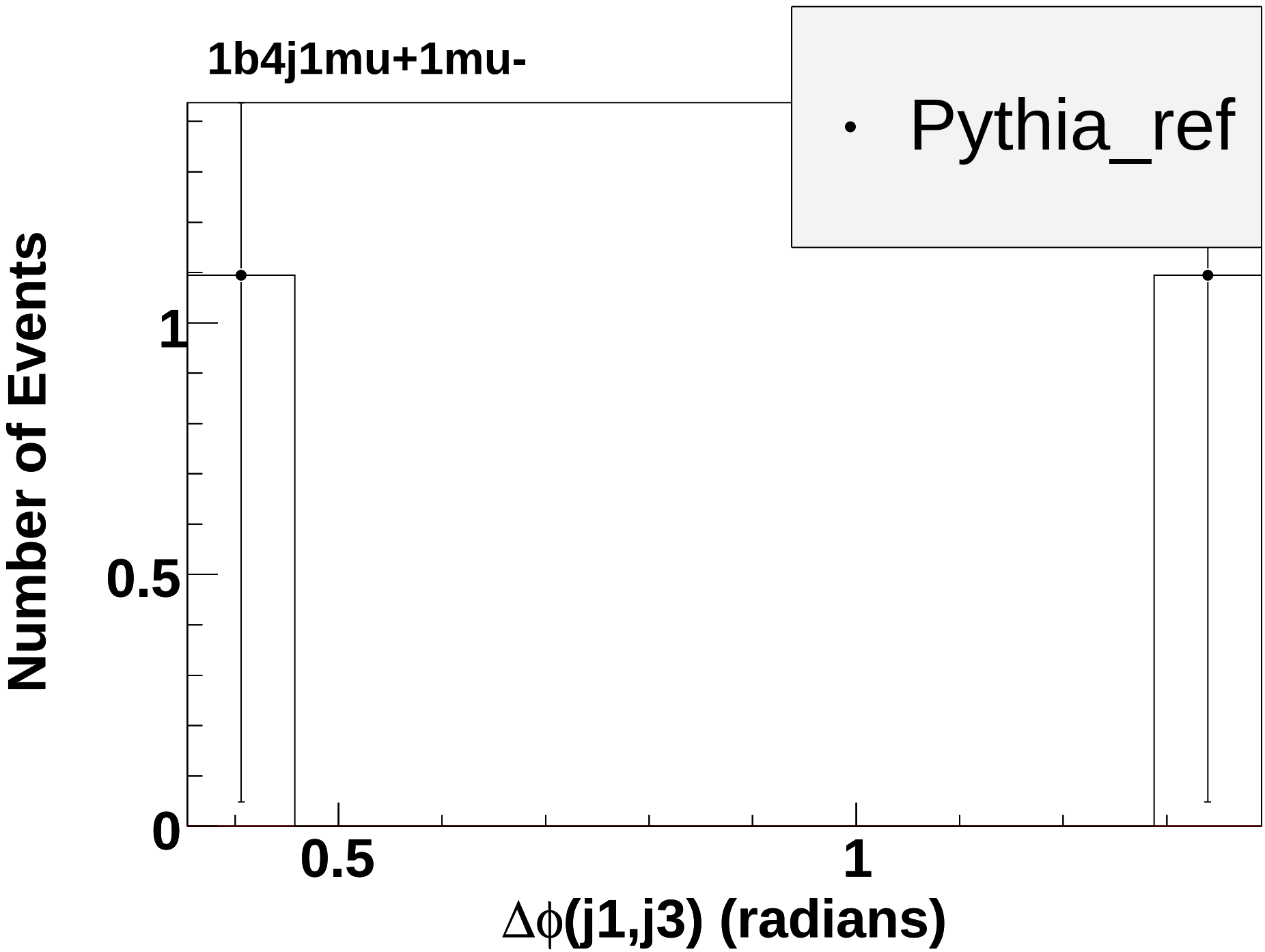

1b4j1mu+1mu-
Pythia_ref
Number of Events
0
0.5
1
1.5
2
2.5
3
Δφ(μ⁻,j2) (radians)

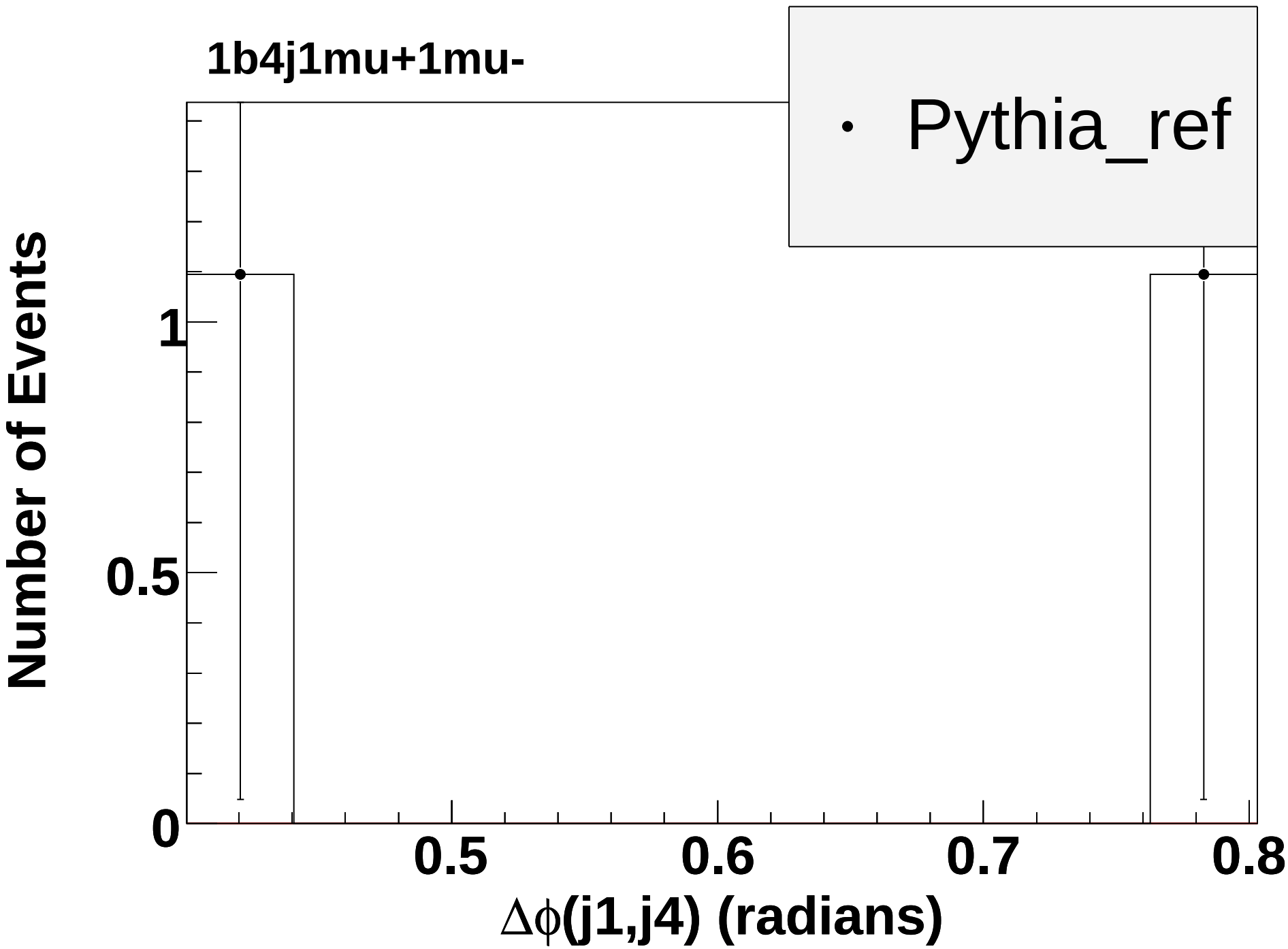

1b4j1mu+1mu-
Pythia_ref
Number of Events
0
0.5
1
1
2
3
Δφ(μ⁻,j3) (radians)

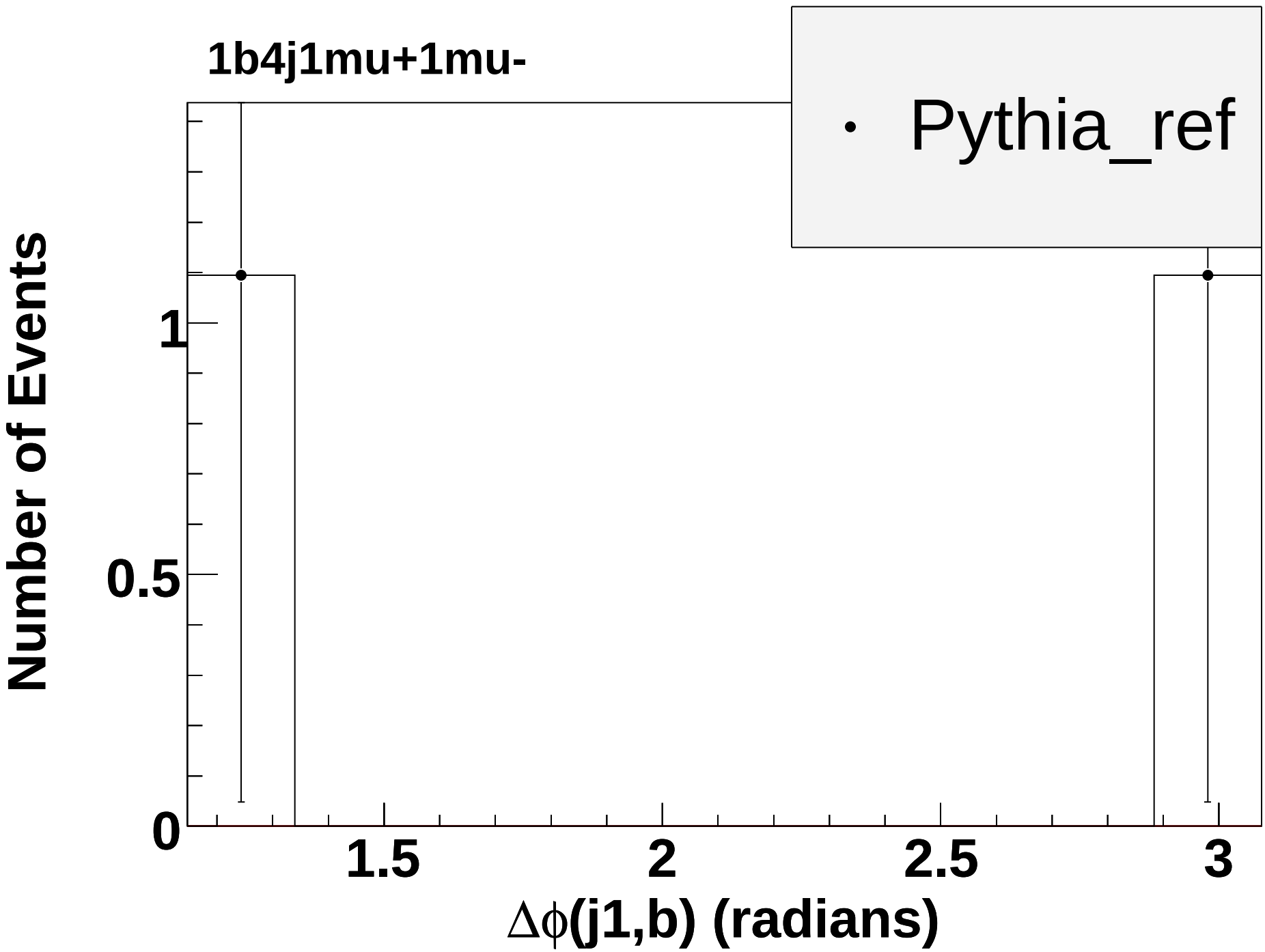

1b4j1mu+1mu-
Pythia_ref
Number of Events
0
0.5
1
0.5
1
Δφ(μ⁻,j4) (radians)

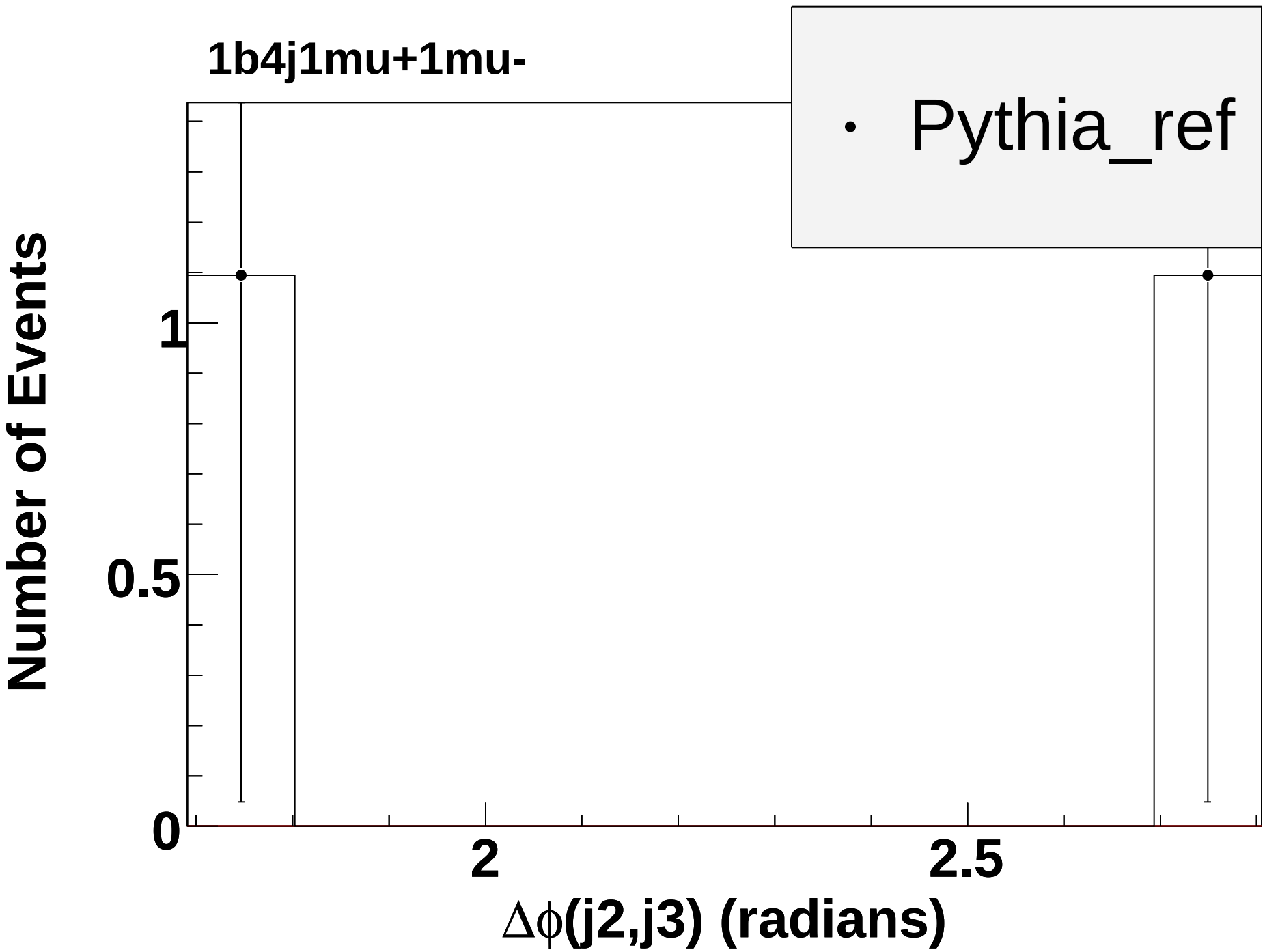

1b4j1mu+1mu-
Pythia_ref
Number of Events
0
0.5
1
1
2
3
Δφ(μ⁻,b) (radians)

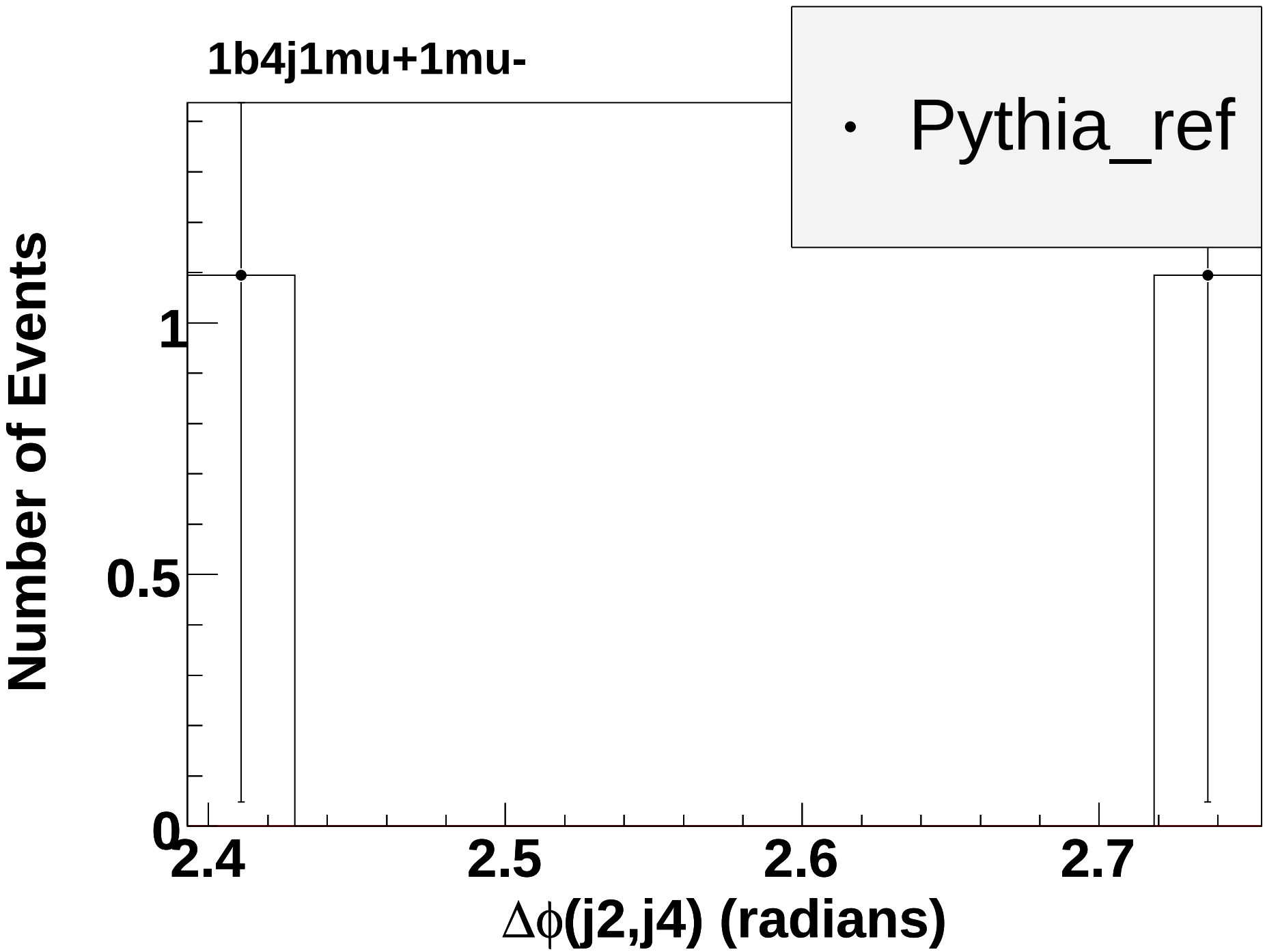

1b4j1mu+1mu-
Pythia_ref
Number of Events
1
0.5
0
3.09
3.1
3.11
3.12
Δϕ(j1,j2) (radians)

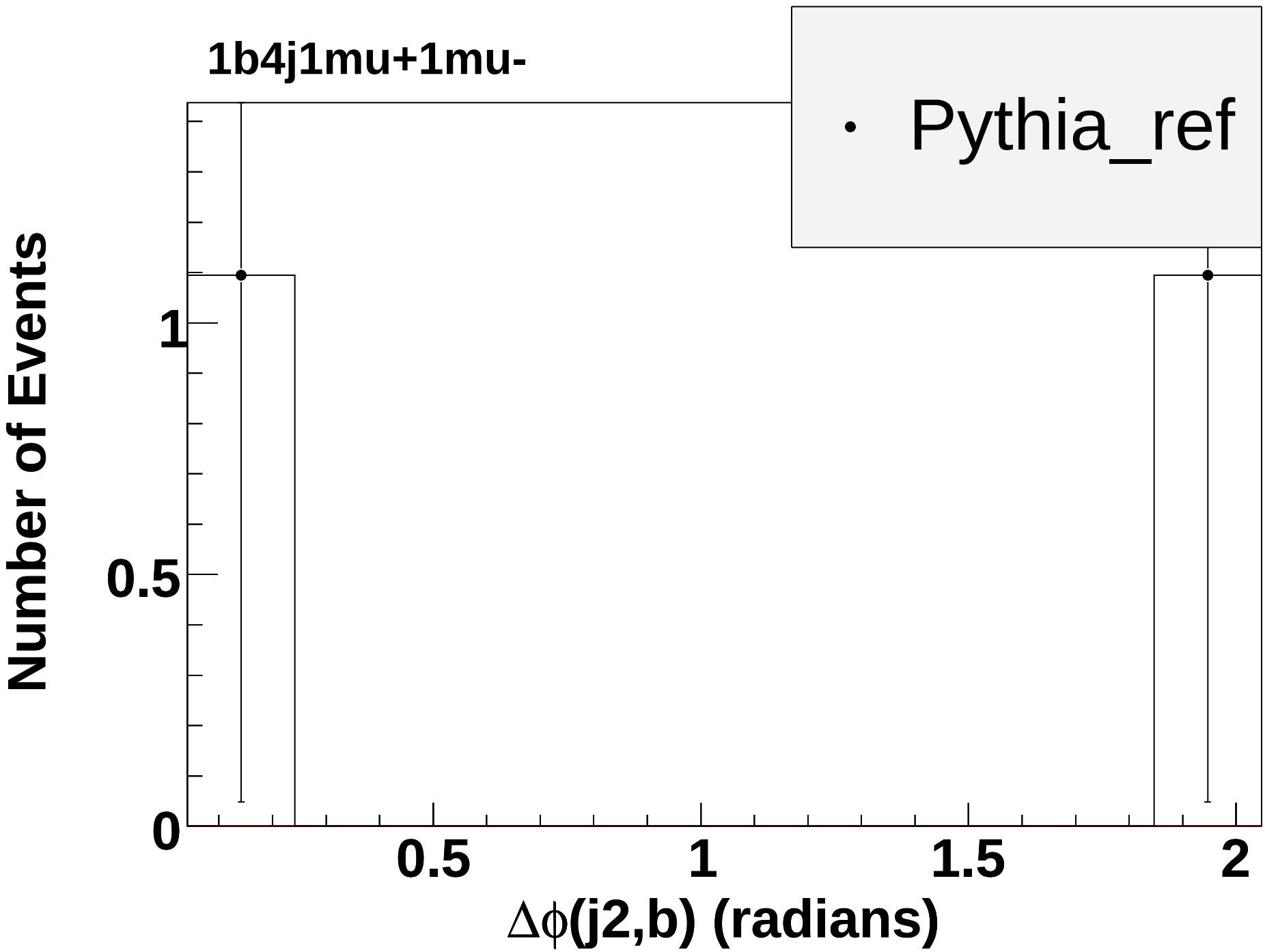

1b4j1mu+1mu-
Pythia_ref
Number of Events
0
0.5
1
0.5
1
Δϕ(j1,j3) (radians)

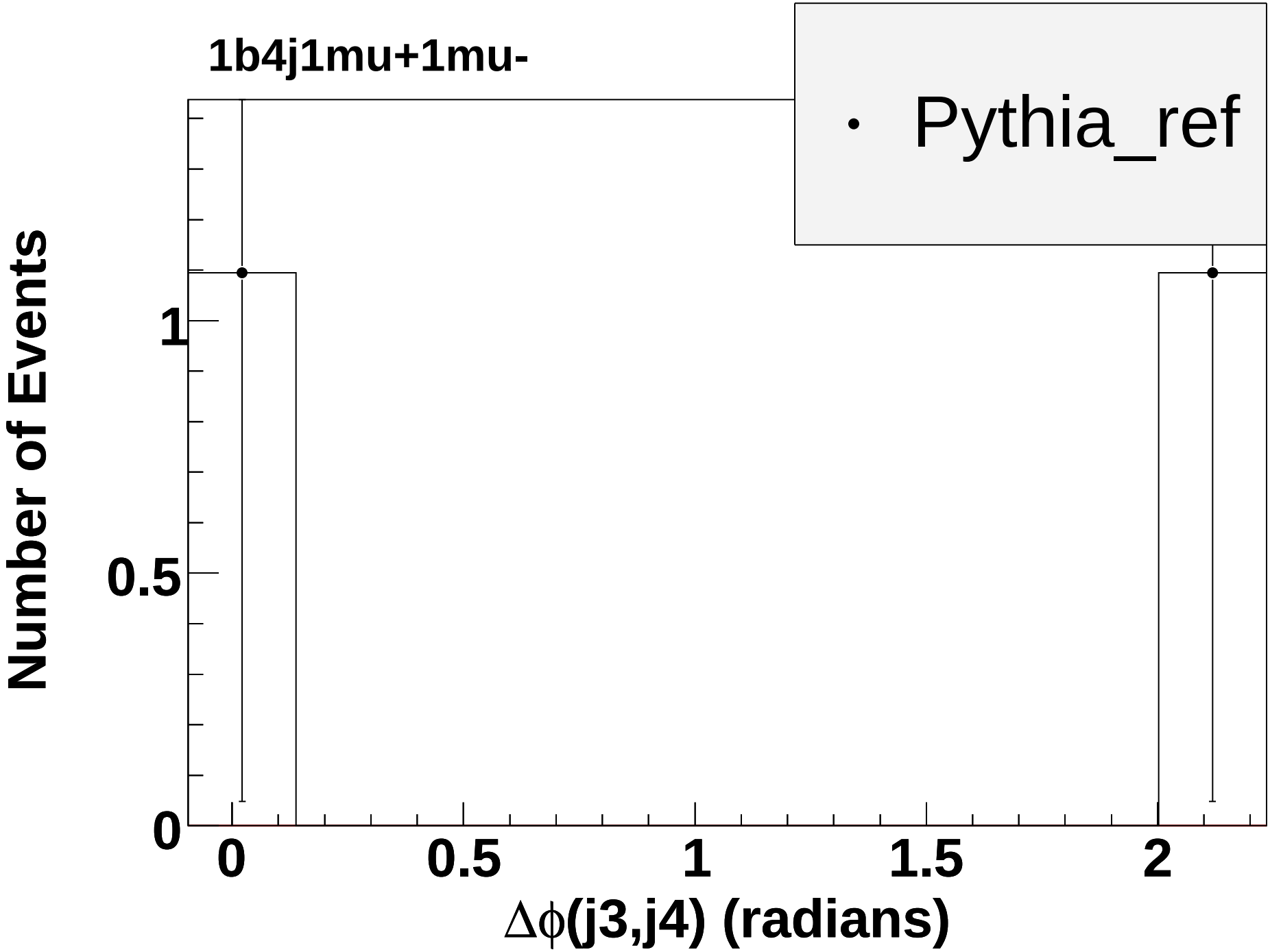

1b4j1mu+1mu-
Pythia_ref
Number of Events
0
0.5
1
0.5
0.6
0.7
0.8
Δϕ(j1,j4) (radians)

