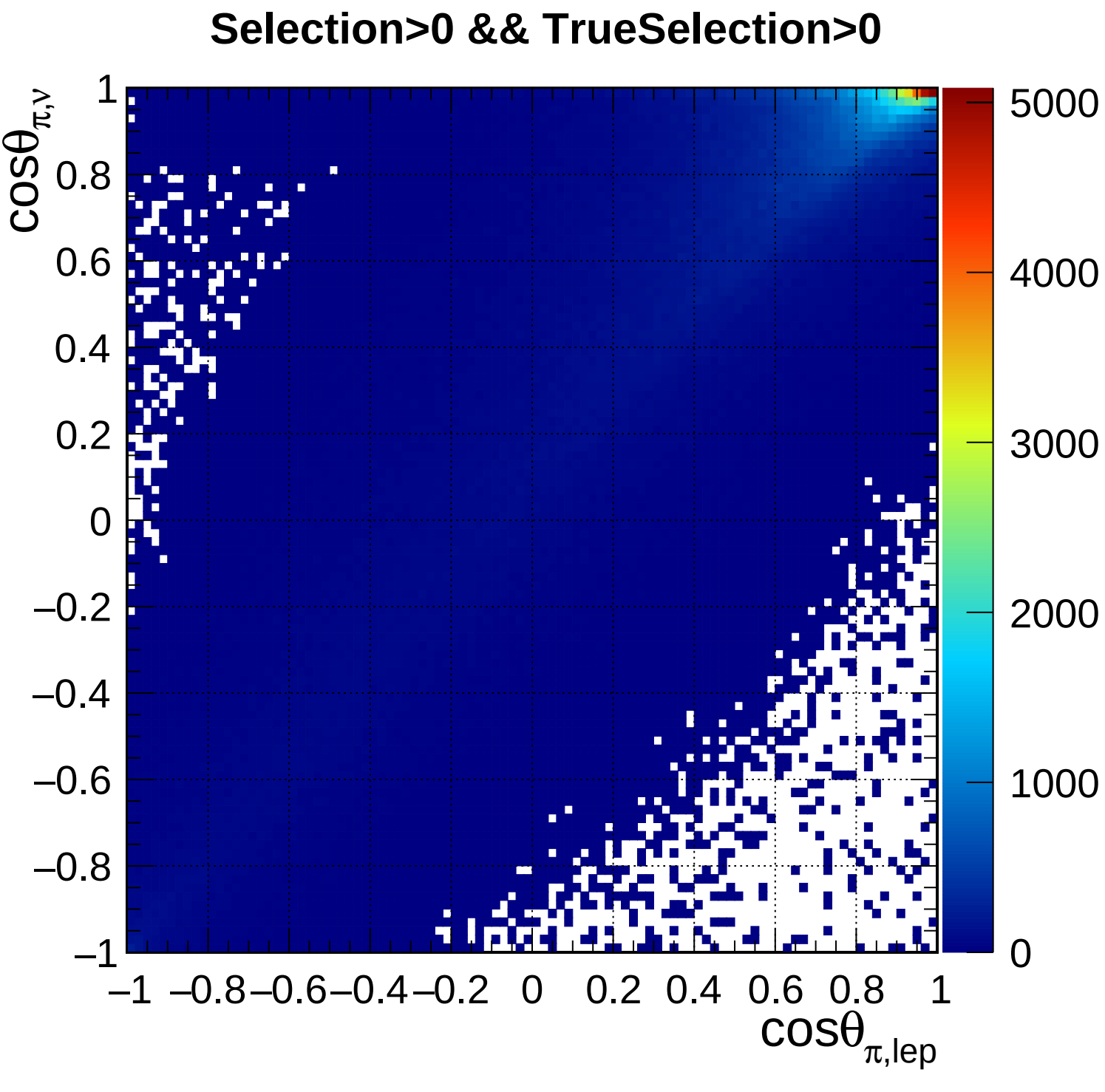
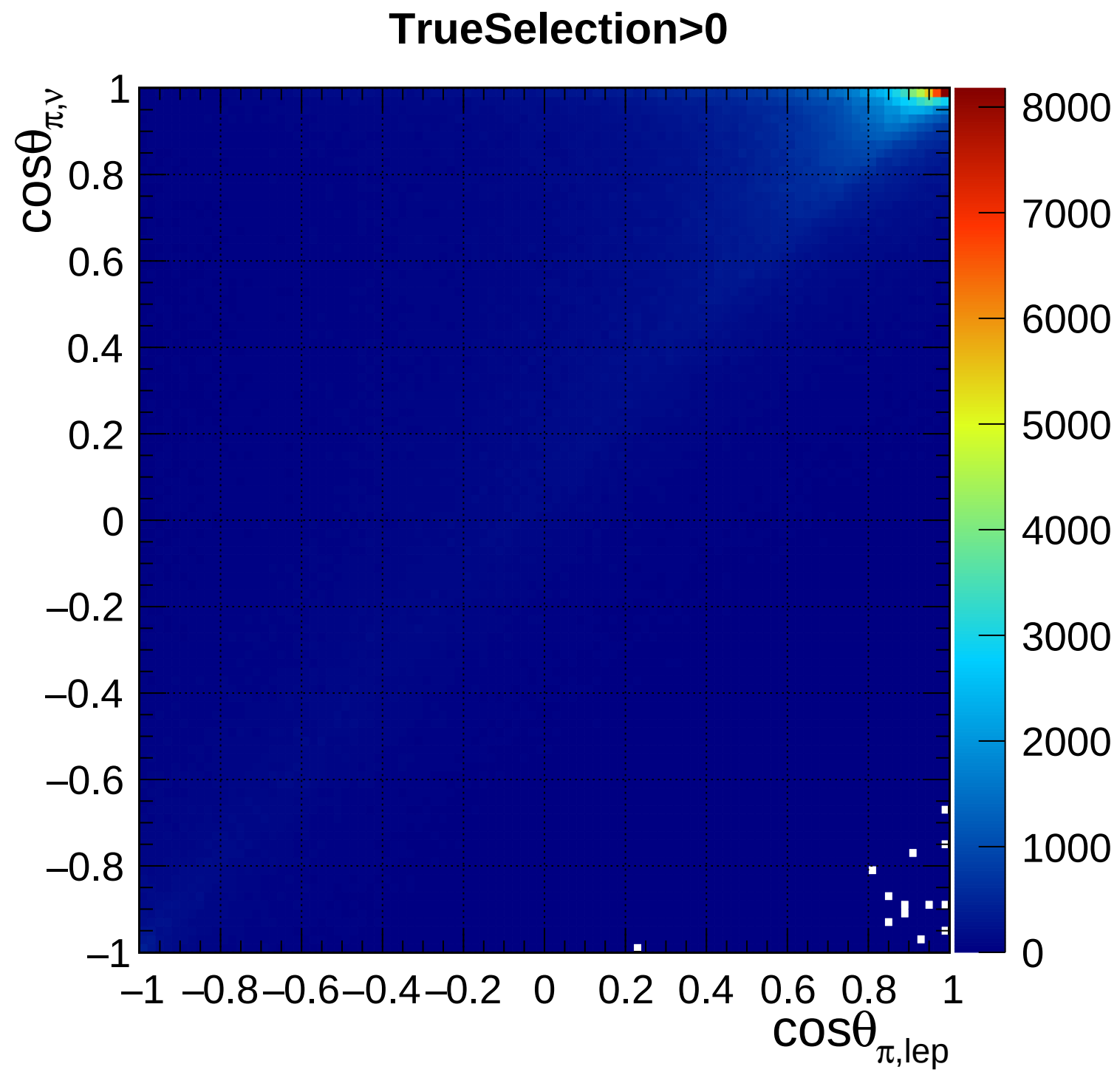
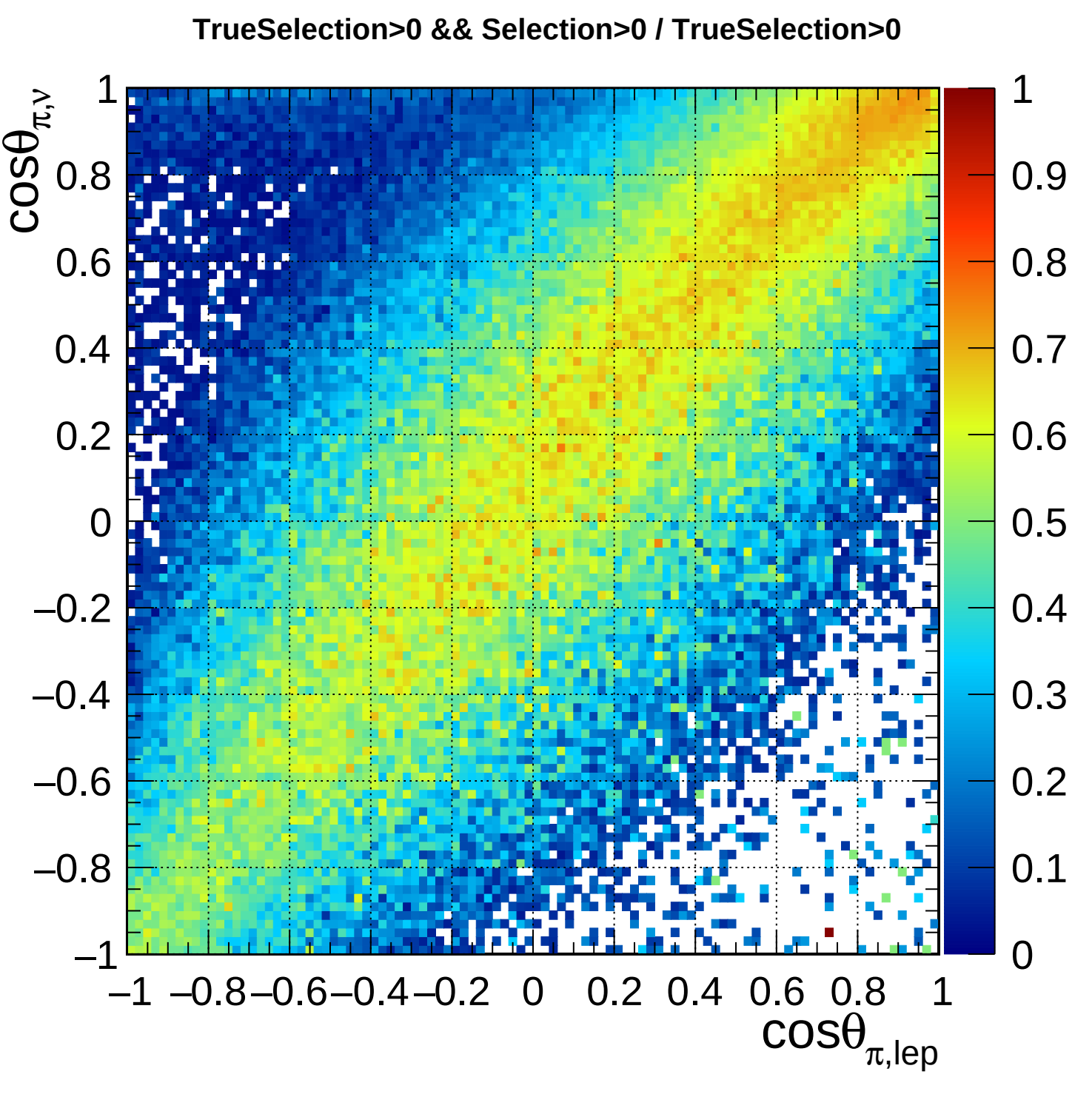
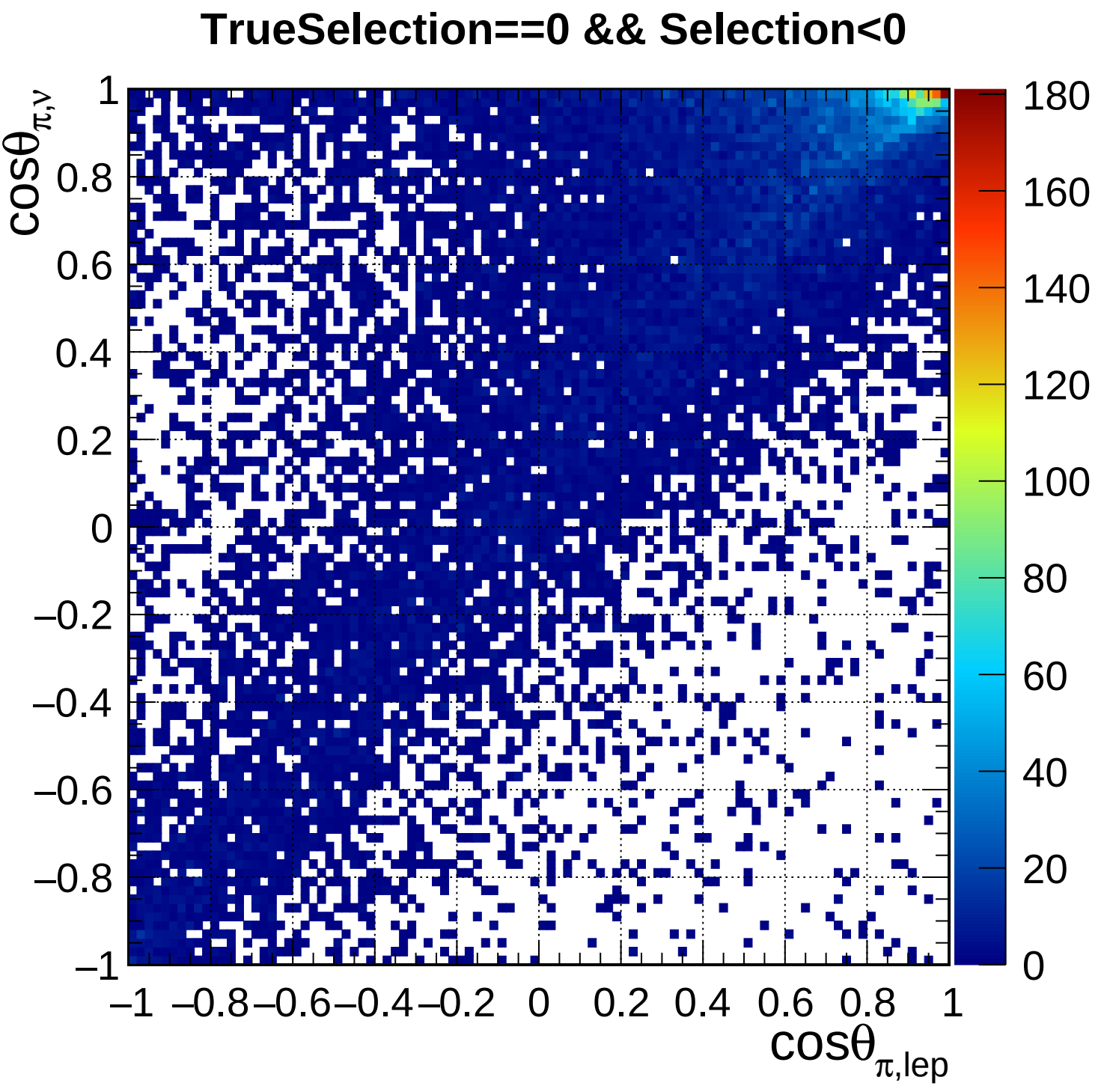
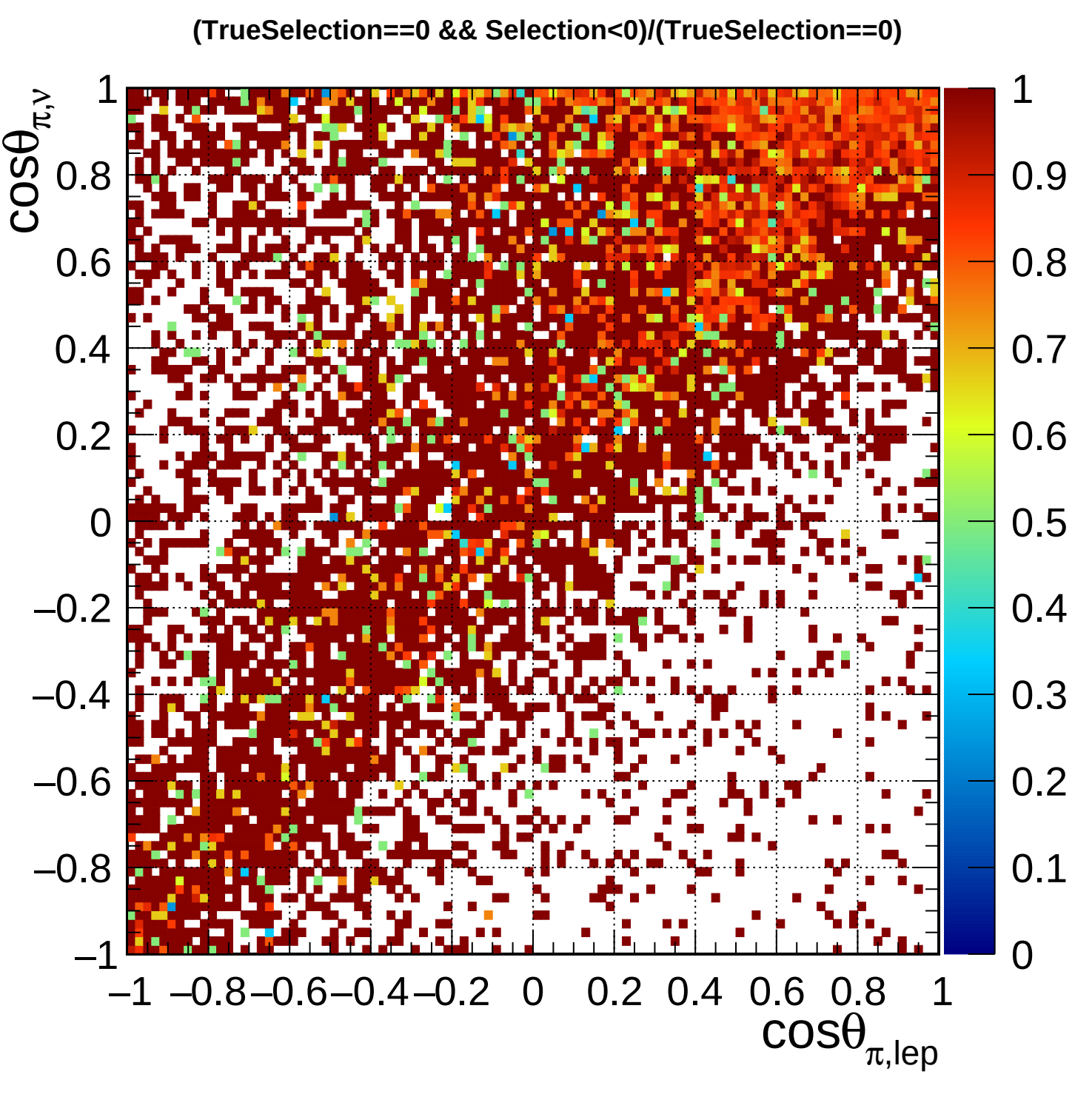
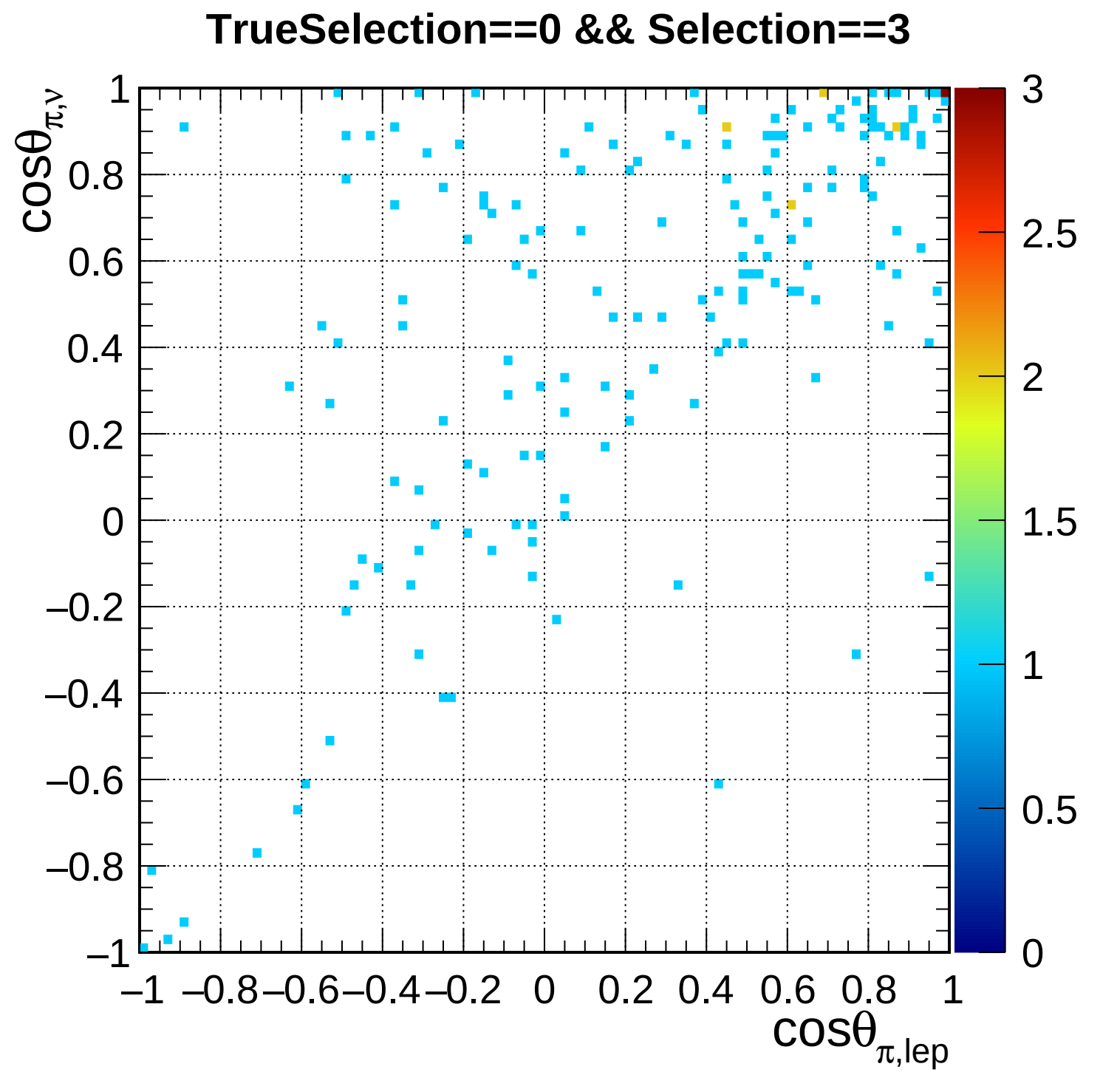

Selection>0 && TrueSelection>0
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
5000
4000
3000
2000
1000
0

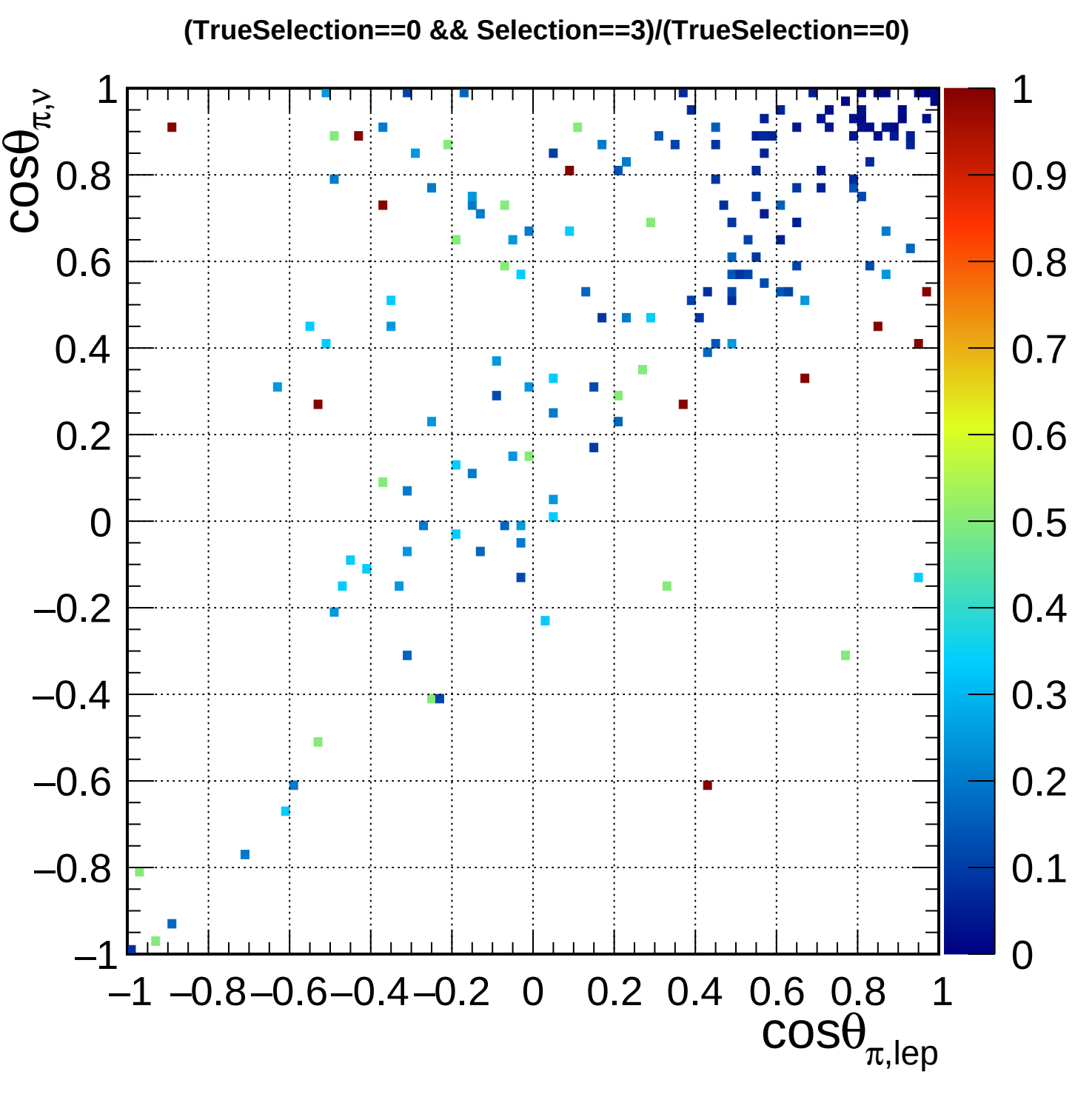

TrueSelection>0
cosθπ,ν
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
–1 –0.8 –0.6 –0.4 –0.2 0 0.2 0.4 0.6 0.8 1
cosθπ,lep
8000
7000
6000
5000
4000
3000
2000
1000
0