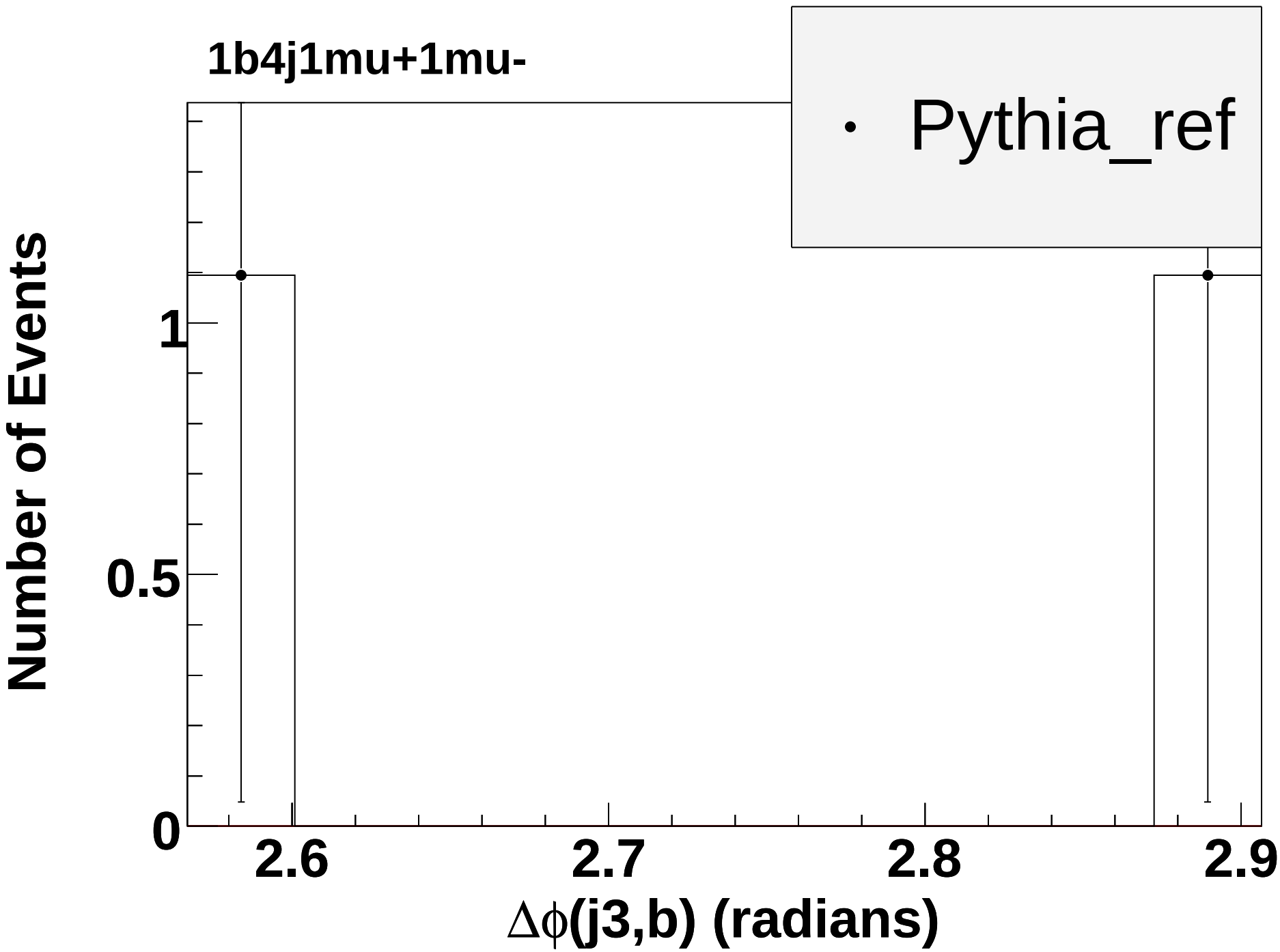

1b4j1mu+1mu-
Pythia_ref
Number of Events
0
0.5
1
1.5
2
2.5
3
Δϕ(j1,b) (radians)

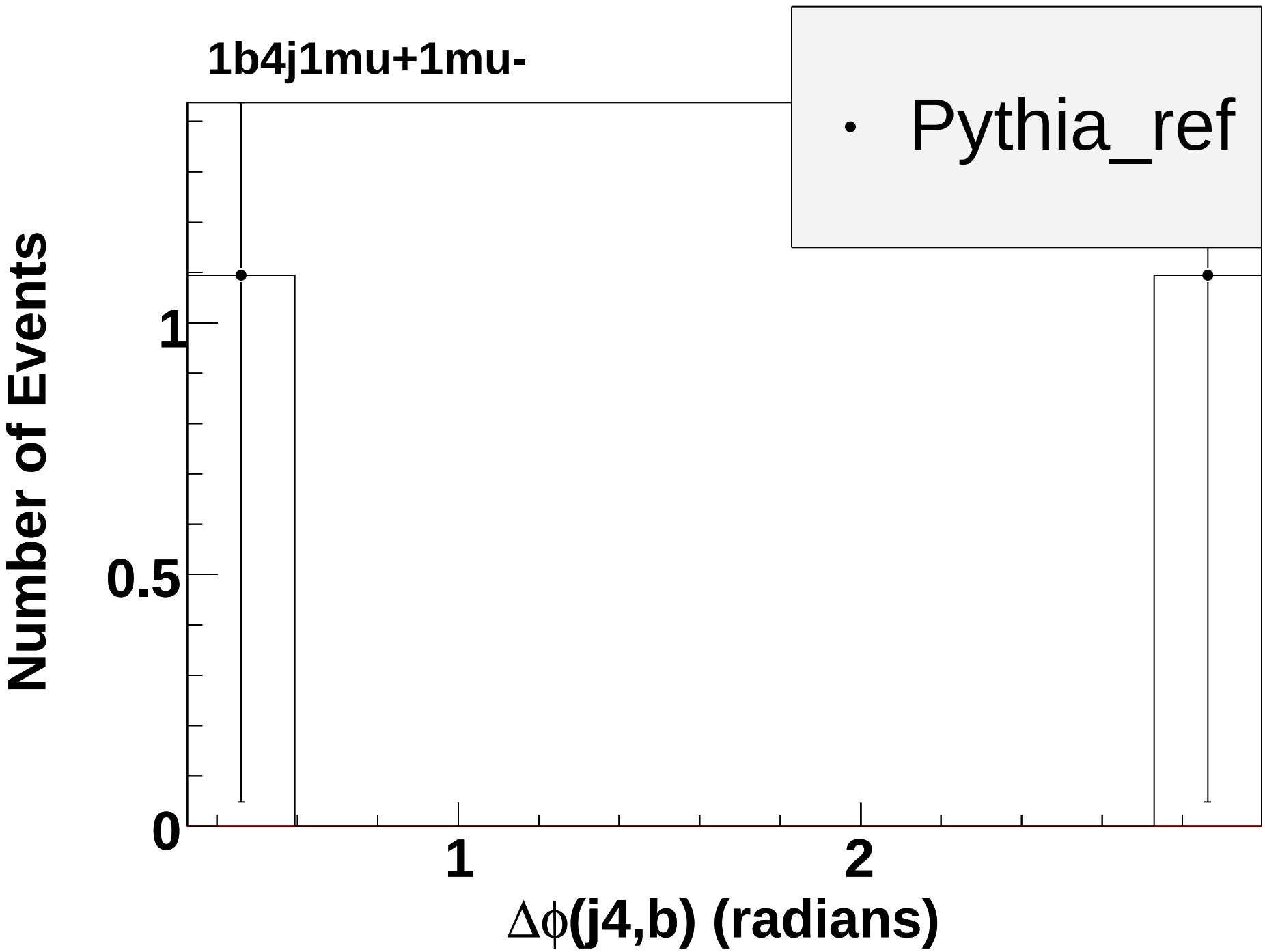

1b4j1mu+1mu-
Pythia_ref
Number of Events
1
0.5
0
2
2.5
Δϕ(j2,j3) (radians)

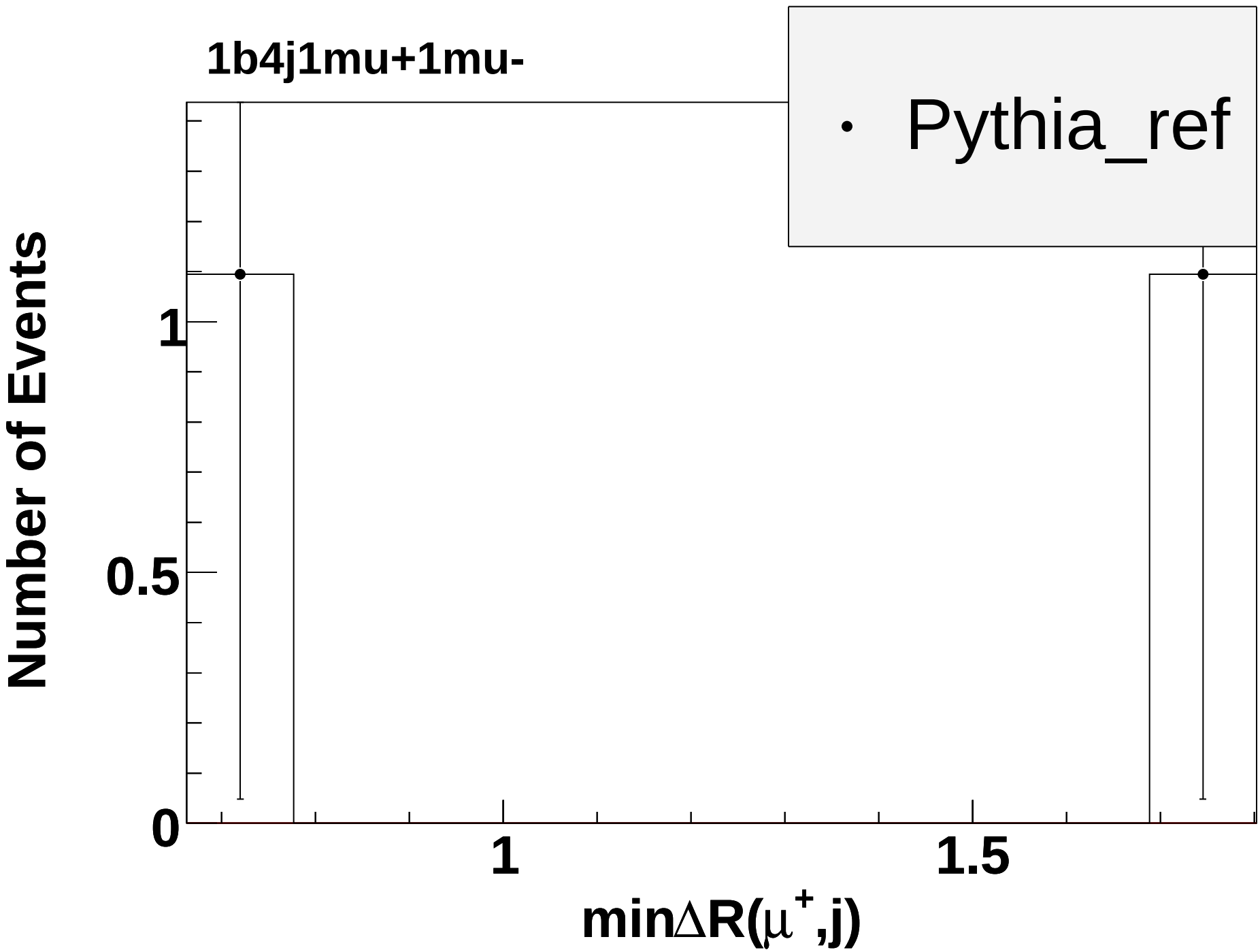

1b4j1mu+1mu-
Pythia_ref
Number of Events
1
0.5
0
2.4
2.5
2.6
2.7
Δϕ(j2,j4) (radians)

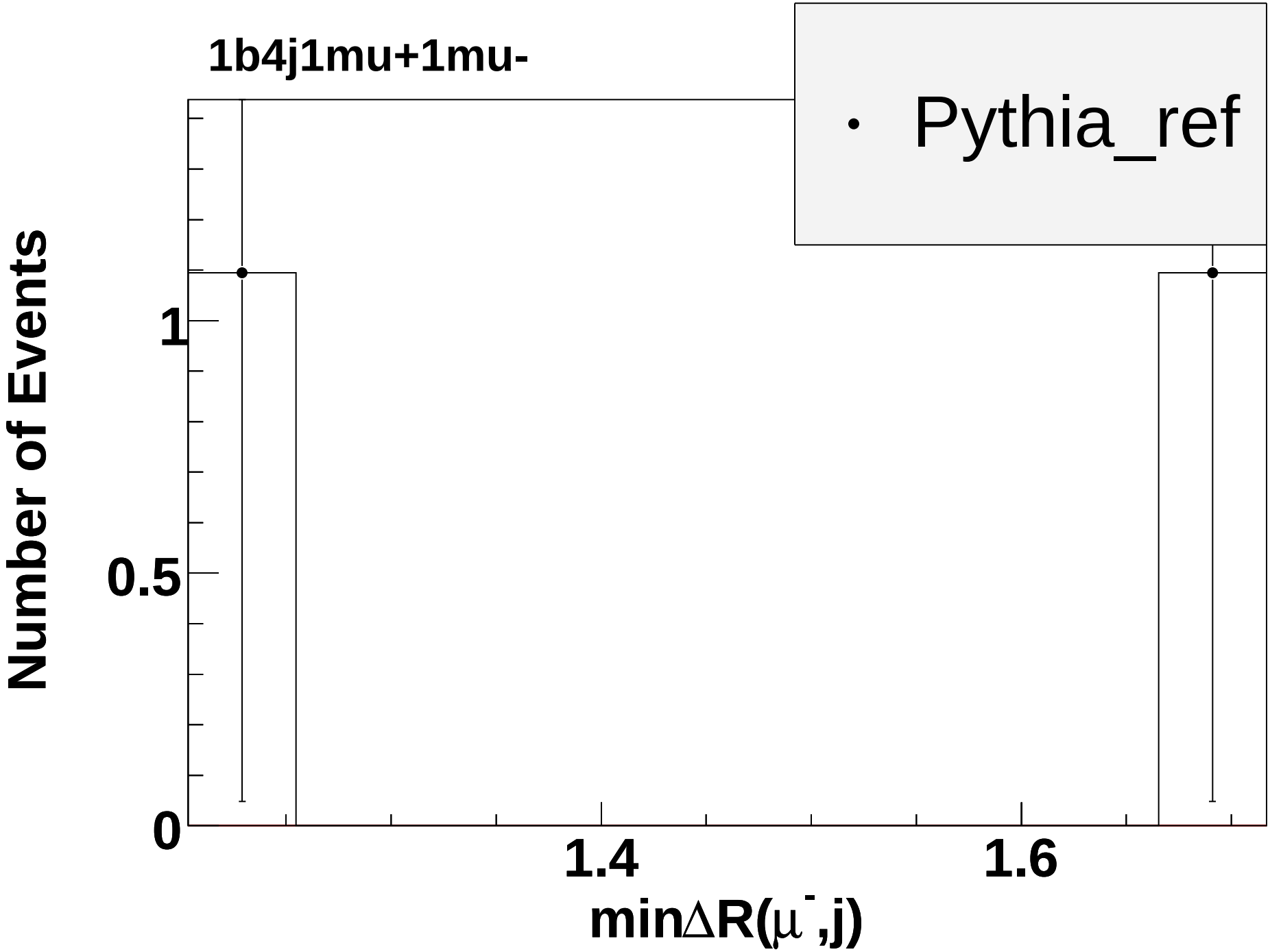

1b4j1mu+1mu-
Pythia_ref
Number of Events
0
0.5
1
0.5
1
1.5
2
Δϕ(j2,b) (radians)

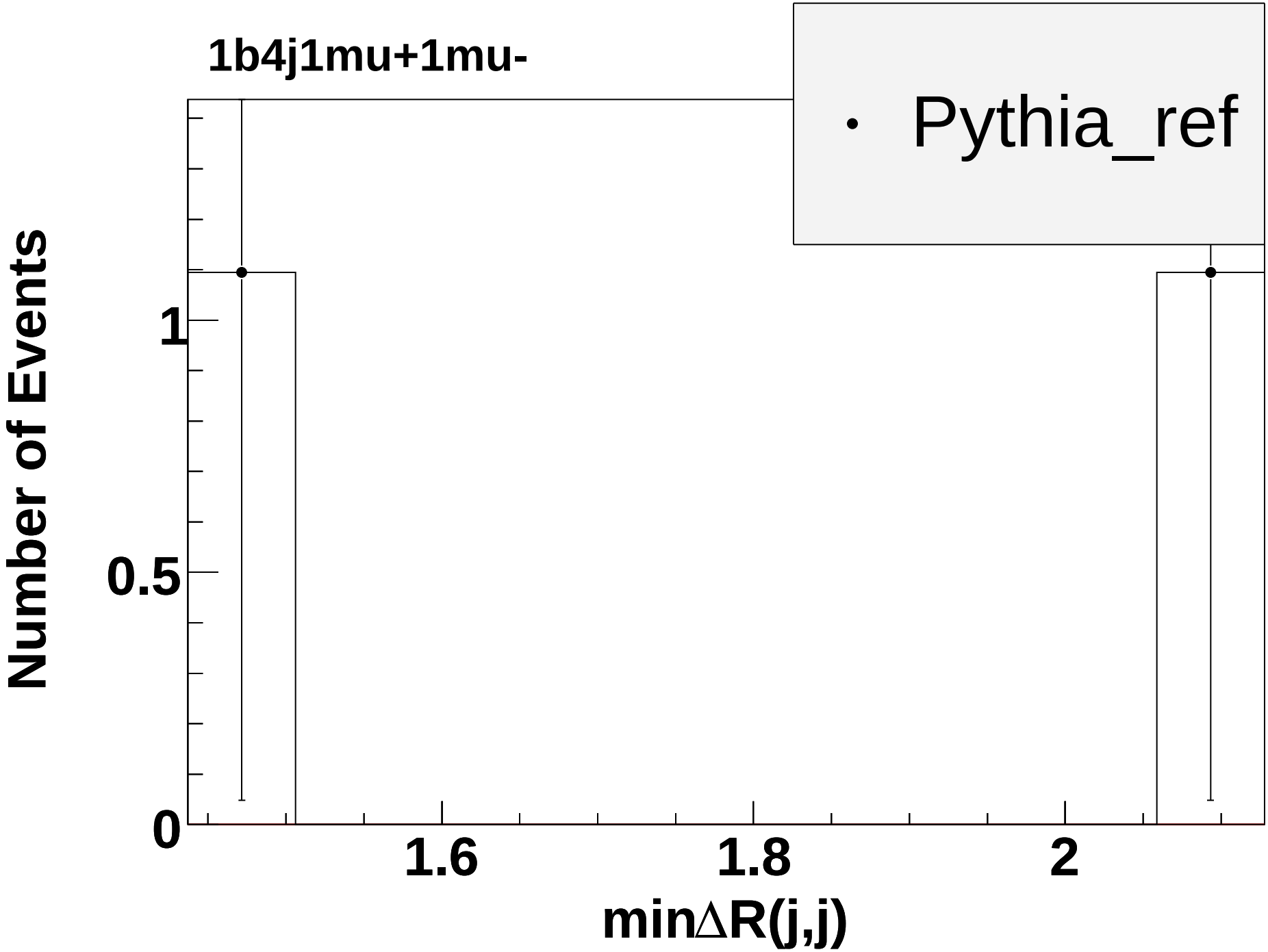

1b4j1mu+1mu-
Pythia_ref
Number of Events
0
0.5
1
0
0.5
1
1.5
2
Δϕ(j3,j4) (radians)

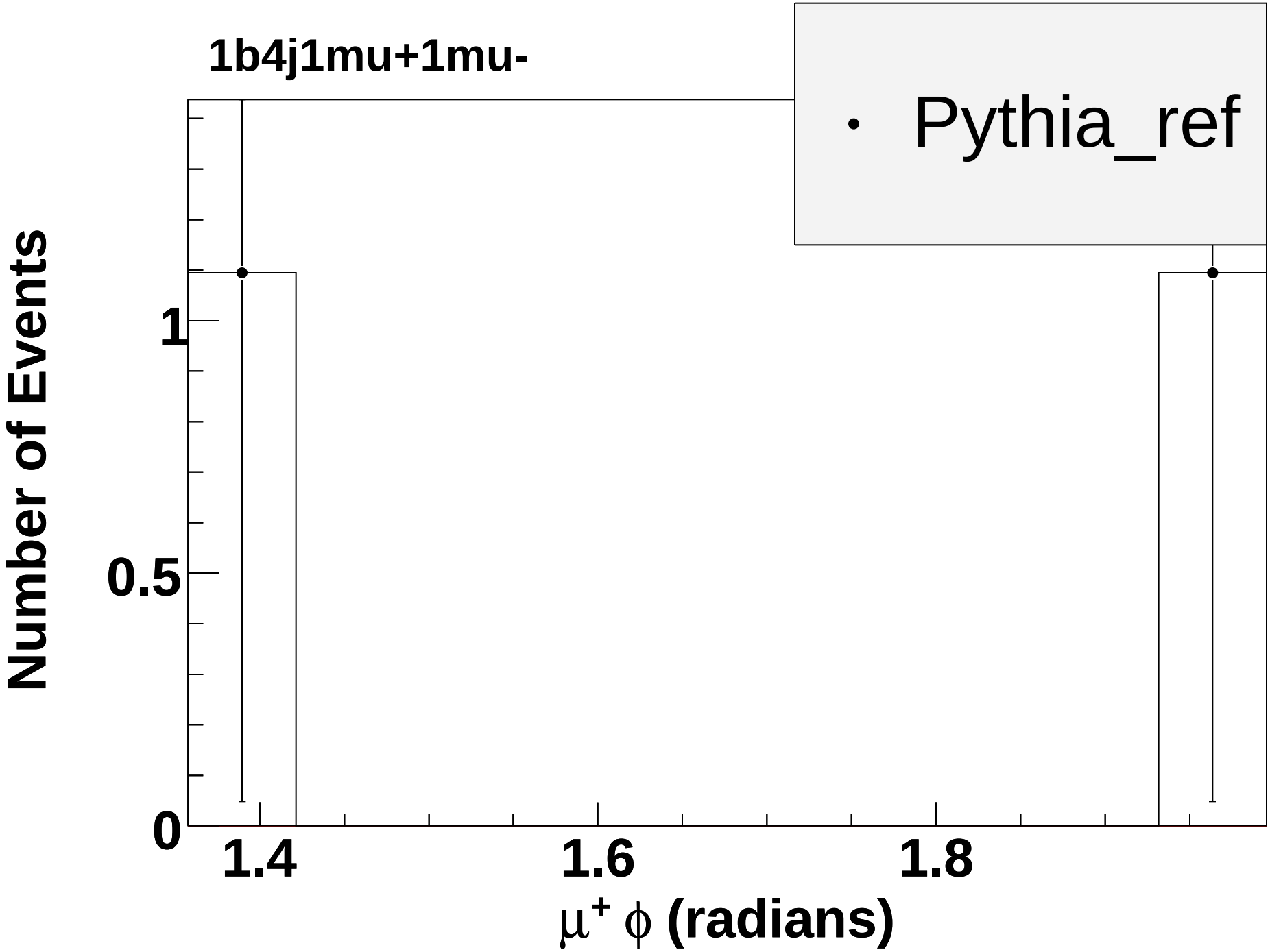

1b4j1mu+1mu-
Pythia_ref
Number of Events
0
0.5
1
2.6
2.7
2.8
2.9
Δϕ(j3,b) (radians)

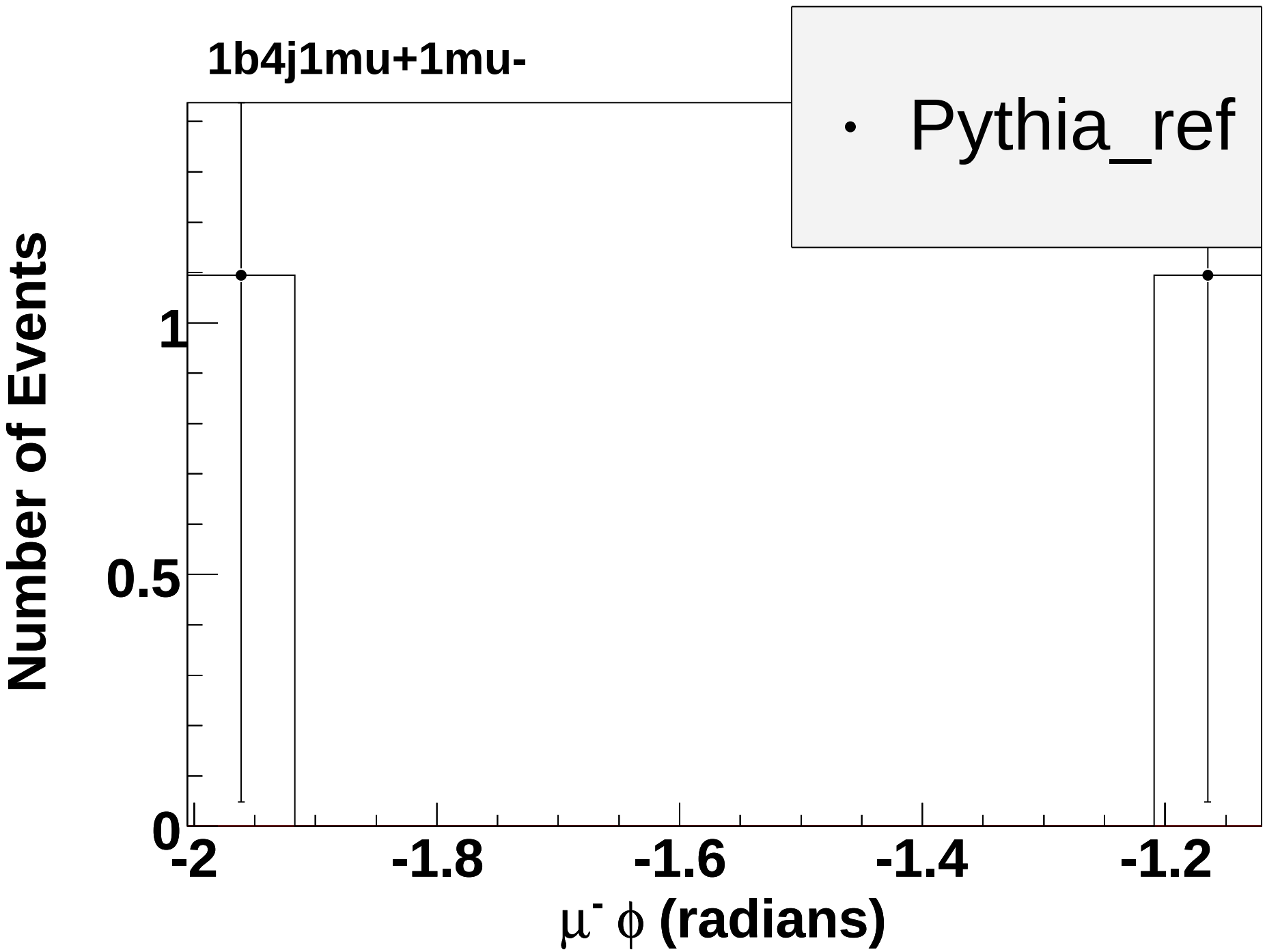

1b4j1mu+1mu-
Pythia_ref
Number of Events
0
0.5
1
1
2
Δϕ(j4,b) (radians)