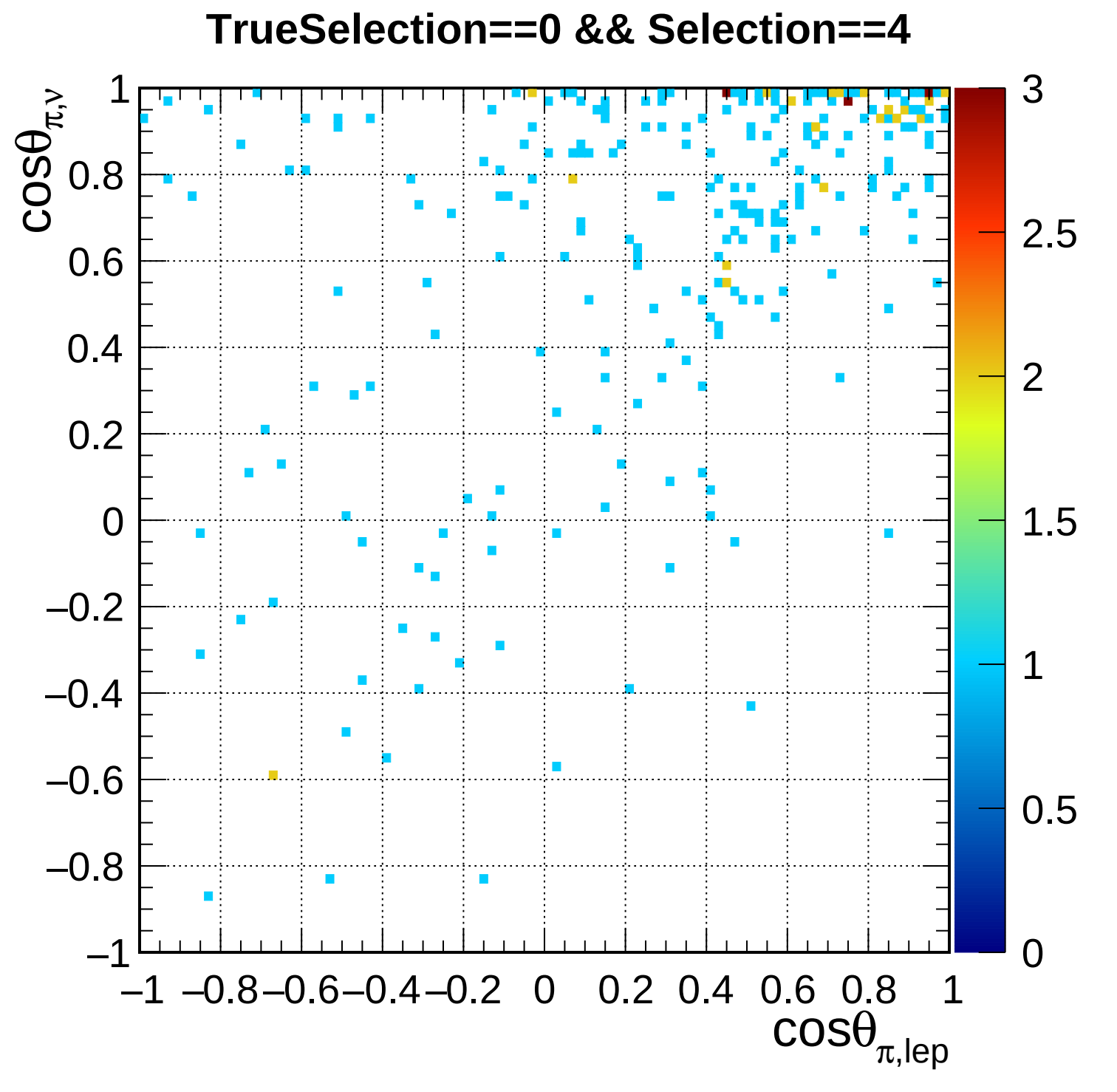

TrueSelection>0 && Selection>0 / TrueSelection>0
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

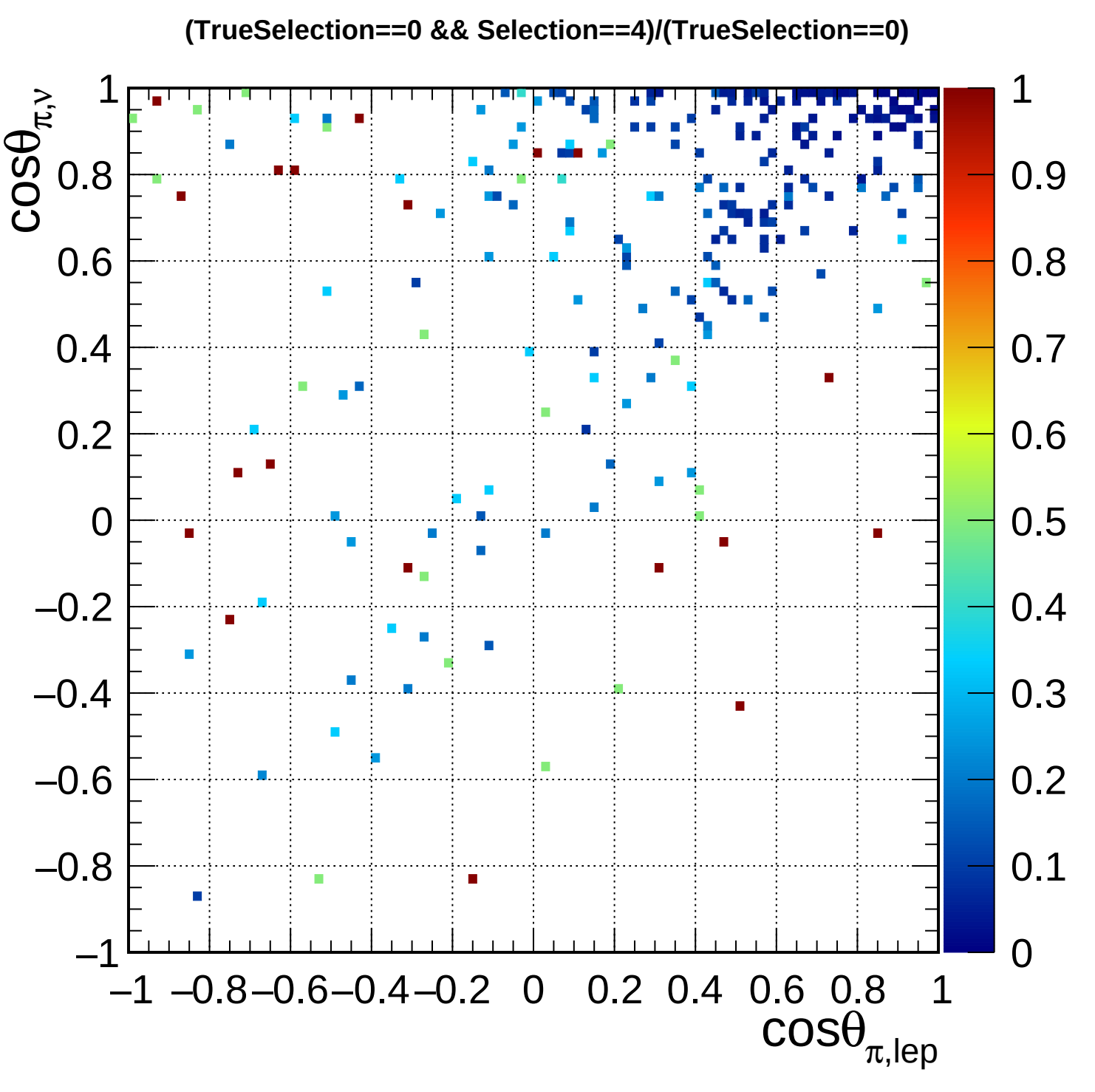

TrueSelection==0 && Selection<0
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
180
160
140
120
100
80
60
40
20
0

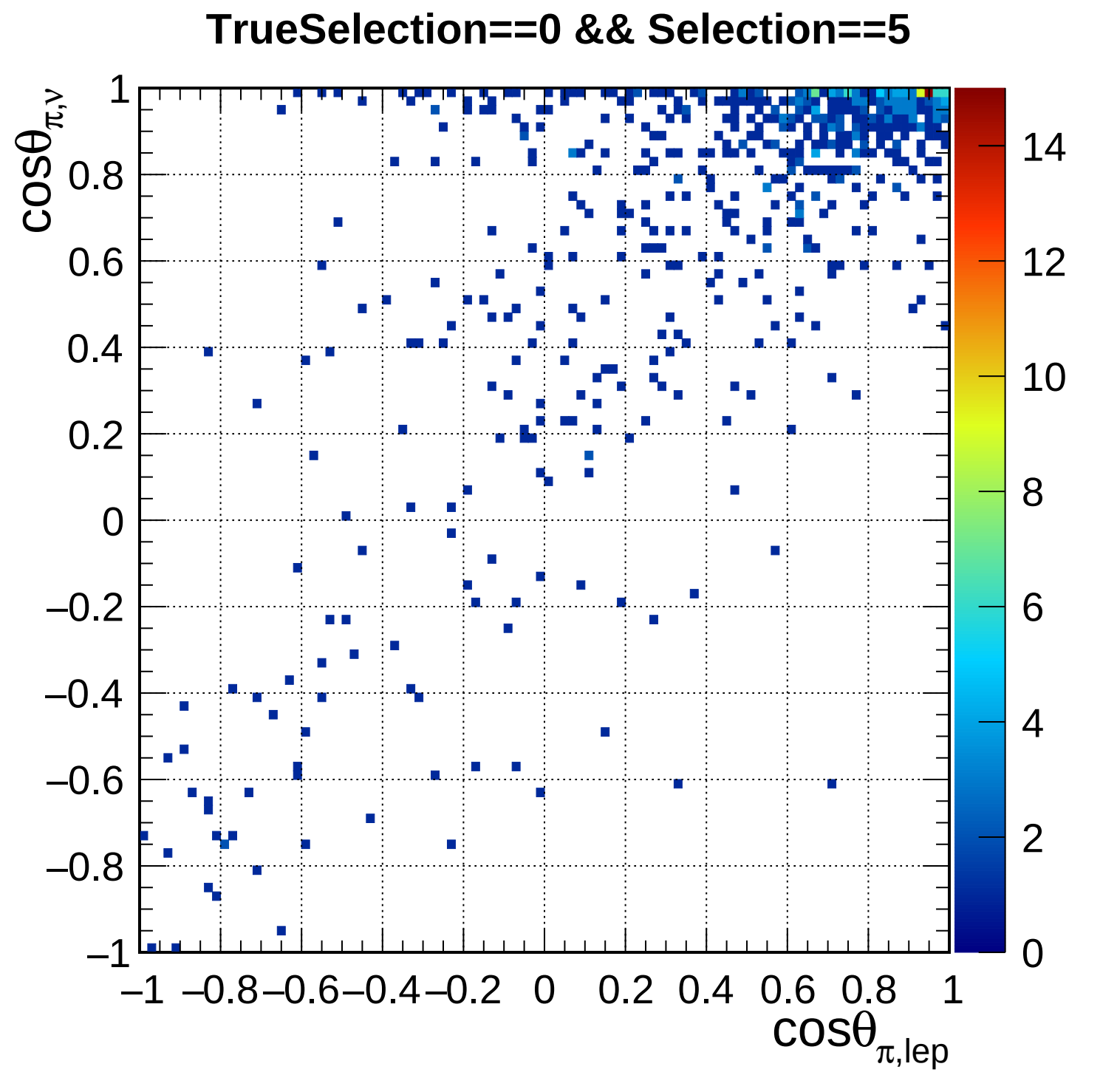

(TrueSelection==0 && Selection<0)/(TrueSelection==0)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

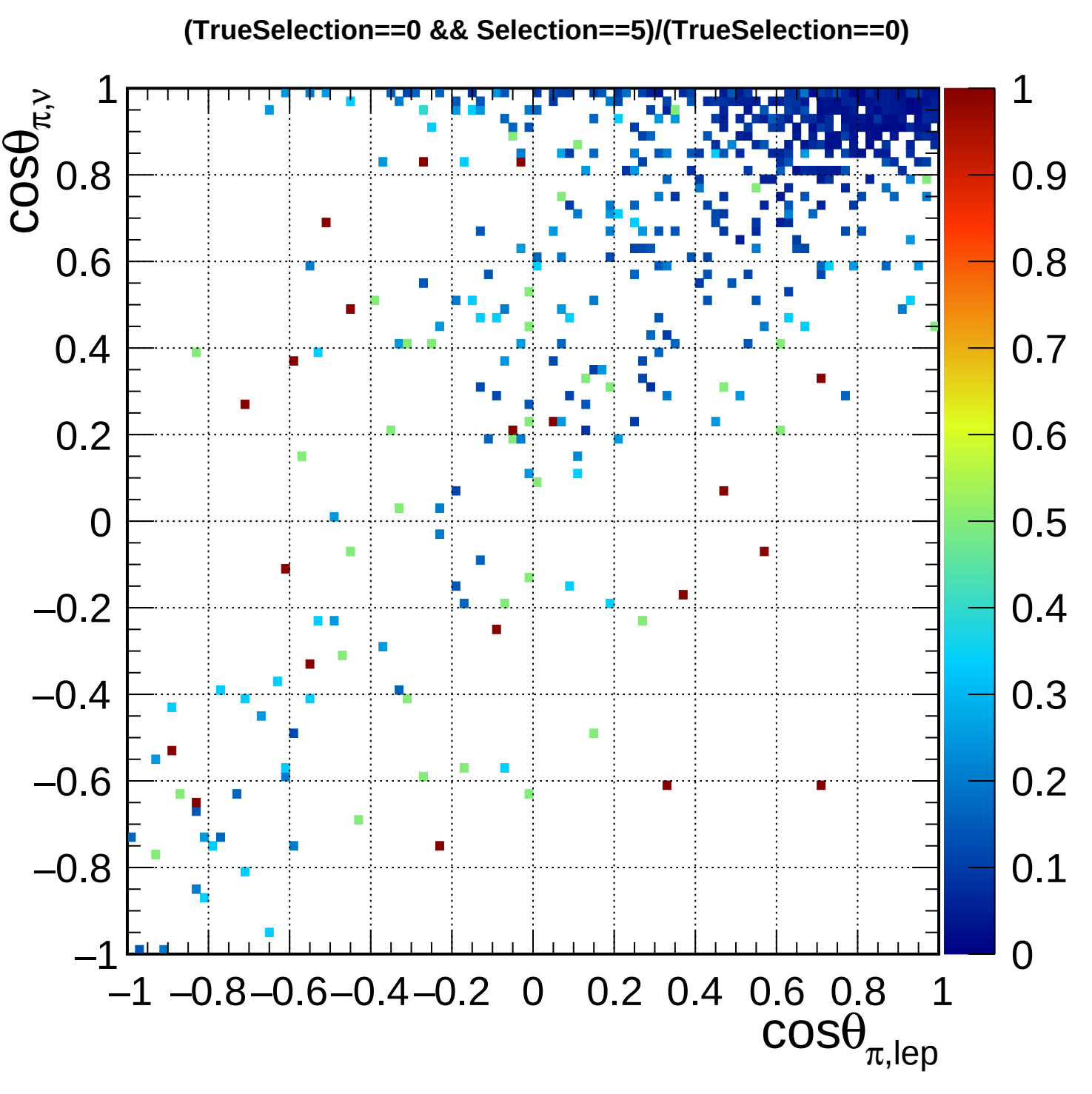

TrueSelection==0 && Selection==3
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
3
2.5
2
1.5
1
0.5
0

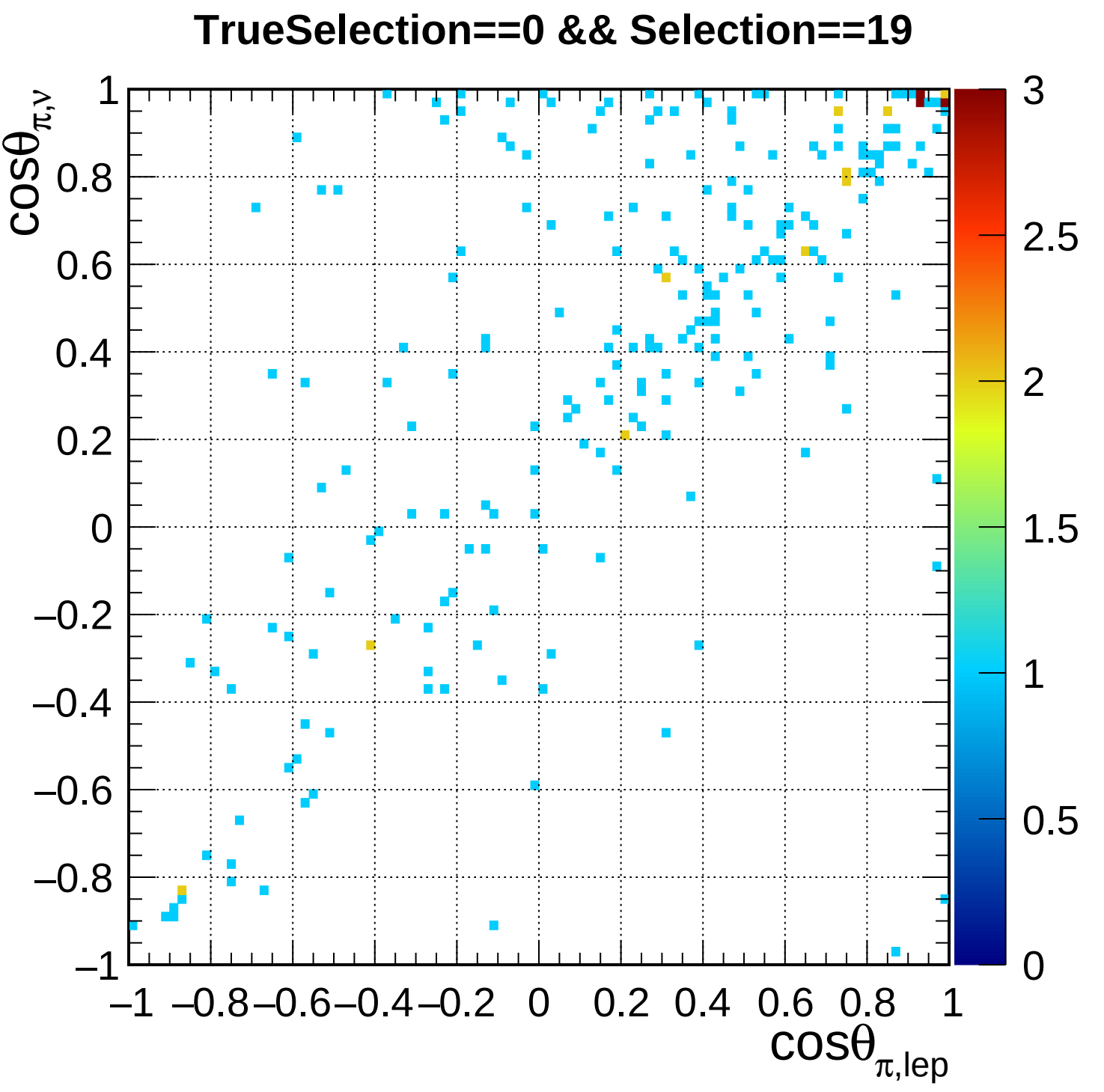

(TrueSelection==0 && Selection==3)/(TrueSelection==0)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

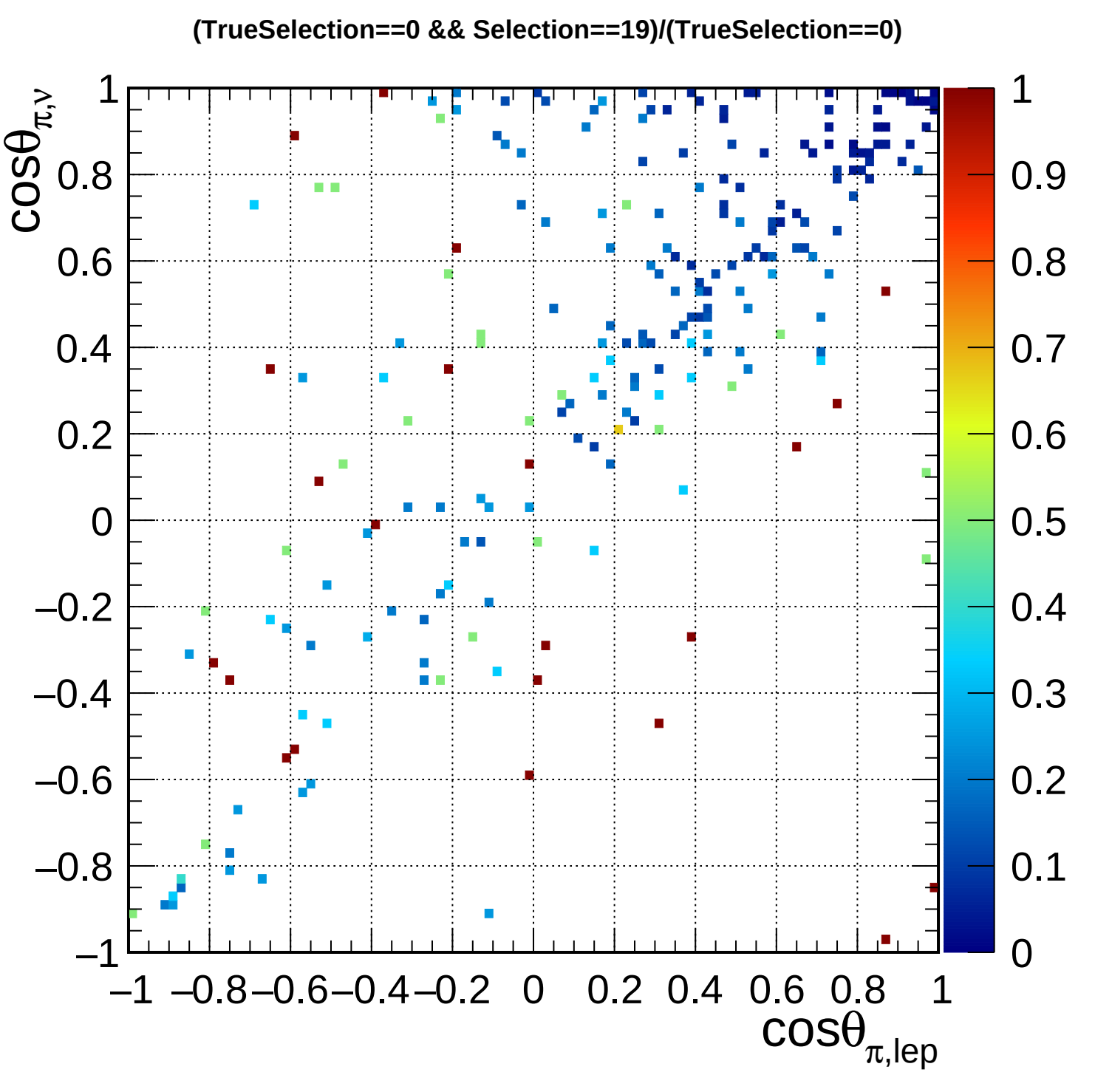

TrueSelection==0 && Selection==4
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
3
2.5
2
1.5
1
0.5
0

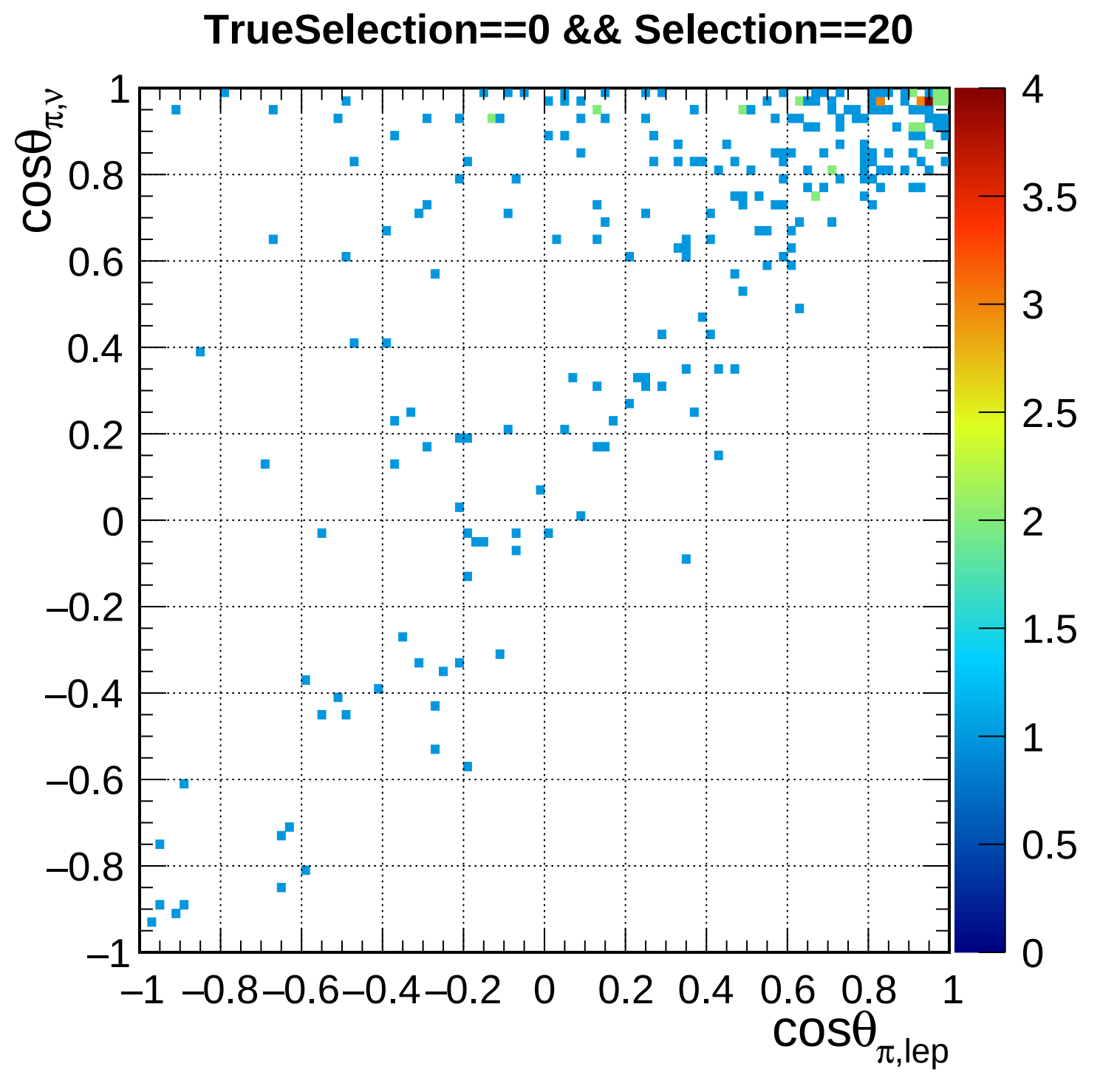

(TrueSelection==0 && Selection==4)/(TrueSelection==0)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

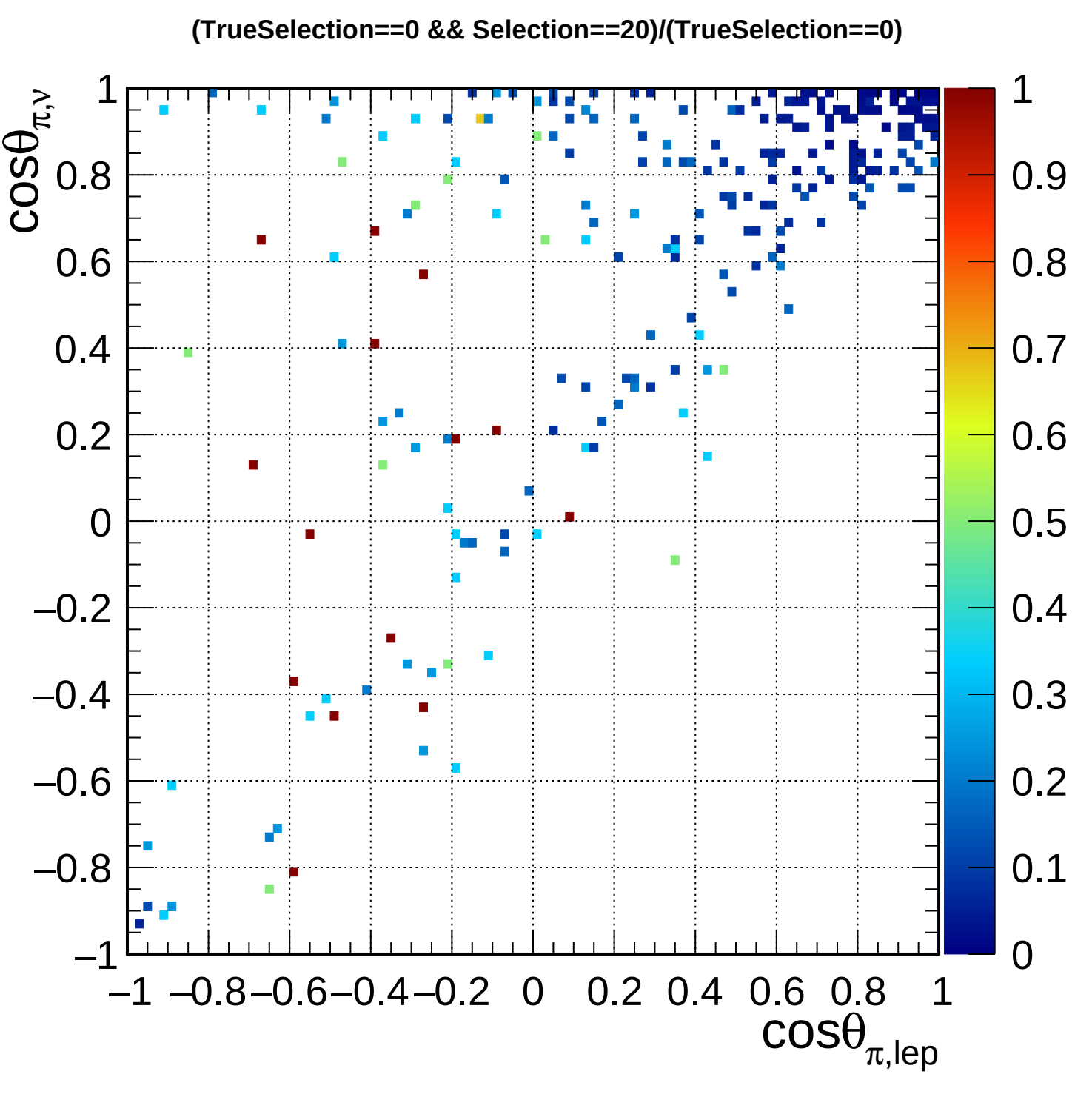

TrueSelection==0 && Selection==5
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
14
12
10
8
6
4
2
0