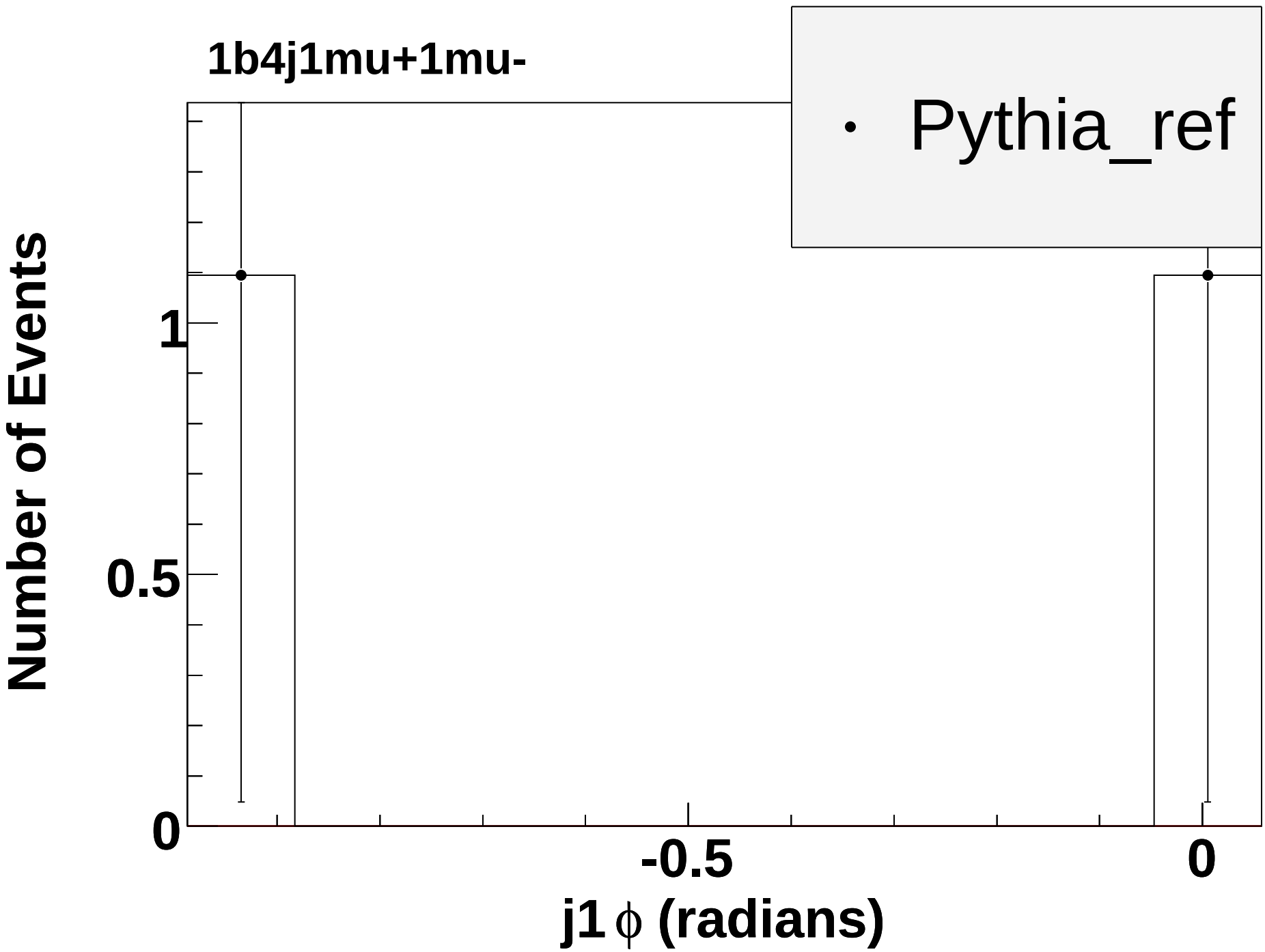

1b4j1mu+1mu-
Pythia_ref
Number of Events
0
0.5
1
1
1.5
minΔR(μ+,j)

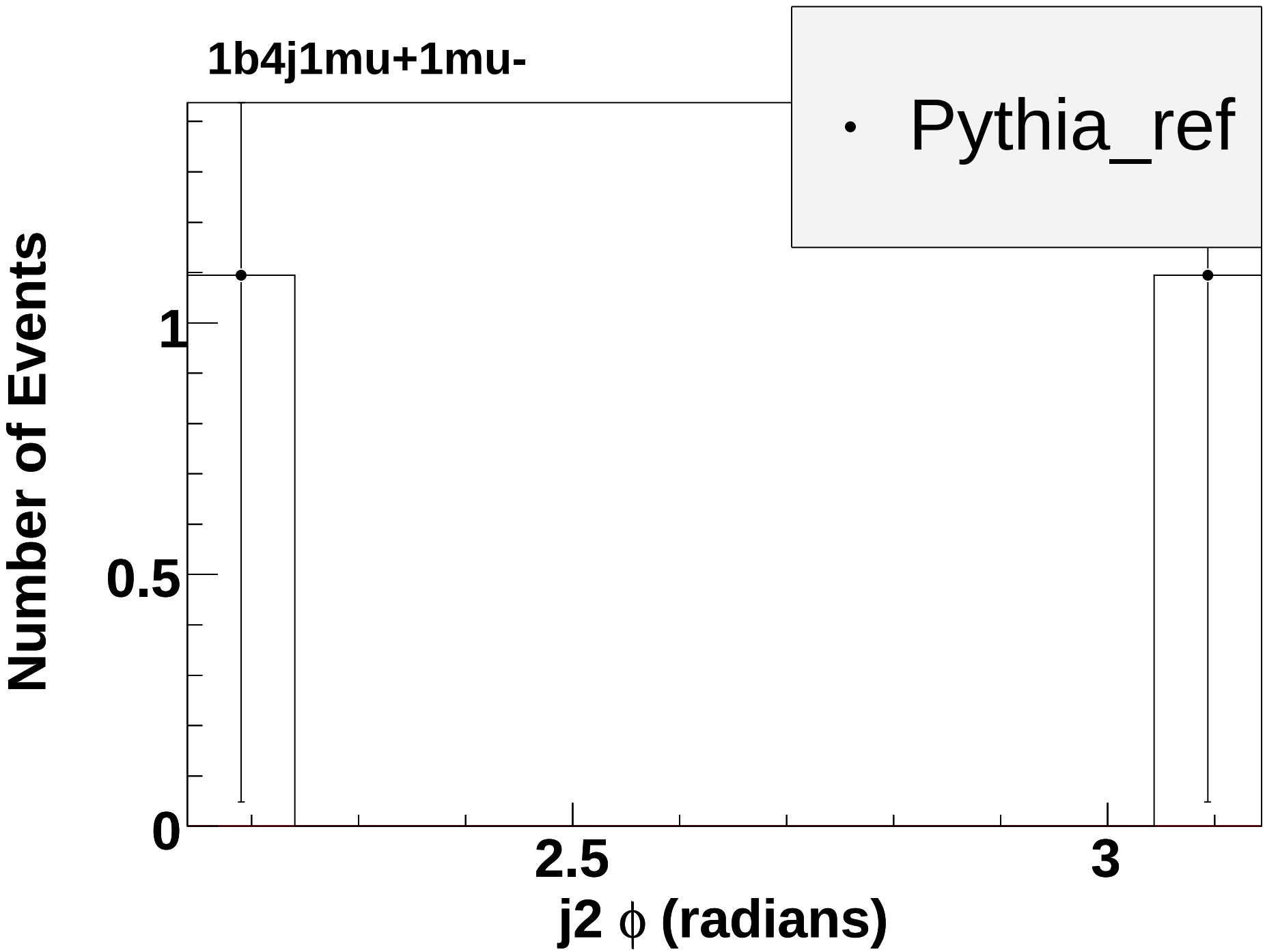

1b4j1mu+1mu-
Pythia_ref
Number of Events
1
0.5
0
1.4
1.6
minΔR(μ⁻,j)

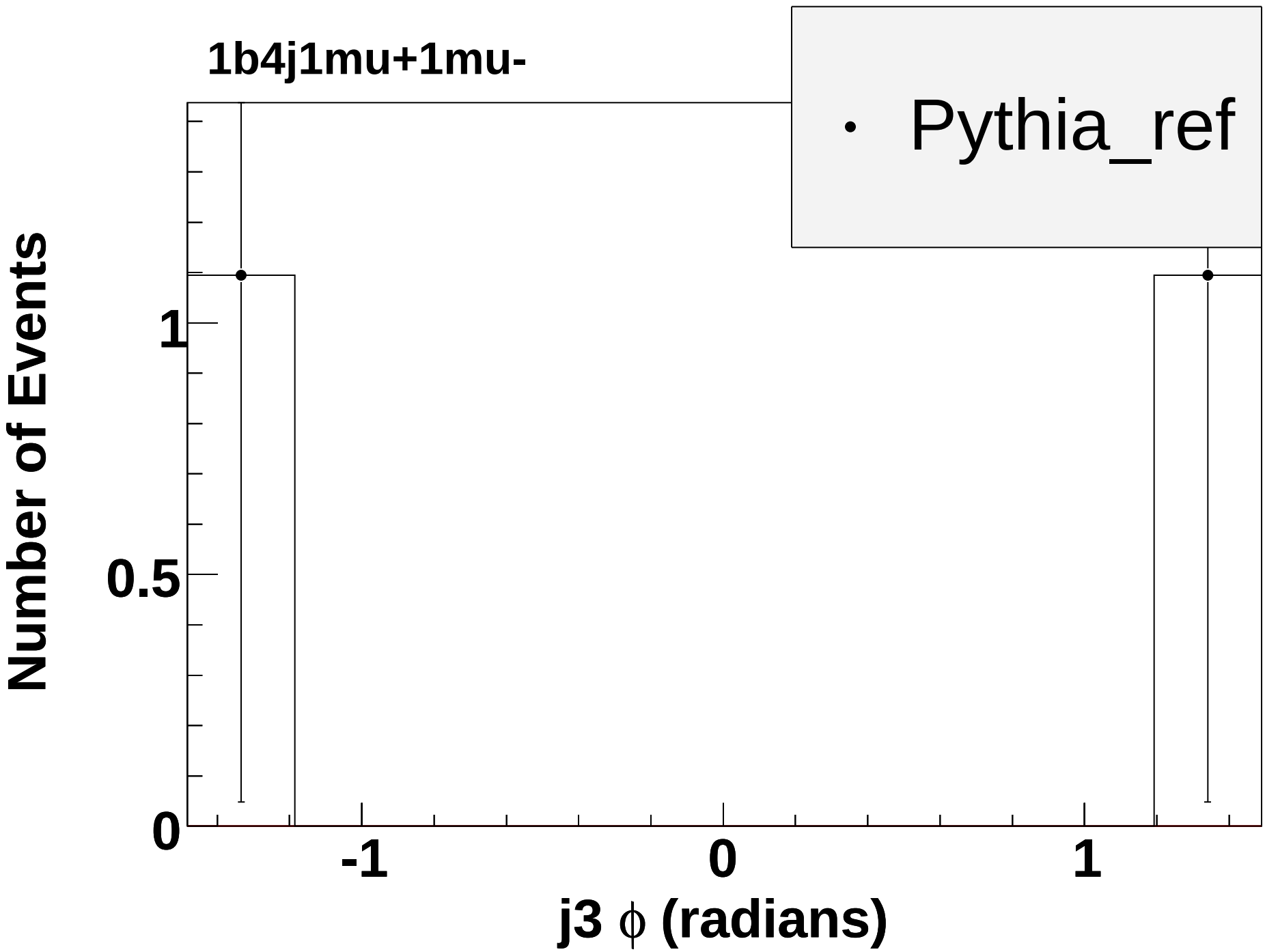

1b4j1mu+1mu-
Pythia_ref
Number of Events
0
0.5
1
1.6
1.8
2
minΔR(j,j)

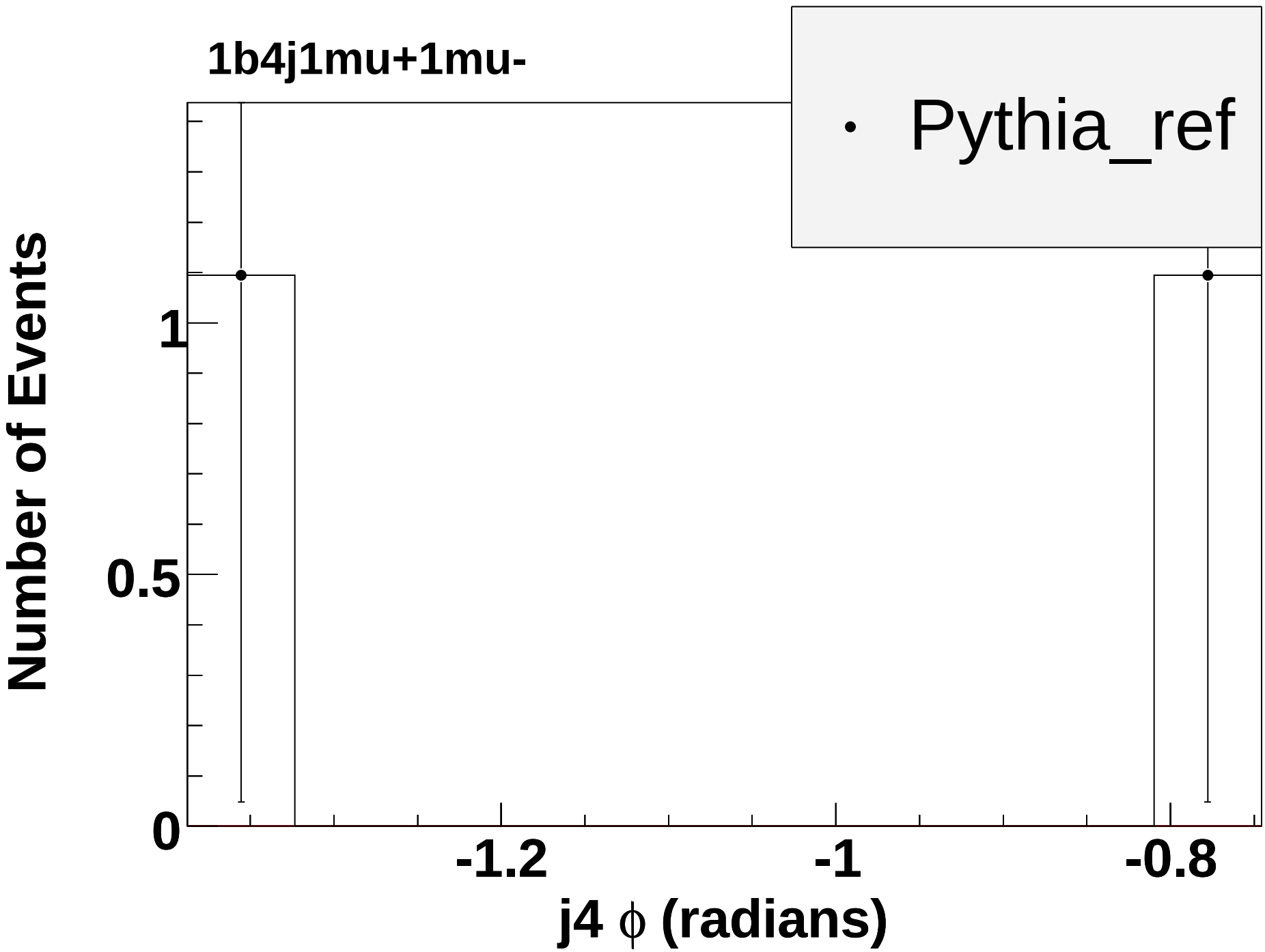

1b4j1mu+1mu-
Pythia_ref
Number of Events
1
0.5
0
1.4
1.6
1.8
μ+ φ (radians)

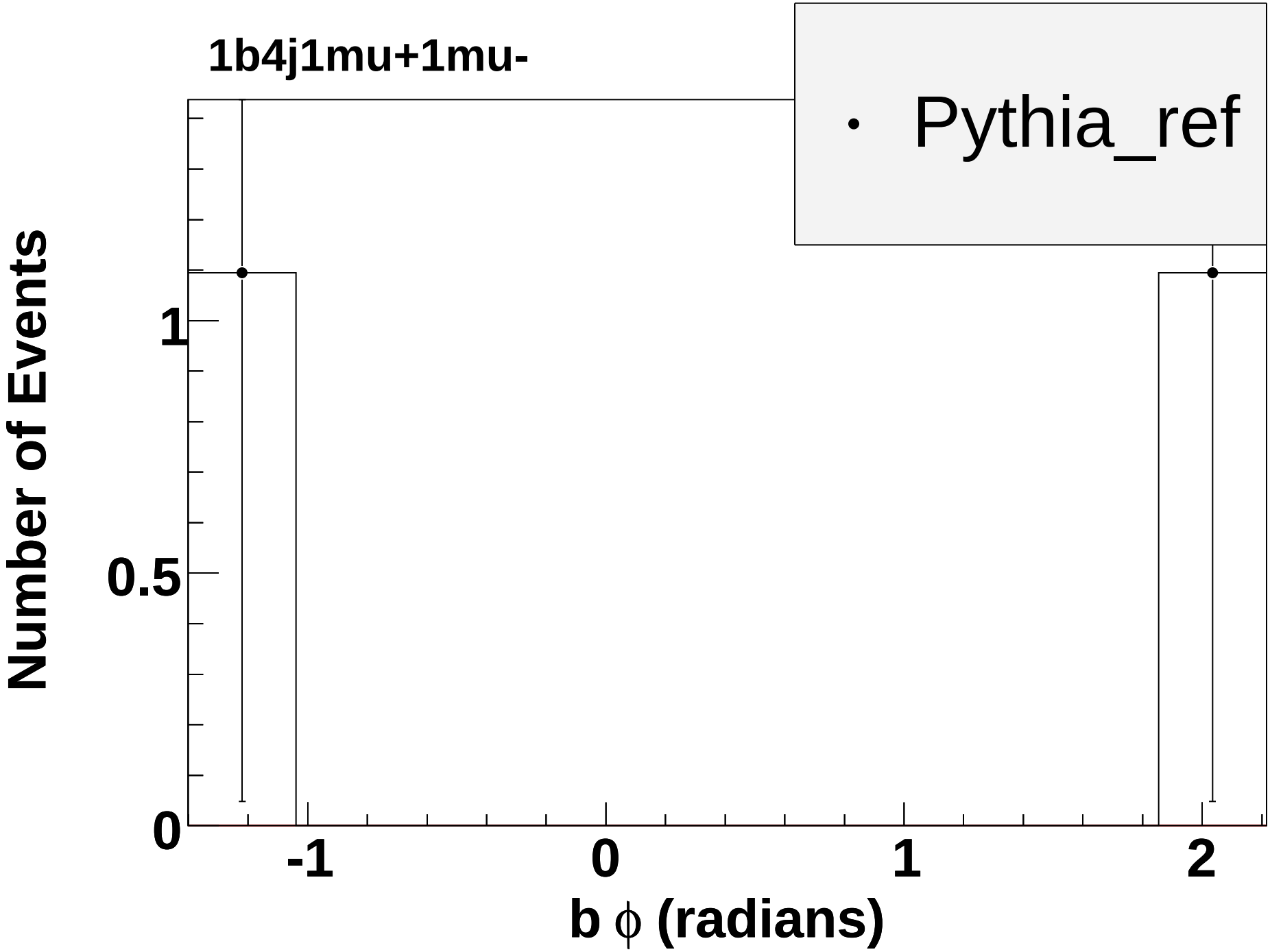

1b4j1mu+1mu-
Pythia_ref
Number of Events
1
0.5
0
-2
-1.8
-1.6
-1.4
-1.2
μ⁻ φ (radians)

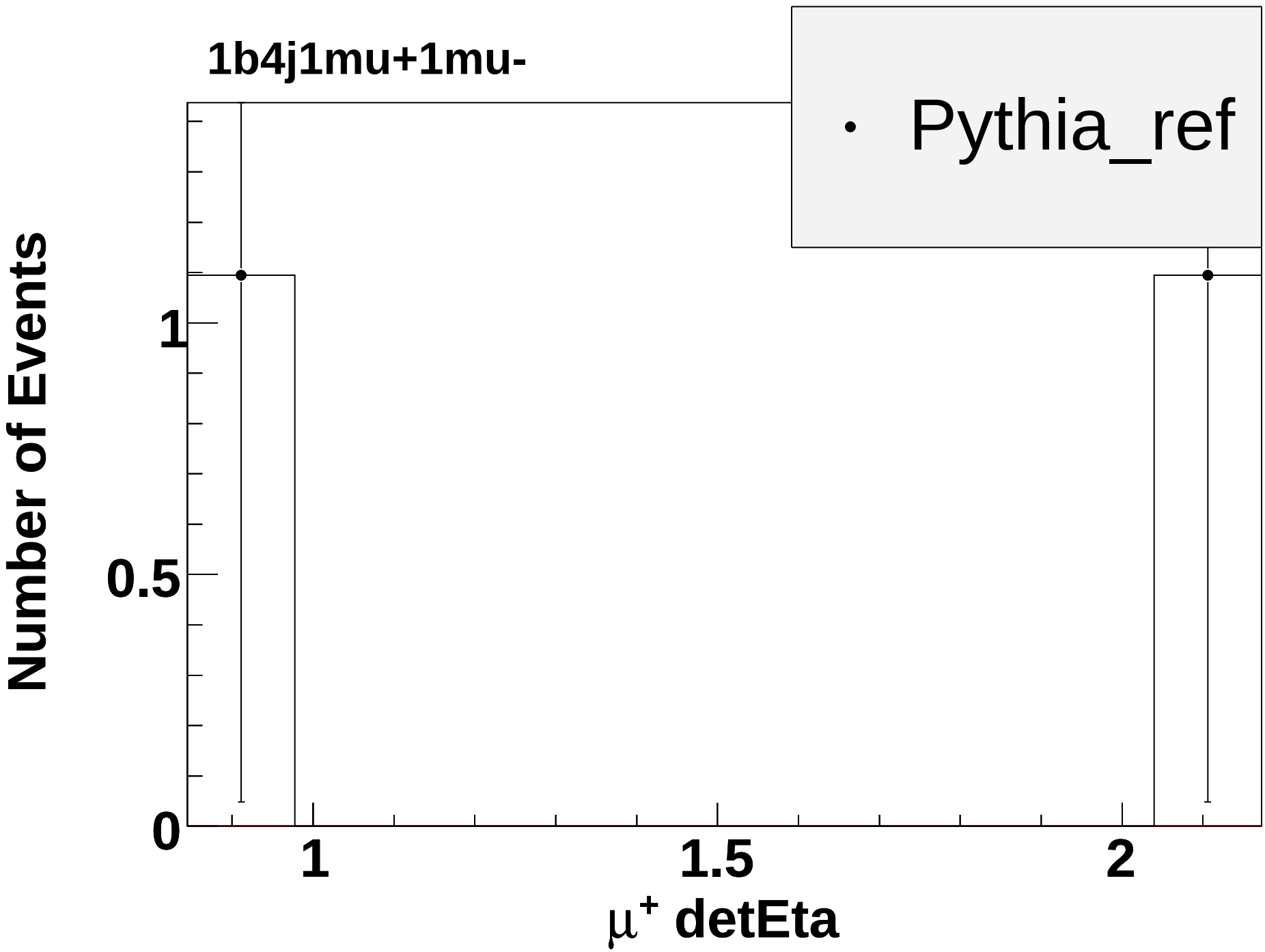

1b4j1mu+1mu-
Pythia_ref
Number of Events
1
0.5
0
-0.5
0
j1 ϕ (radians)

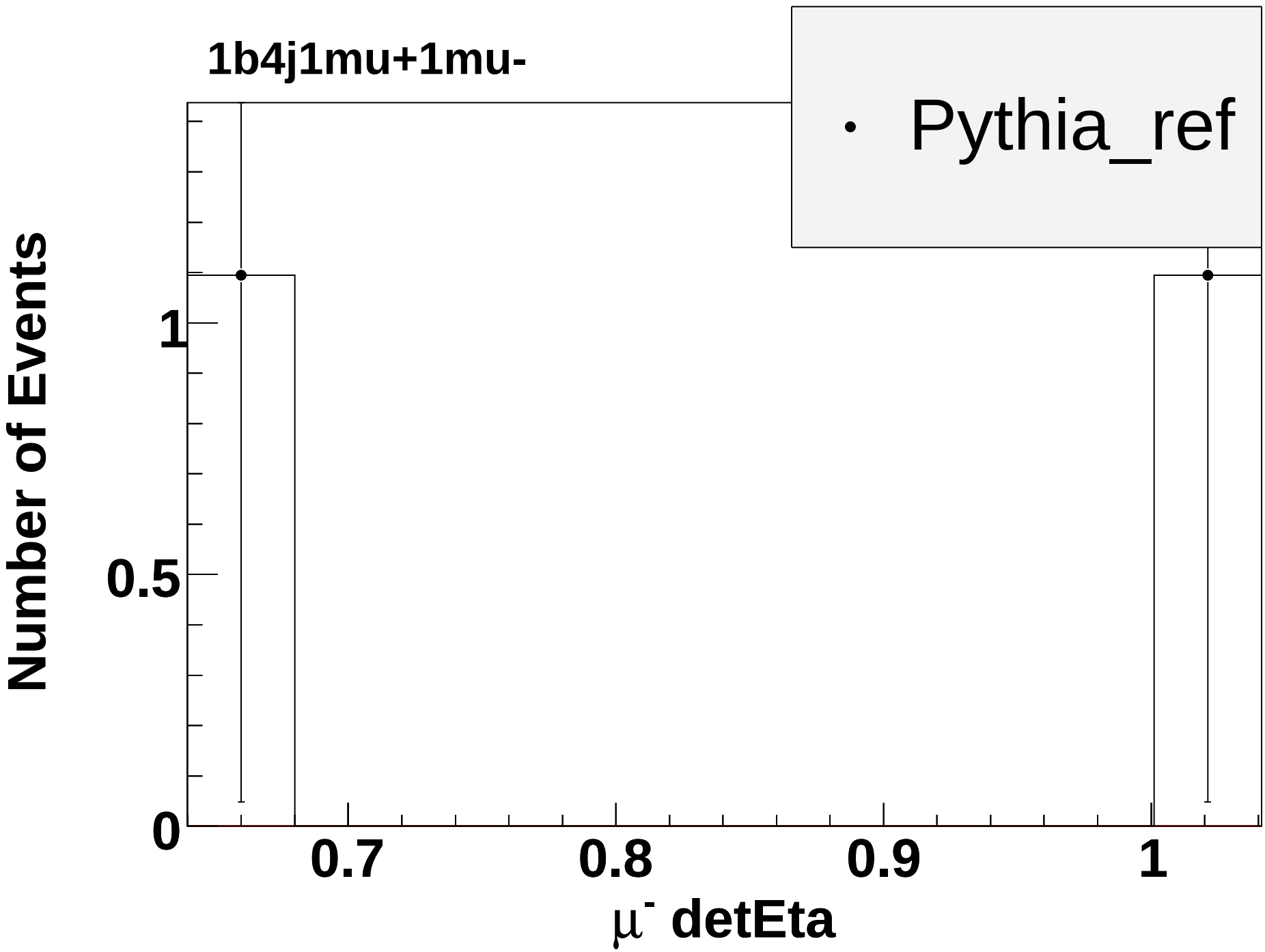

1b4j1mu+1mu-
Pythia_ref
Number of Events
1
0.5
0
2.5
3
j2 ϕ (radians)

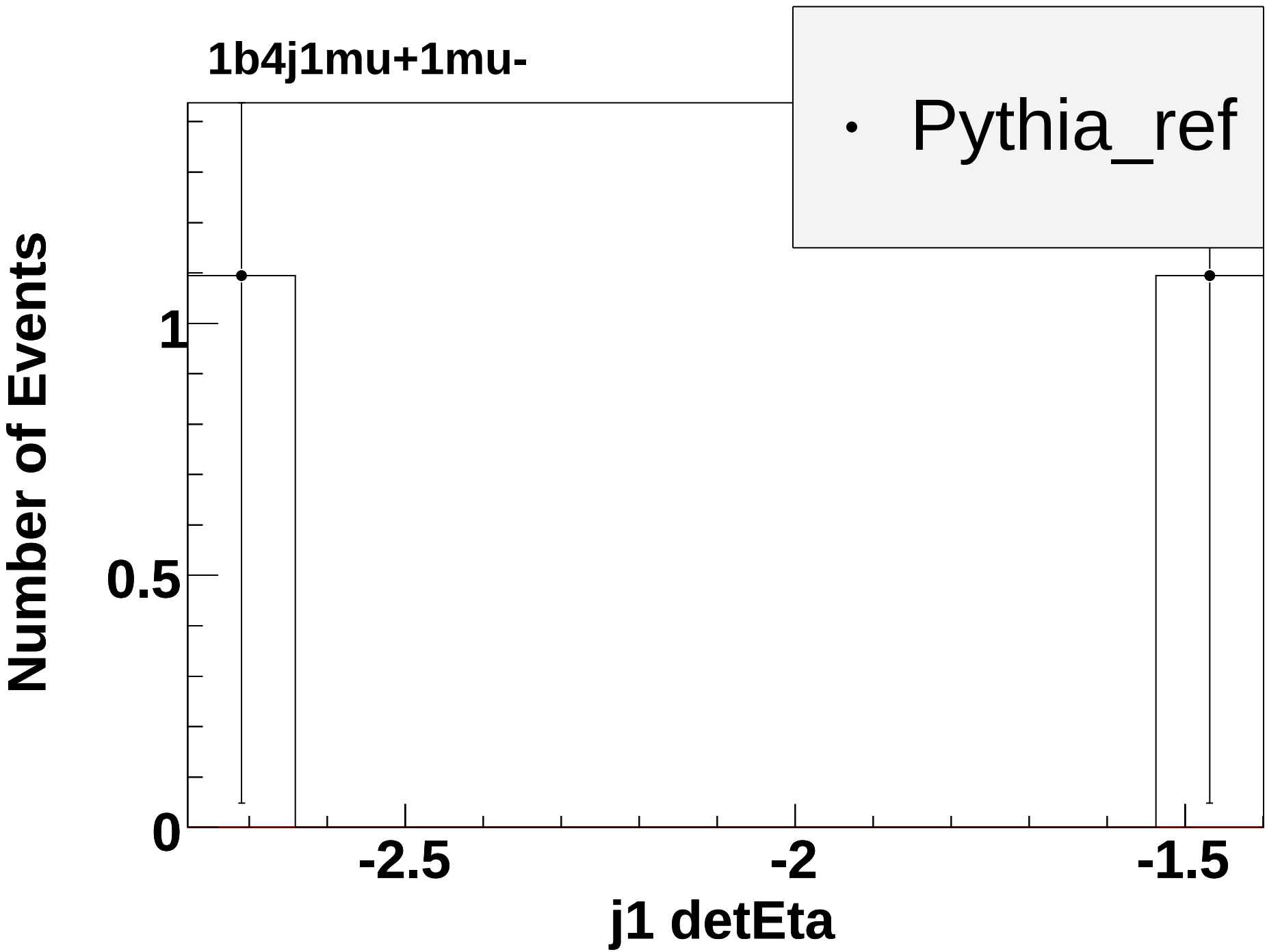

1b4j1mu+1mu-
Pythia_ref
Number of Events
0
0.5
1
-1
0
1
j3 ϕ (radians)

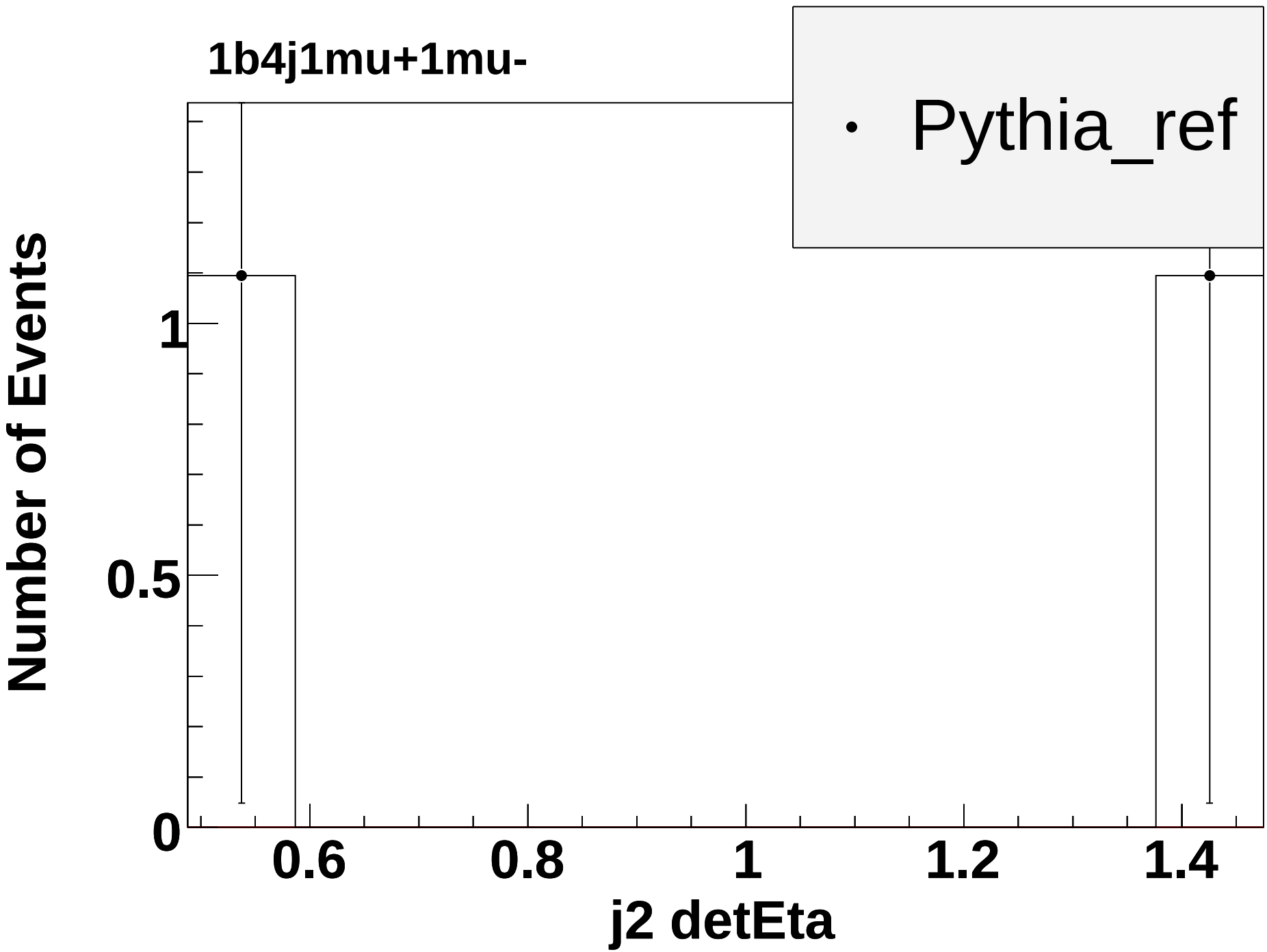

1b4j1mu+1mu-
Pythia_ref
Number of Events
1
0.5
0
-1.2
-1
-0.8
j4 ϕ (radians)

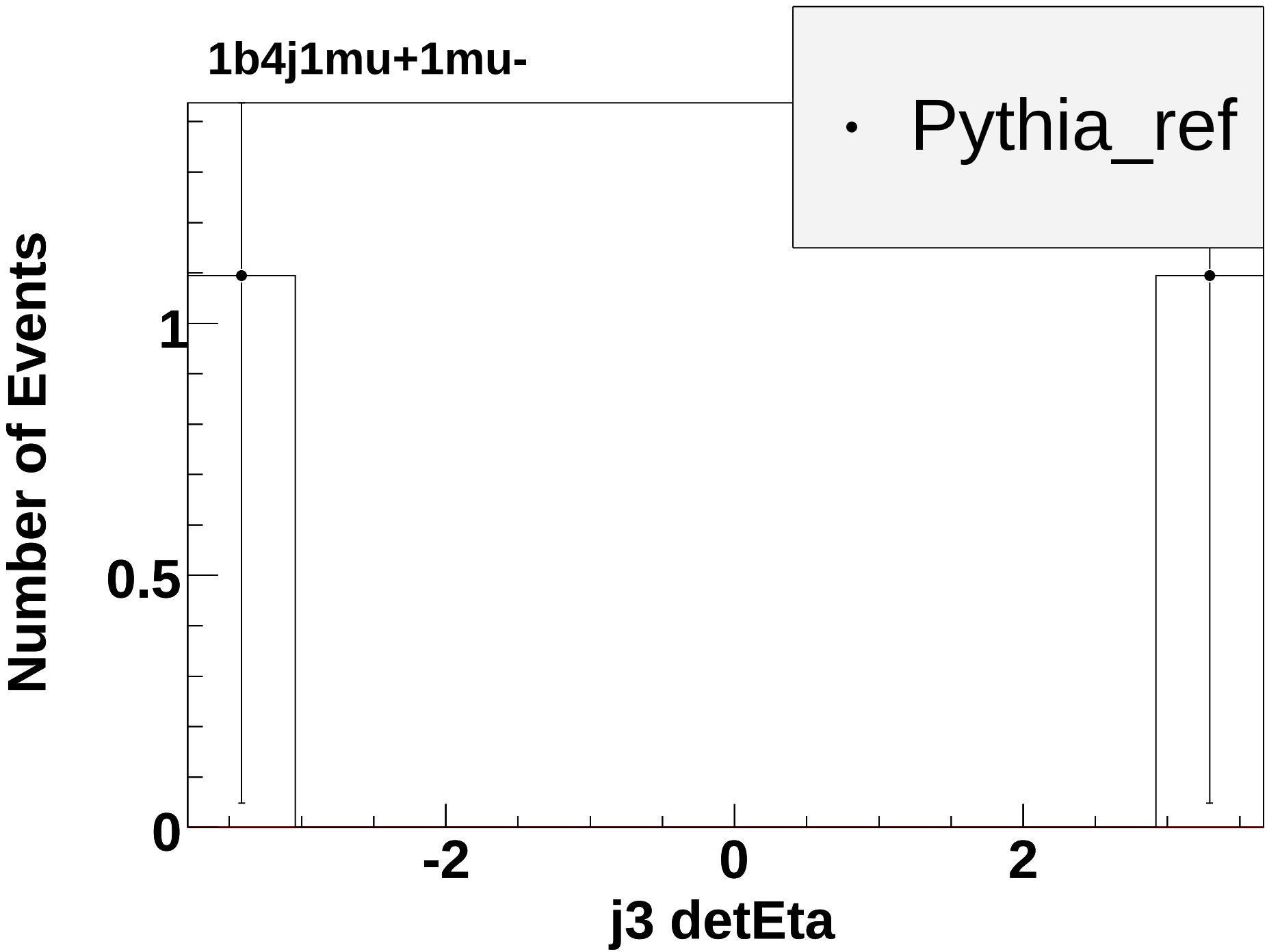

1b4j1mu+1mu-
Pythia_ref
Number of Events
0
0.5
1
-1
0
1
2
b ϕ (radians)