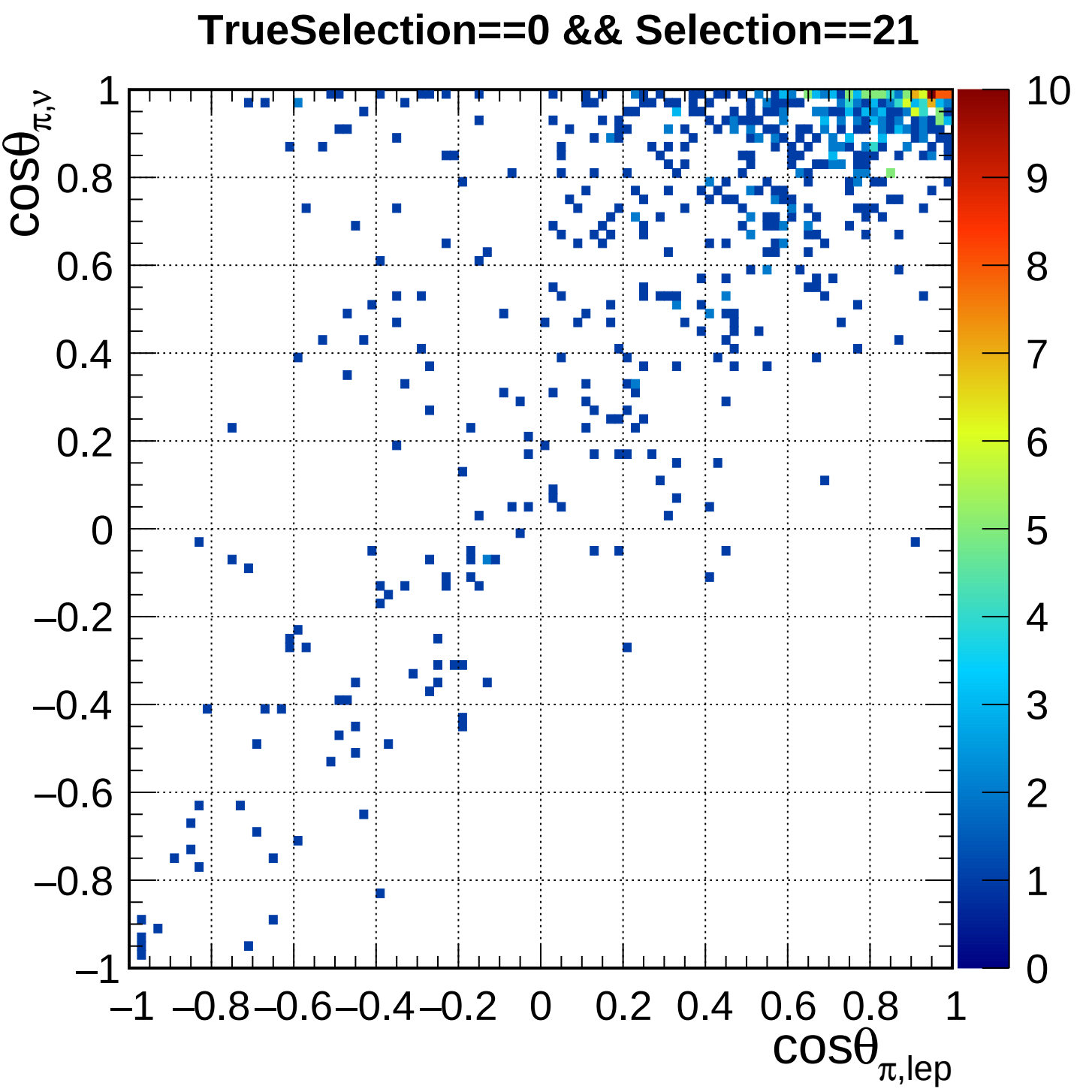

(TrueSelection==0 && Selection==5)/(TrueSelection==0)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

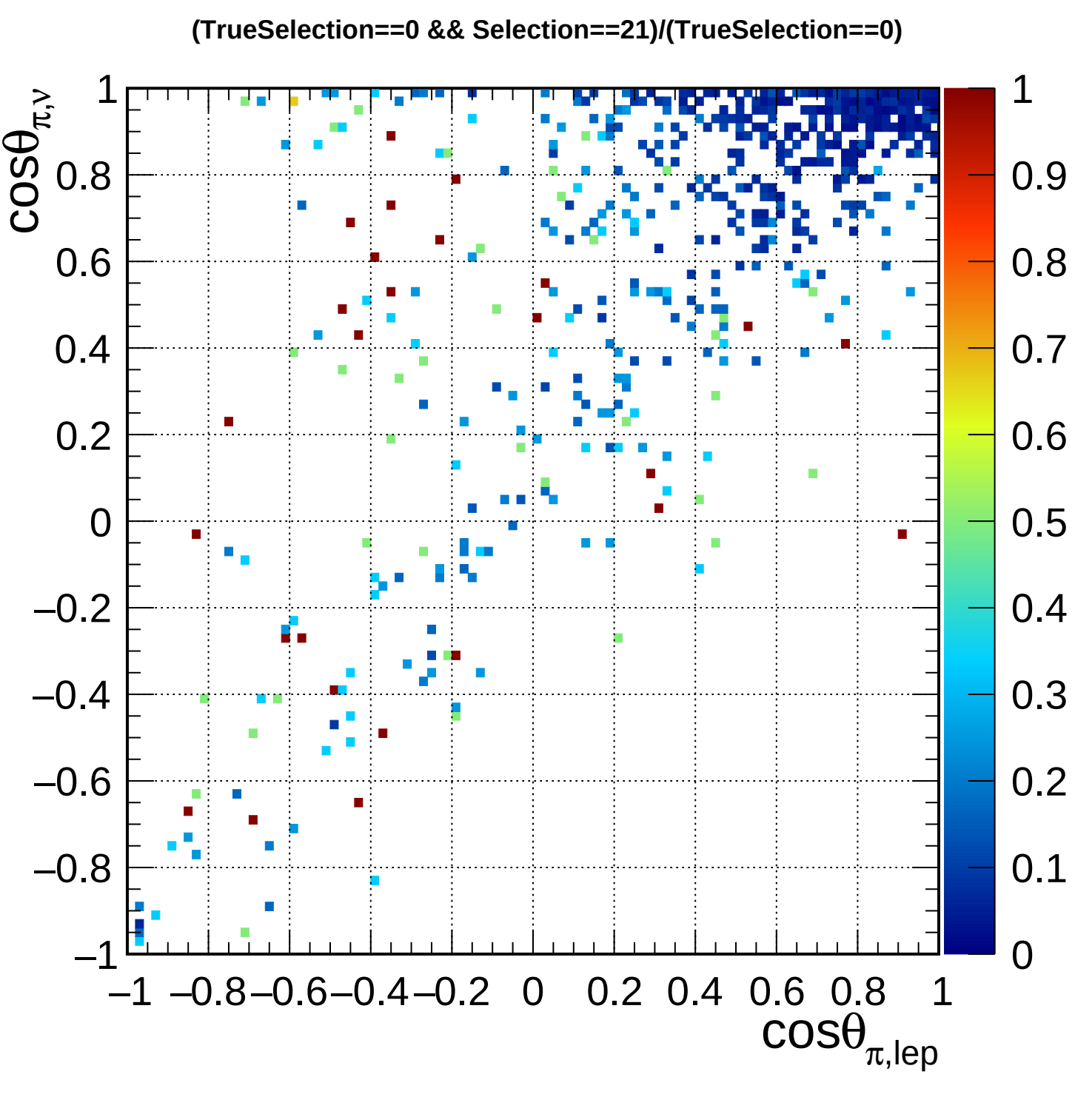

TrueSelection==0 && Selection==19
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
3
2.5
2
1.5
1
0.5
0

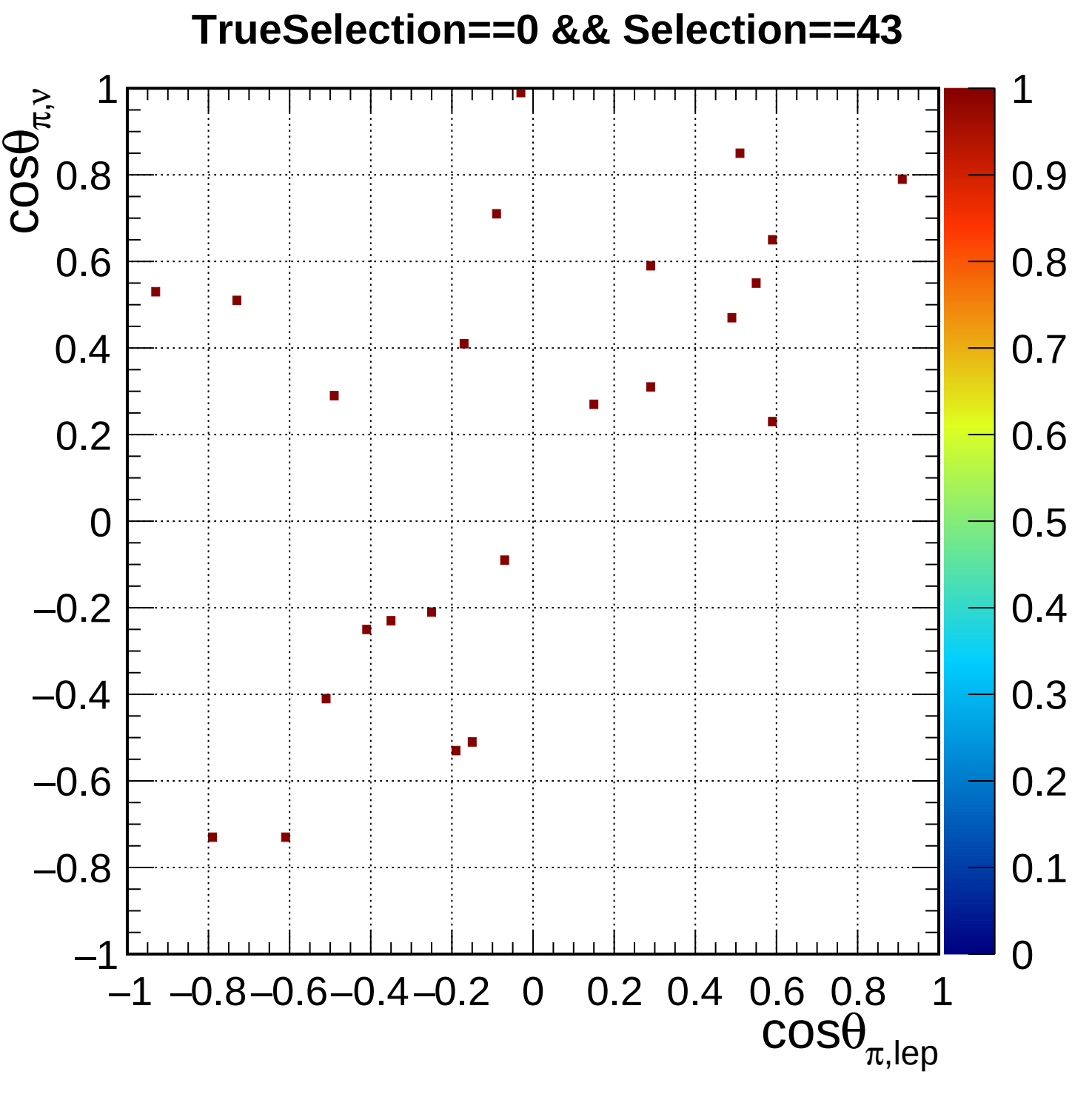

(TrueSelection==0 && Selection==19)/(TrueSelection==0)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

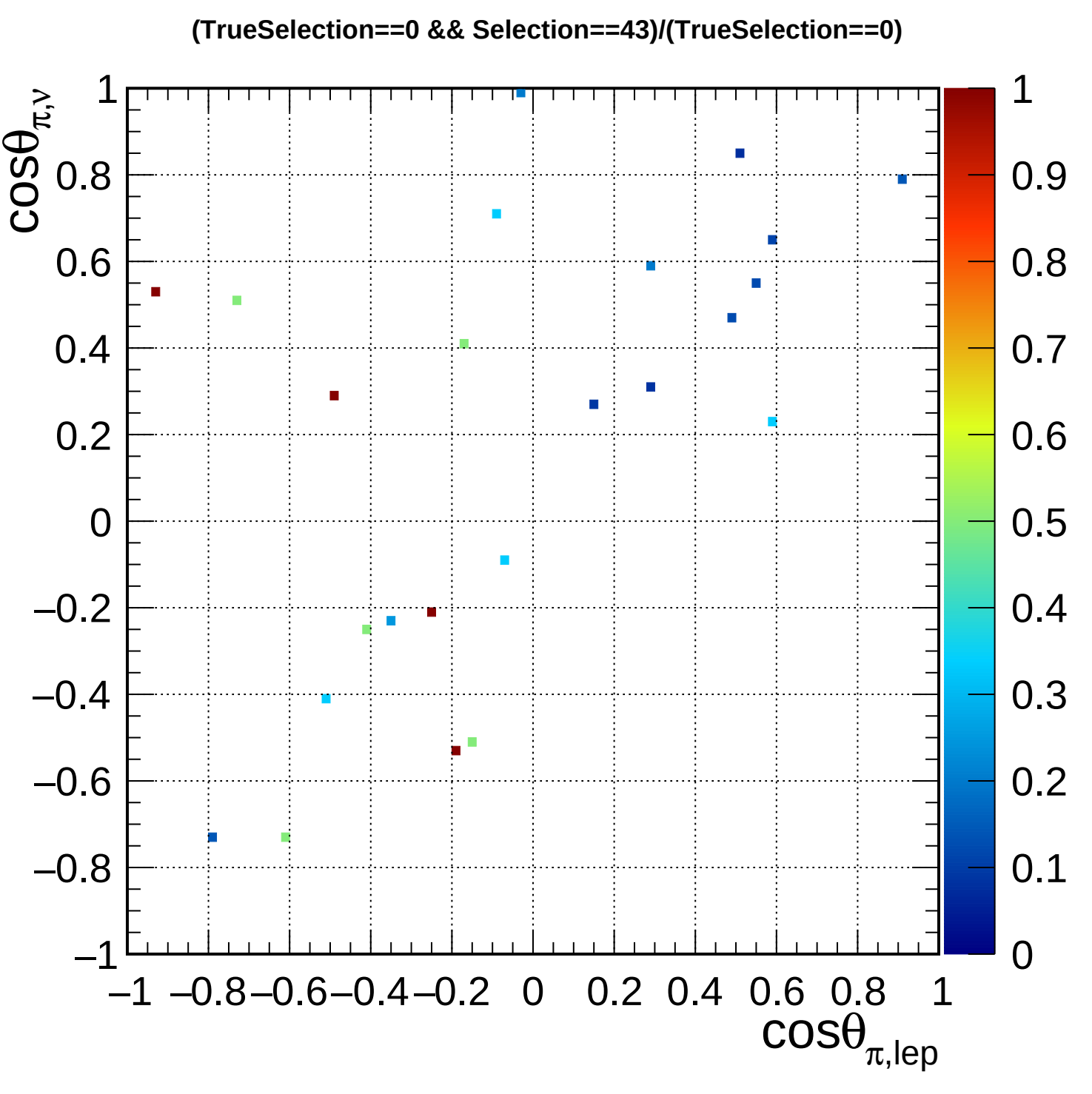

TrueSelection==0 && Selection==20
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
4
3.5
3
2.5
2
1.5
1
0.5
0

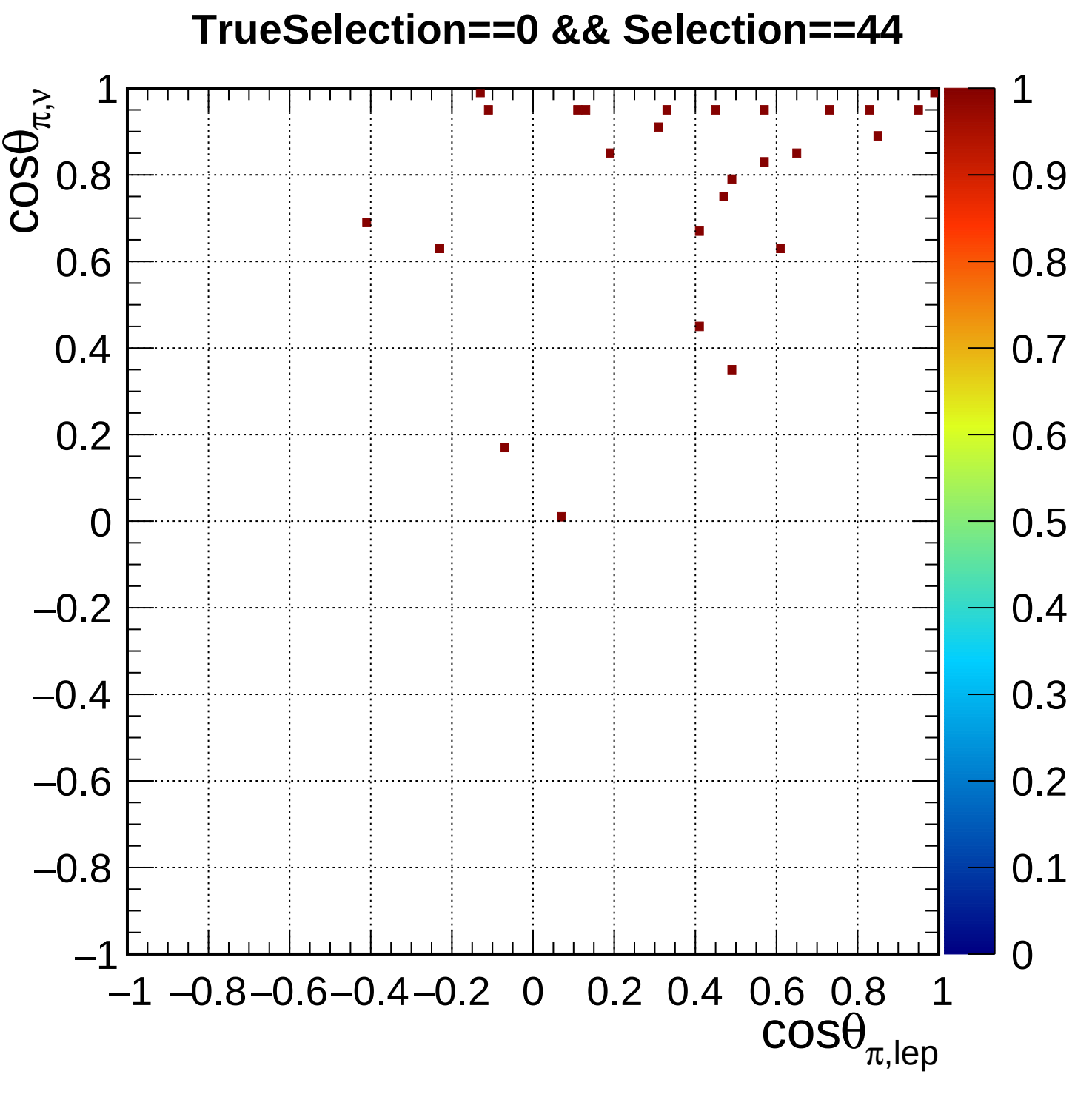

(TrueSelection==0 && Selection==20)/(TrueSelection==0)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

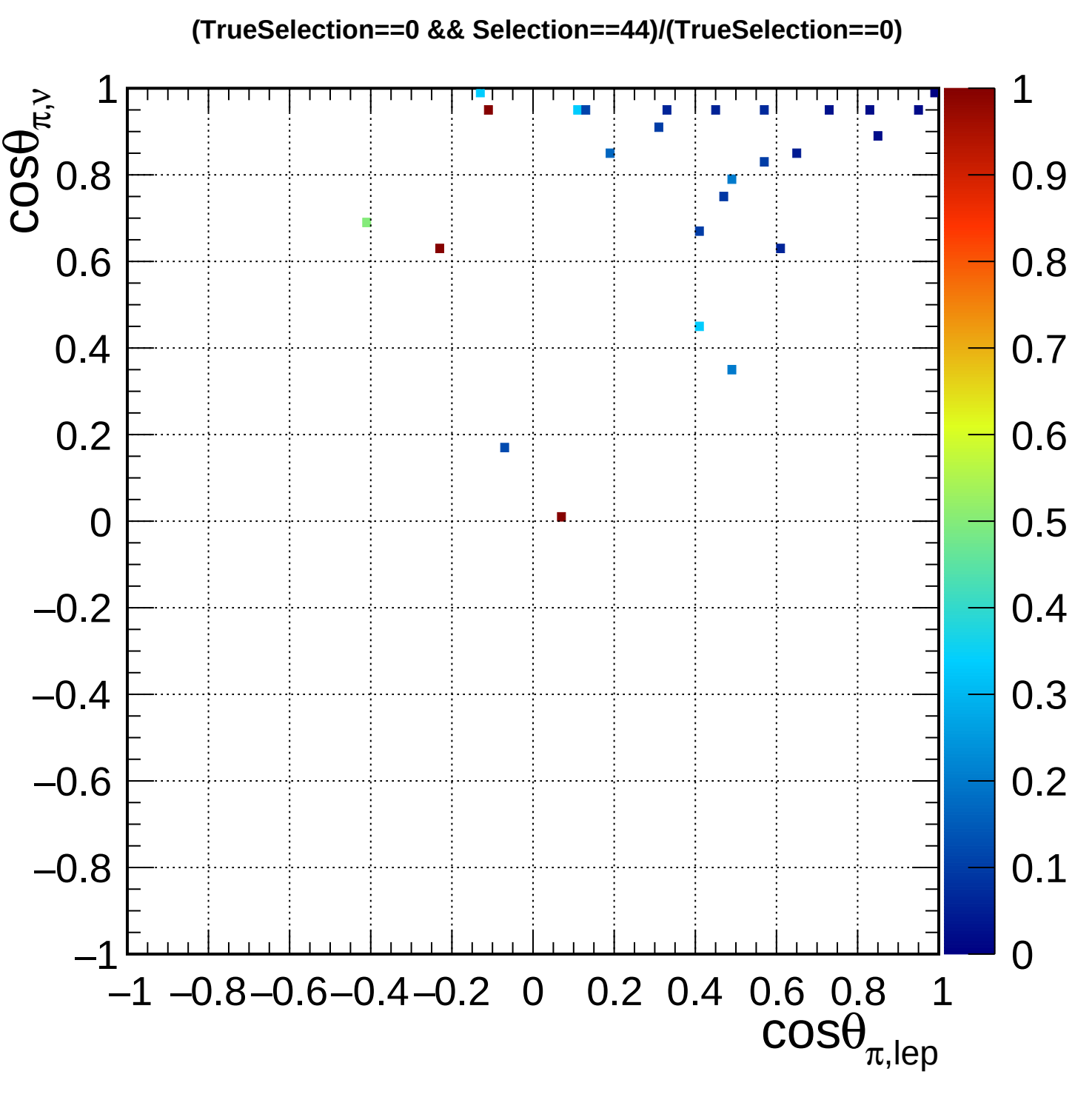

TrueSelection==0 && Selection==21
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
10
9
8
7
6
5
4
3
2
1
0

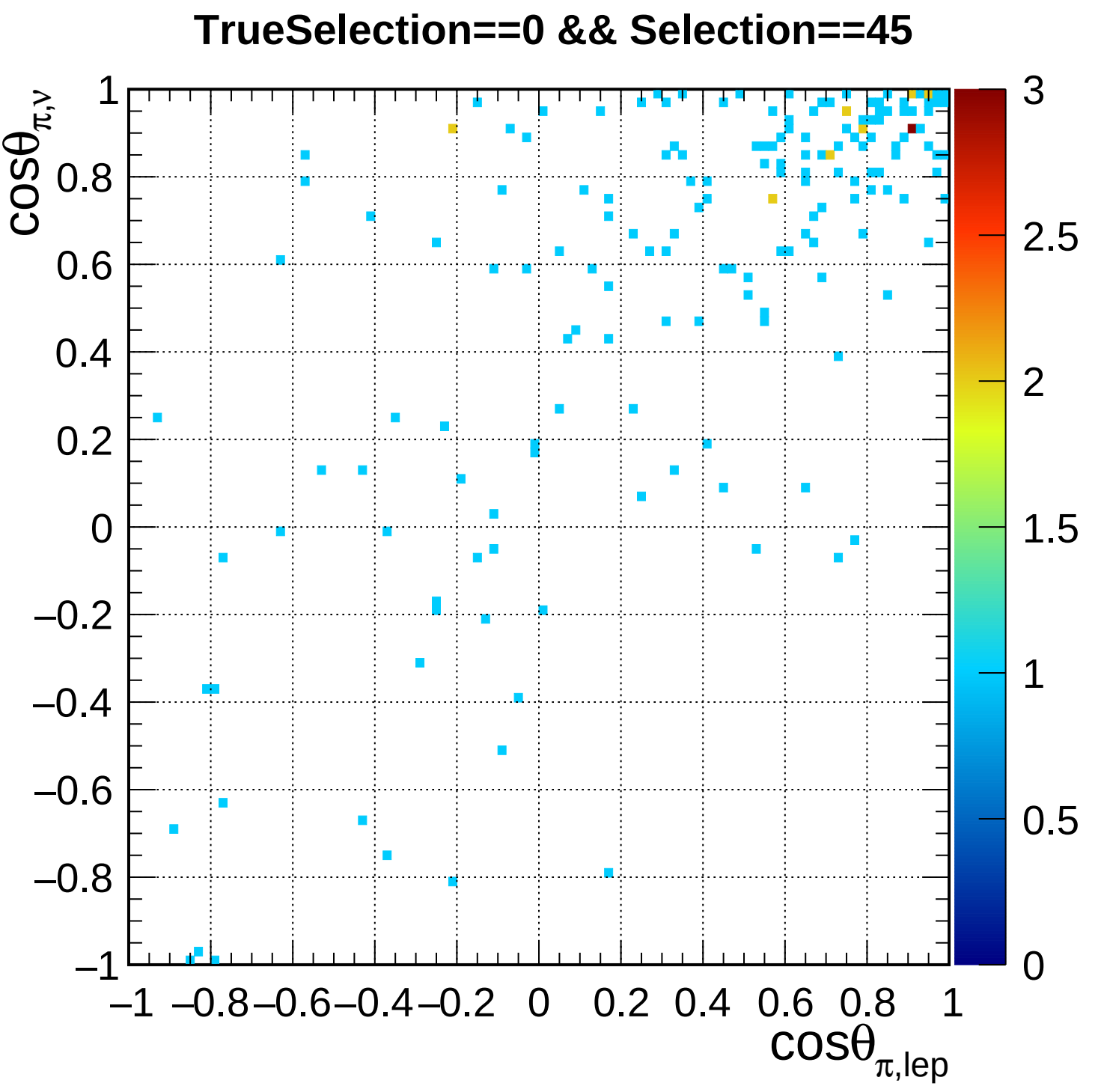

(TrueSelection==0 && Selection==21)/(TrueSelection==0)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

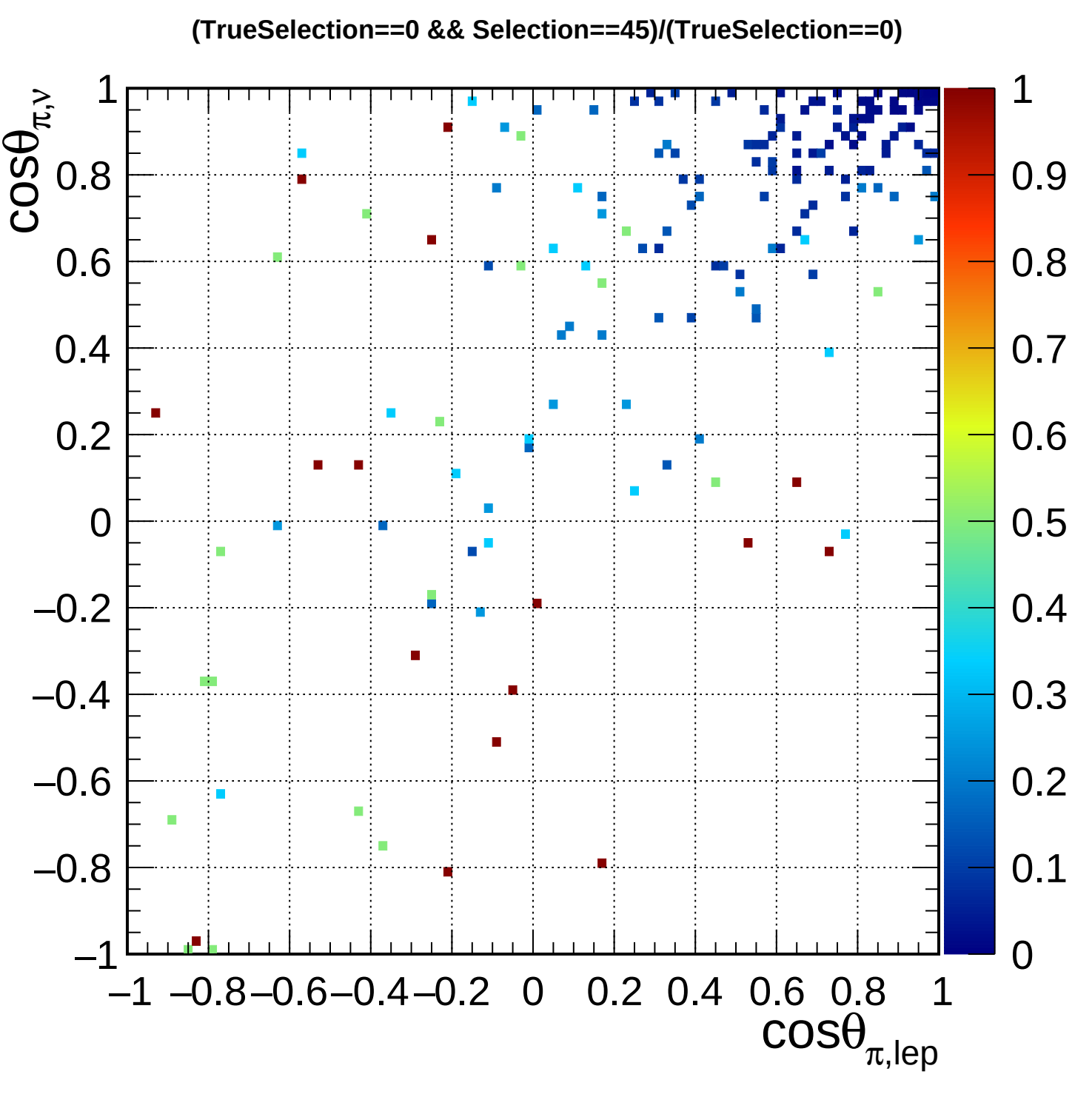

TrueSelection==0 && Selection==43
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

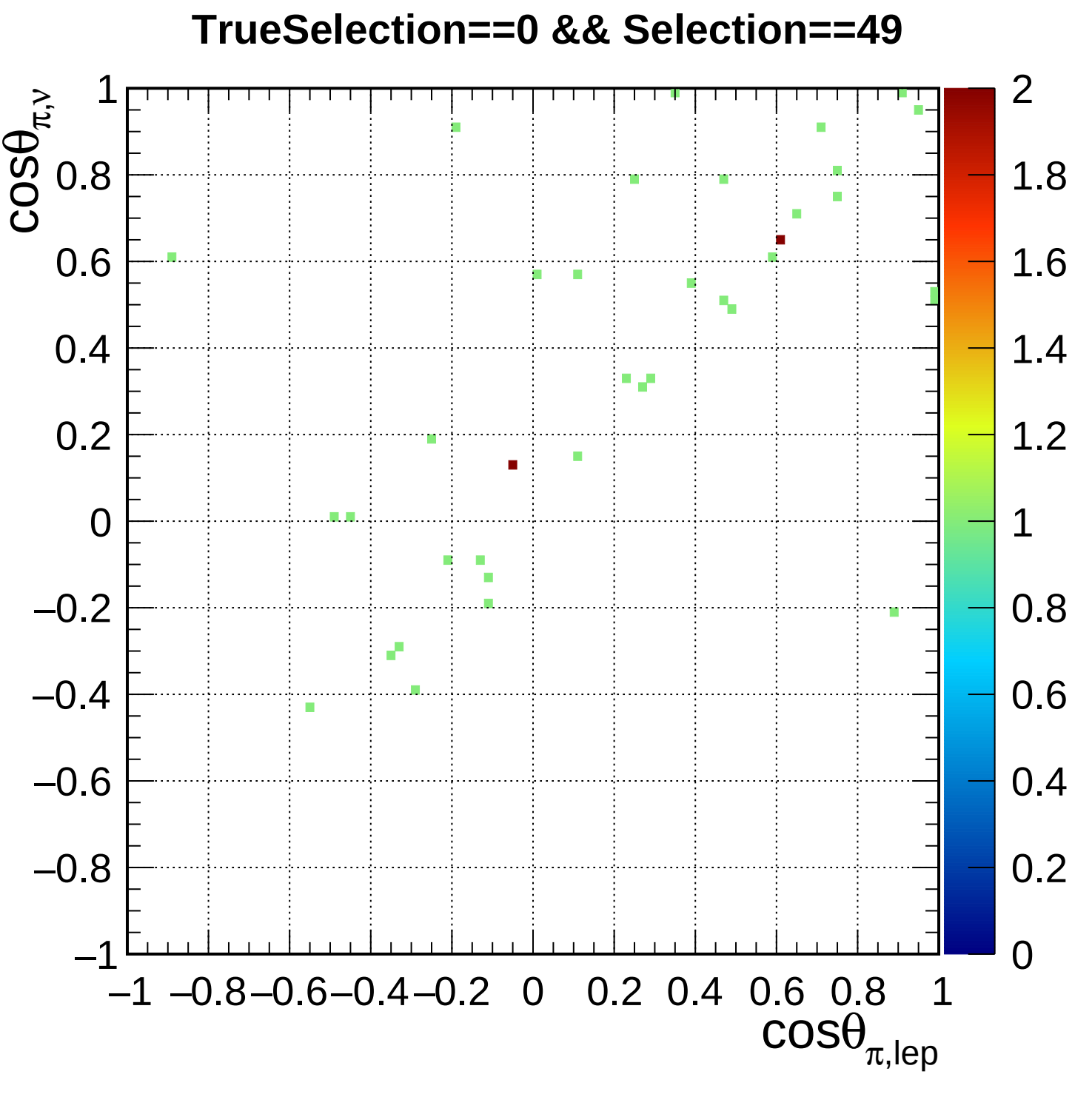

(TrueSelection==0 && Selection==43)/(TrueSelection==0)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

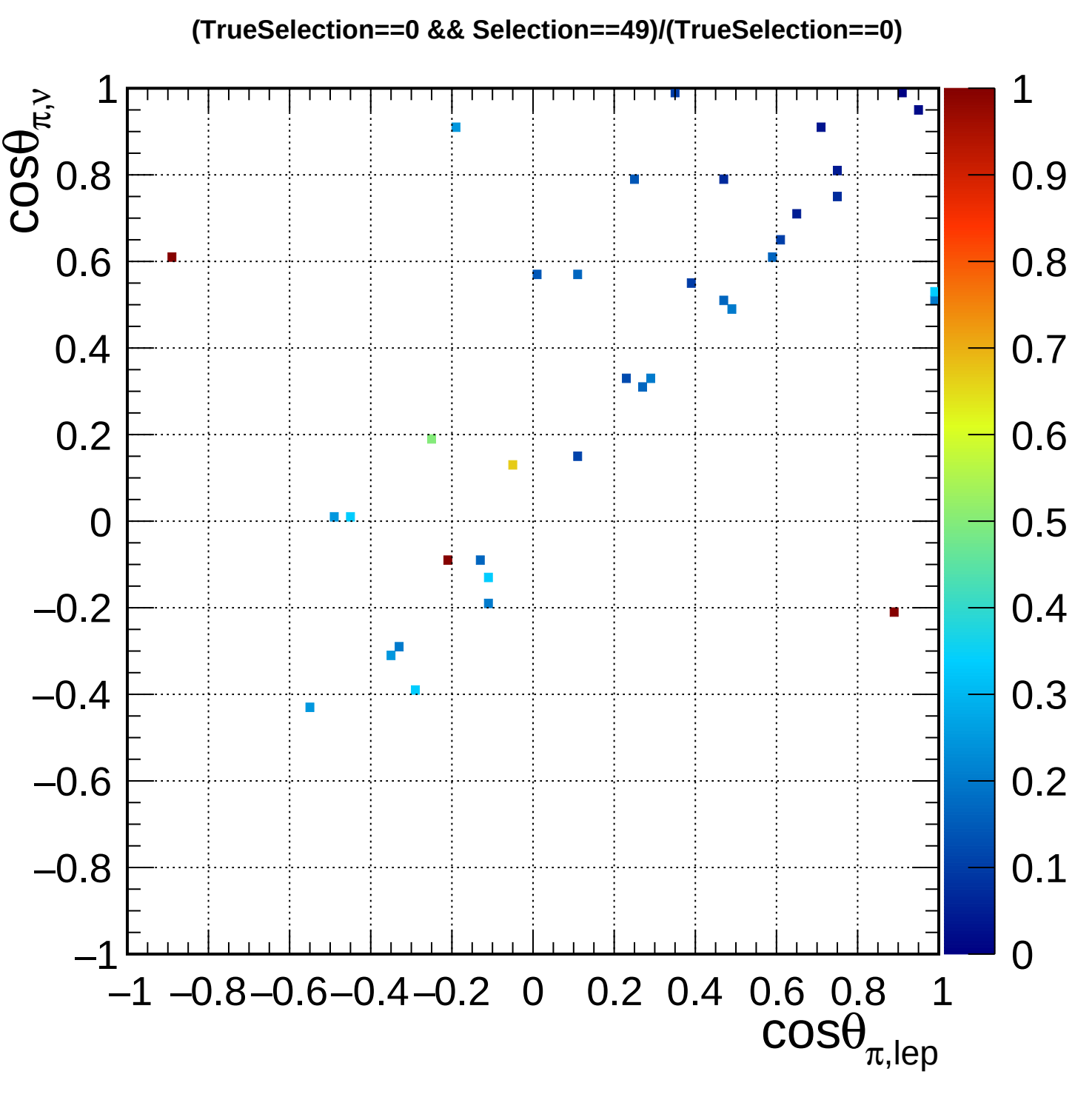

TrueSelection==0 && Selection==44
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

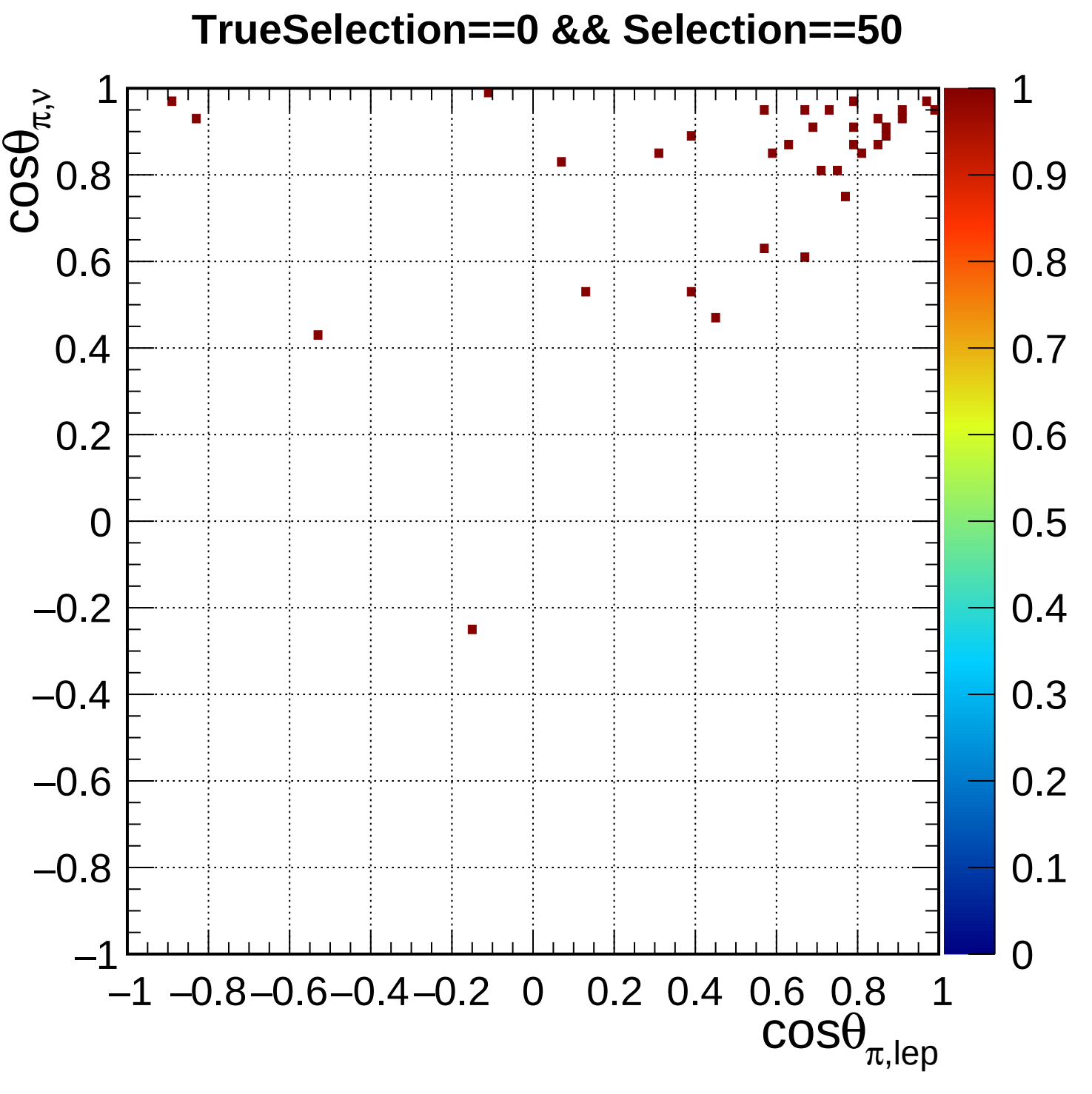

(TrueSelection==0 && Selection==44)/(TrueSelection==0)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

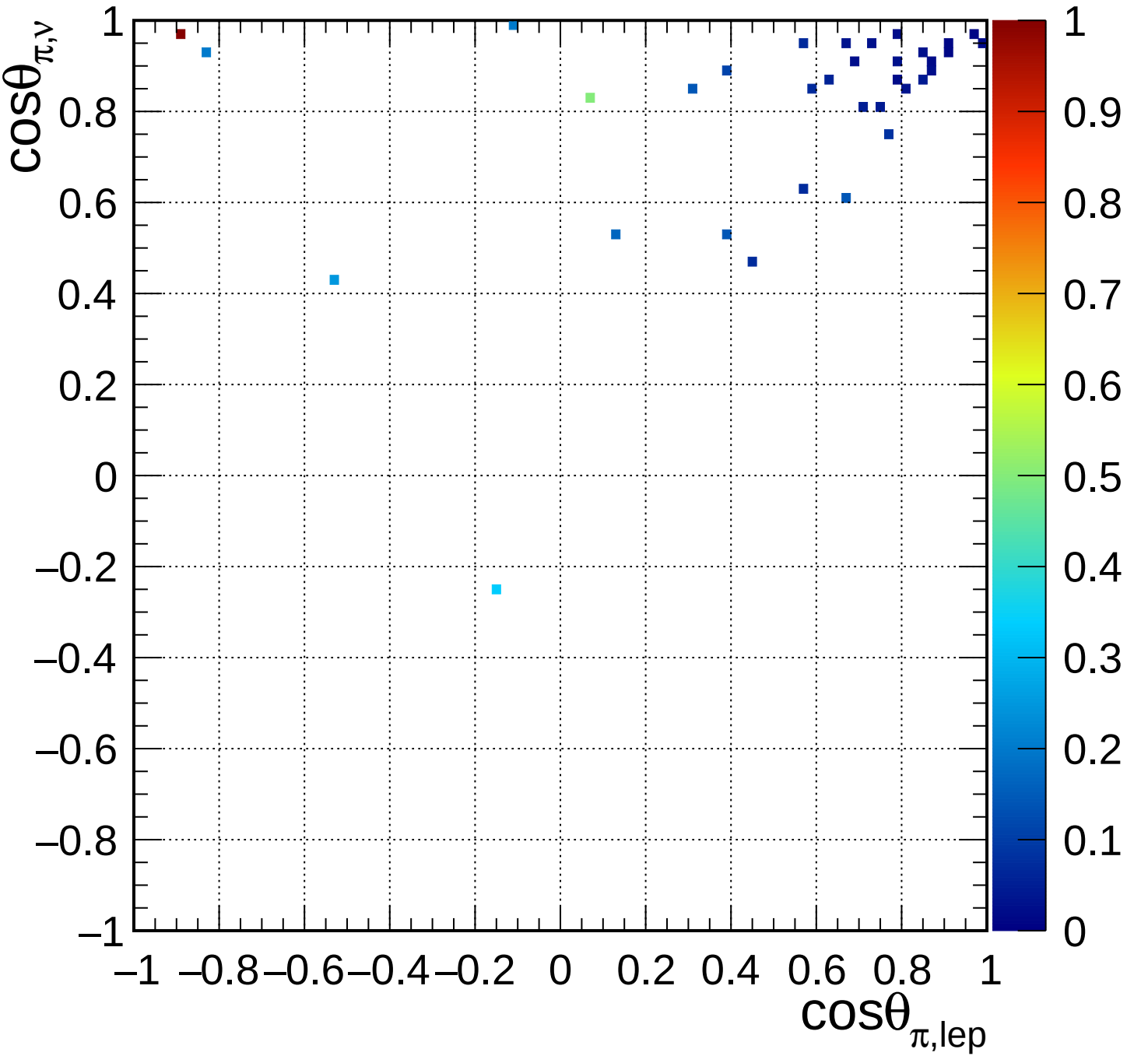

TrueSelection==0 && Selection==45
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
3
2.5
2
1.5
1
0.5
0

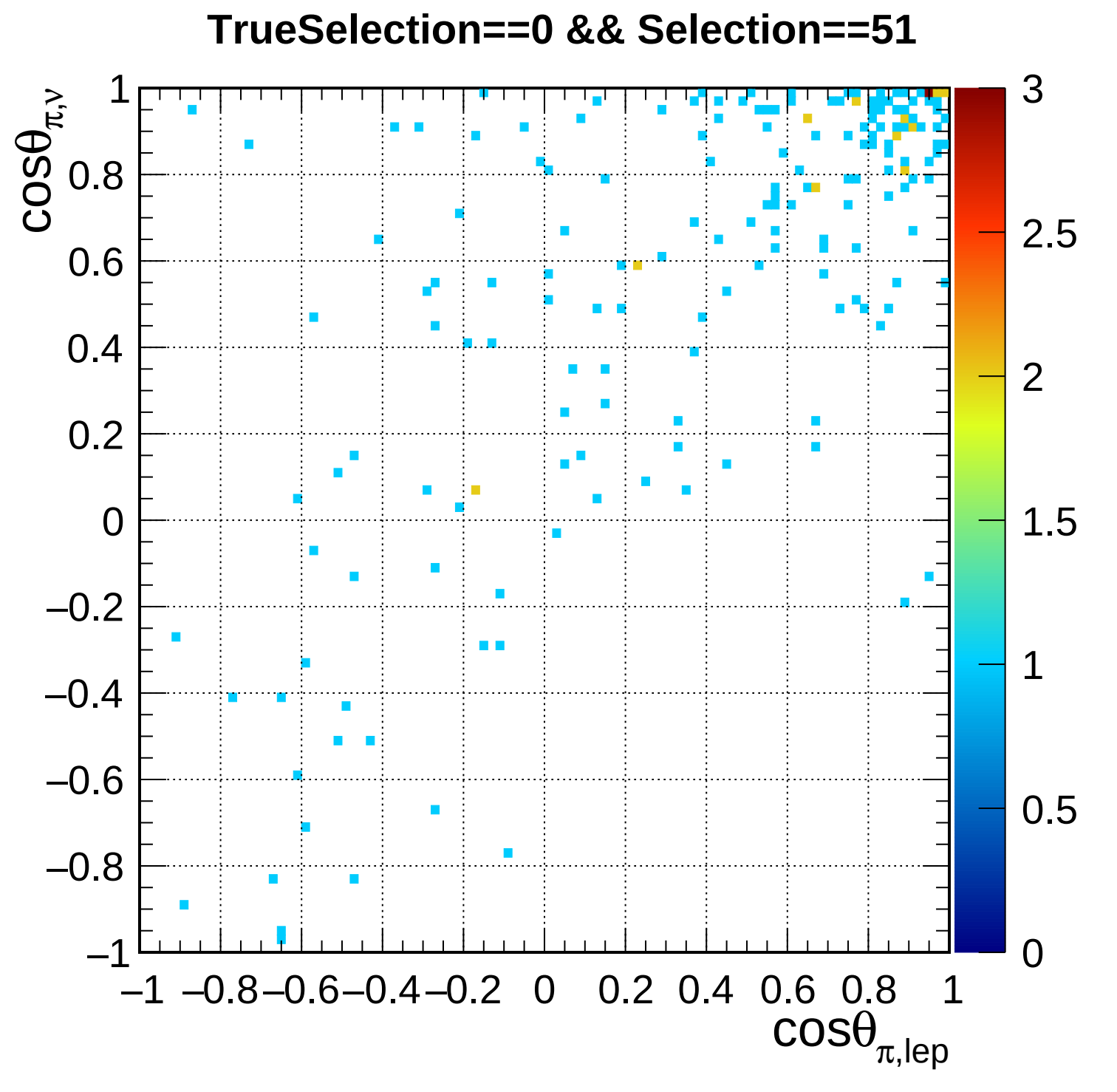

(TrueSelection==0 && Selection==45)/(TrueSelection==0)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

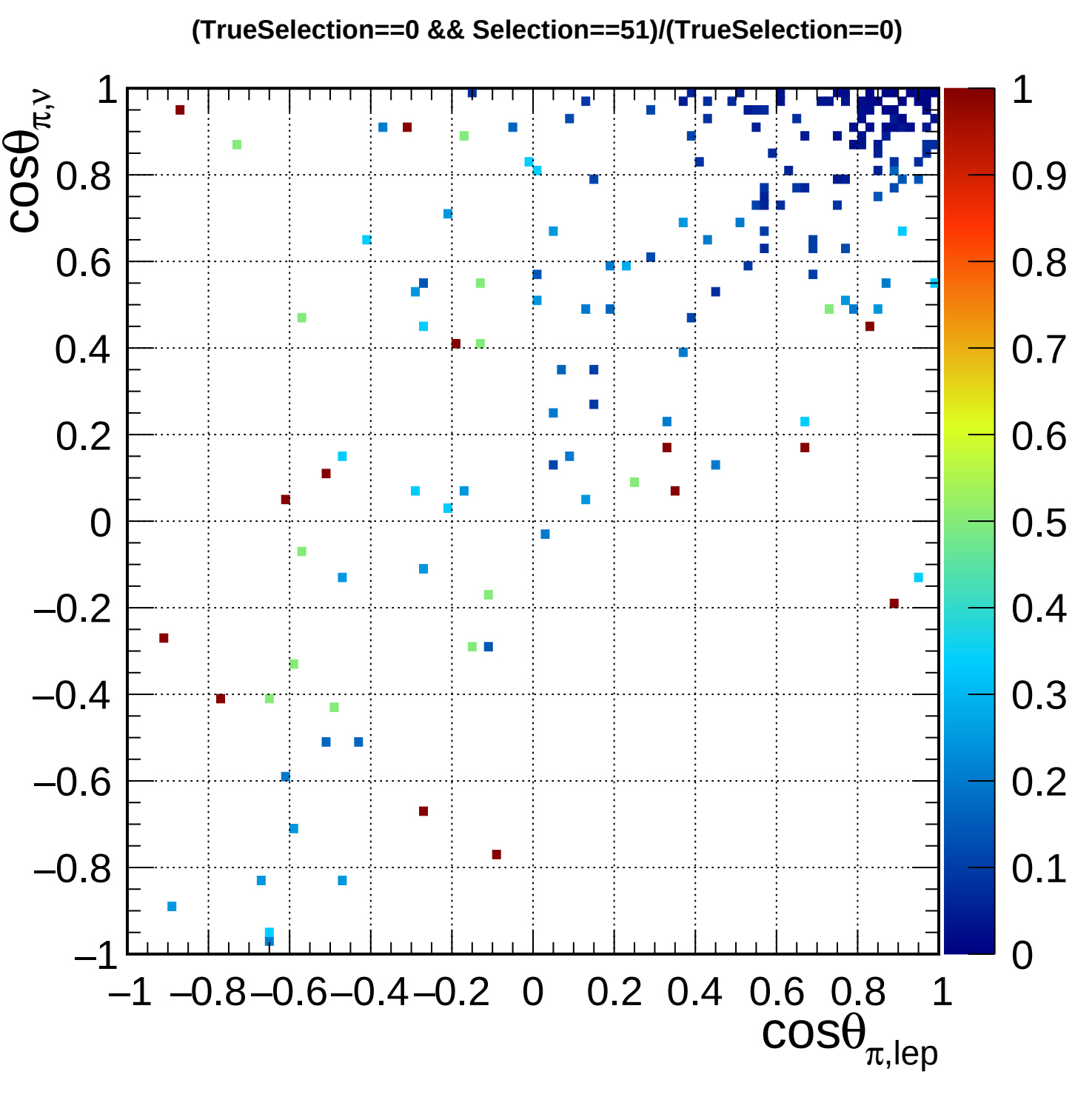

TrueSelection==0 && Selection==49
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0

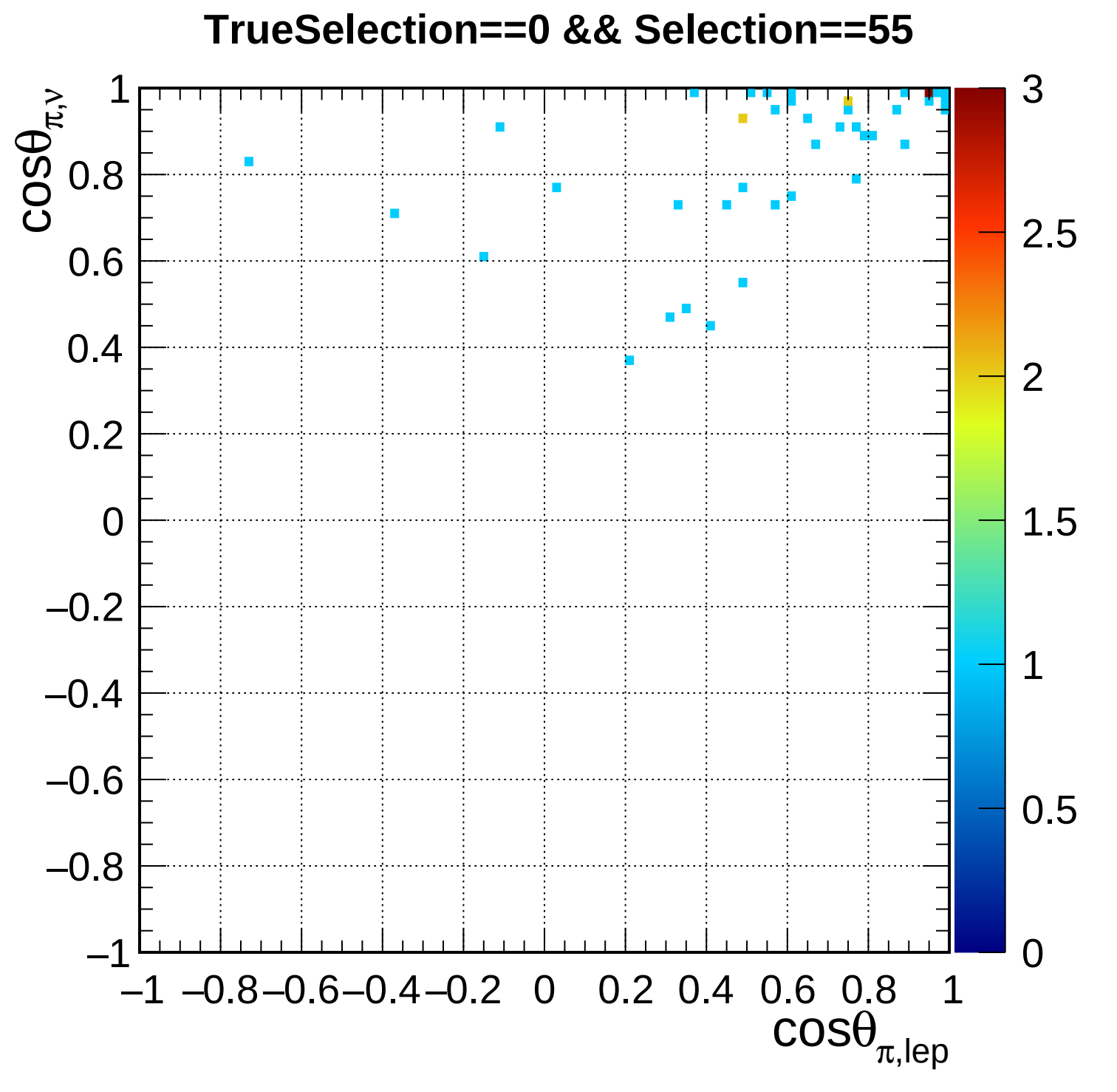

(TrueSelection==0 && Selection==49)/(TrueSelection==0)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