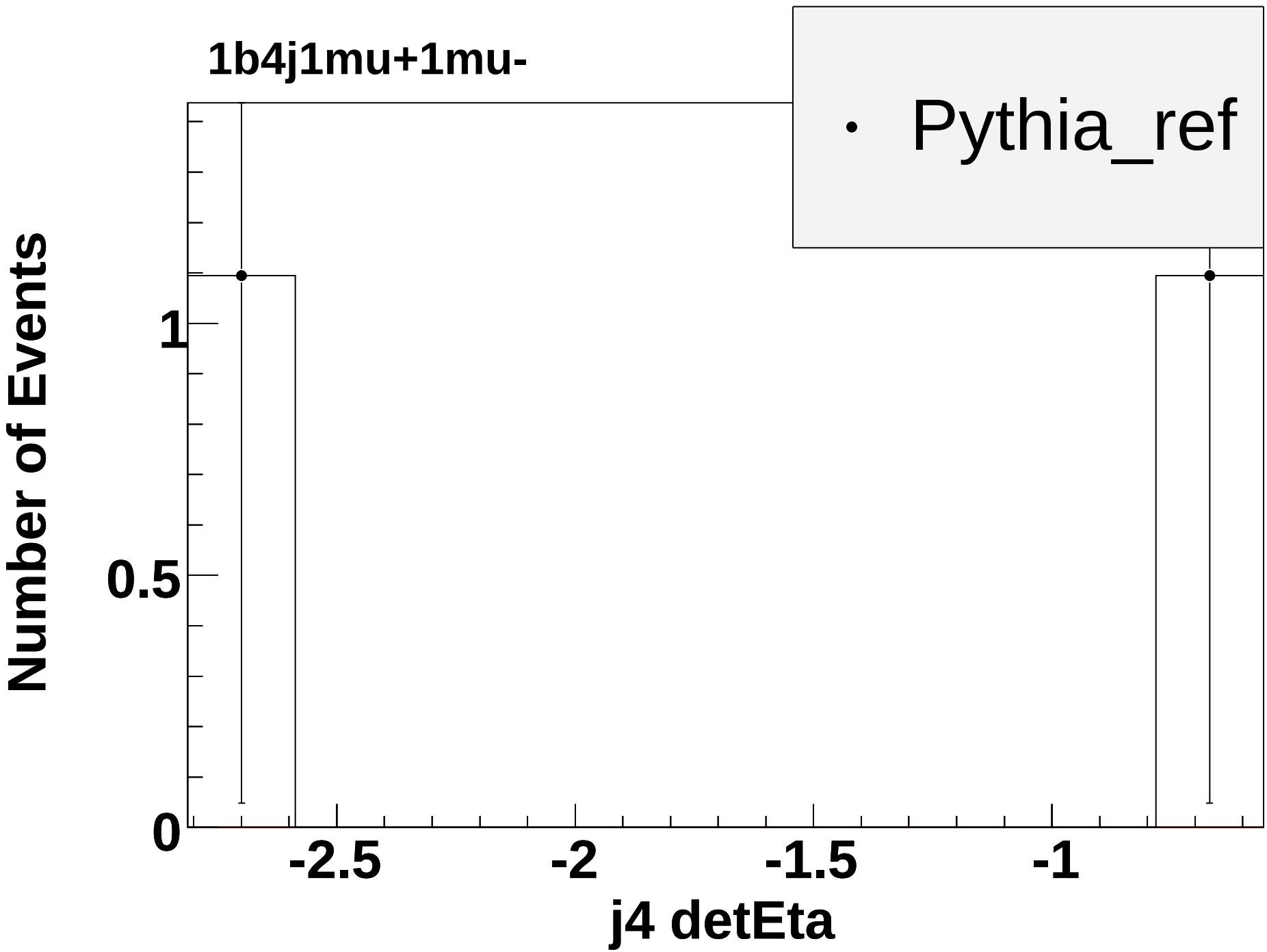

1b4j1mu+1mu-
Pythia_ref
Number of Events
0
0.5
1
1
1.5
2
μ+ detEta

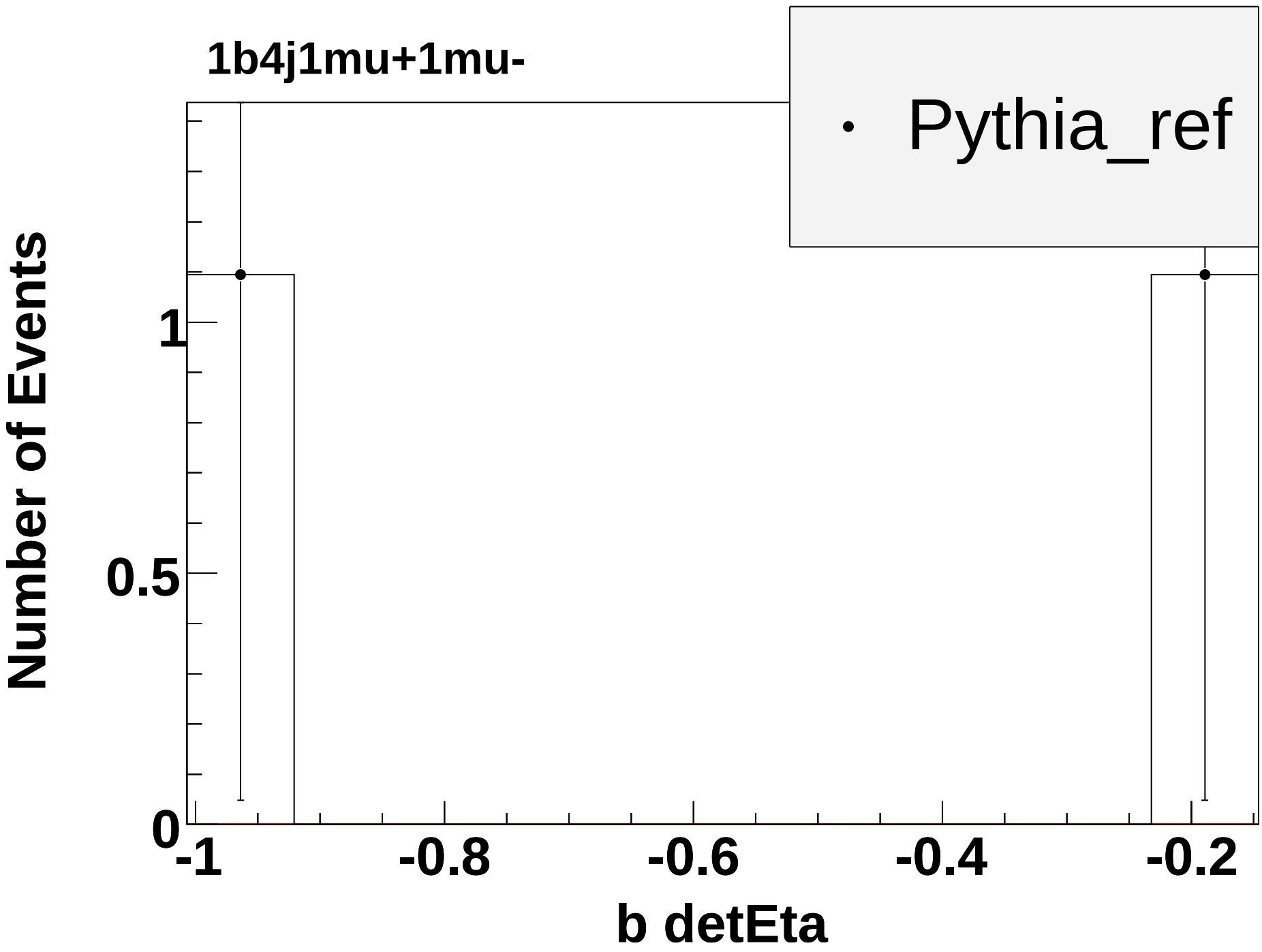

1b4j1mu+1mu-
Pythia_ref
Number of Events
1
0.5
0
0.7
0.8
0.9
1
μ- detEta

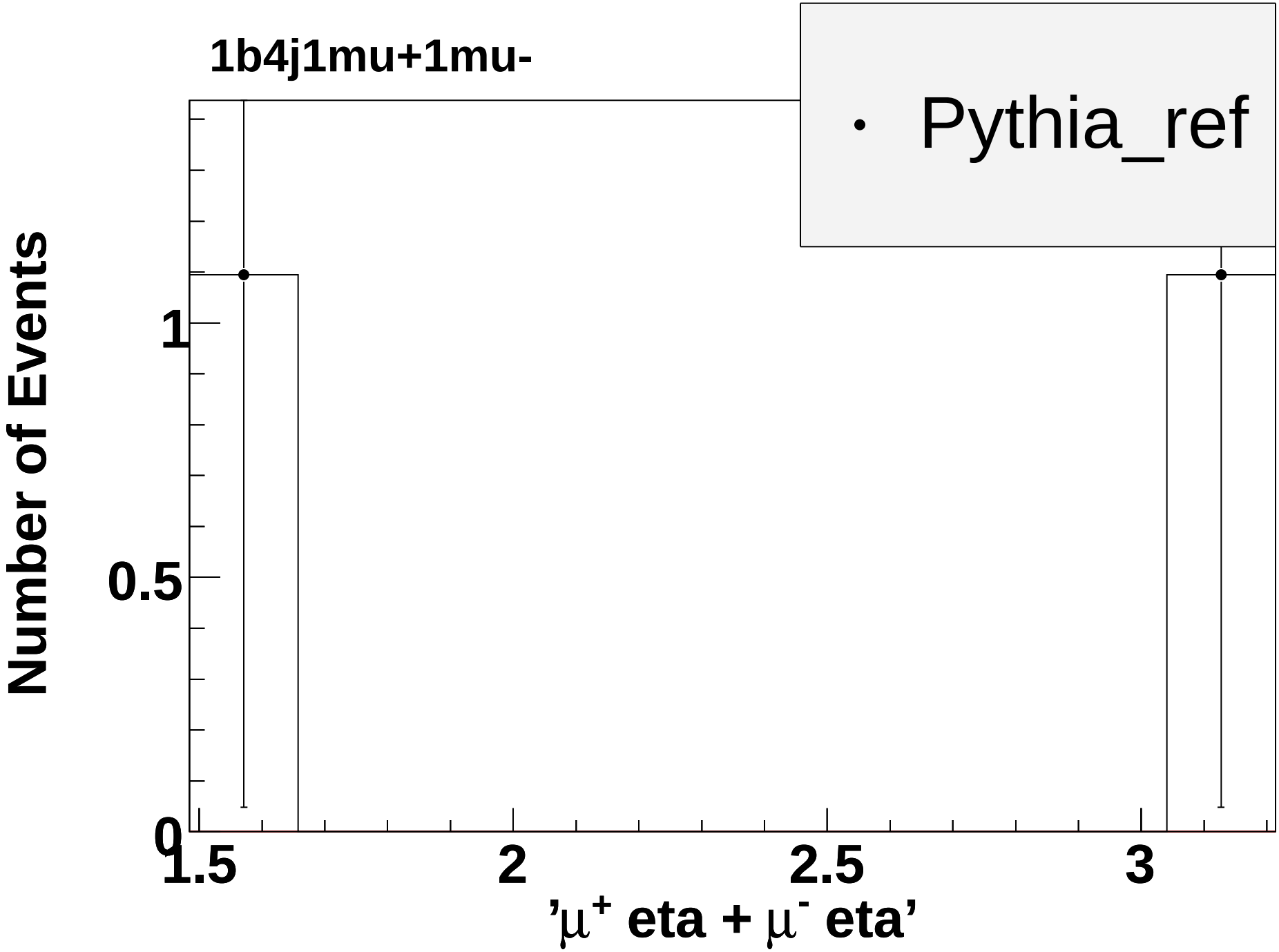

1b4j1mu+1mu-
Pythia_ref
Number of Events
1
0.5
0
-2.5
-2
-1.5
j1 detEta

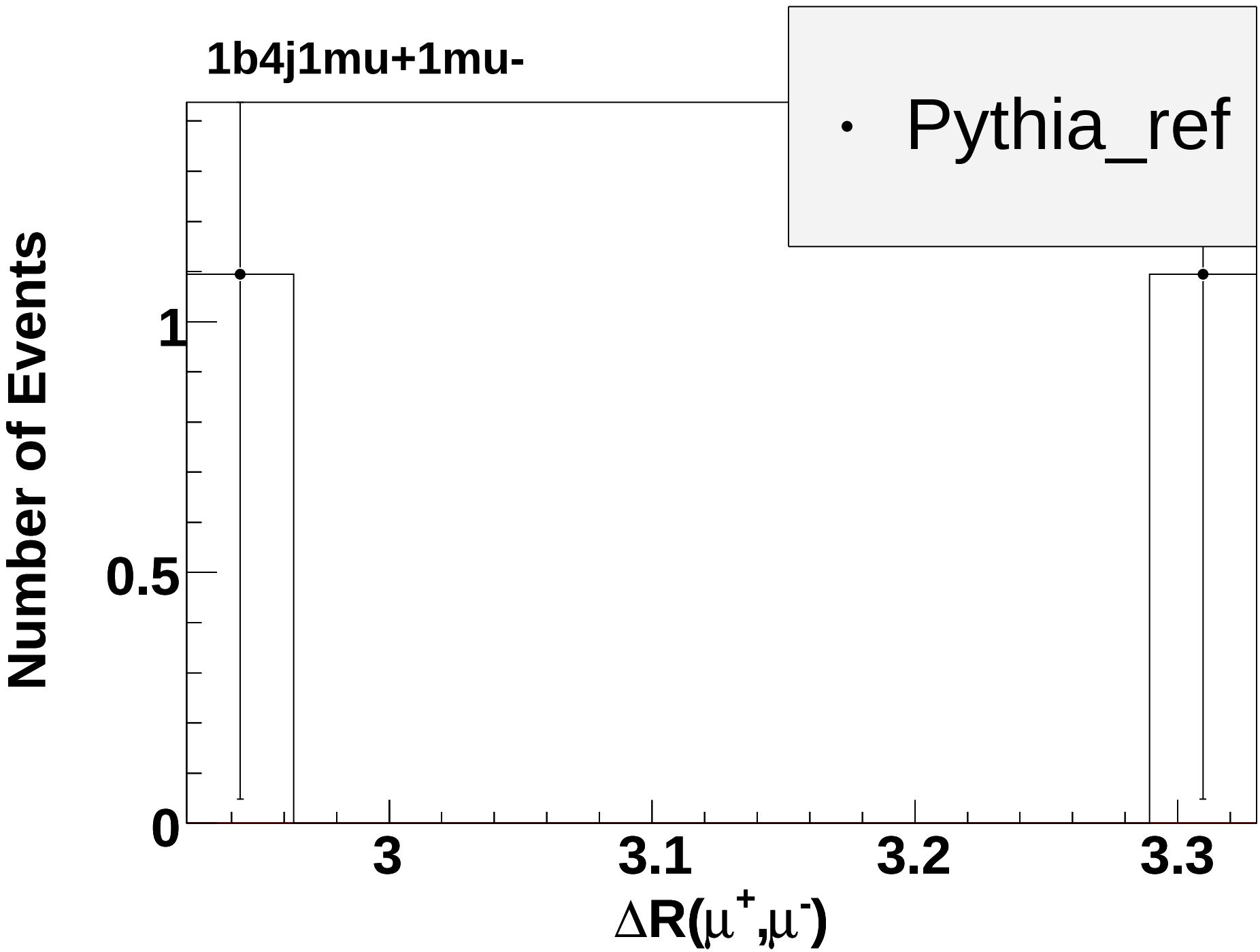

1b4j1mu+1mu-
Pythia_ref
Number of Events
0
0.5
1
0.6
0.8
1
1.2
1.4
j2 detEta

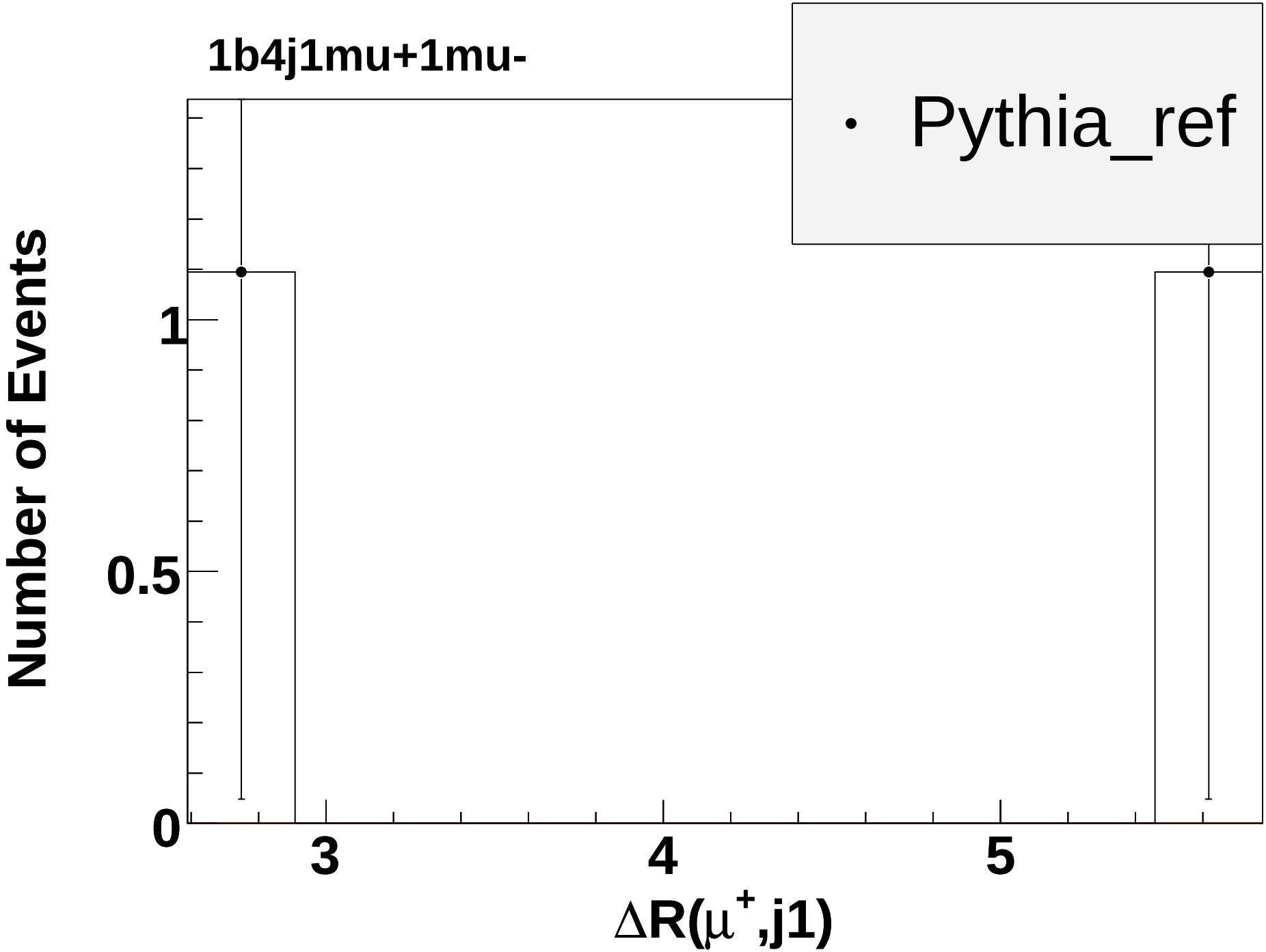

1b4j1mu+1mu-
Pythia_ref
Number of Events
1
0.5
0
-2
0
2
j3 detEta

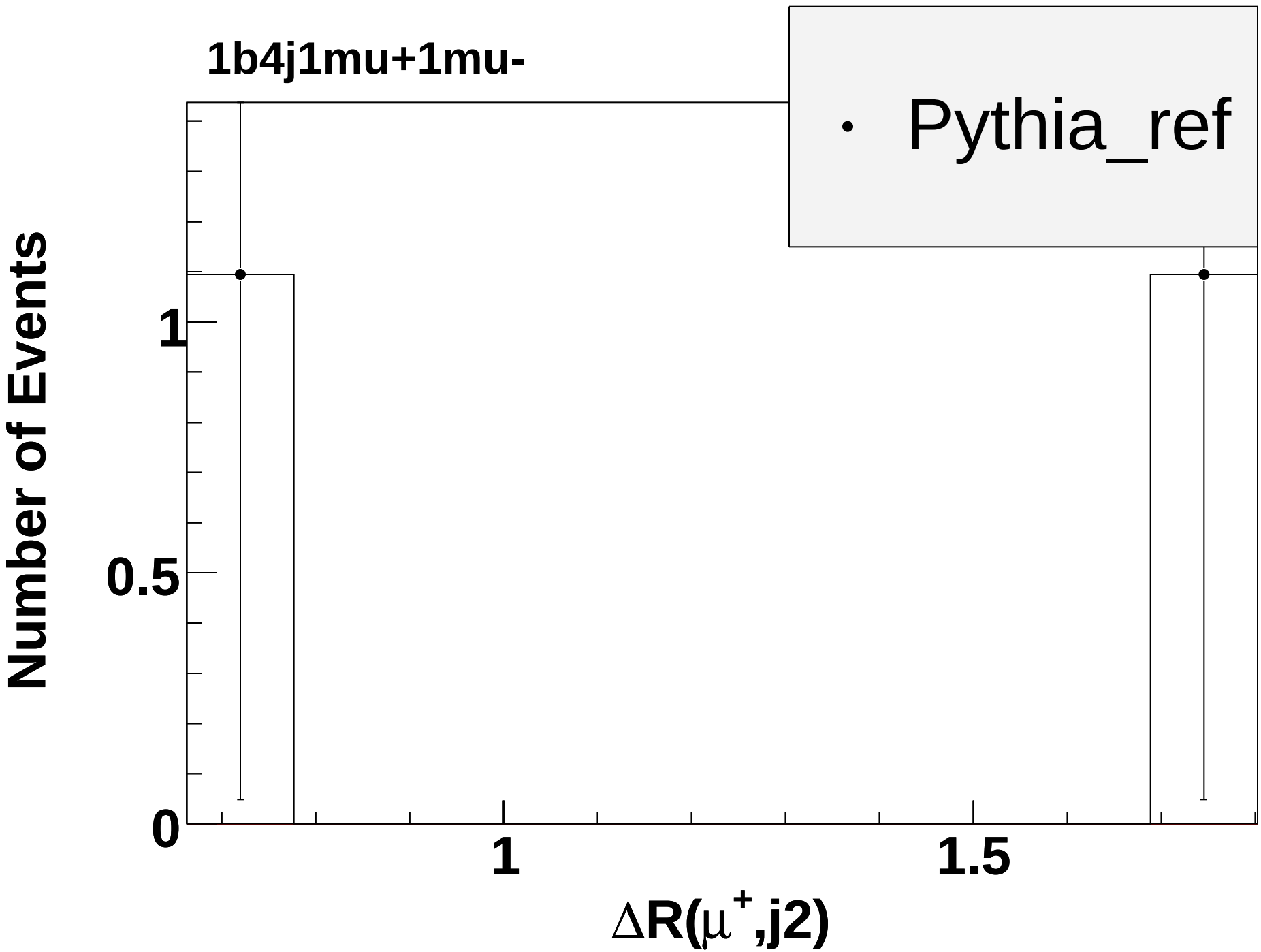

1b4j1mu+1mu-
Pythia_ref
Number of Events
1
0.5
0
-2.5
-2
-1.5
-1
j4 detEta

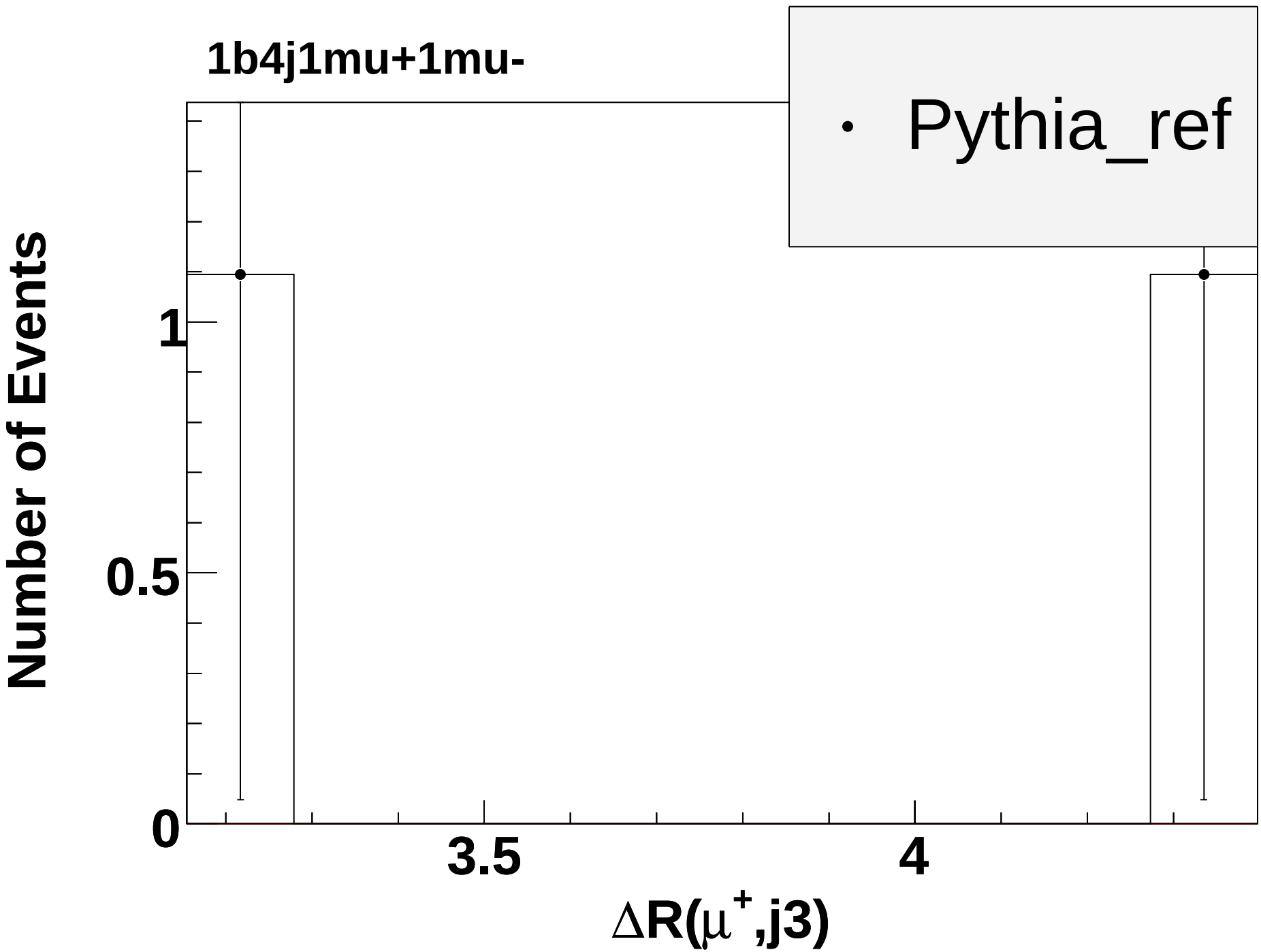

1b4j1mu+1mu-
Pythia_ref
Number of Events
1
0.5
0
-1
-0.8
-0.6
-0.4
-0.2
b detEta

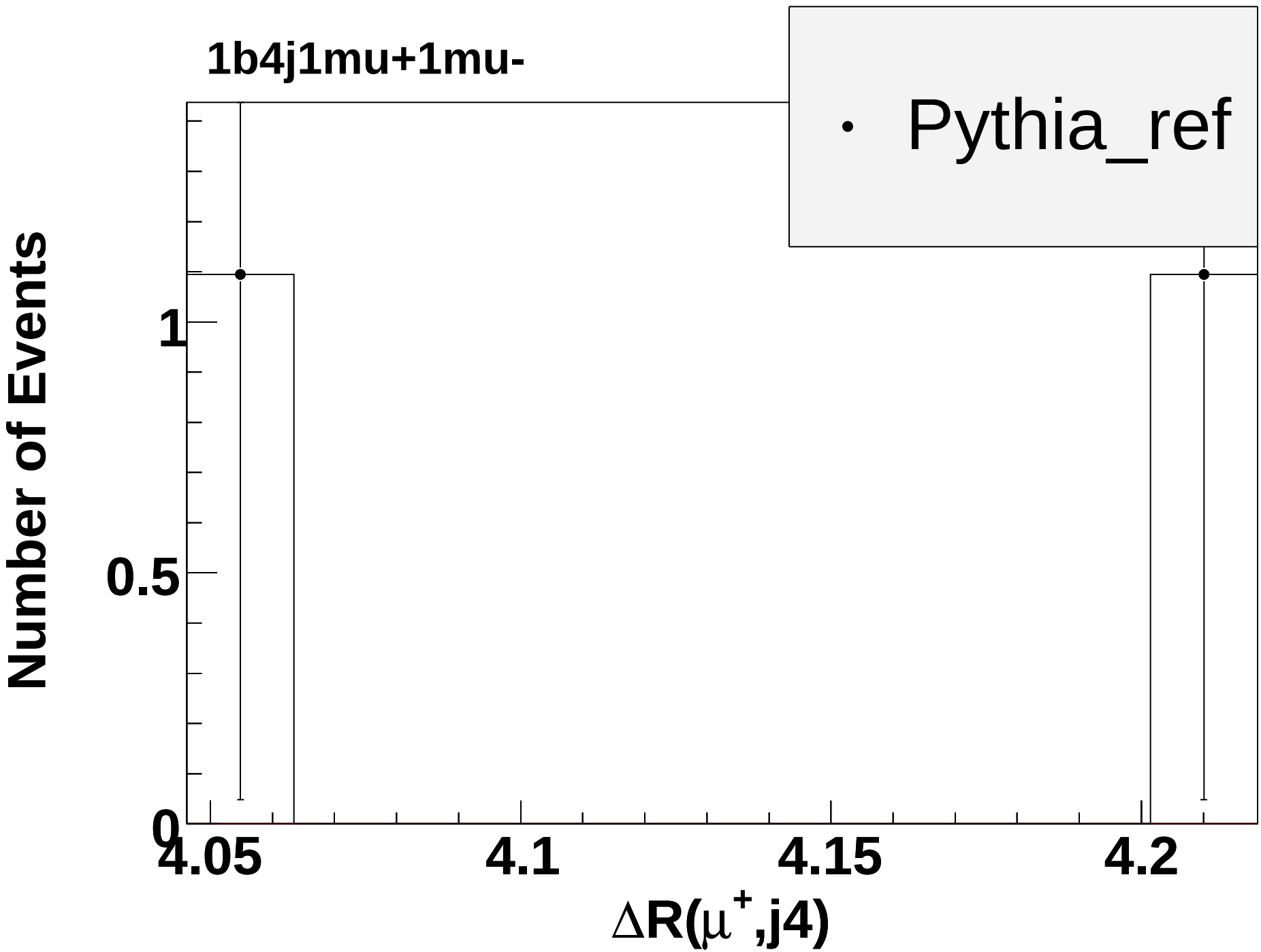

1b4j1mu+1mu-
Pythia_ref
Number of Events
1
0.5
0
1.5
2
2.5
3
'μ+ eta + μ- eta'

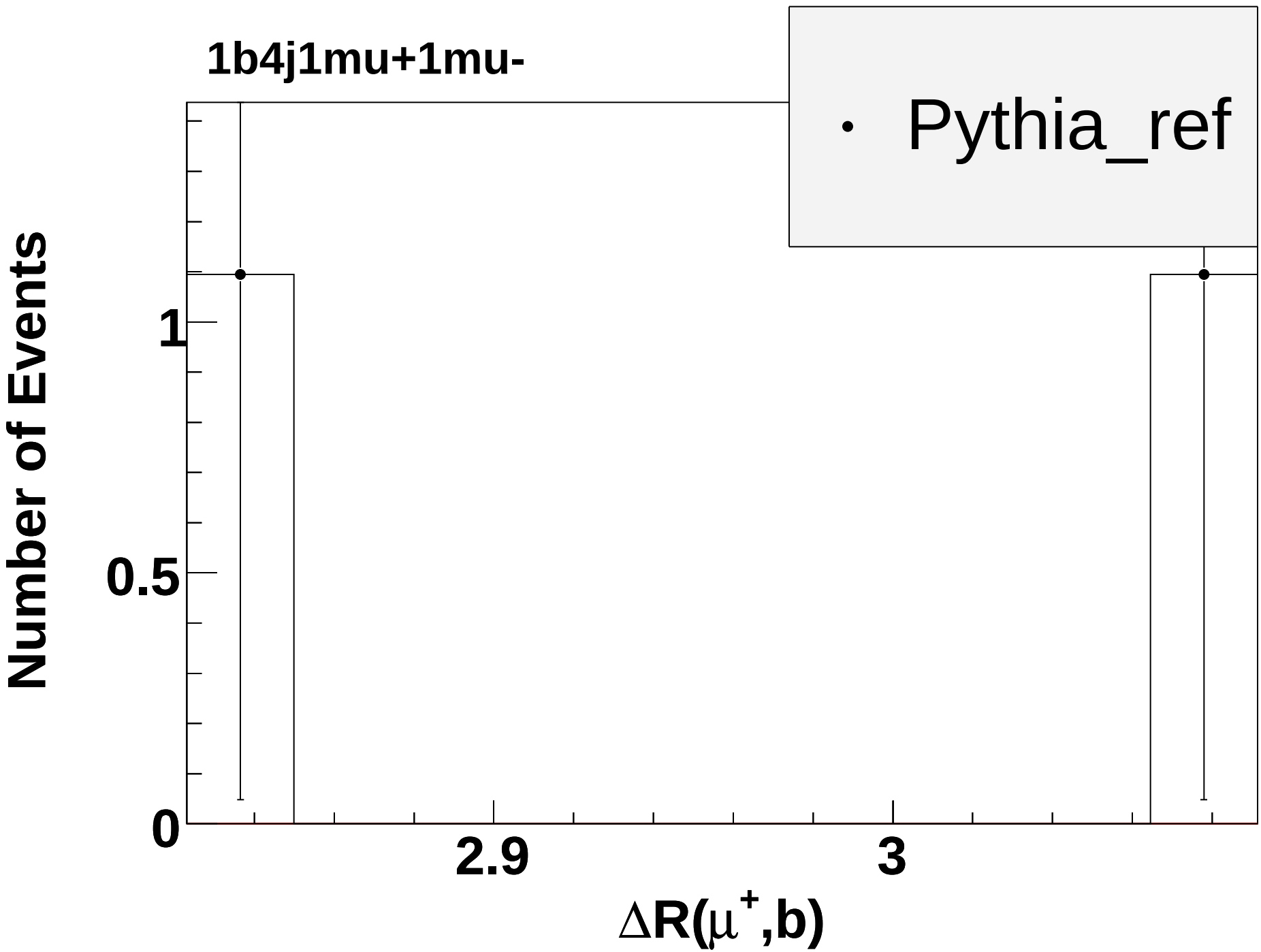

1b4j1mu+1mu-
Pythia_ref
Number of Events
0
0.5
1
3
3.1
3.2
3.3
ΔR(μ+,μ-)

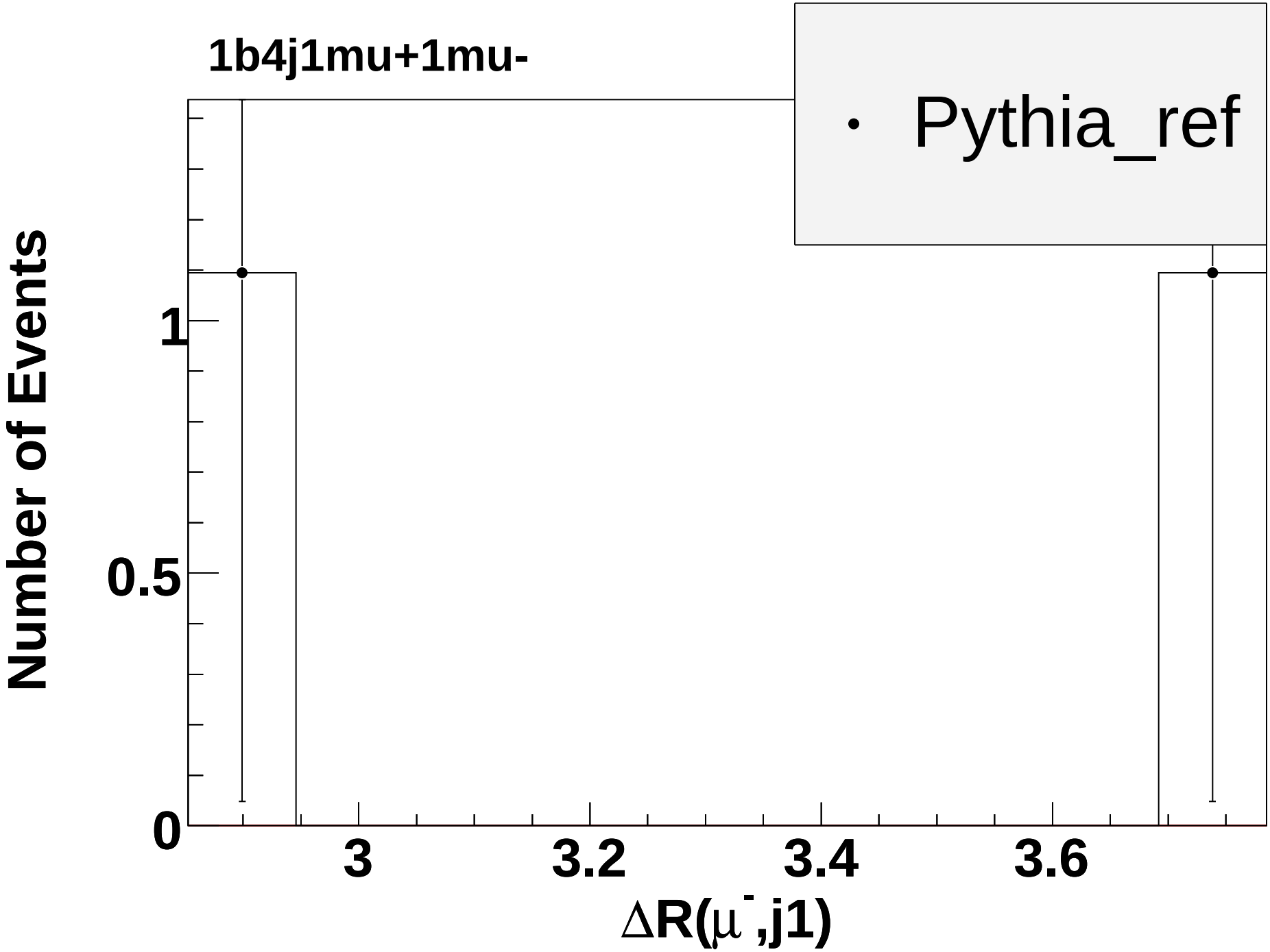

1b4j1mu+1mu-
Pythia_ref
Number of Events
0
0.5
1
3
4
5
ΔR(μ+,j1)