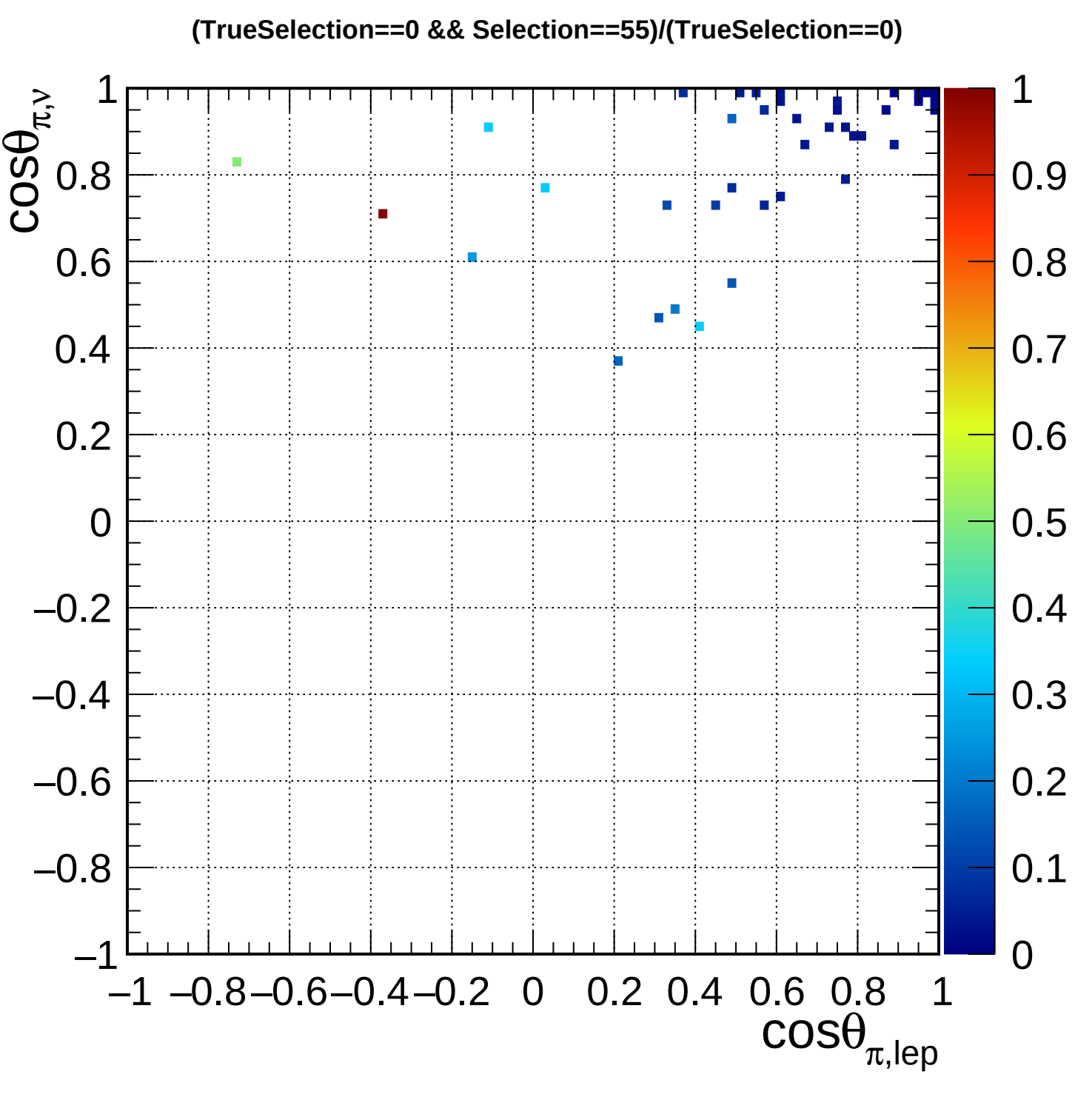

TrueSelection==0 && Selection==50
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

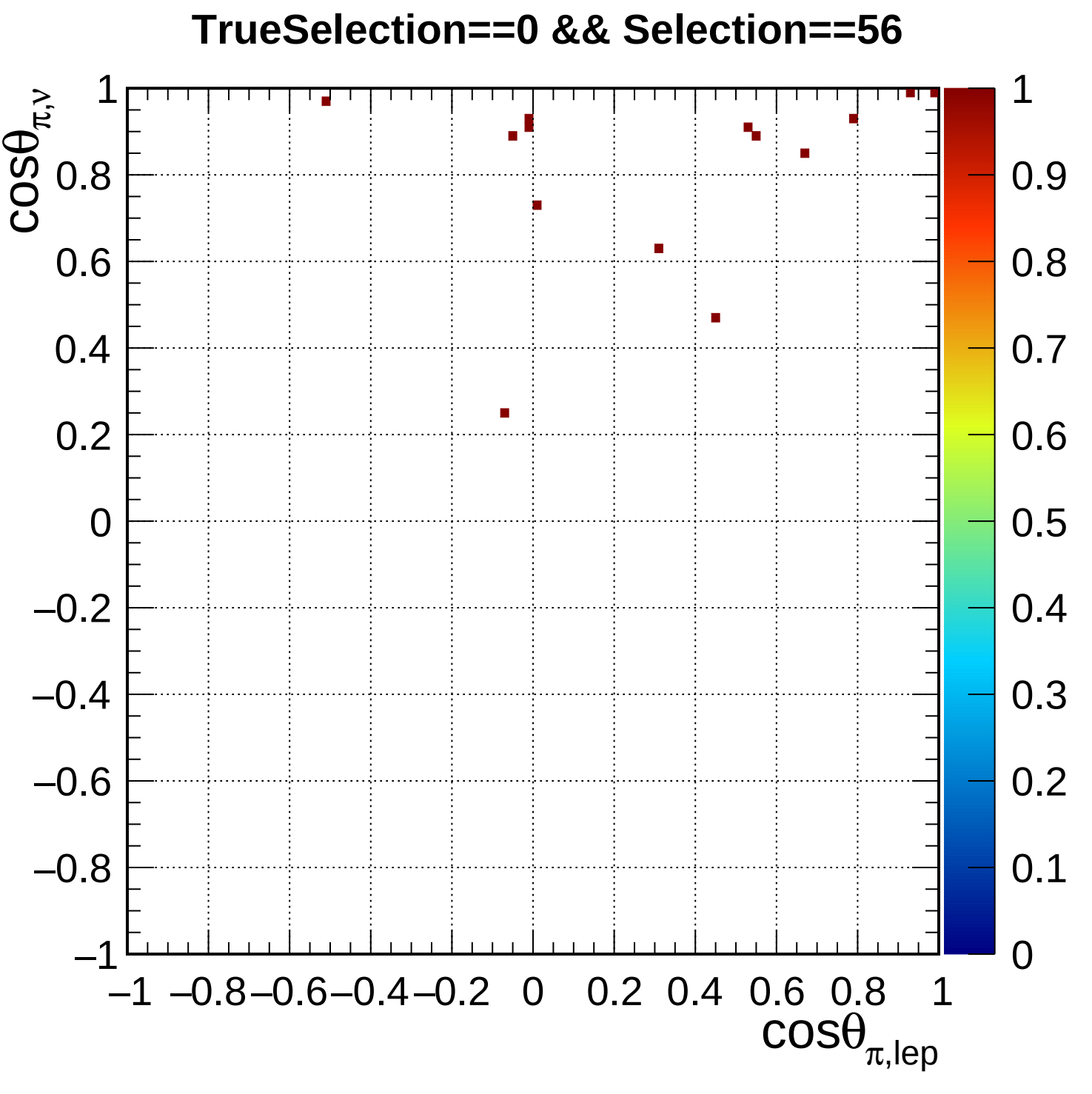

(TrueSelection==0 && Selection==50)/(TrueSelection==0)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

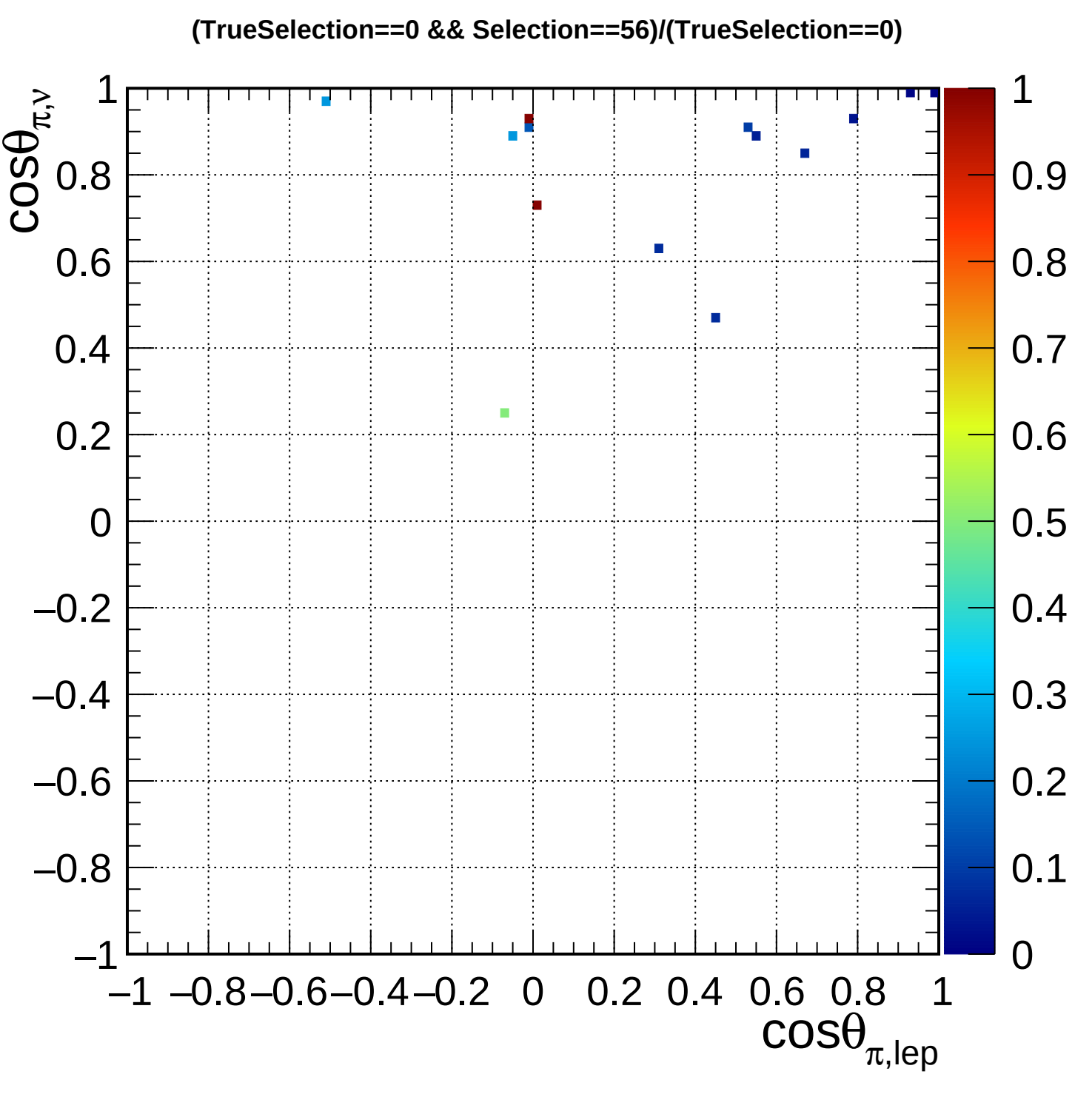

TrueSelection==0 && Selection==51
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
3
2.5
2
1.5
1
0.5
0

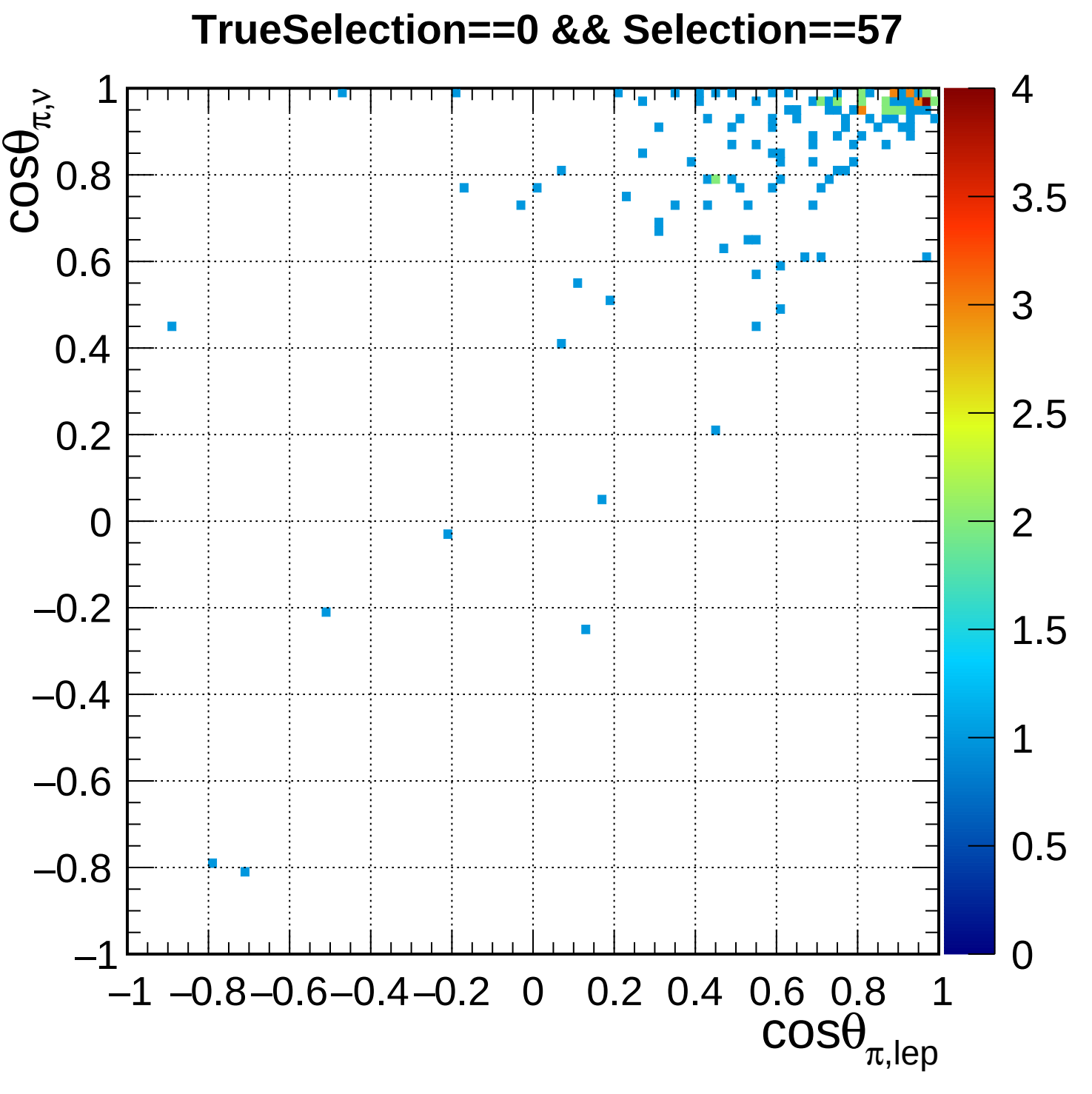

(TrueSelection==0 && Selection==51)/(TrueSelection==0)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

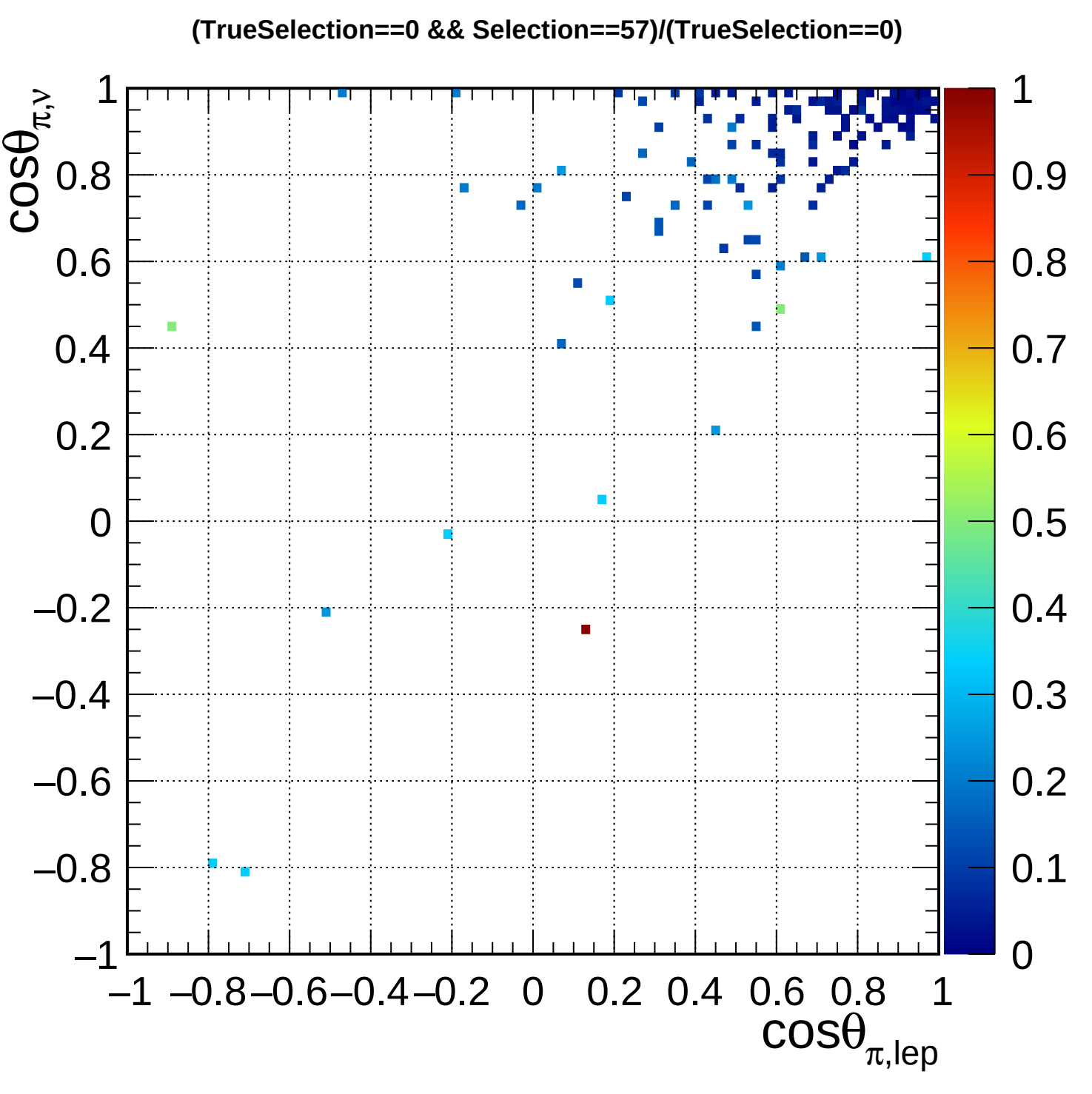

TrueSelection==0 && Selection==55
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
3
2.5
2
1.5
1
0.5
0

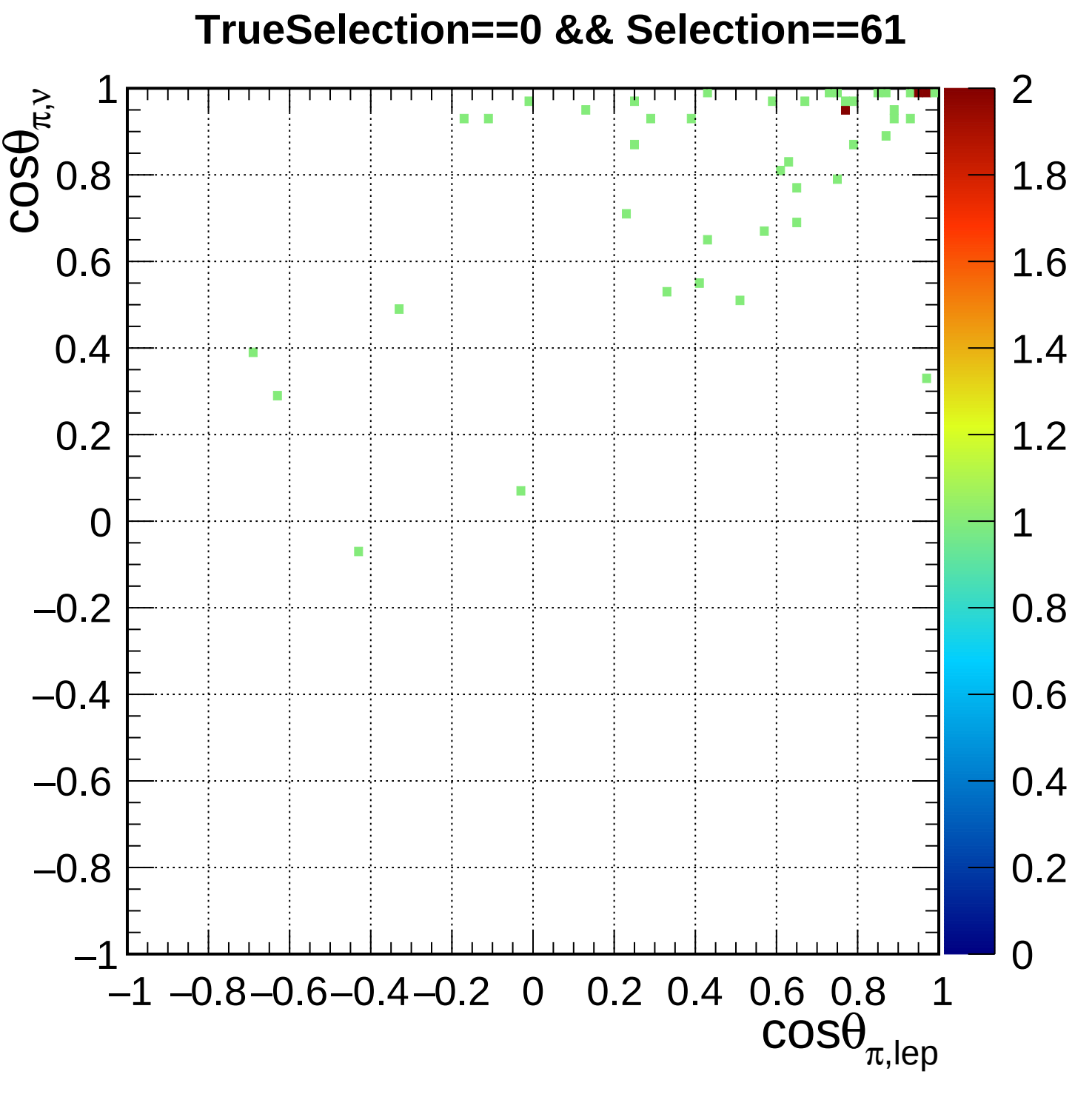

(TrueSelection==0 && Selection==55)/(TrueSelection==0)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

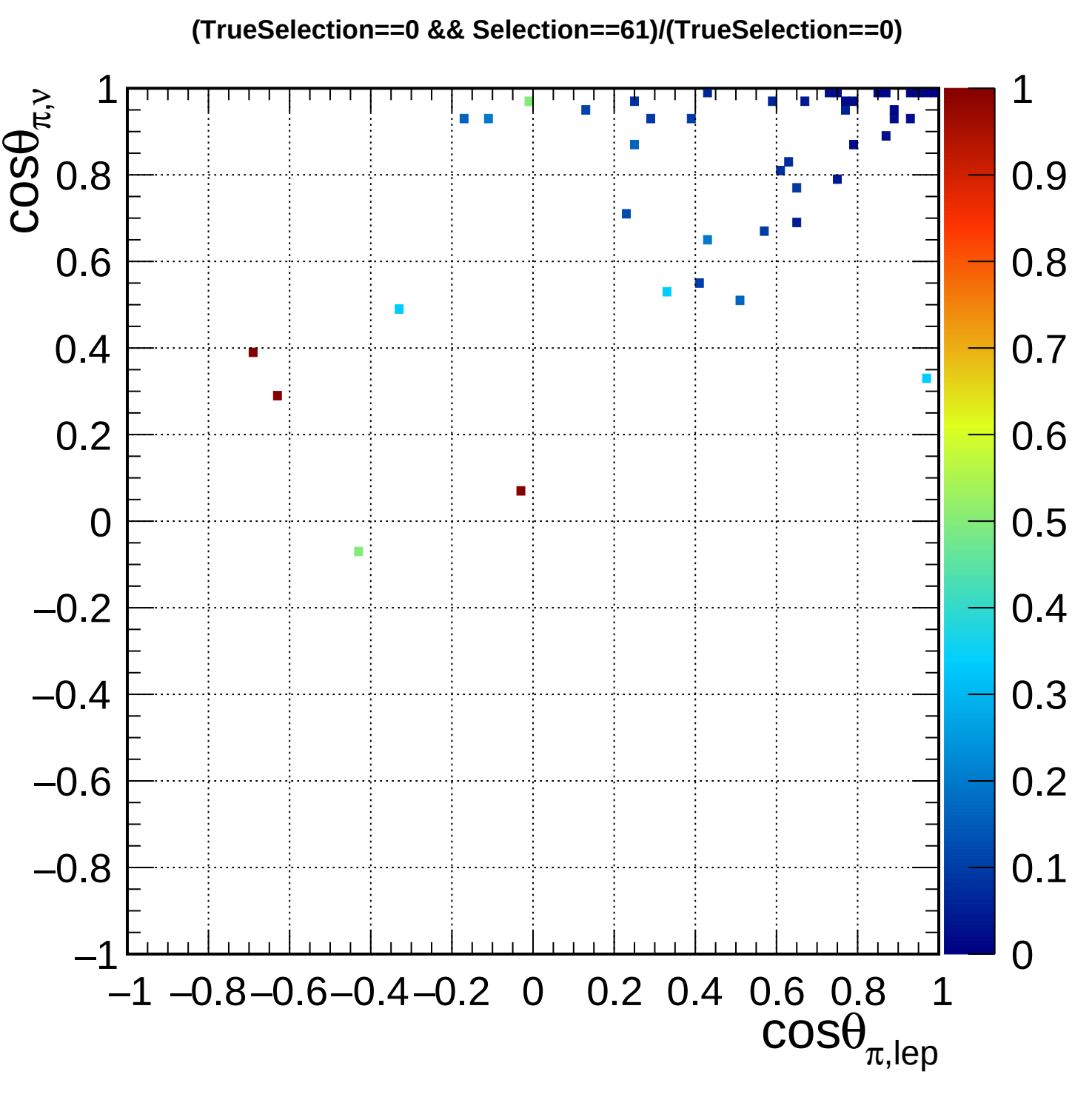

TrueSelection==0 && Selection==56
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

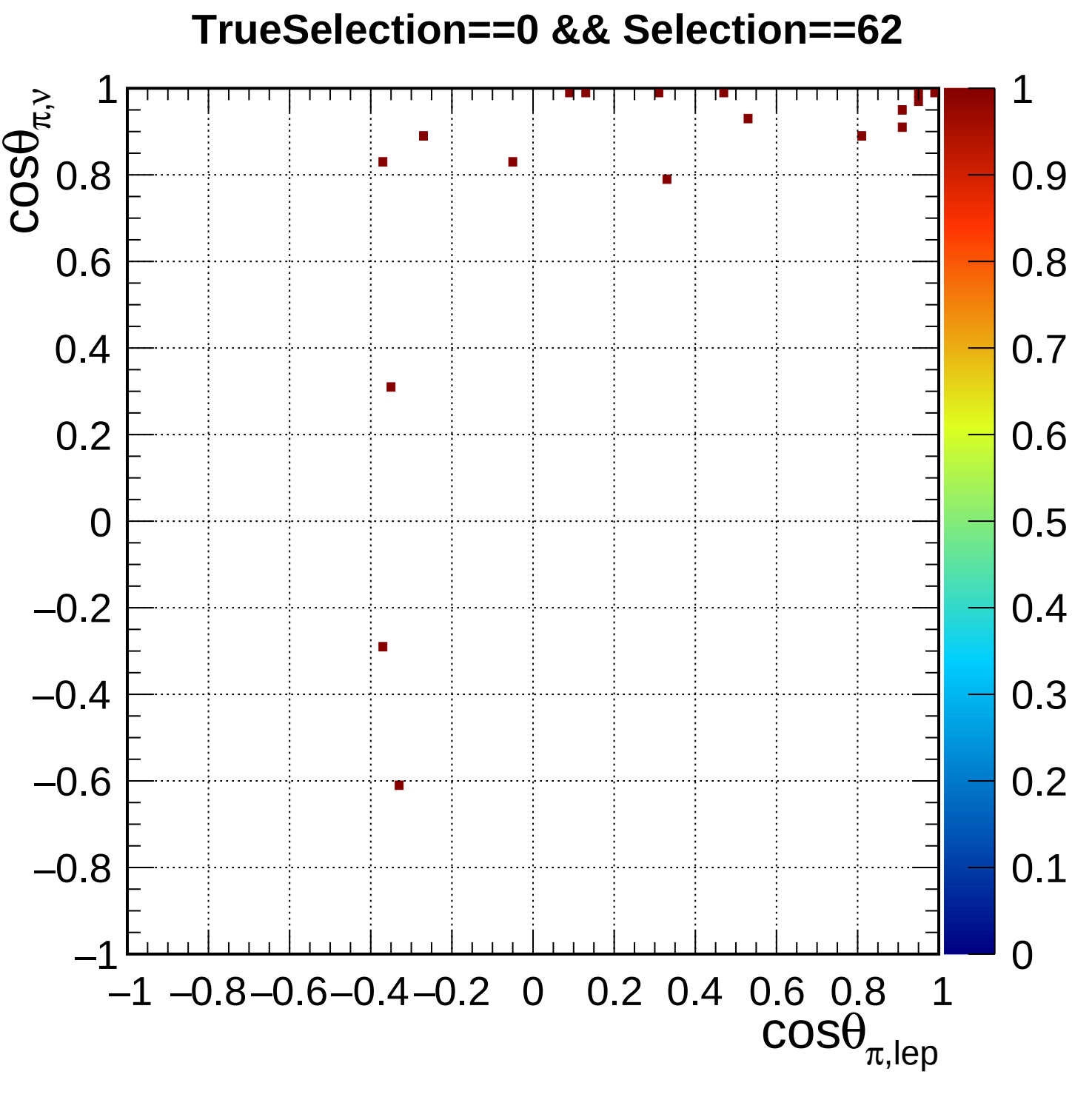

(TrueSelection==0 && Selection==56)/(TrueSelection==0)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

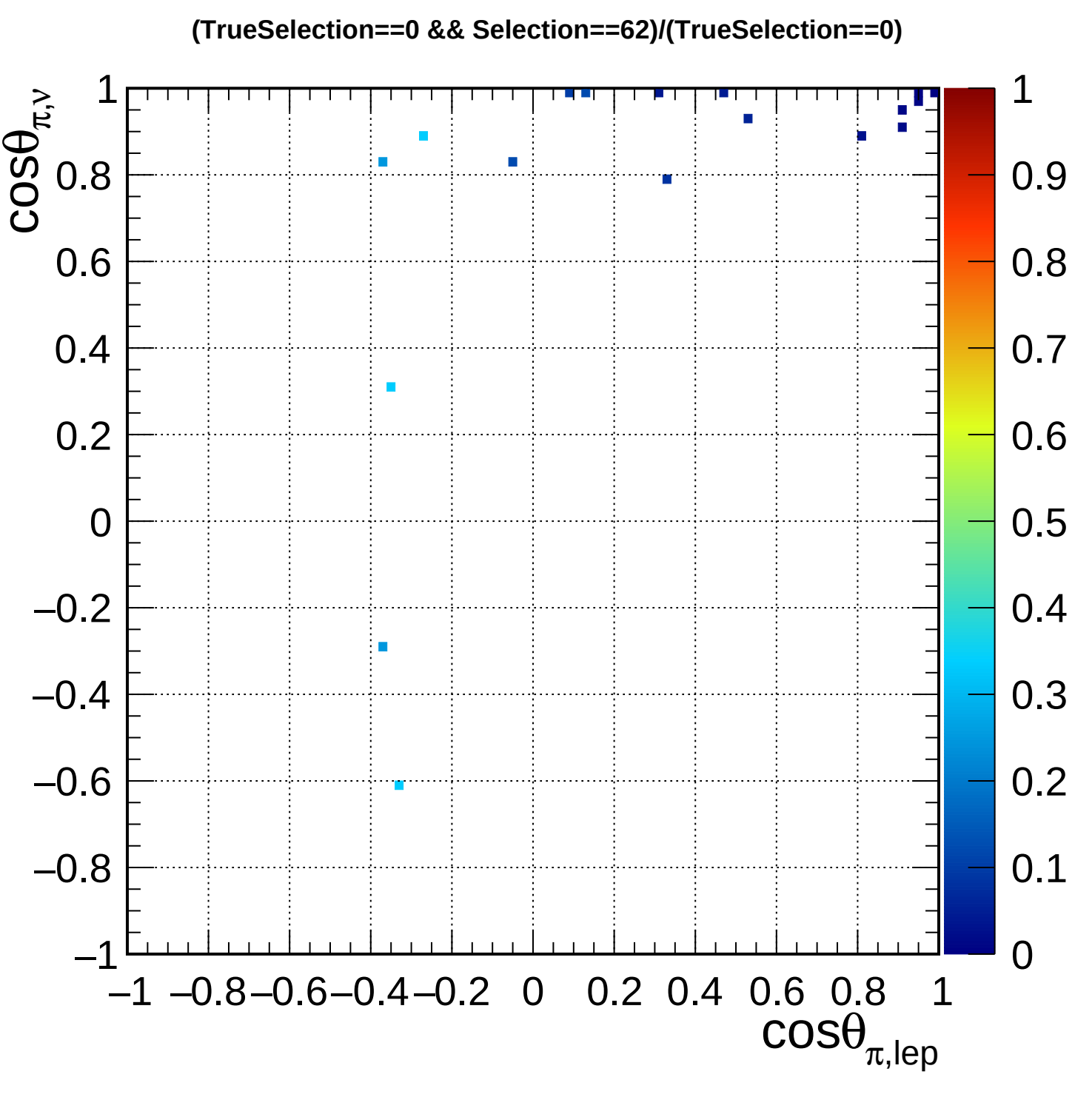

TrueSelection==0 && Selection==57
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
4
3.5
3
2.5
2
1.5
1
0.5
0

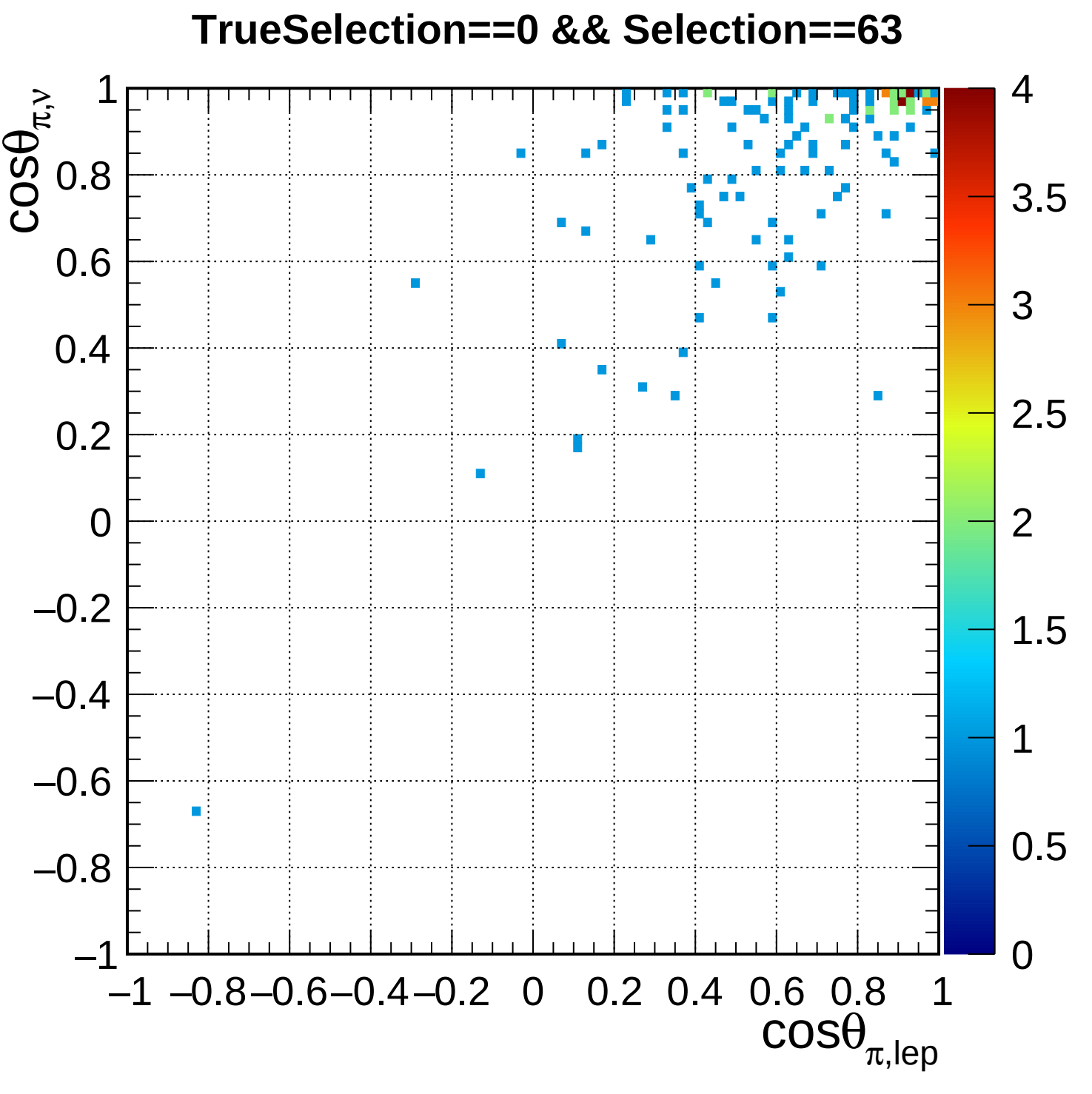

(TrueSelection==0 && Selection==57)/(TrueSelection==0)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

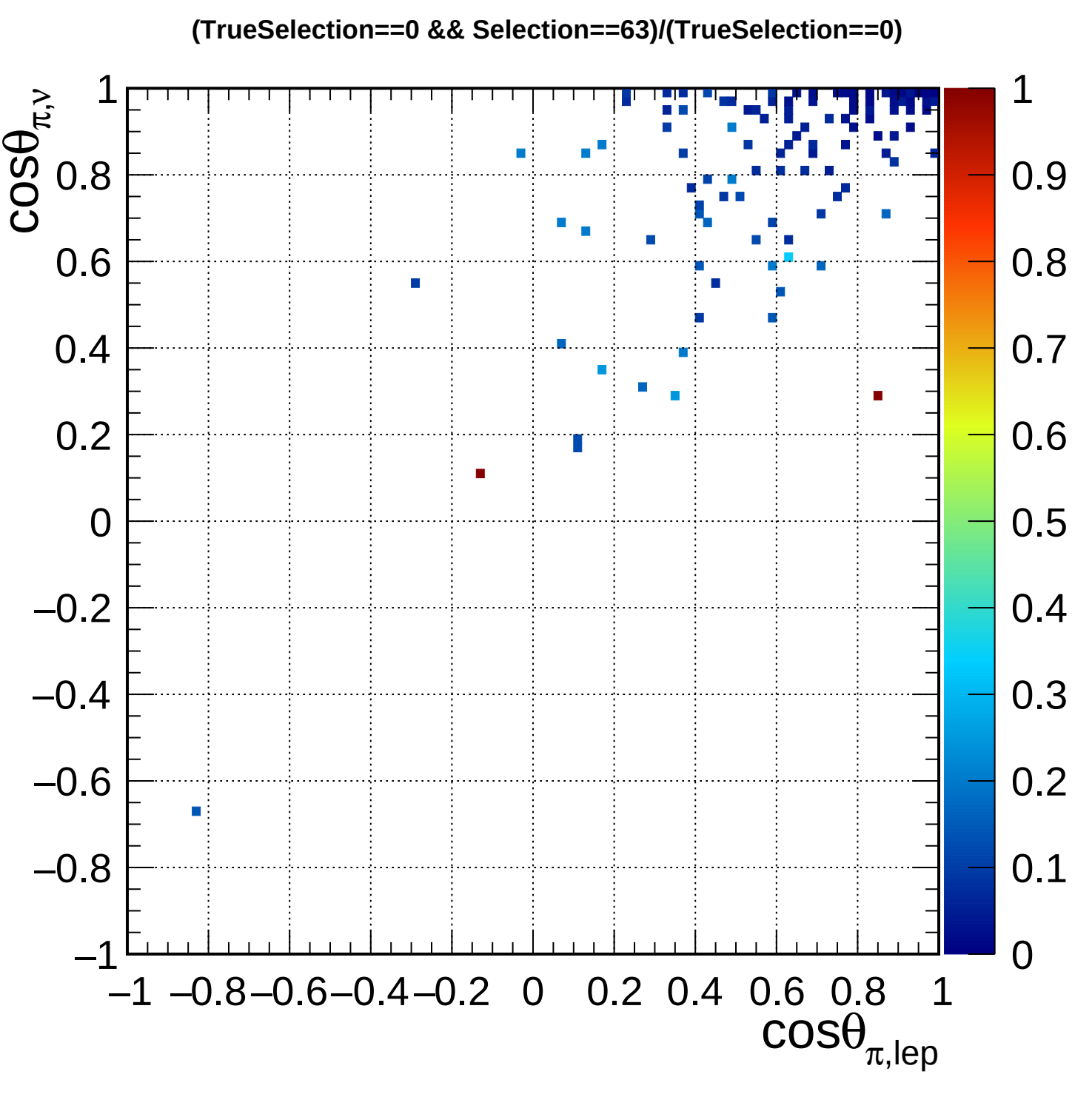

TrueSelection==0 && Selection==61
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0

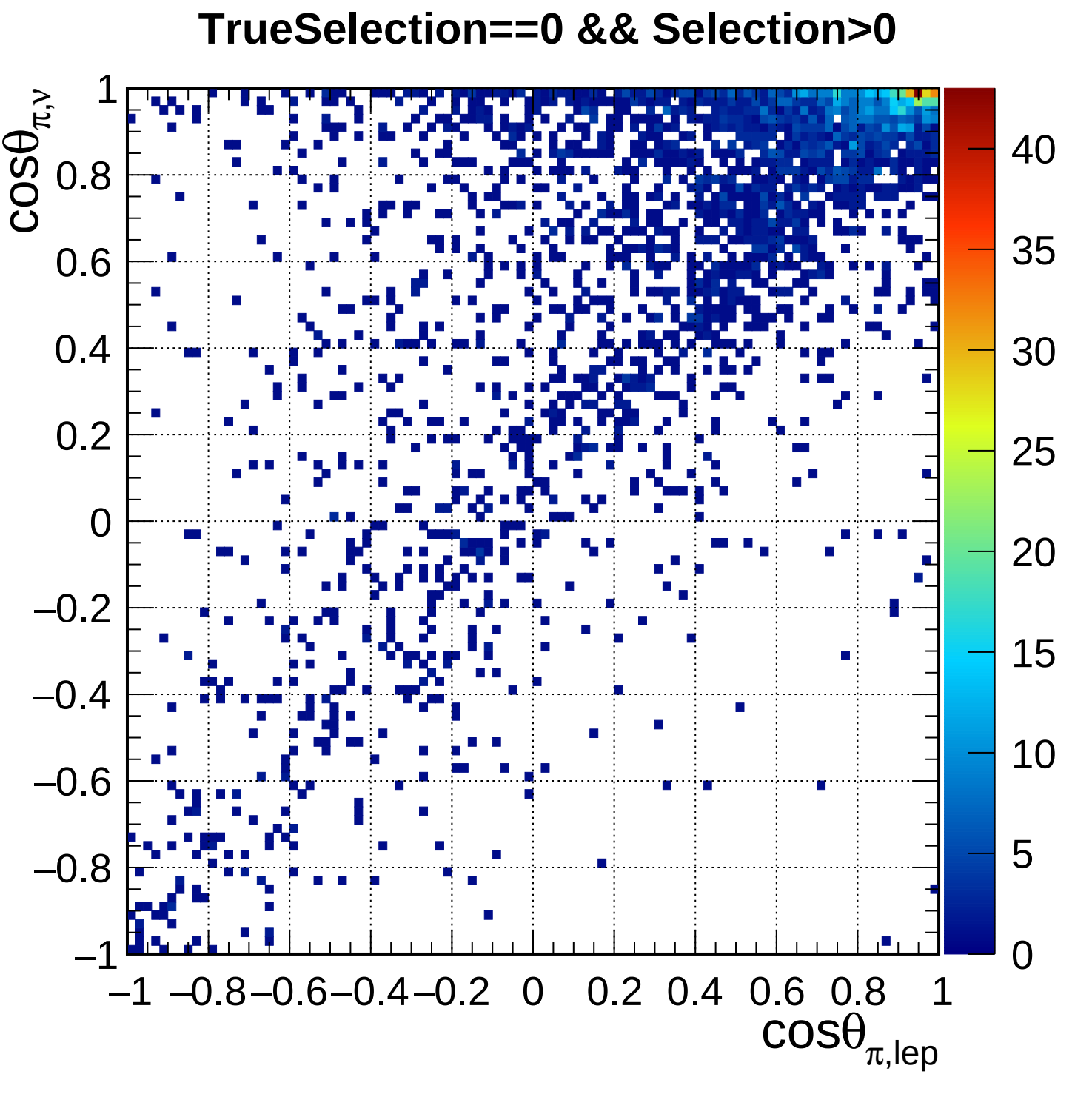

(TrueSelection==0 && Selection==61)/(TrueSelection==0)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

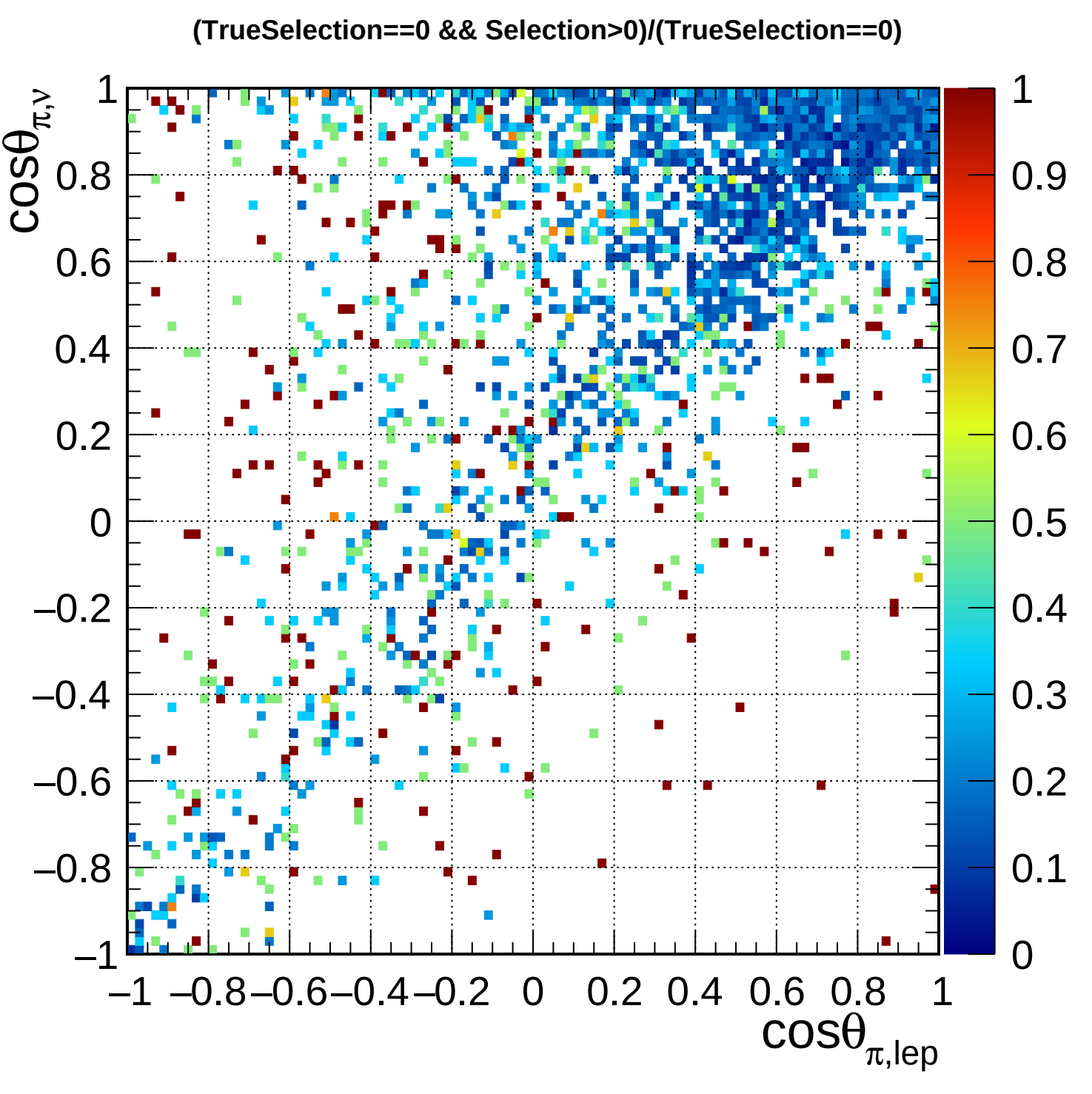

TrueSelection==0 && Selection==62
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

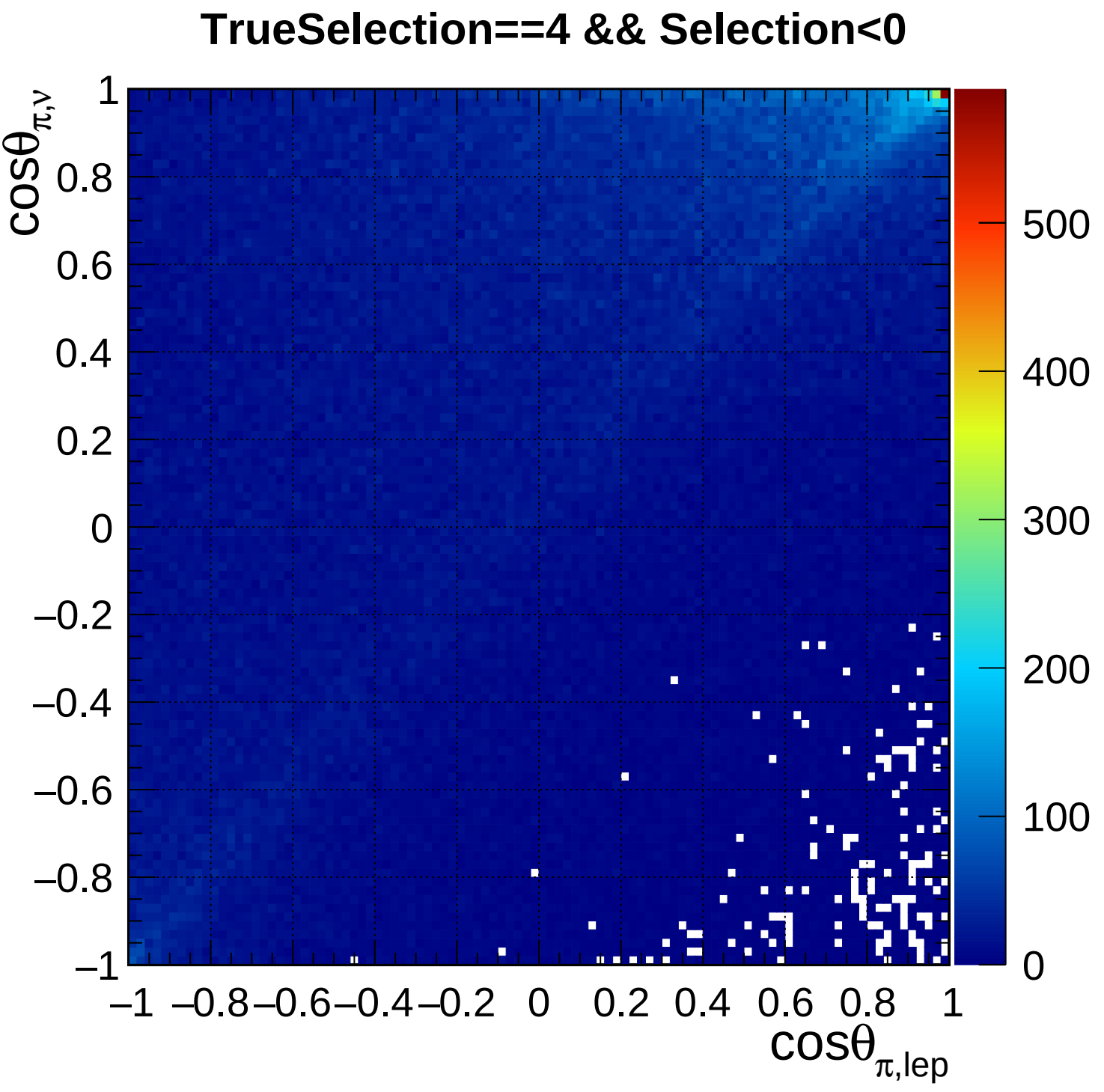

(TrueSelection==0 && Selection==62)/(TrueSelection==0)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