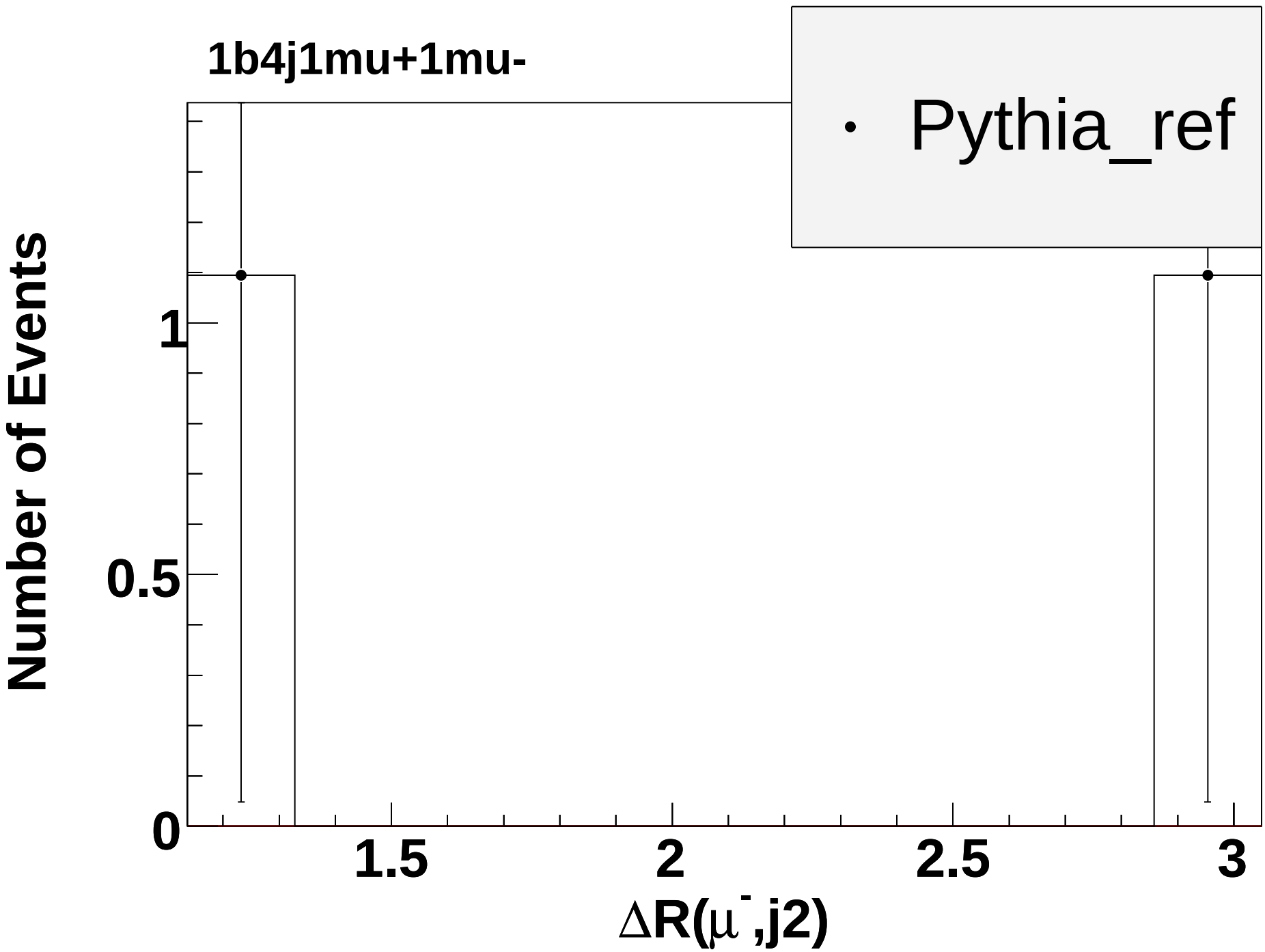

1b4j1mu+1mu-
Pythia_ref
Number of Events
0
0.5
1
1
1.5
ΔR(μ+,j2)

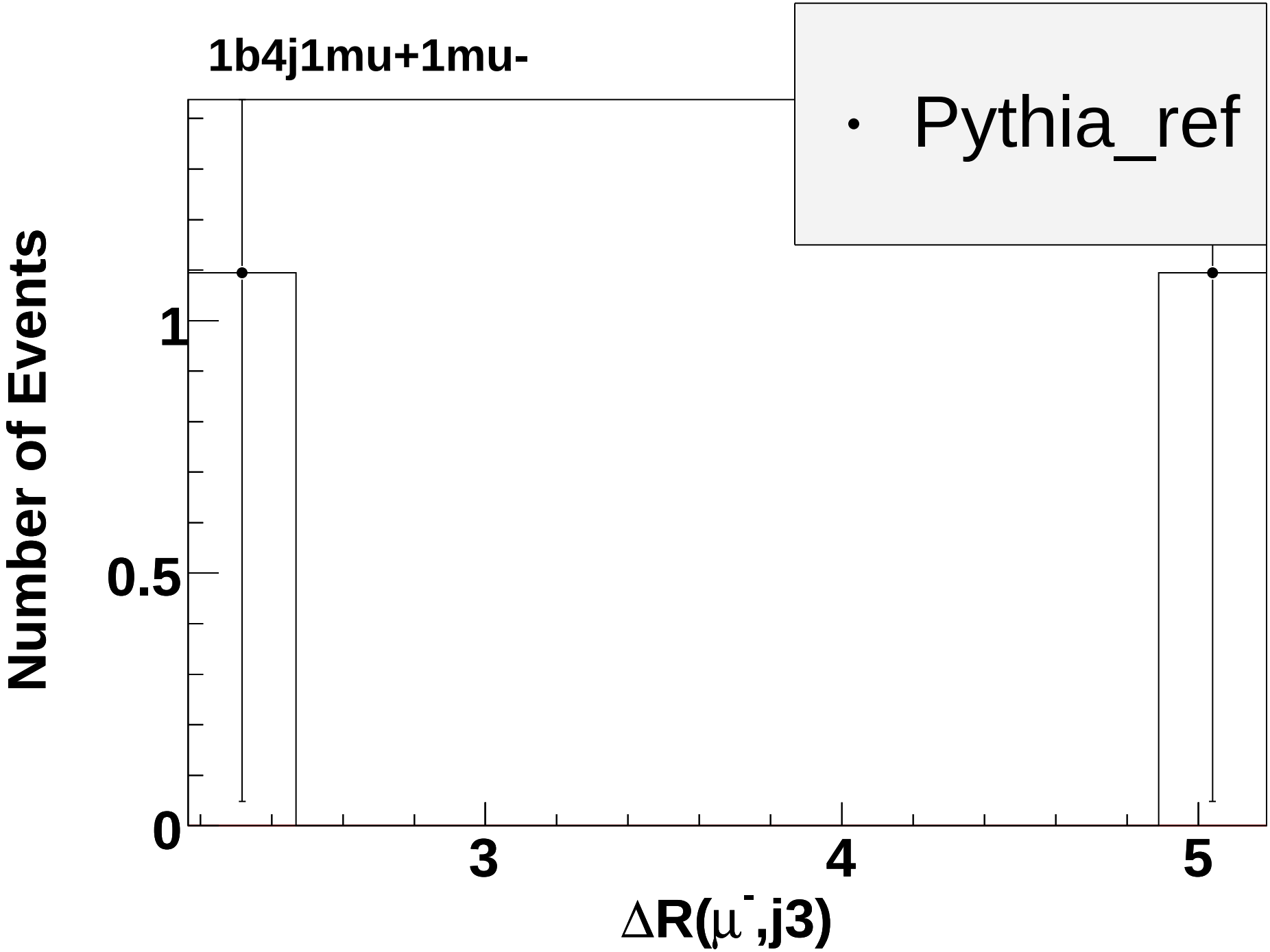

1b4j1mu+1mu-
Pythia_ref
Number of Events
1
0.5
0
3.5
4
ΔR(μ+,j3)

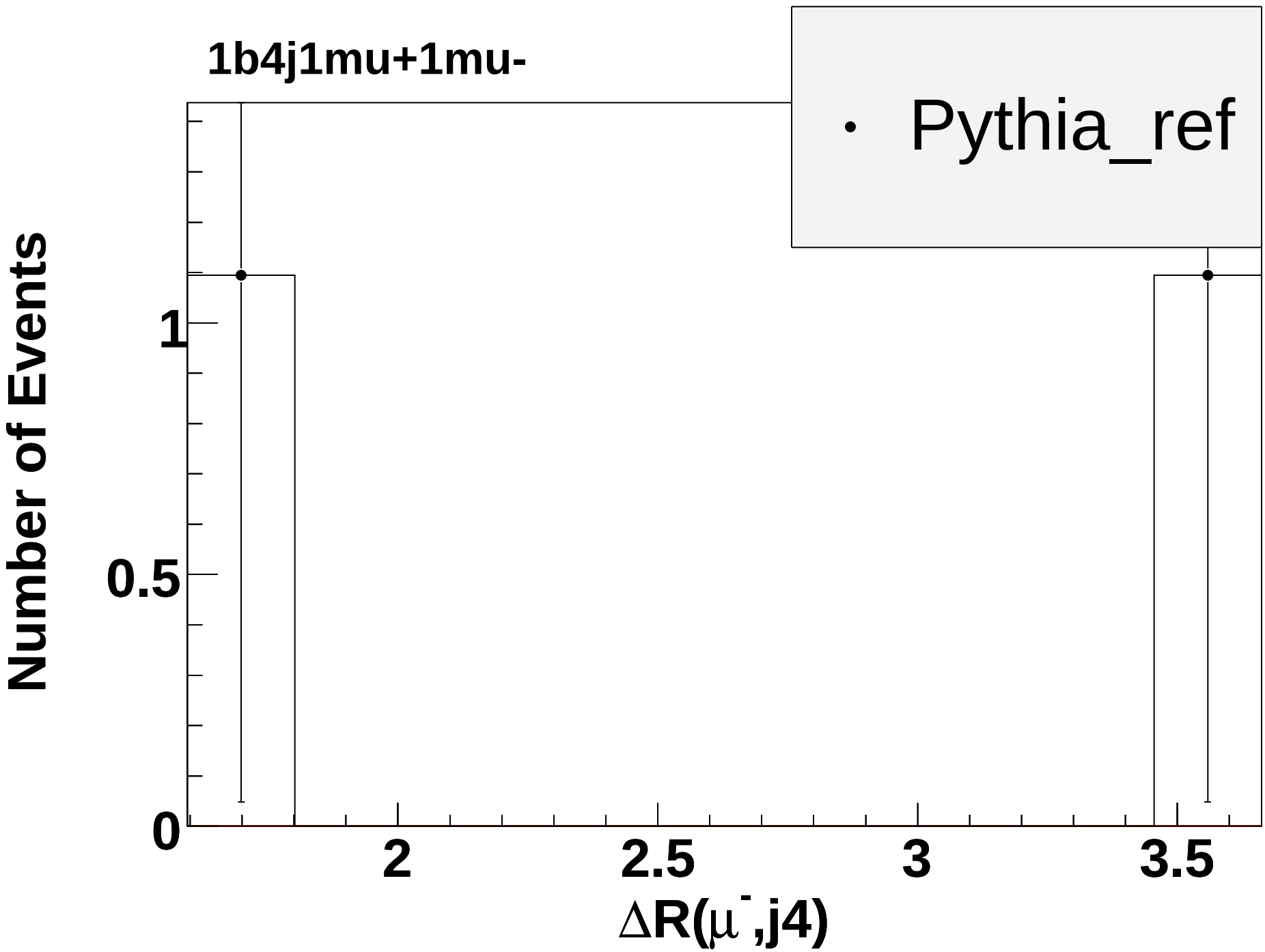

1b4j1mu+1mu-
Pythia_ref
Number of Events
1
0.5
0
4.05
4.1
4.15
4.2
ΔR(μ+,j4)

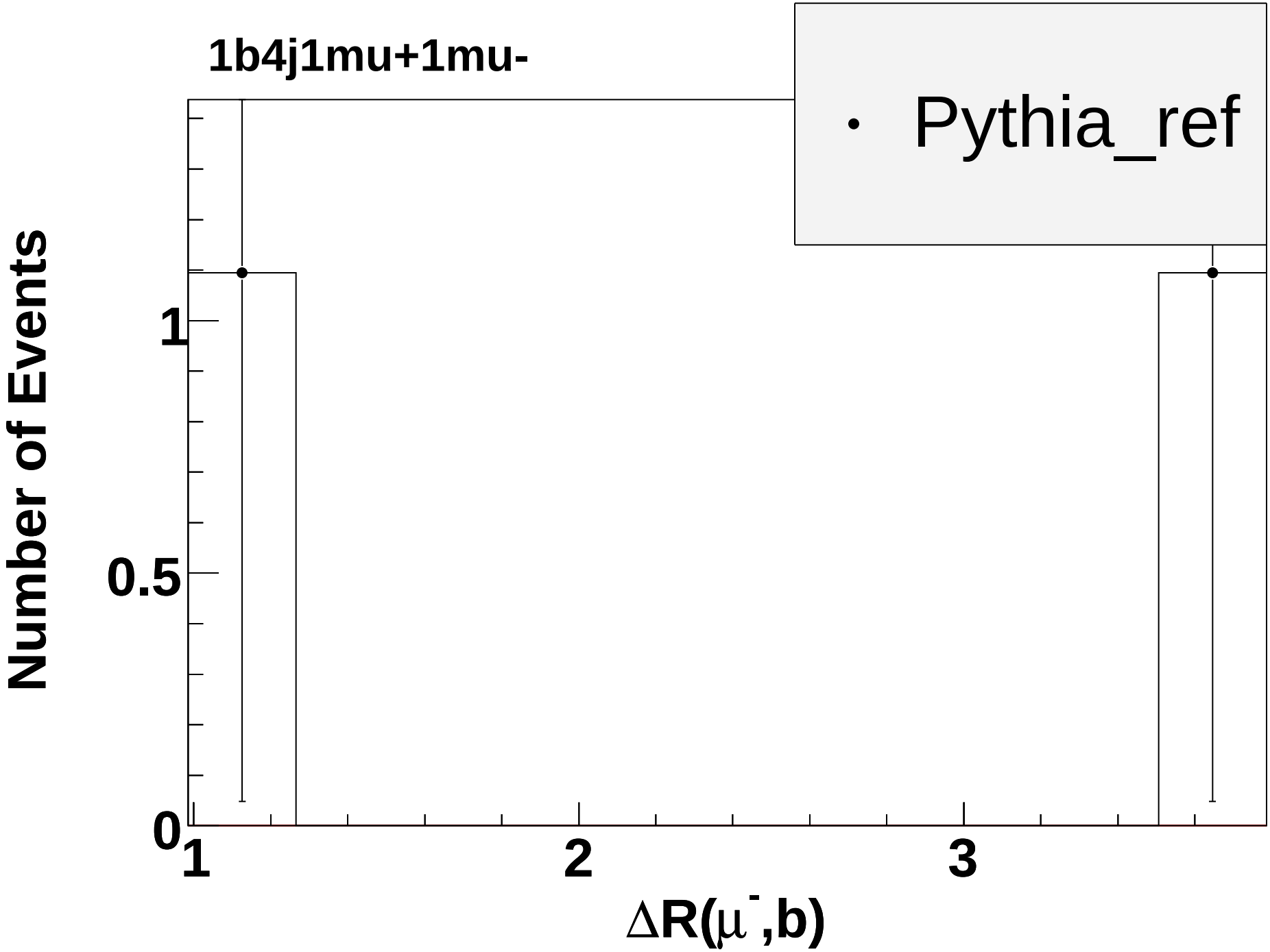

1b4j1mu+1mu-
Pythia_ref
Number of Events
1
0.5
0
2.9
3
ΔR(μ+,b)

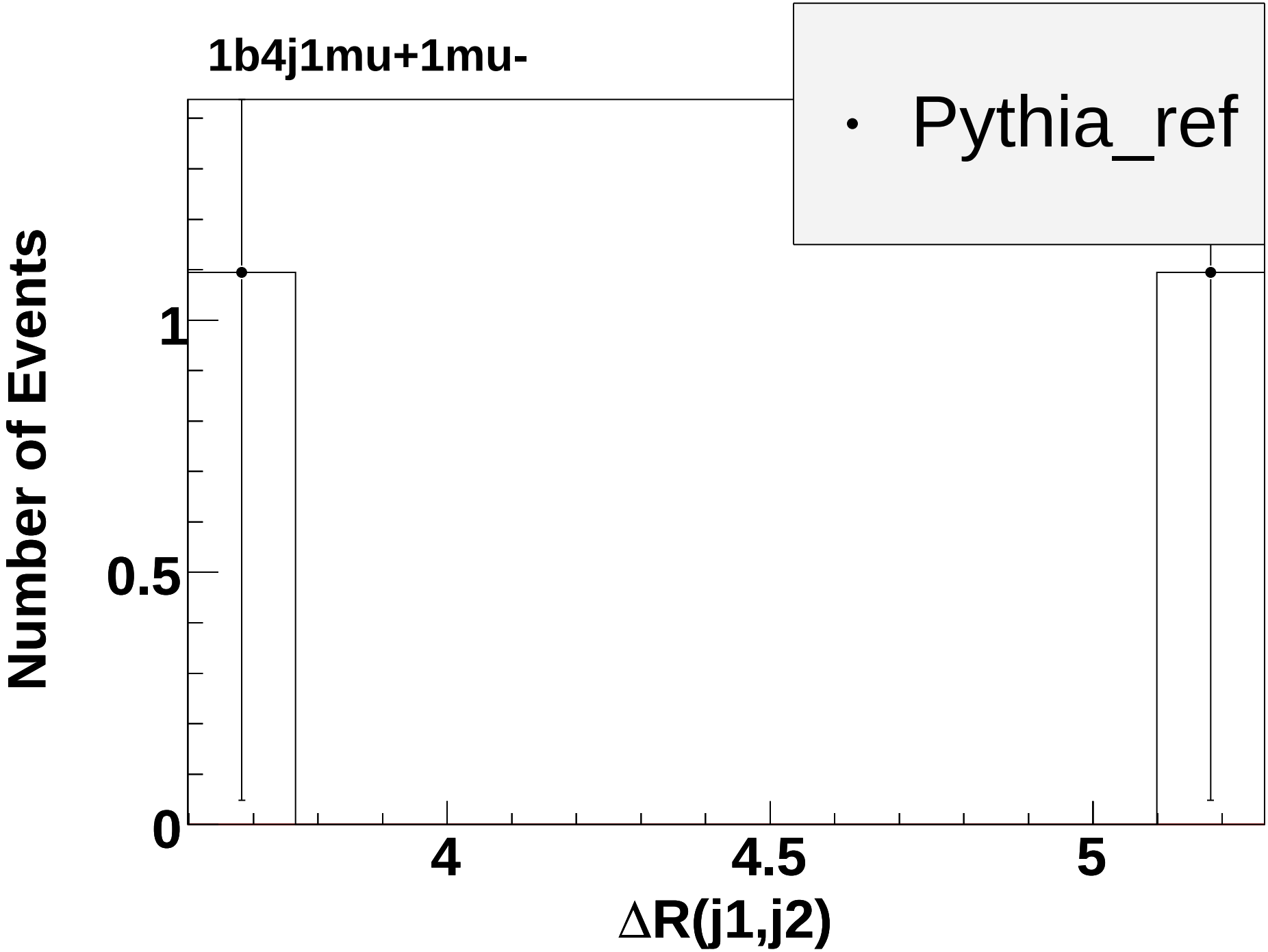

1b4j1mu+1mu-
Pythia_ref
Number of Events
0
0.5
1
3
3.2
3.4
3.6
ΔR(μ⁻,j1)

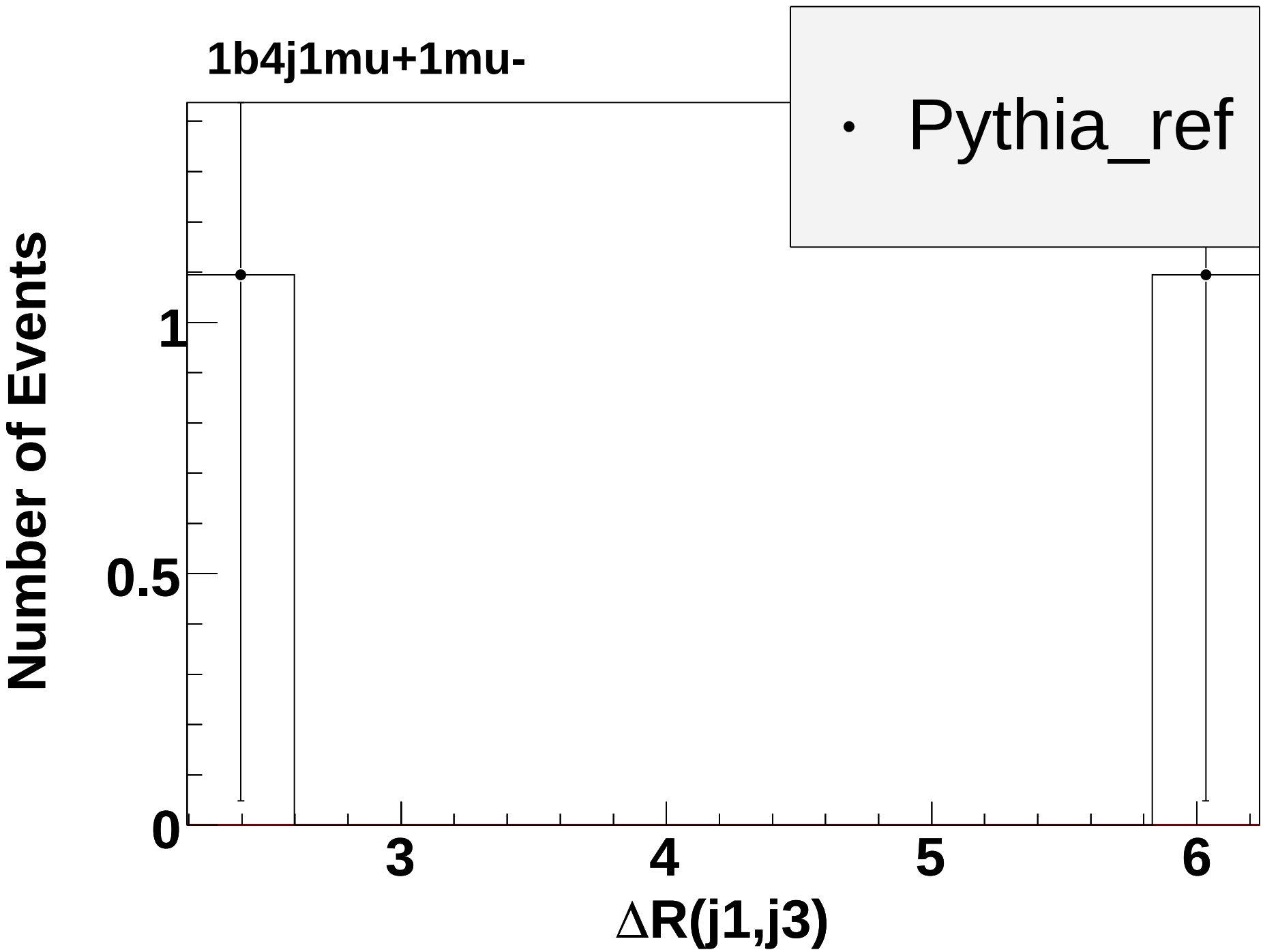

1b4j1mu+1mu-
Pythia_ref
Number of Events
0
0.5
1
1.5
2
2.5
3
ΔR(μ⁻,j2)

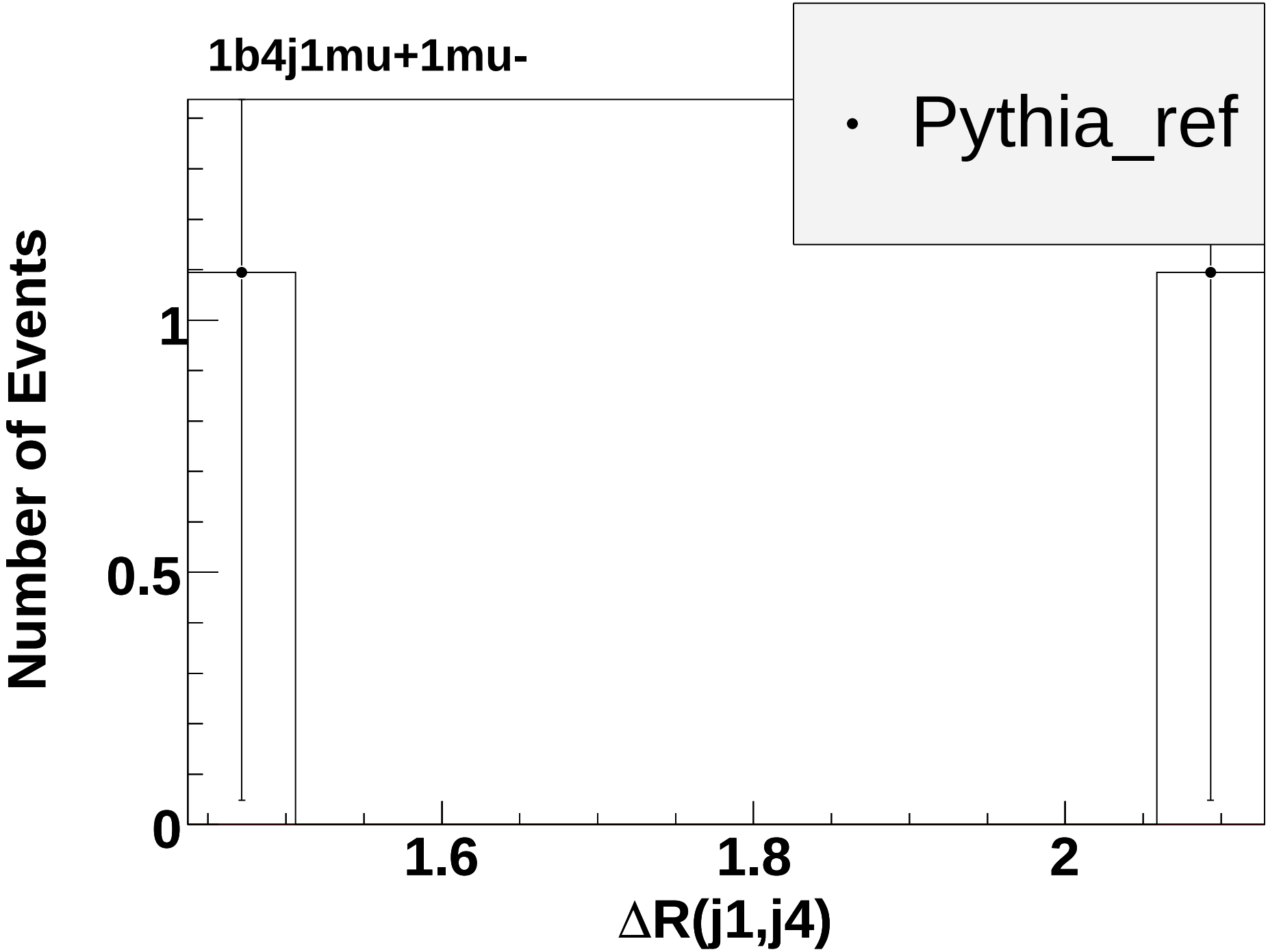

1b4j1mu+1mu-
Pythia_ref
Number of Events
0
0.5
1
3
4
5
ΔR(μ⁻,j3)