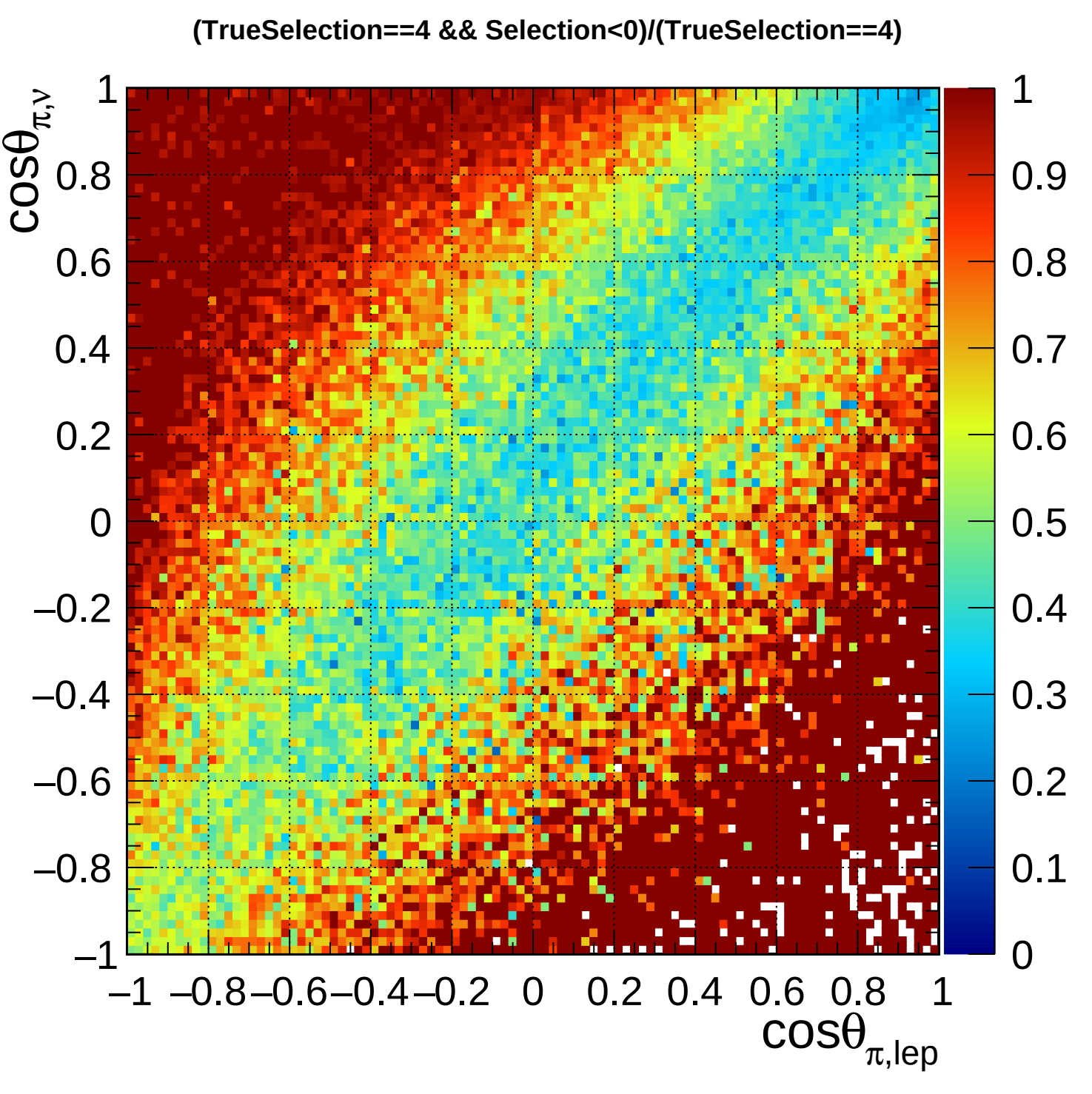

TrueSelection==0 && Selection==63
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
4
3.5
3
2.5
2
1.5
1
0.5
0

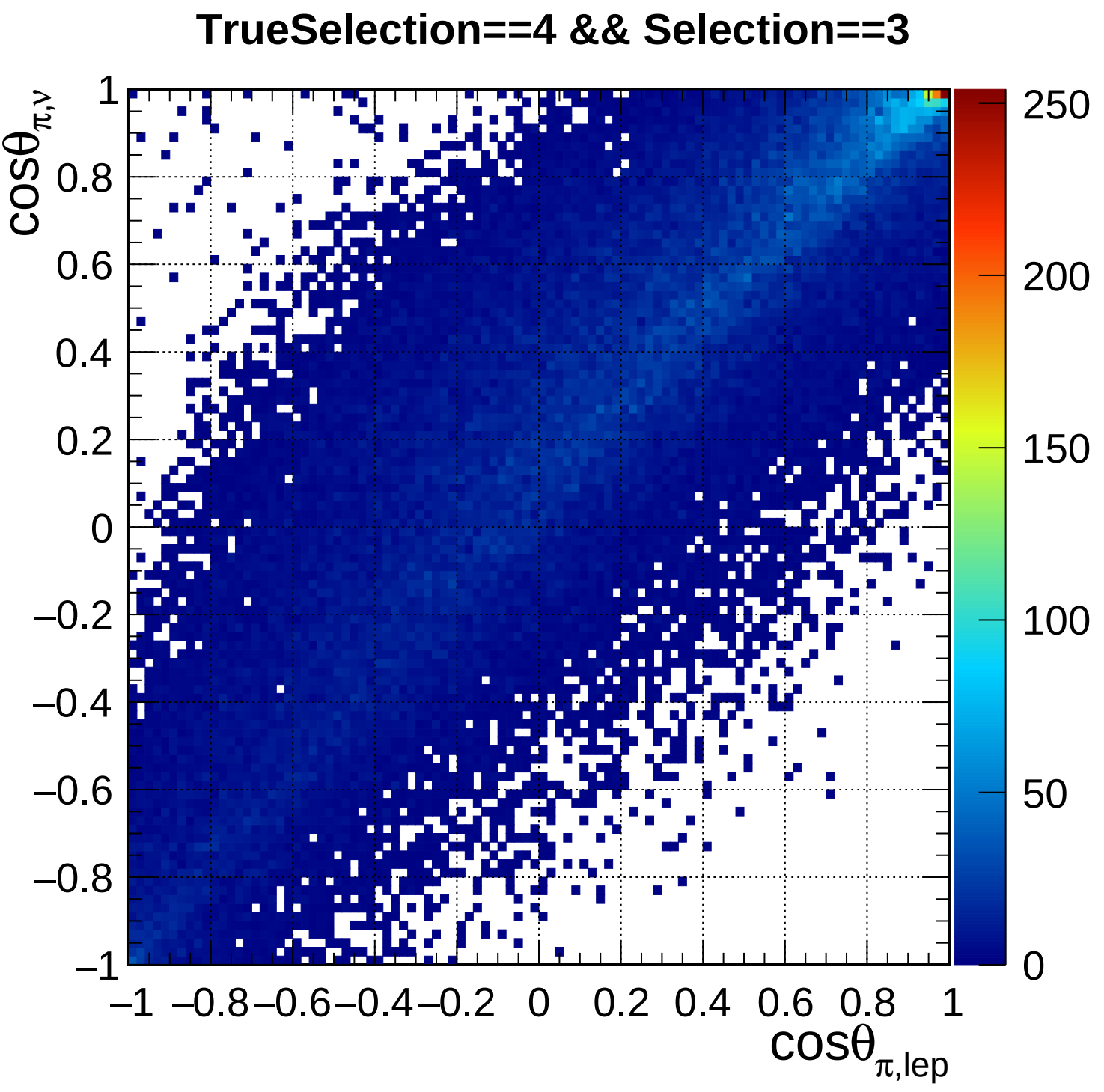

(TrueSelection==0 && Selection==63)/(TrueSelection==0)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

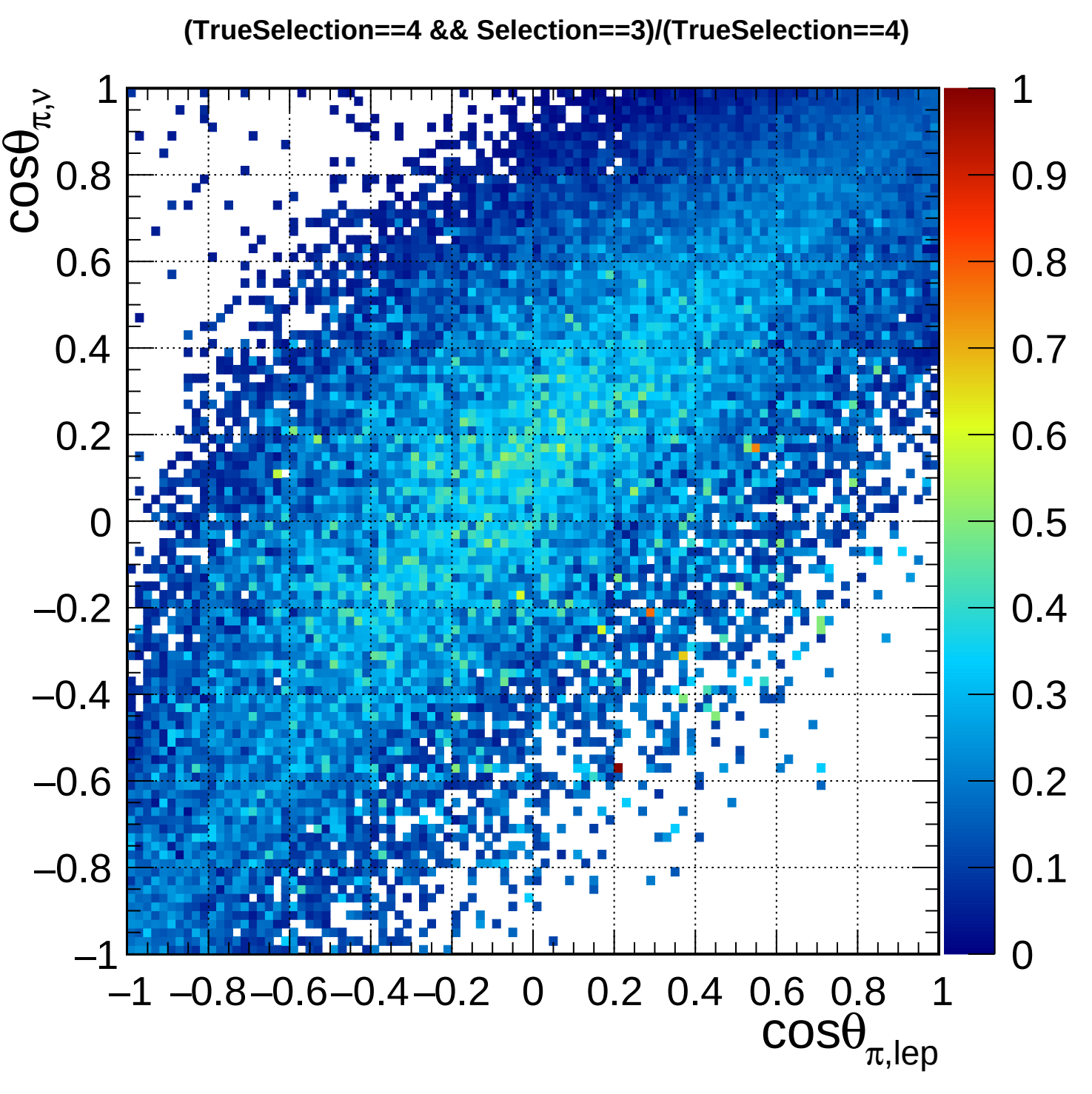

TrueSelection==0 && Selection>0
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
40
35
30
25
20
15
10
5
0

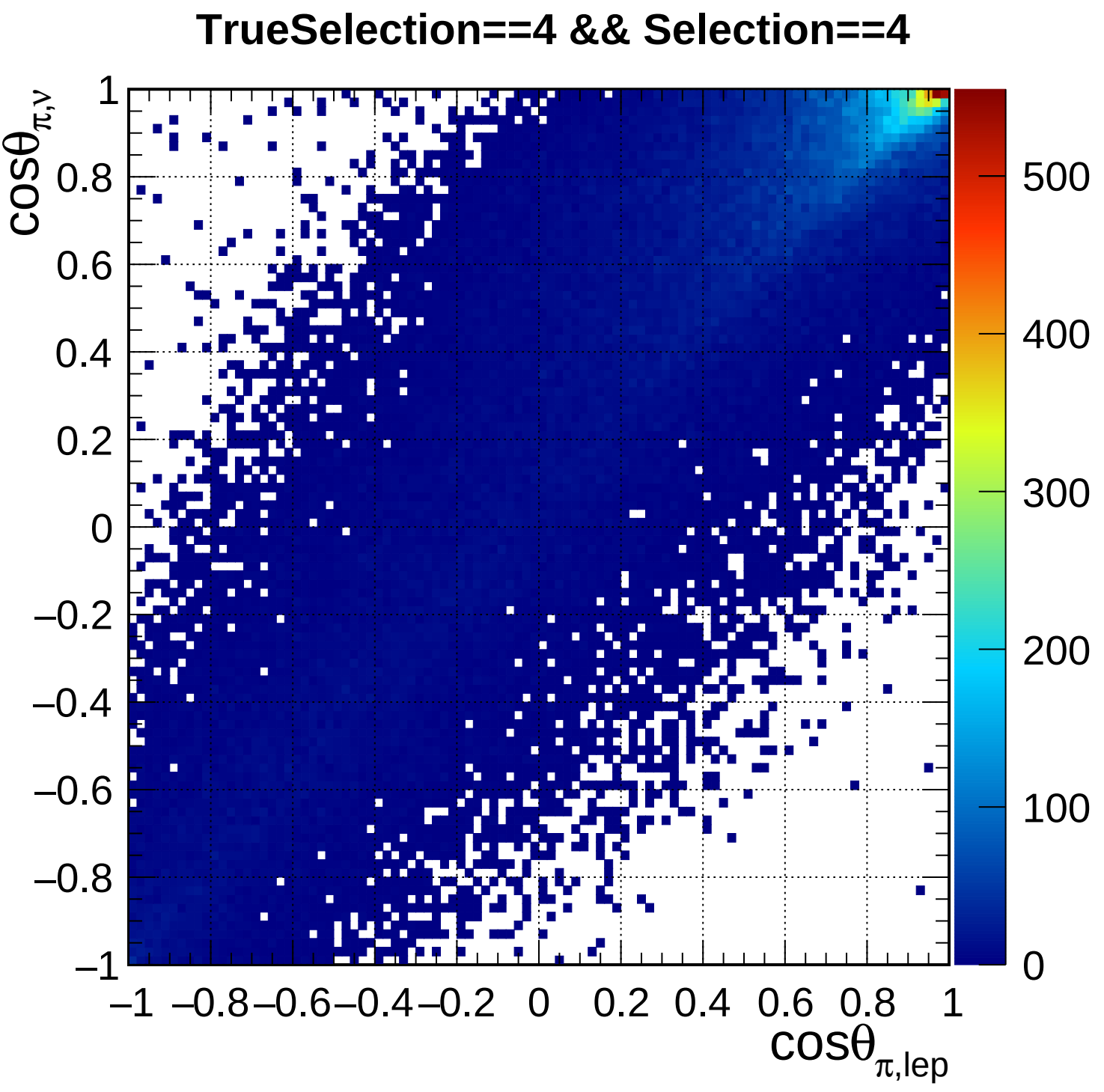

(TrueSelection==0 && Selection>0)/(TrueSelection==0)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

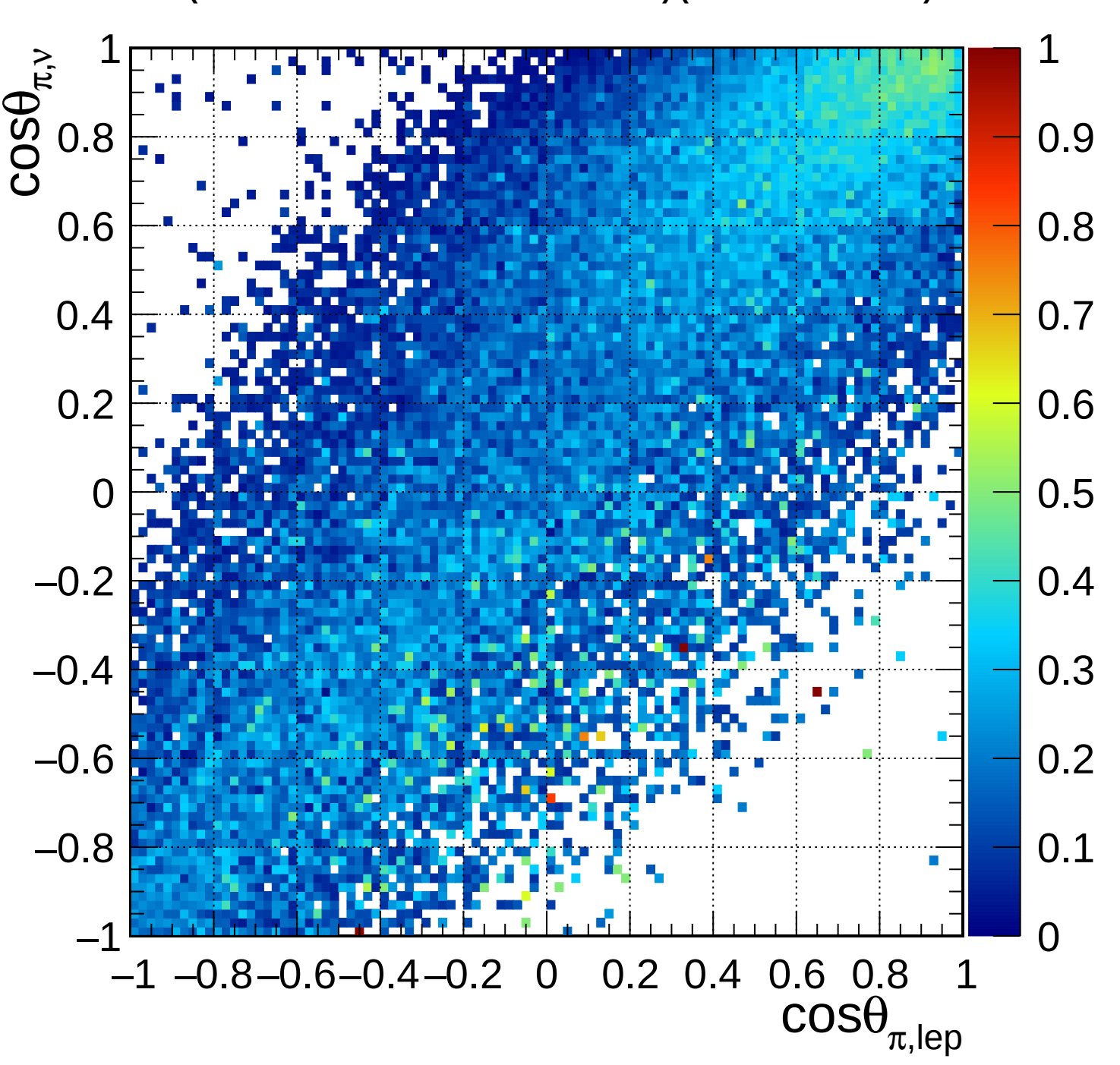

TrueSelection==4 && Selection<0
cosθπ,ν
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
–1 –0.8 –0.6 –0.4 –0.2 0 0.2 0.4 0.6 0.8 1
cosθπ,lep
500
400
300
200
100
0

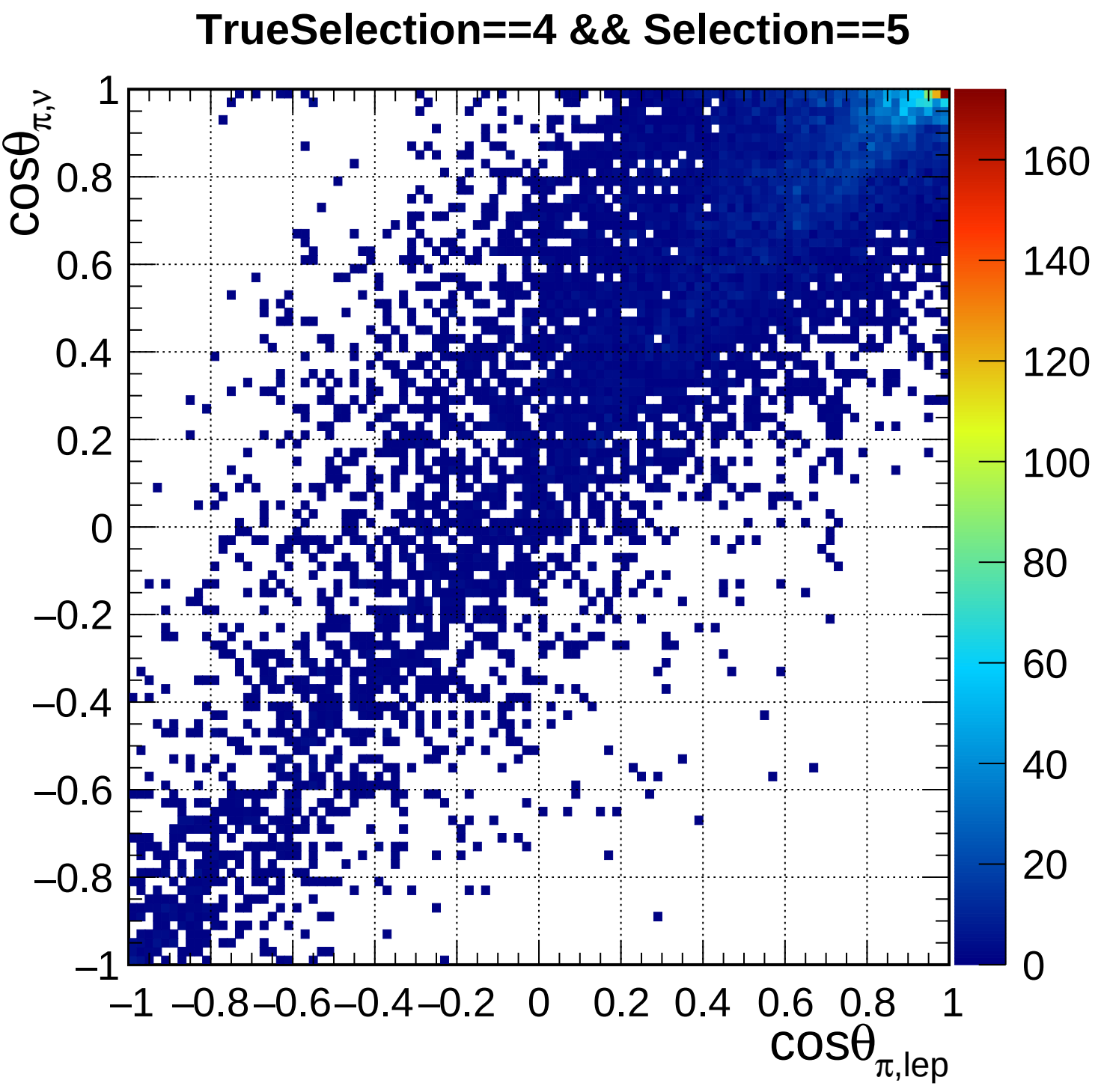

(TrueSelection==4 && Selection<0)/(TrueSelection==4)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

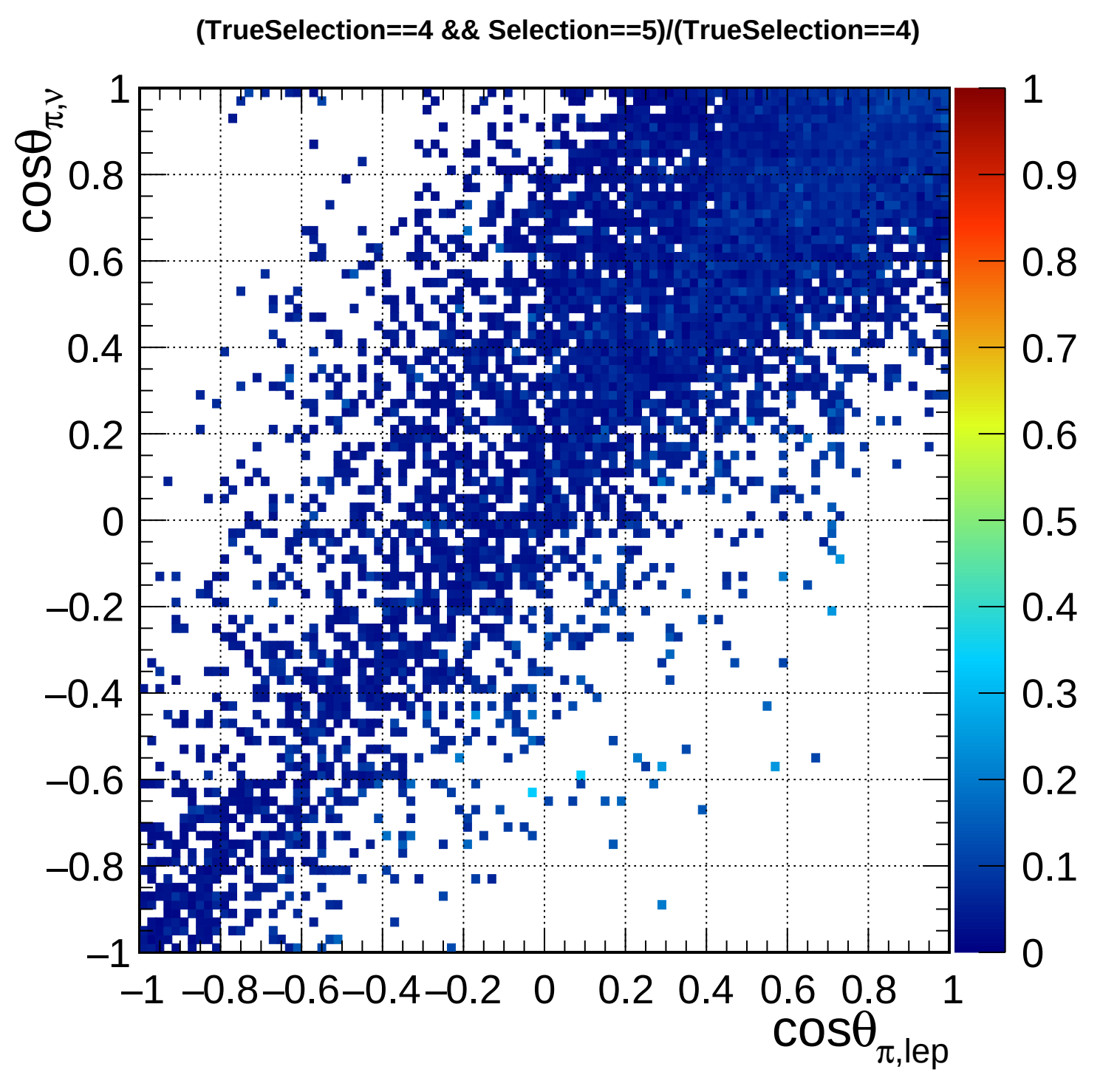

TrueSelection==4 && Selection==3
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
250
200
150
100
50
0

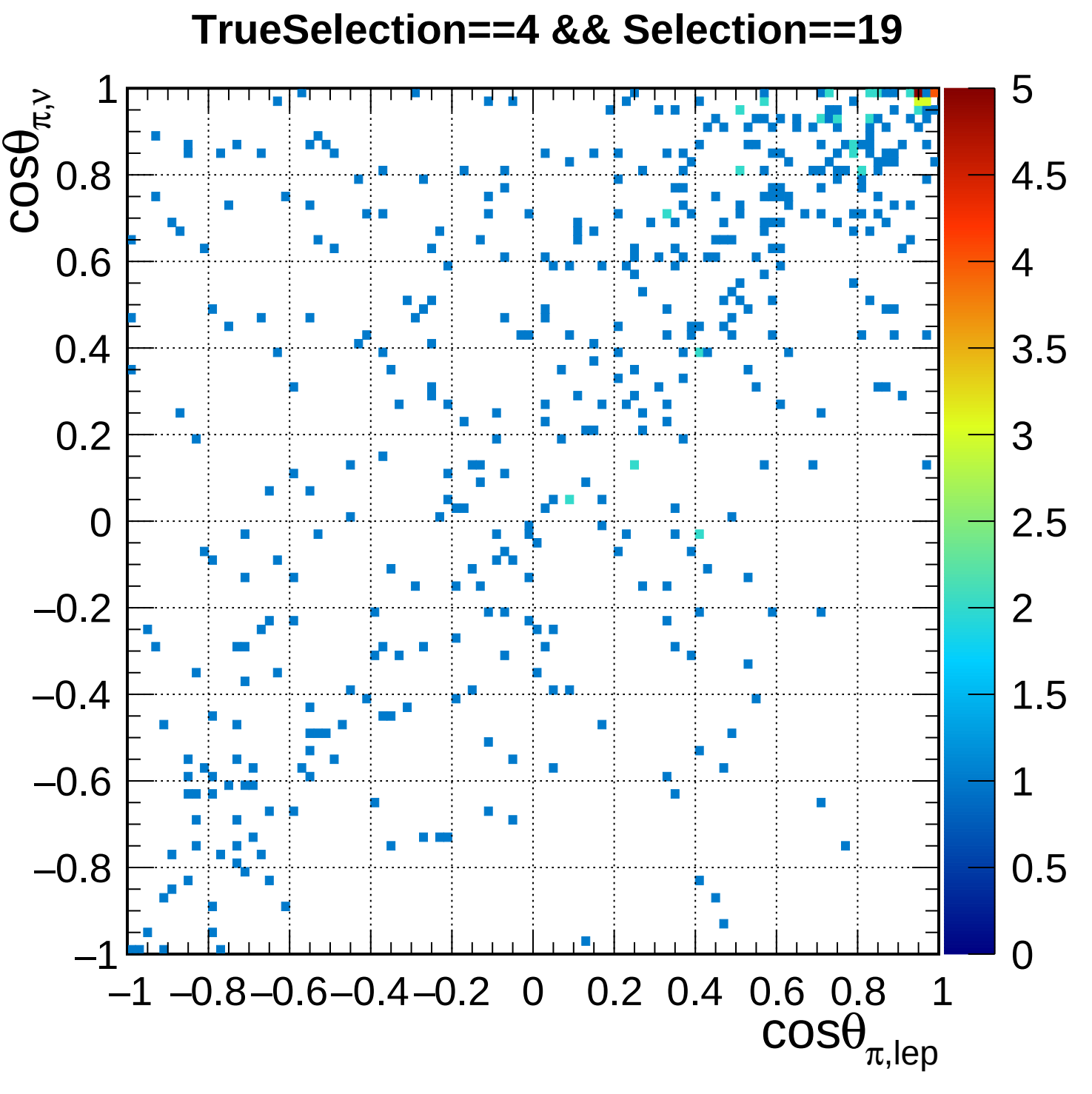

(TrueSelection==4 && Selection==3)/(TrueSelection==4)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