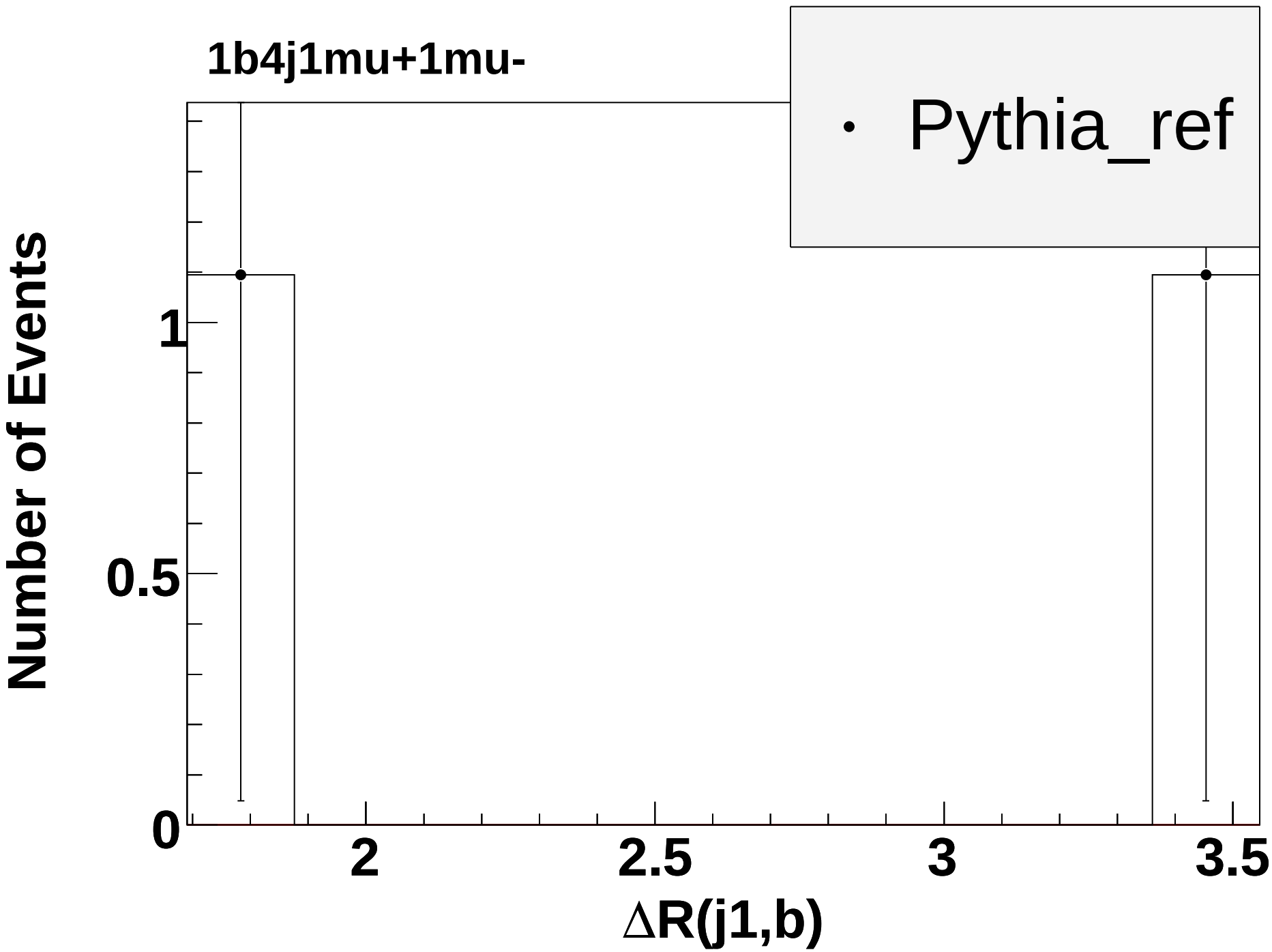

1b4j1mu+1mu-
Pythia_ref
Number of Events
0
0.5
1
2
2.5
3
3.5
ΔR(μ⁻,j4)

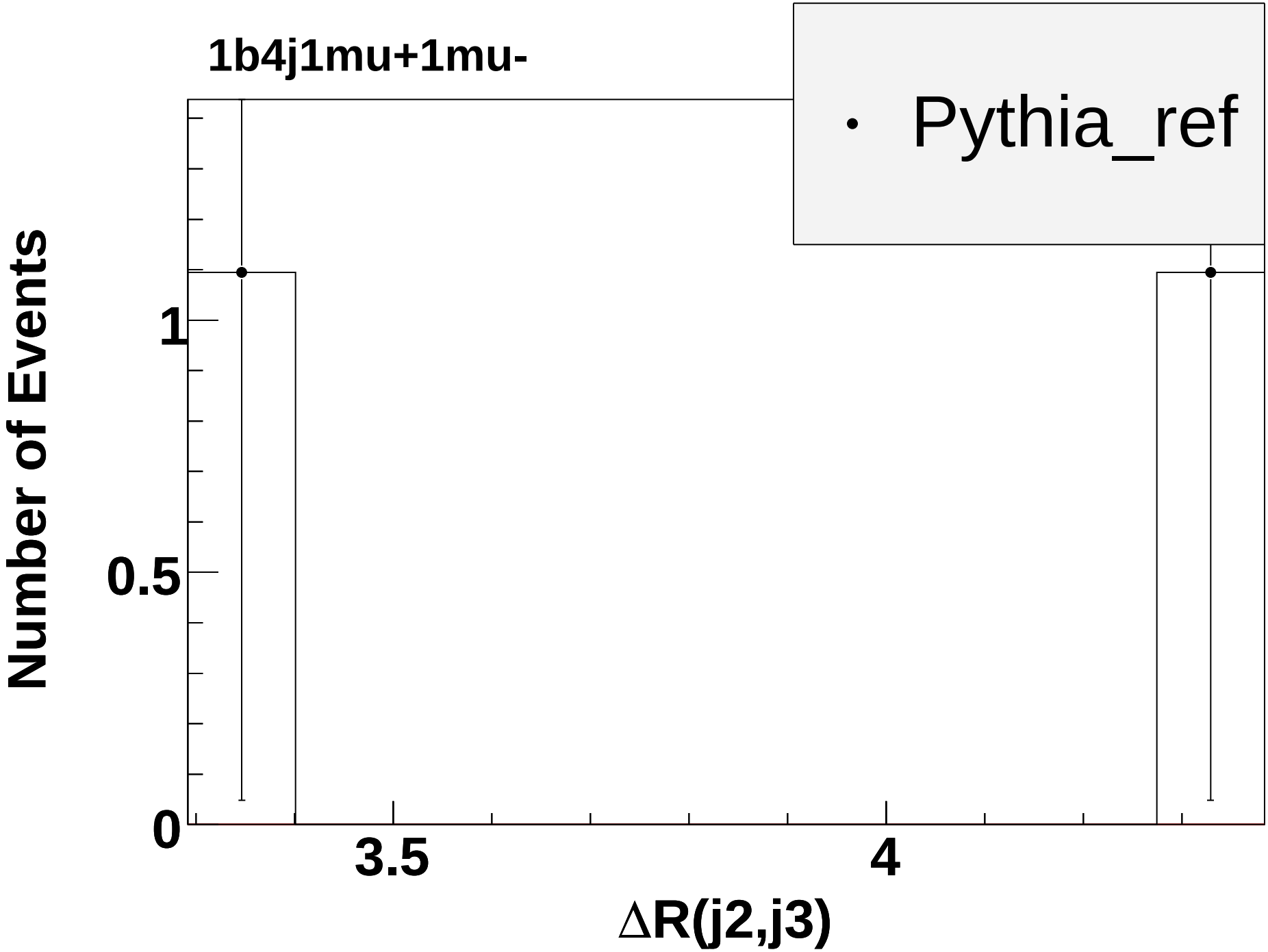

1b4j1mu+1mu-
Pythia_ref
Number of Events
1
0.5
0
1
2
3
ΔR(μ⁻,b)

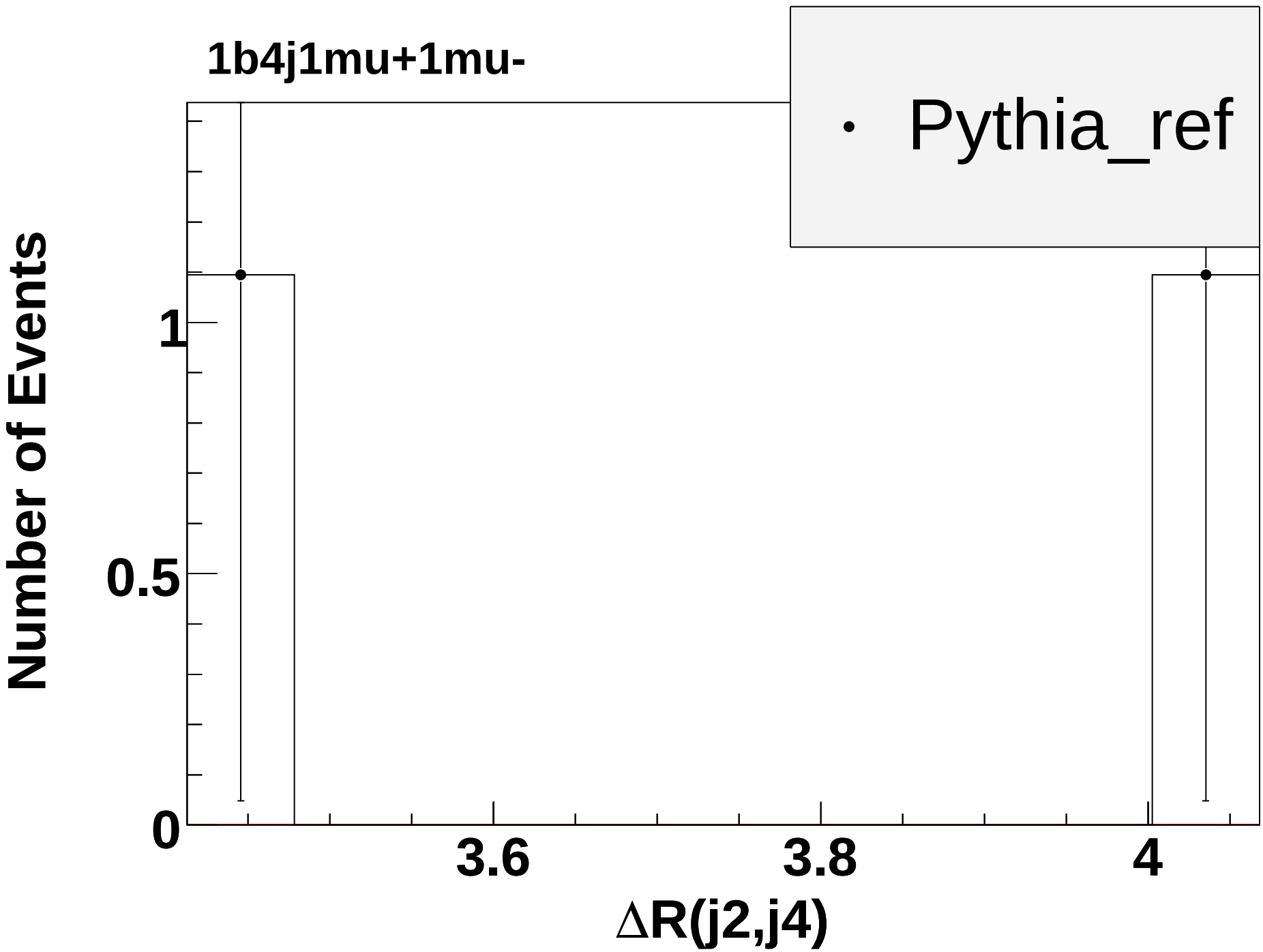

1b4j1mu+1mu-
Pythia_ref
Number of Events
0
0.5
1
4
4.5
5
ΔR(j1,j2)

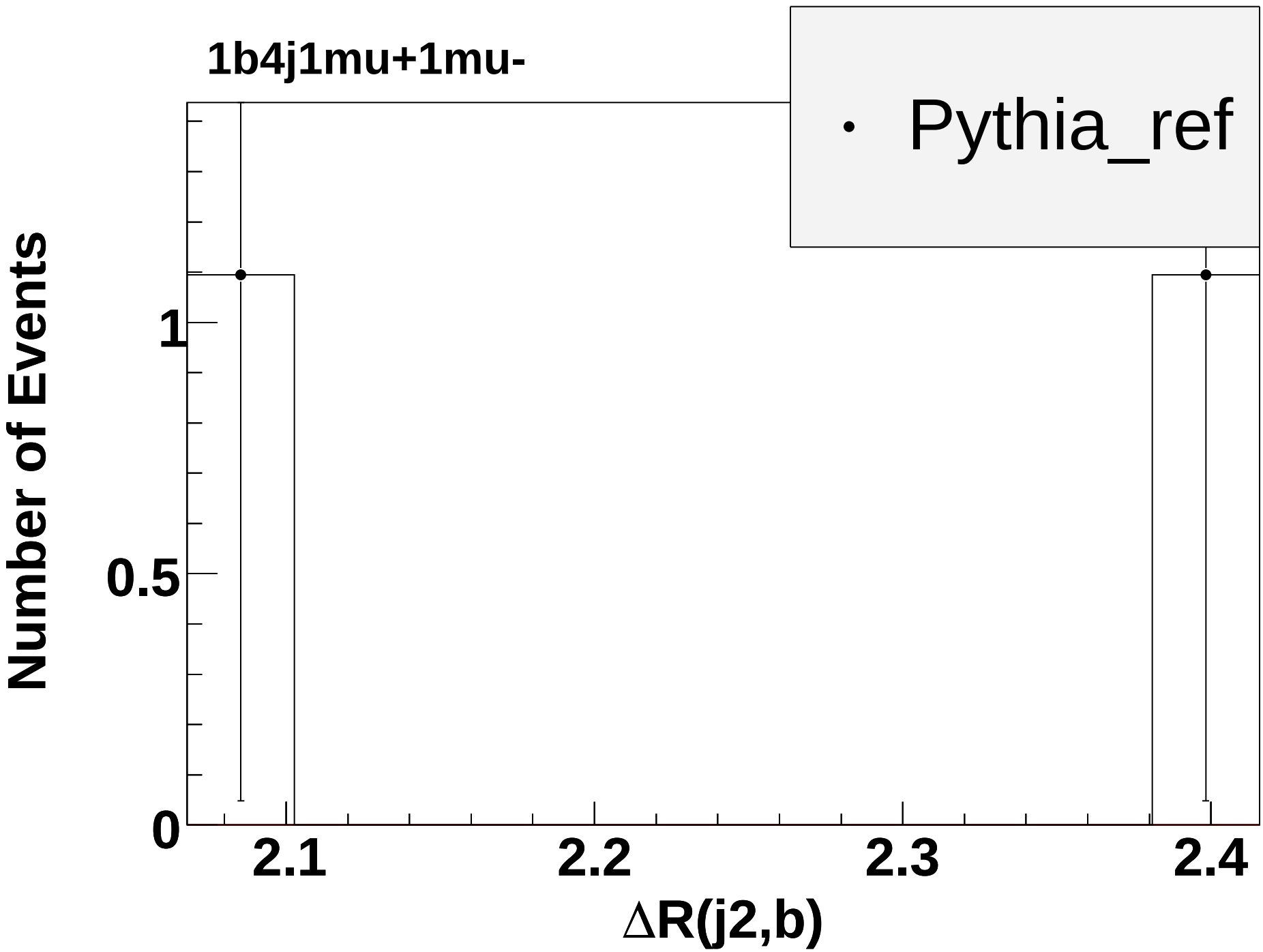

1b4j1mu+1mu-
Pythia_ref
Number of Events
0
0.5
1
3
4
5
6
ΔR(j1,j3)

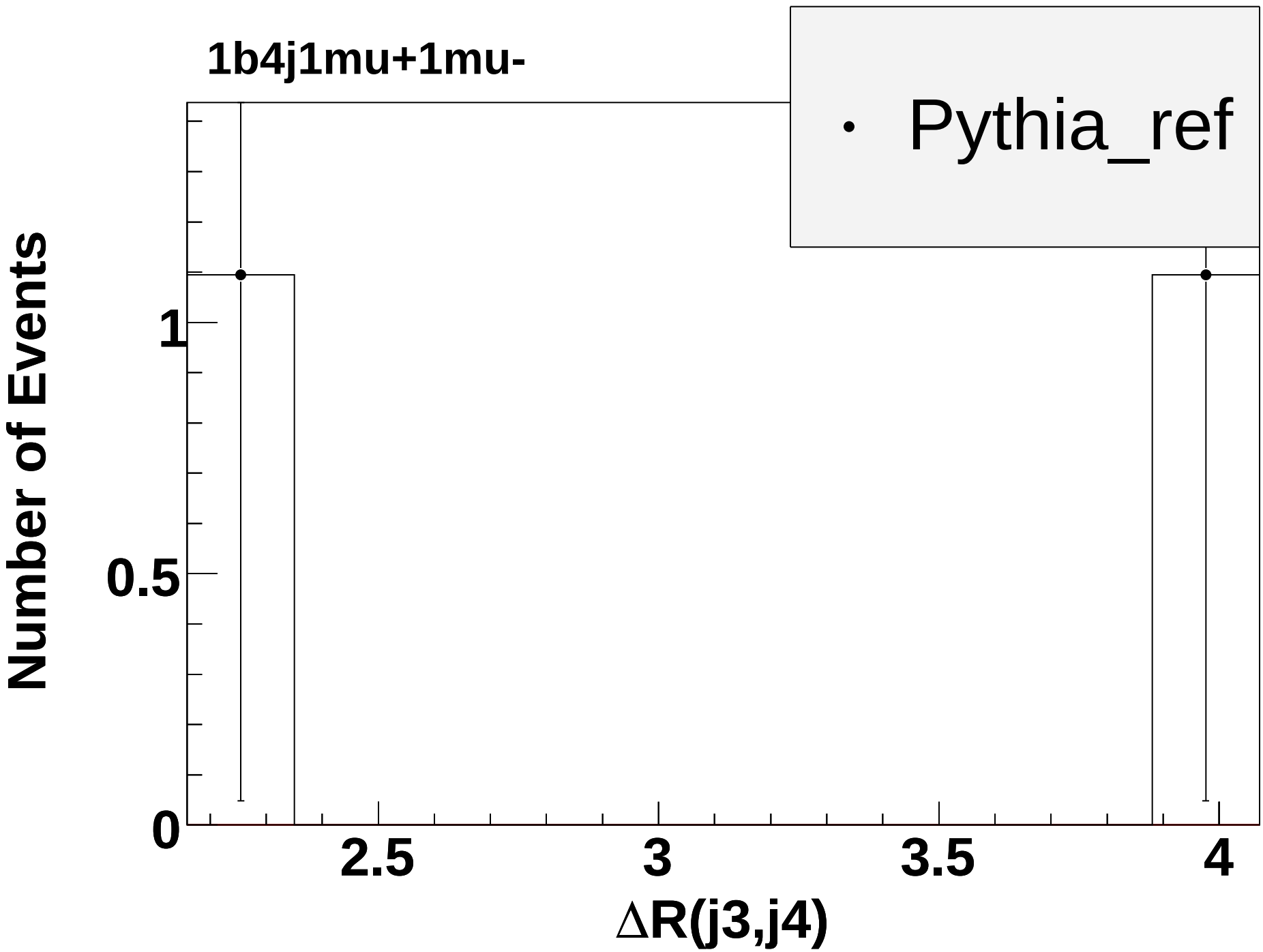

1b4j1mu+1mu-
Pythia_ref
Number of Events
1
0.5
0
1.6
1.8
2
ΔR(j1,j4)

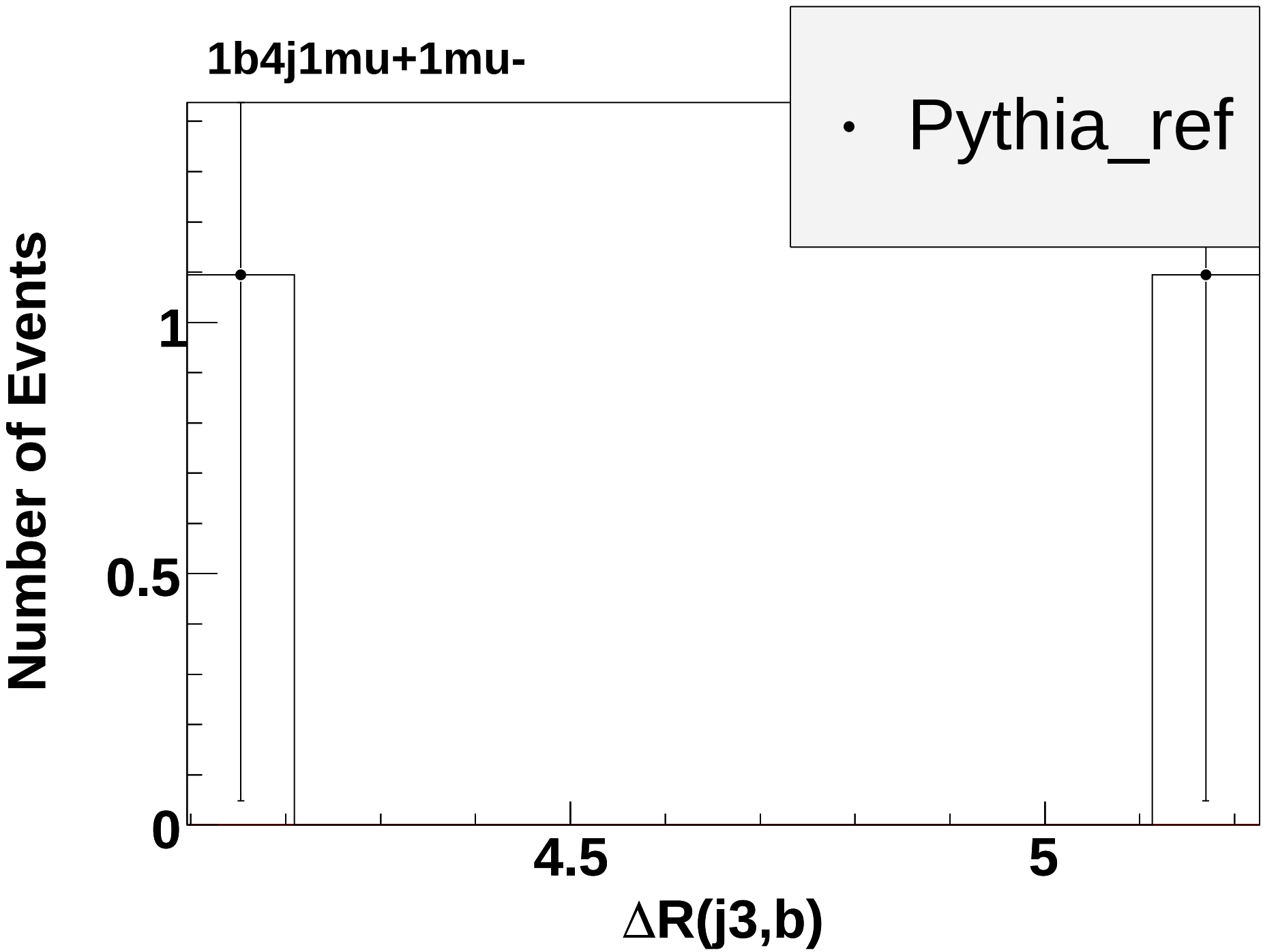

1b4j1mu+1mu-
Pythia_ref
Number of Events
0
0.5
1
2
2.5
3
3.5
ΔR(j1,b)

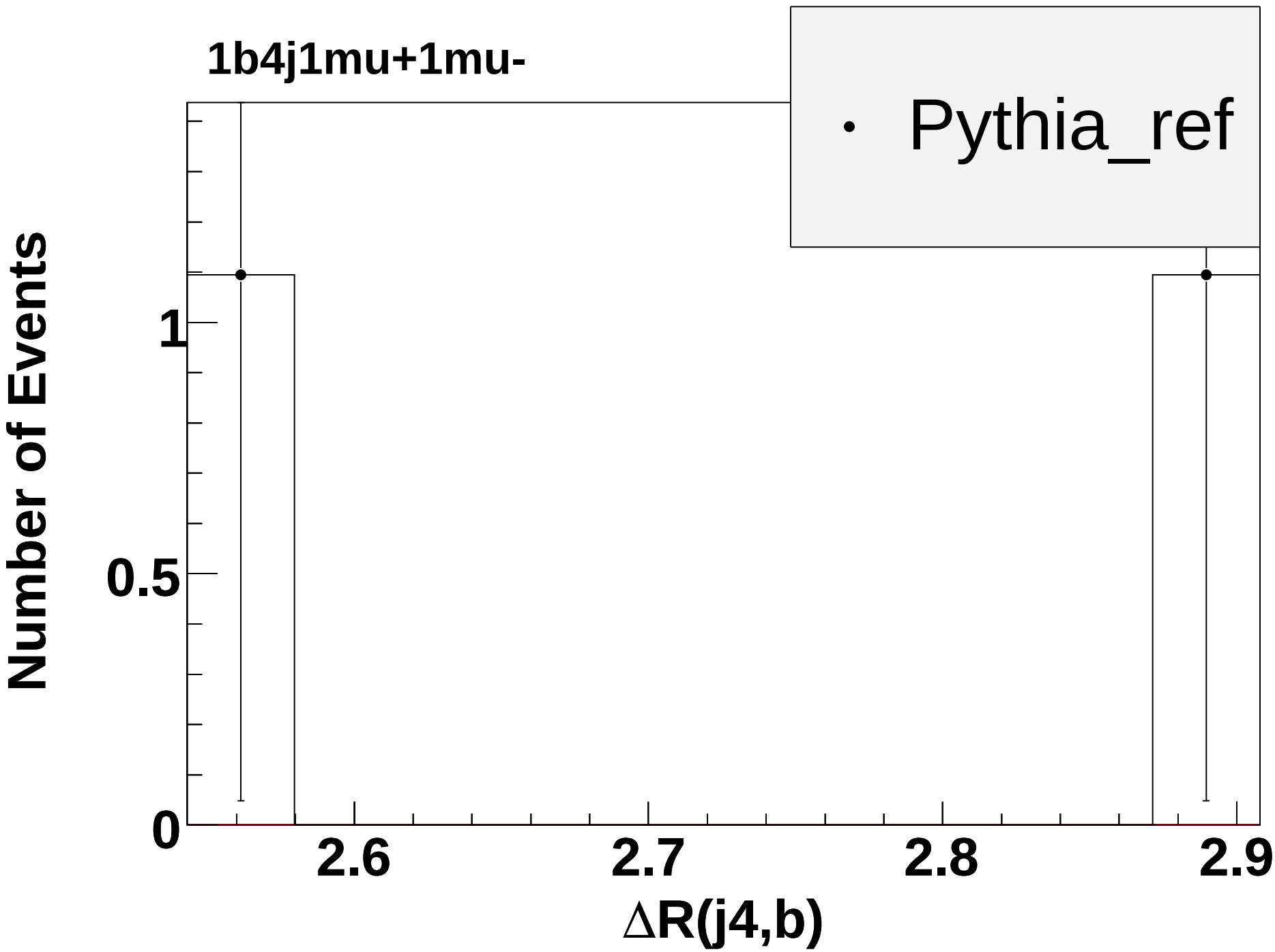

1b4j1mu+1mu-
Pythia_ref
Number of Events
1
0.5
0
3.5
4
ΔR(j2,j3)

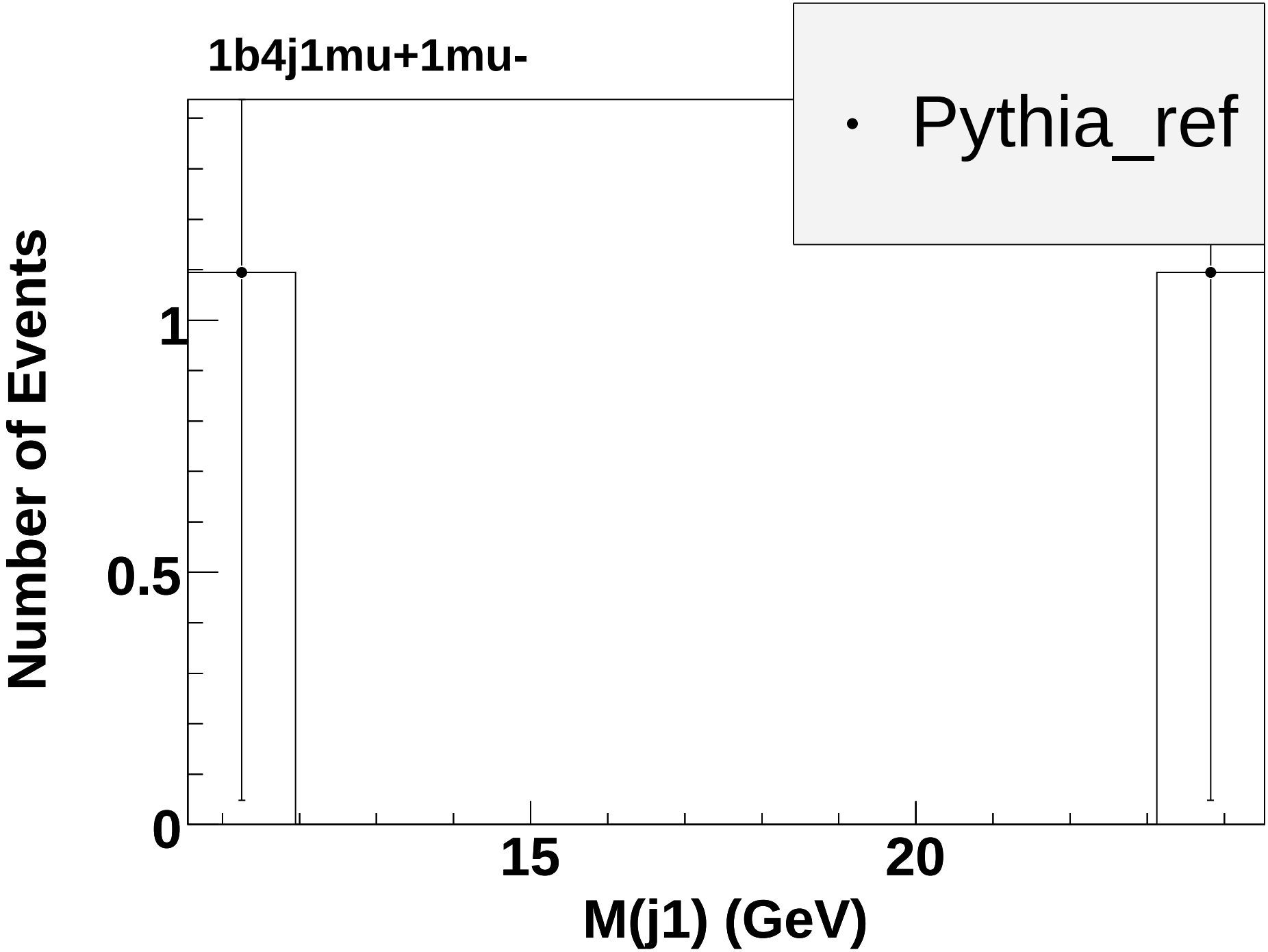

1b4j1mu+1mu-
Pythia_ref
Number of Events
1
0.5
0
3.6
3.8
4
ΔR(j2,j4)

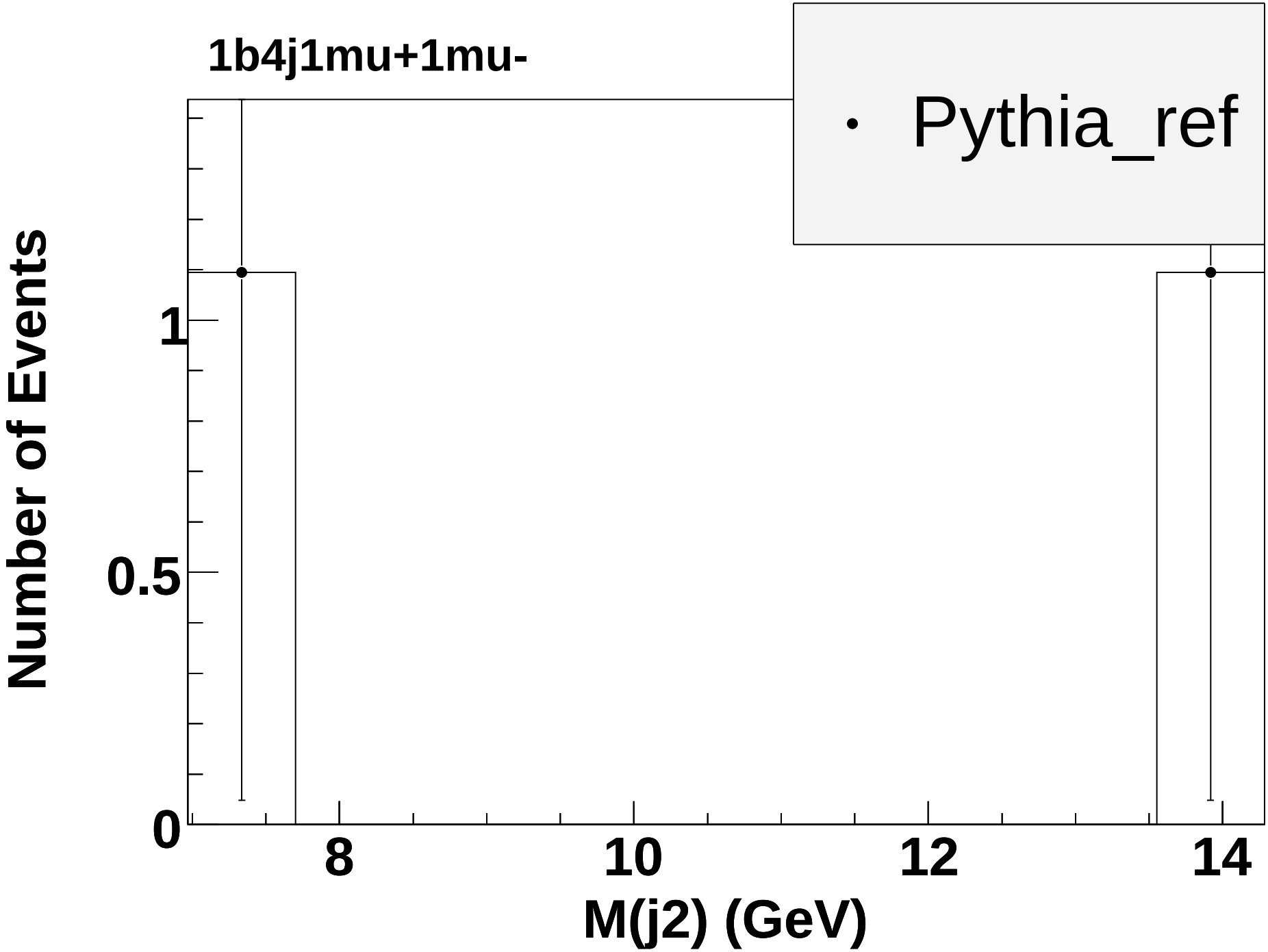

1b4j1mu+1mu-
Pythia_ref
Number of Events
0
0.5
1
2.1
2.2
2.3
2.4
ΔR(j2,b)

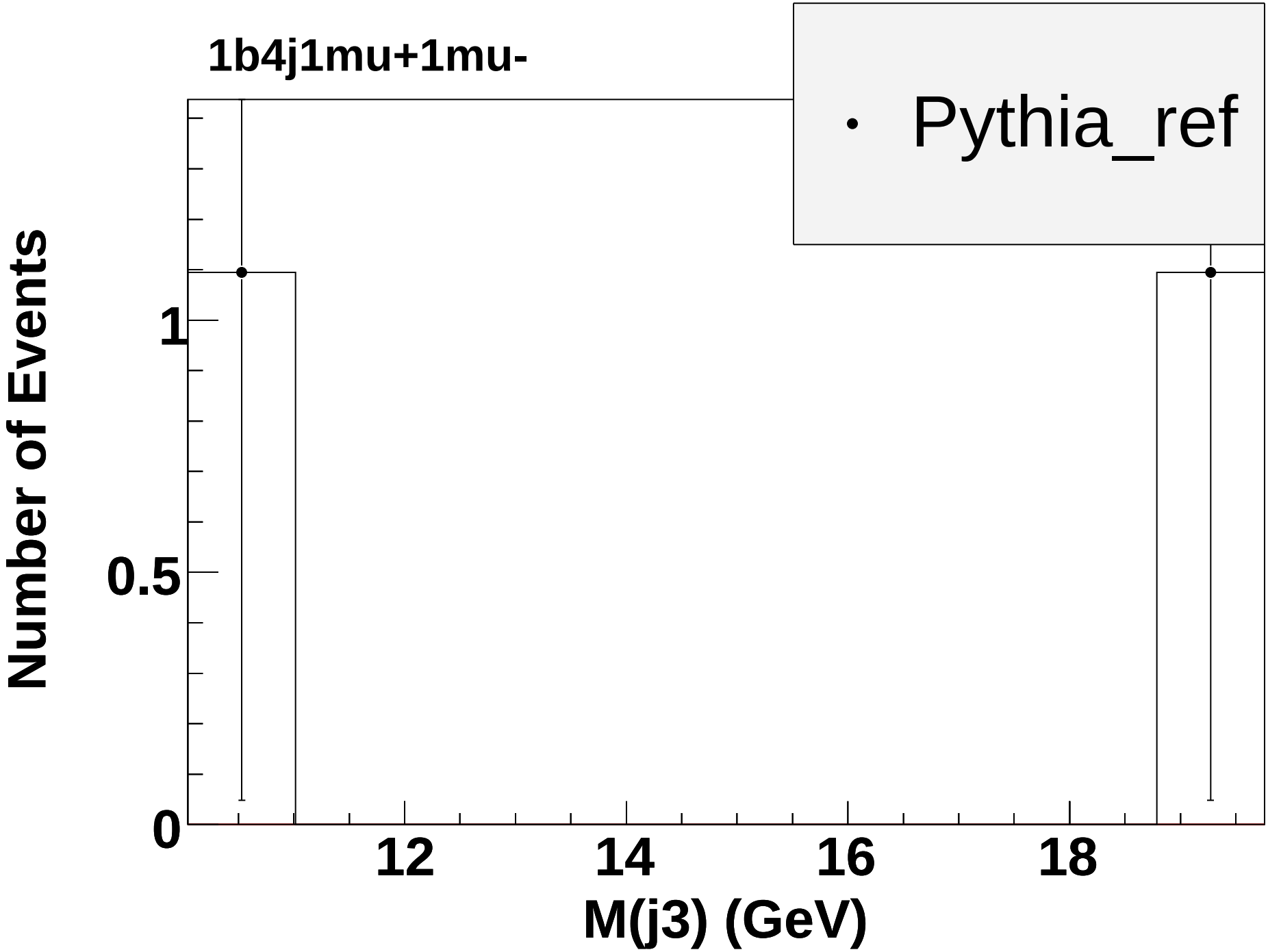

1b4j1mu+1mu-
Pythia_ref
Number of Events
0
0.5
1
2.5
3
3.5
4
ΔR(j3,j4)

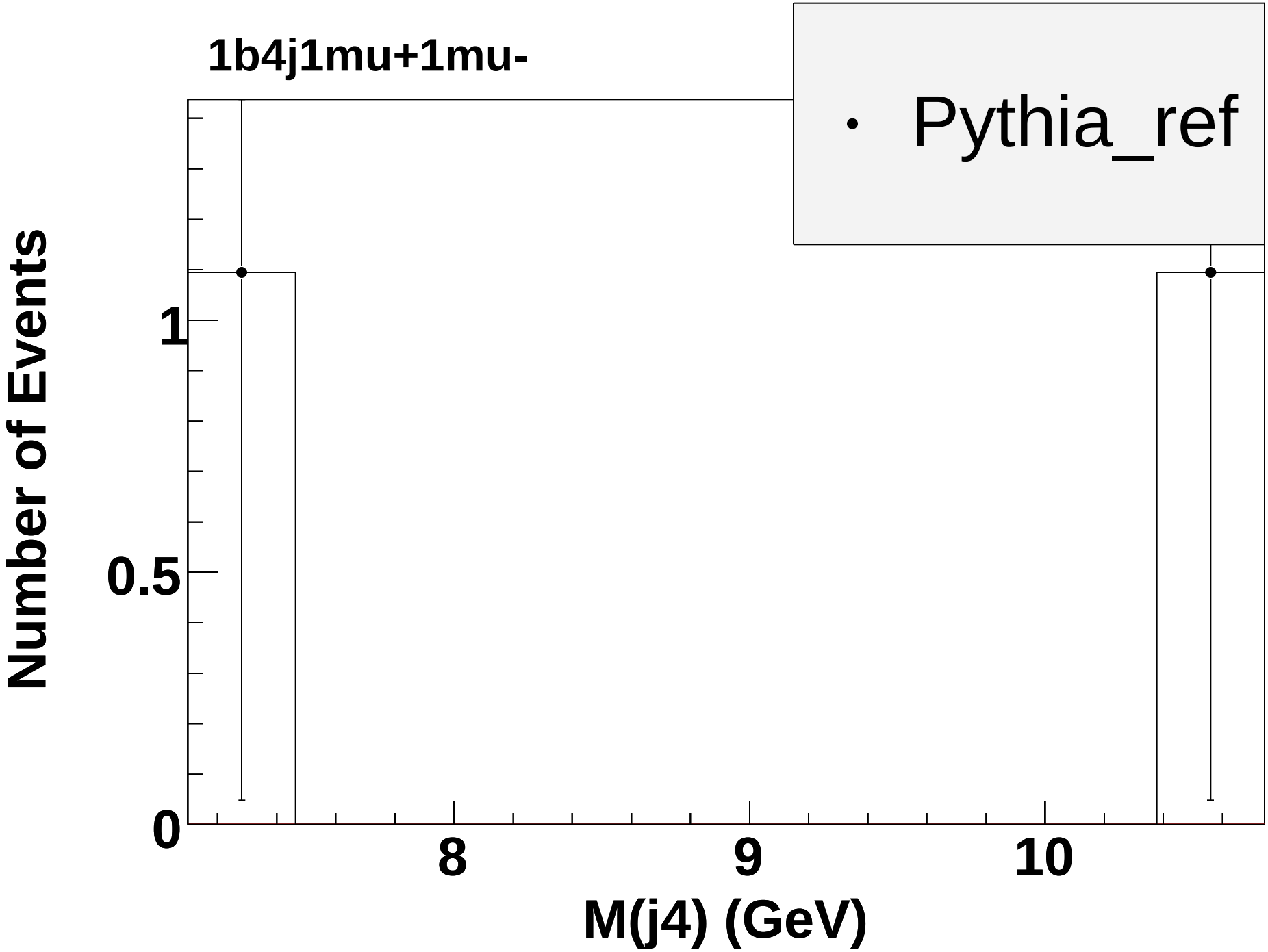

1b4j1mu+1mu-
Pythia_ref
Number of Events
1
0.5
0
4.5
5
ΔR(j3,b)

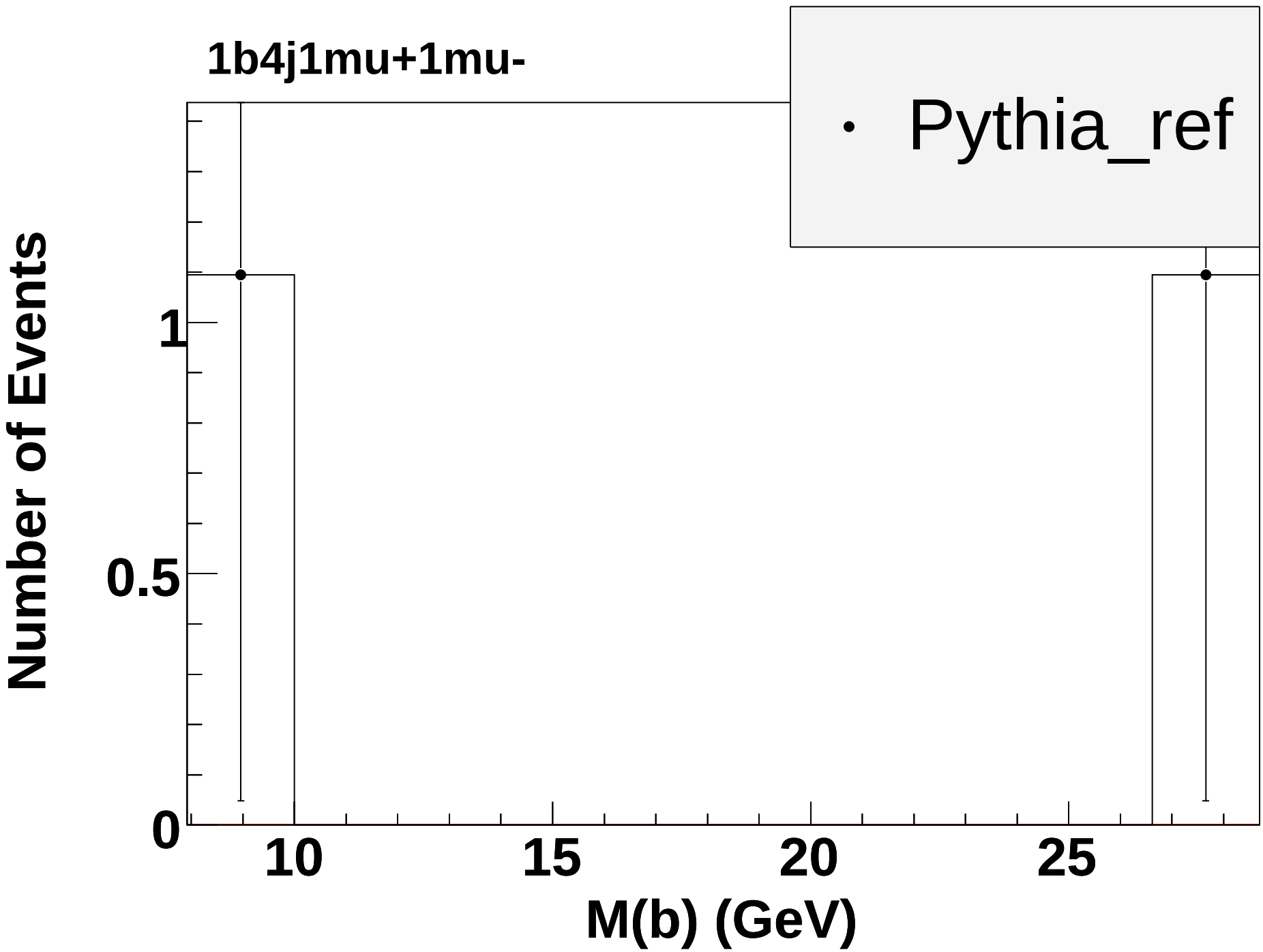

1b4j1mu+1mu-
Pythia_ref
Number of Events
1
0.5
0
2.6
2.7
2.8
2.9
ΔR(j4,b)

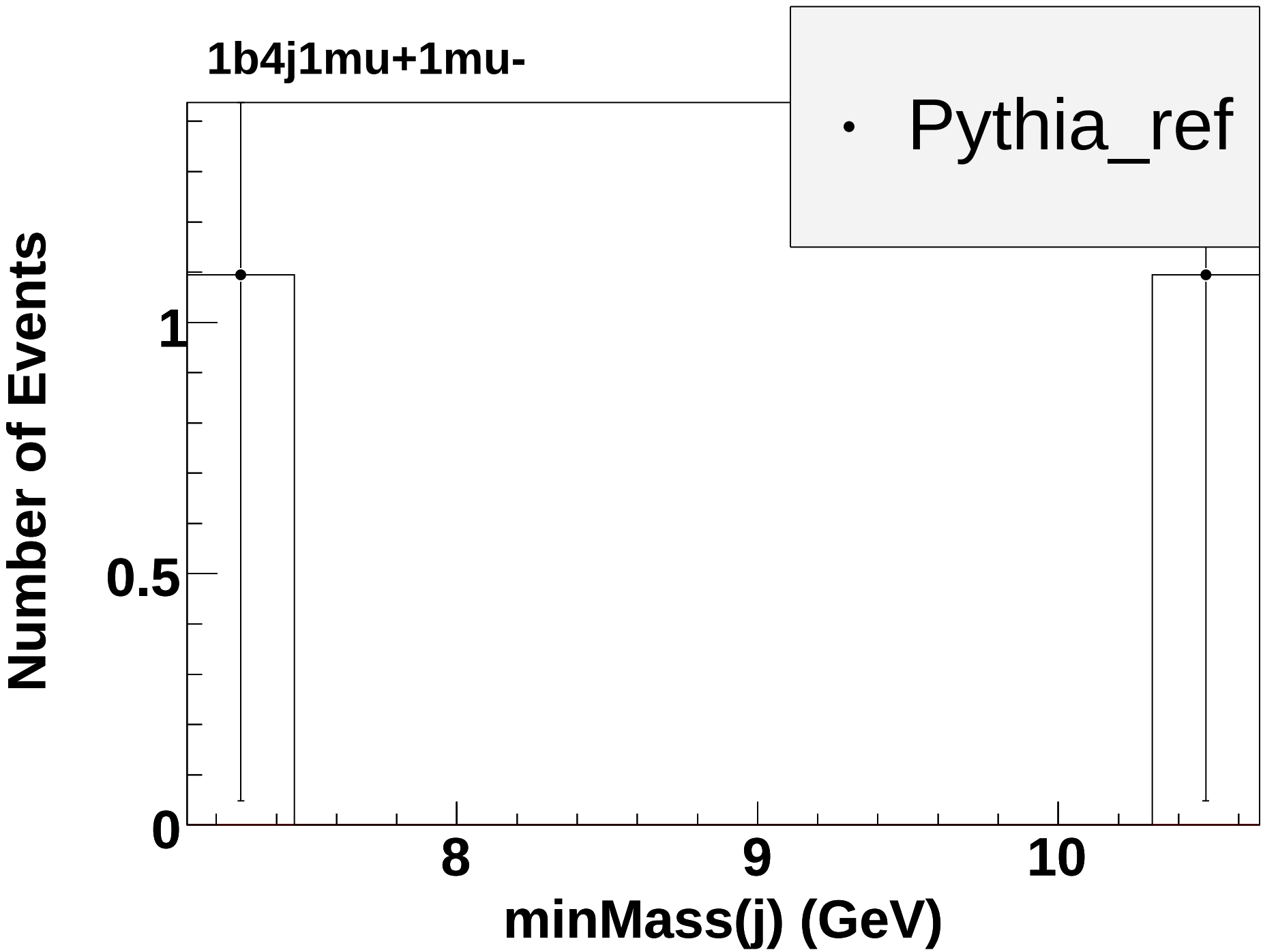

1b4j1mu+1mu-
Pythia_ref
Number of Events
1
0.5
0
15
20
M(j1) (GeV)

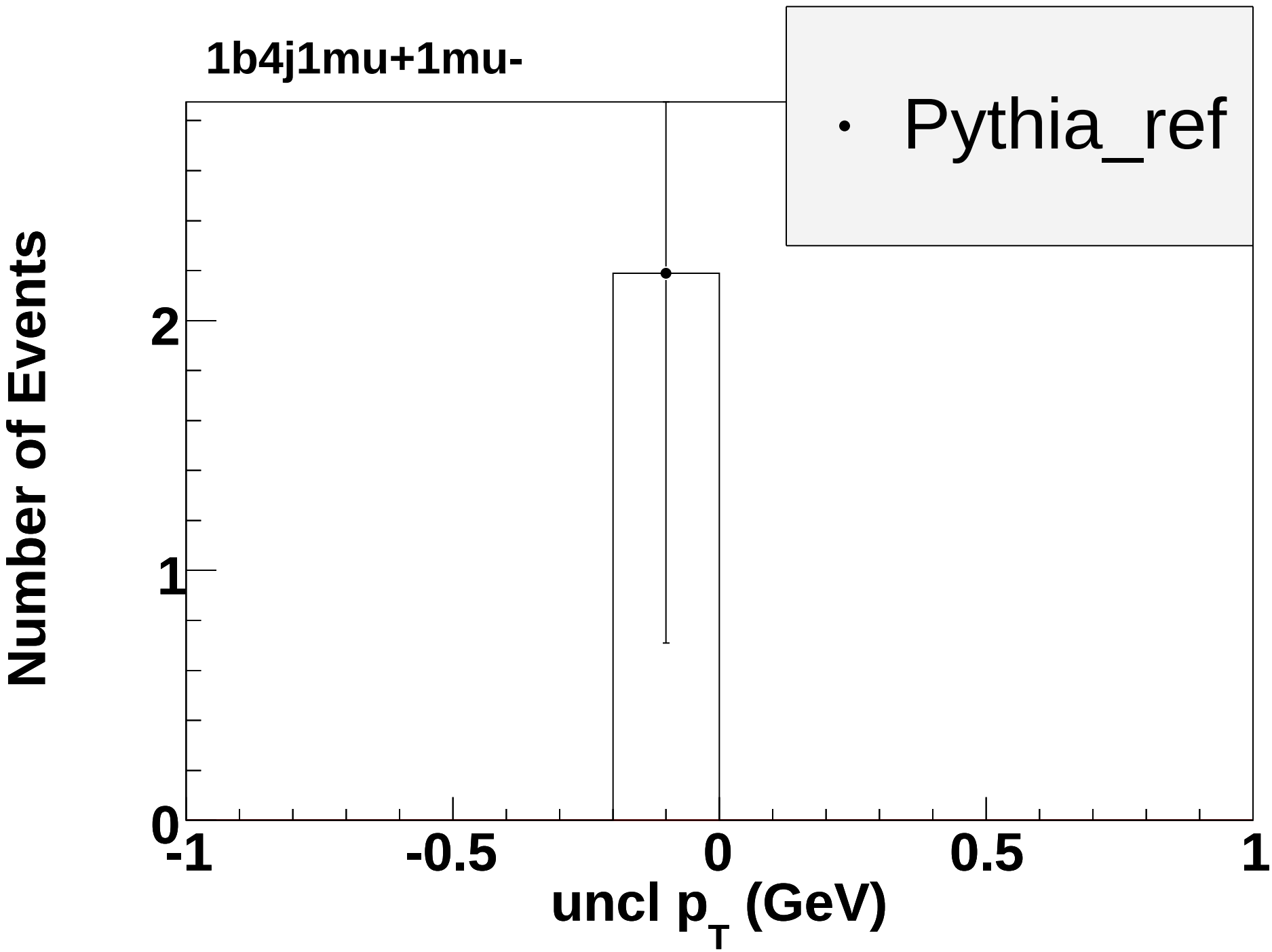

1b4j1mu+1mu-
Pythia_ref
Number of Events
0
0.5
1
8
10
12
14
M(j2) (GeV)


1b4j1mu+1mu-
Pythia_ref
Number of Events
0
0.5
1
12
14
16
18
M(j3) (GeV)


1b4j1mu+1mu-
Pythia_ref
Number of Events
0
0.5
1
8
9
10
M(j4) (GeV)


1b4j1mu+1mu-
Pythia_ref
Number of Events
0
0.5
1
10
15
20
25
M(b) (GeV)


1b4j1mu+1mu-
Pythia_ref
Number of Events
0
0.5
1
8
9
10
minMass(j) (GeV)


1b4j1mu+1mu-
Pythia_ref
Number of Events
0
1
2
-1
-0.5
0
0.5
1
uncl $p_T$ (GeV)