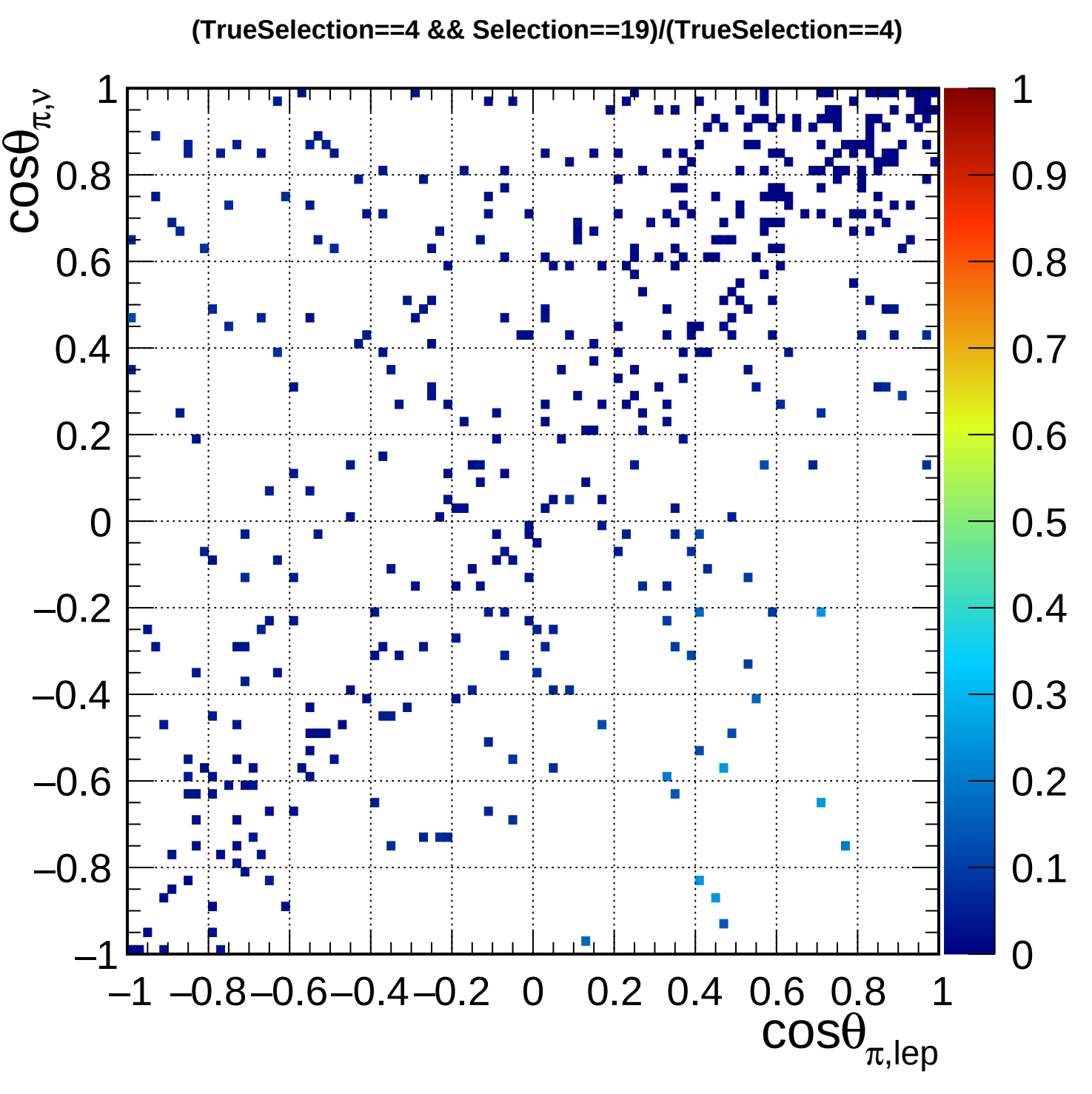

TrueSelection==4 && Selection==4
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
500
400
300
200
100
0

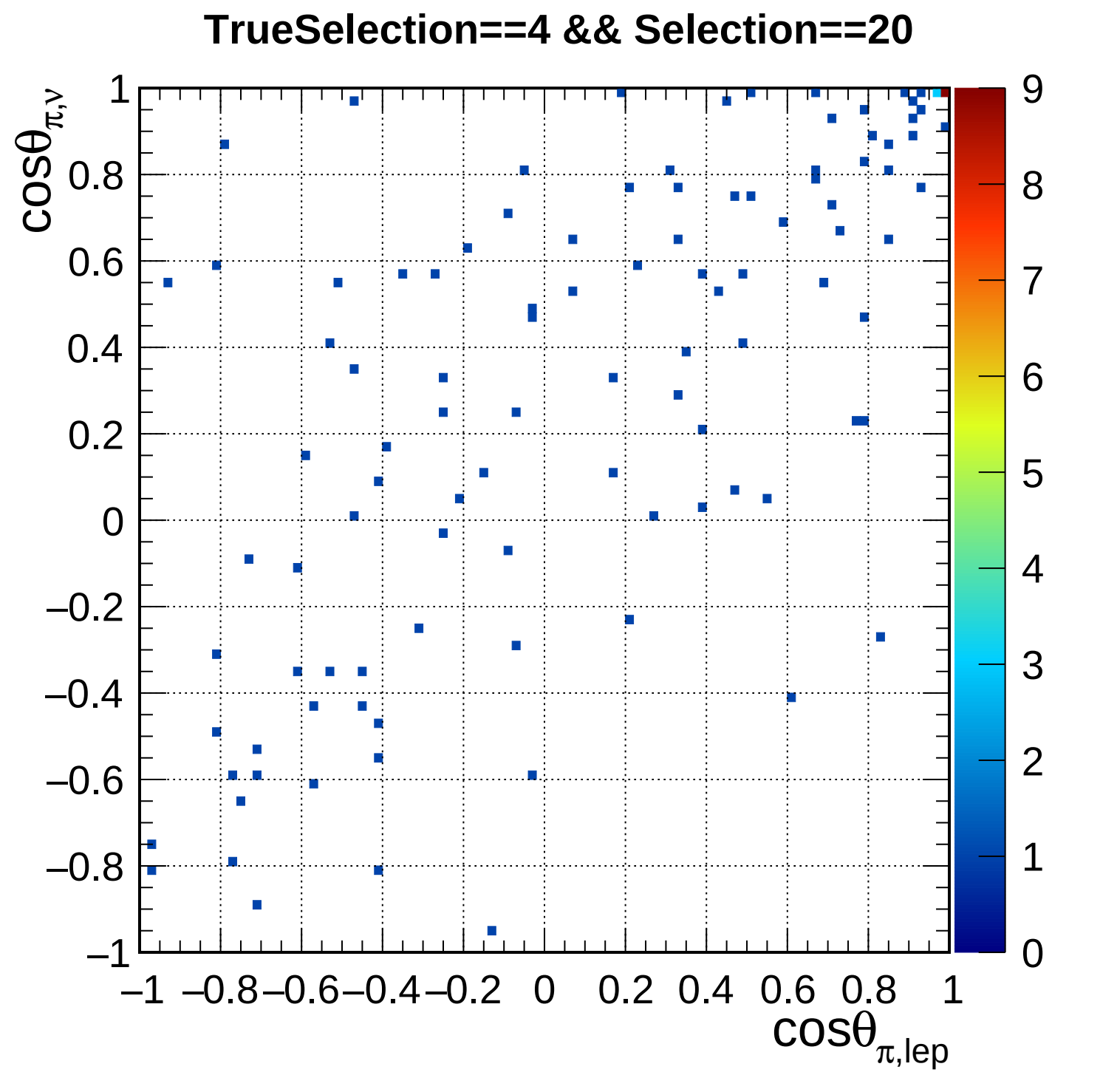

(TrueSelection==4 && Selection==4)/(TrueSelection==4)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

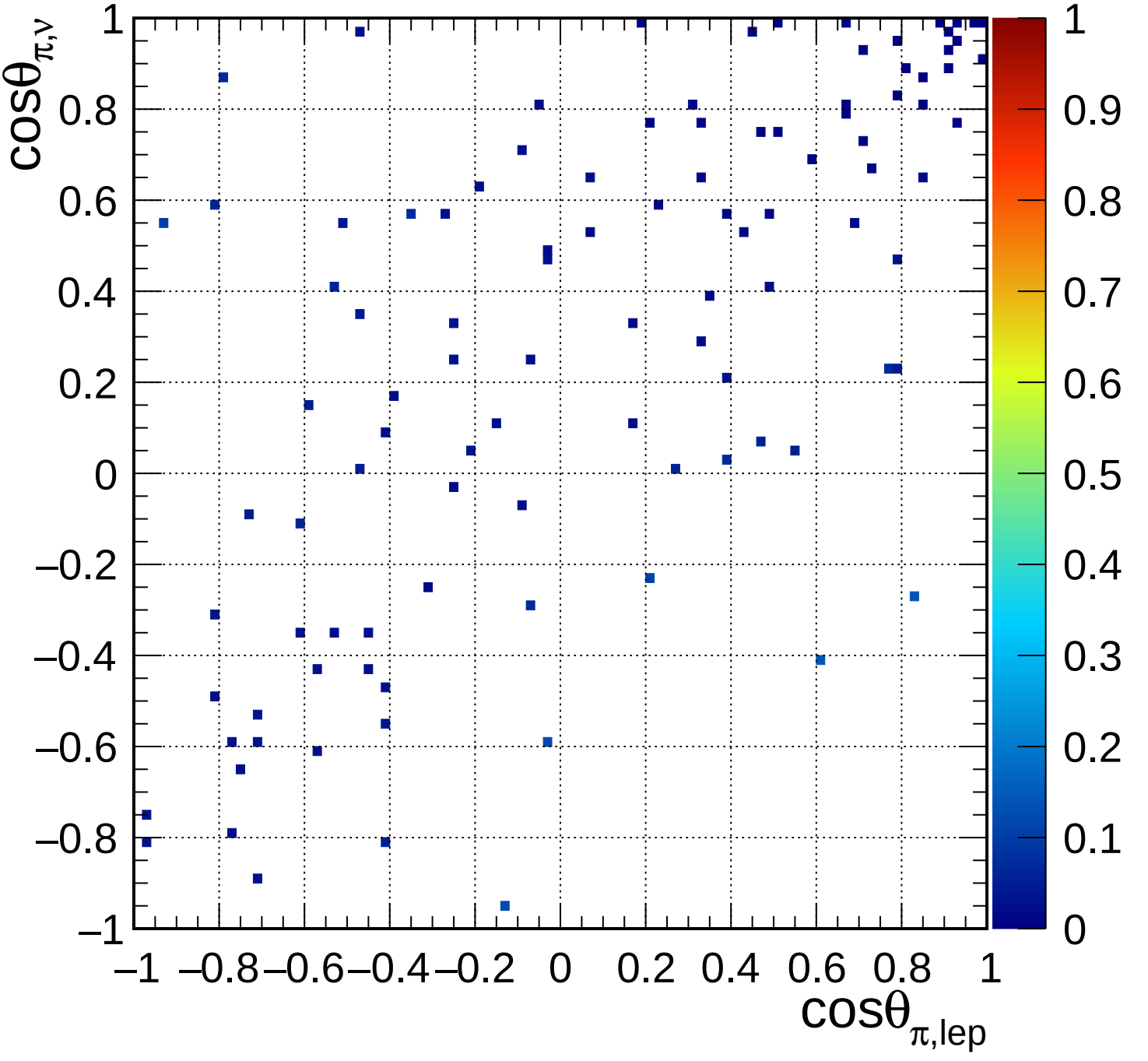

TrueSelection==4 && Selection==5
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
160
140
120
100
80
60
40
20
0

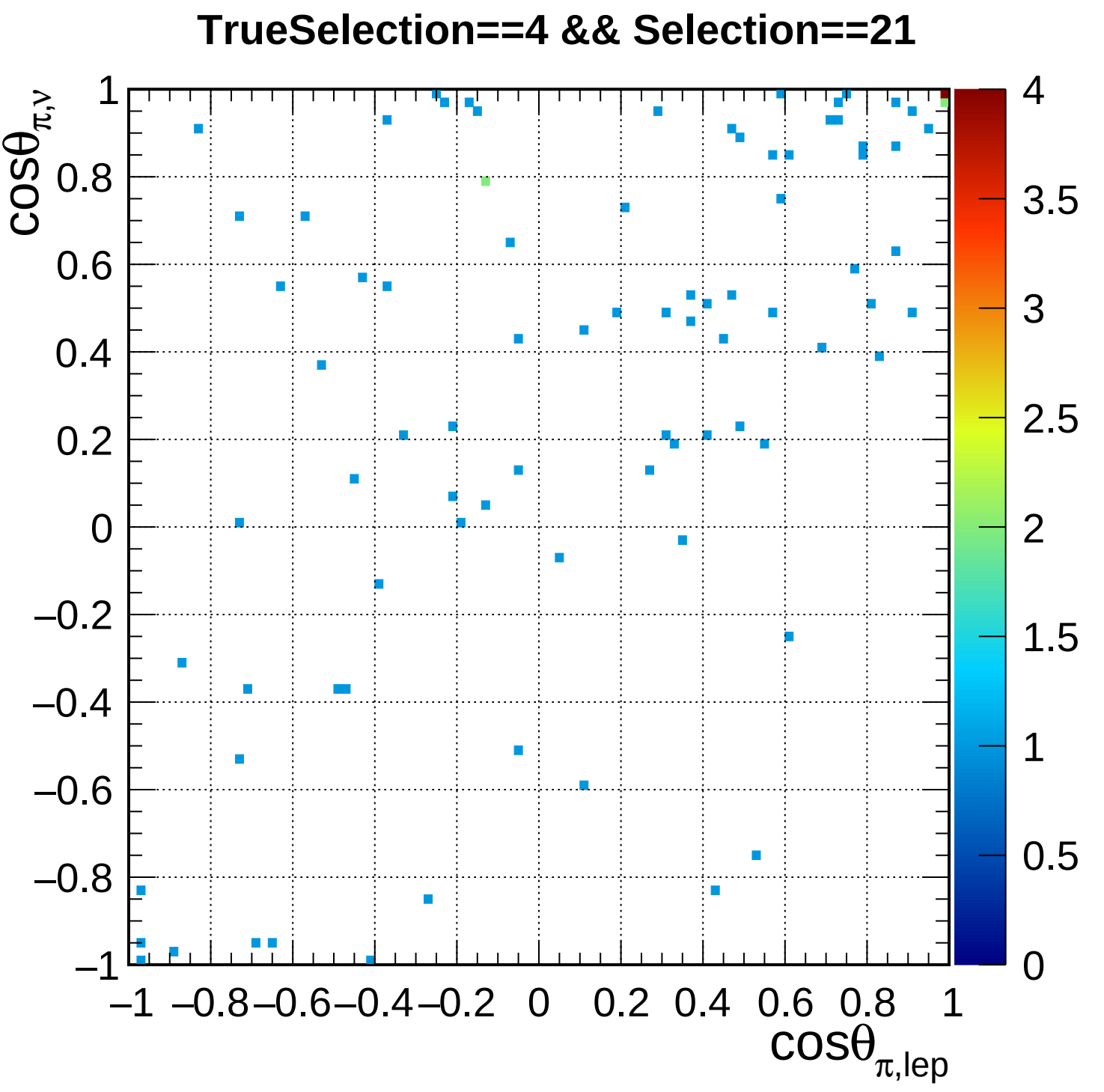

(TrueSelection==4 && Selection==5)/(TrueSelection==4)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

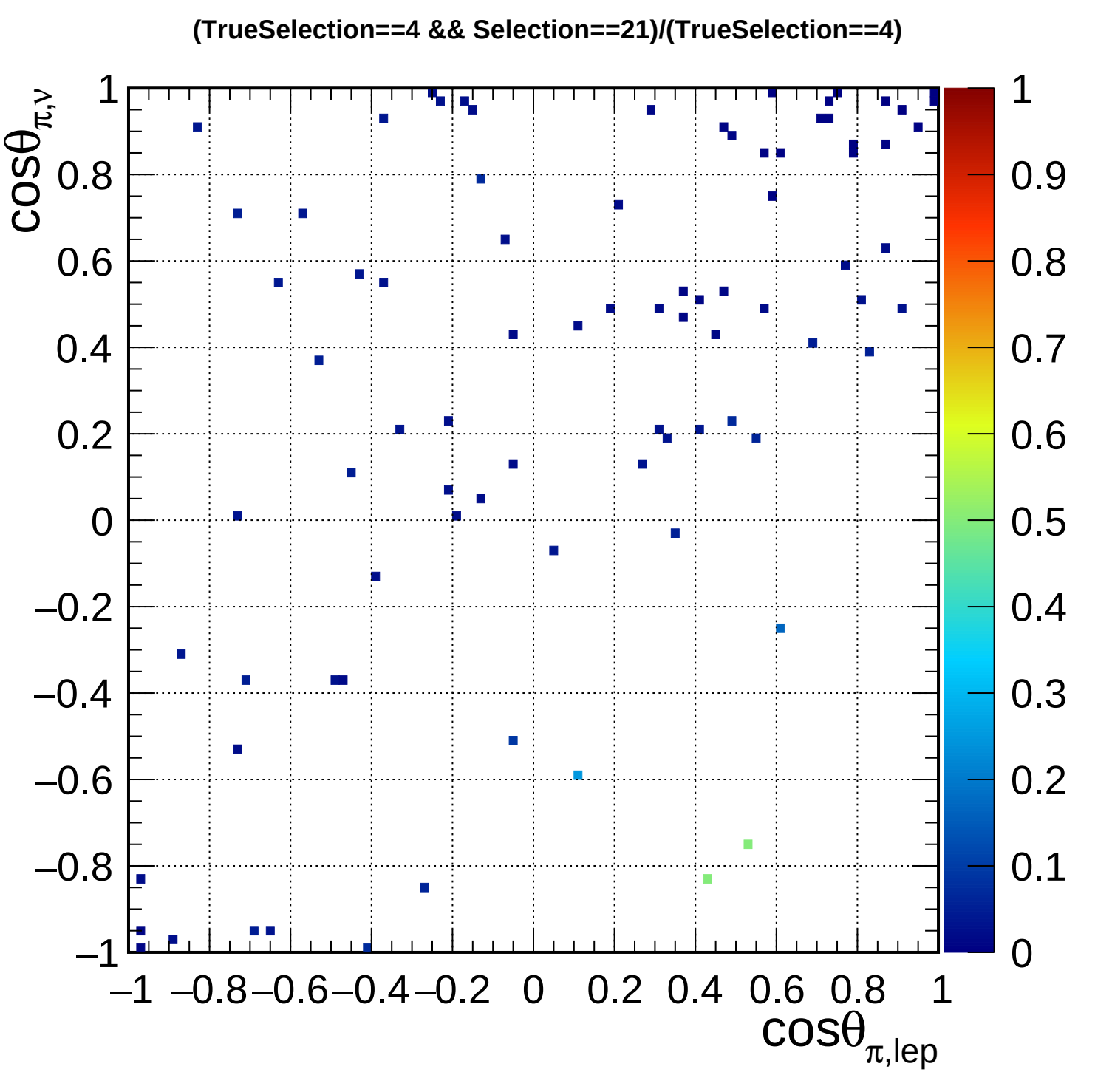

TrueSelection==4 && Selection==19
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0

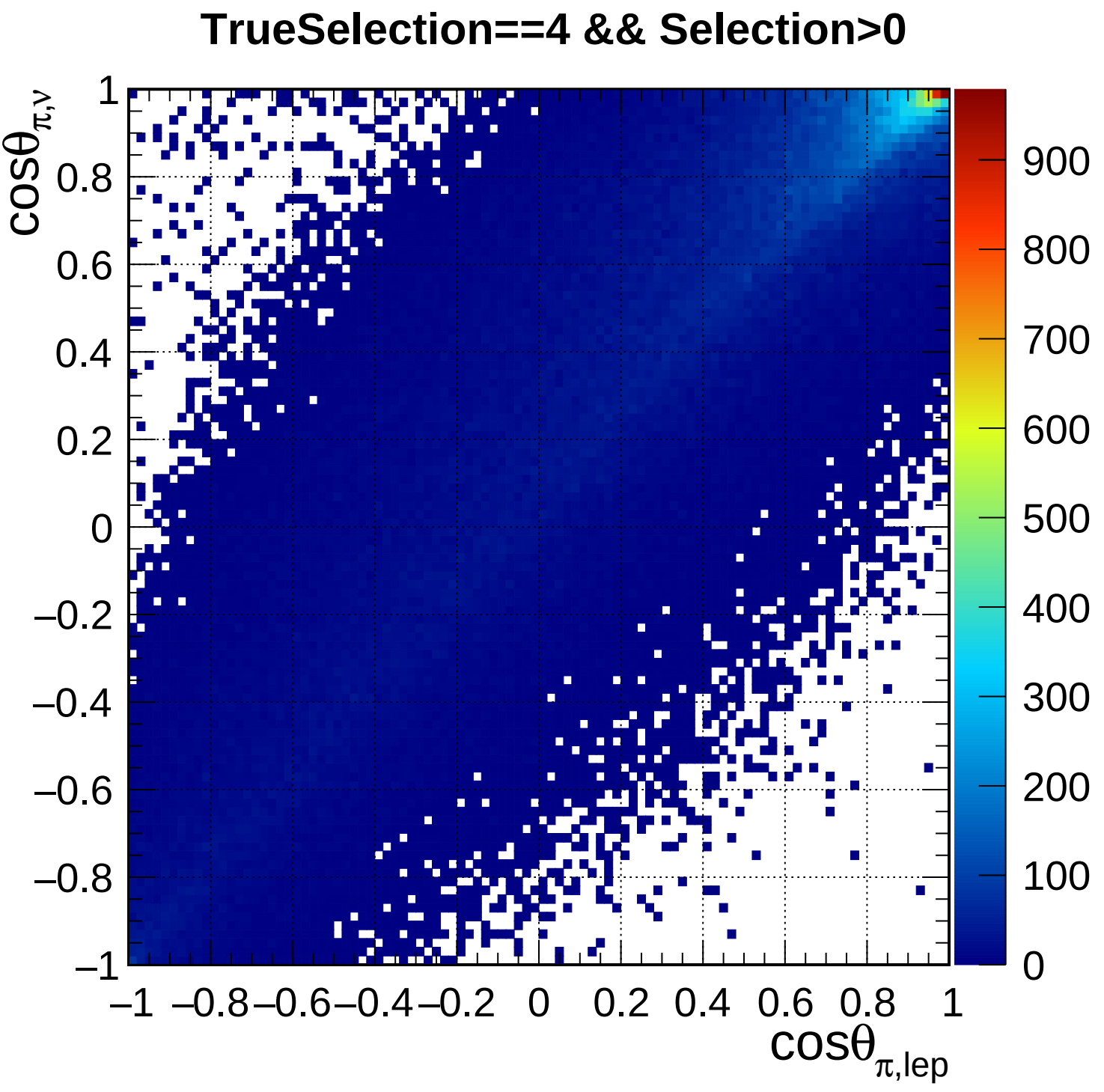

(TrueSelection==4 && Selection==19)/(TrueSelection==4)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

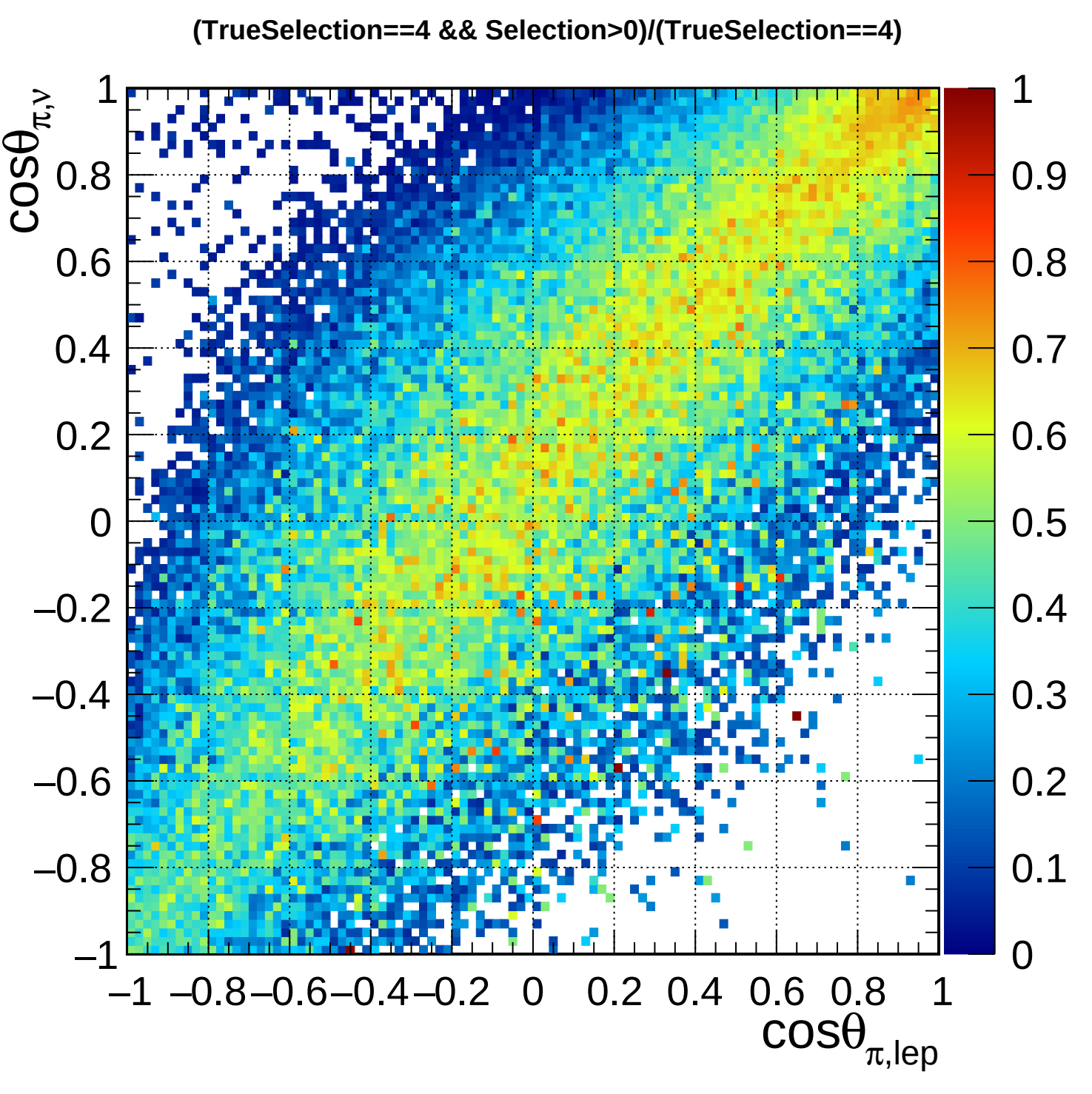

TrueSelection==4 && Selection==20
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
9
8
7
6
5
4
3
2
1
0

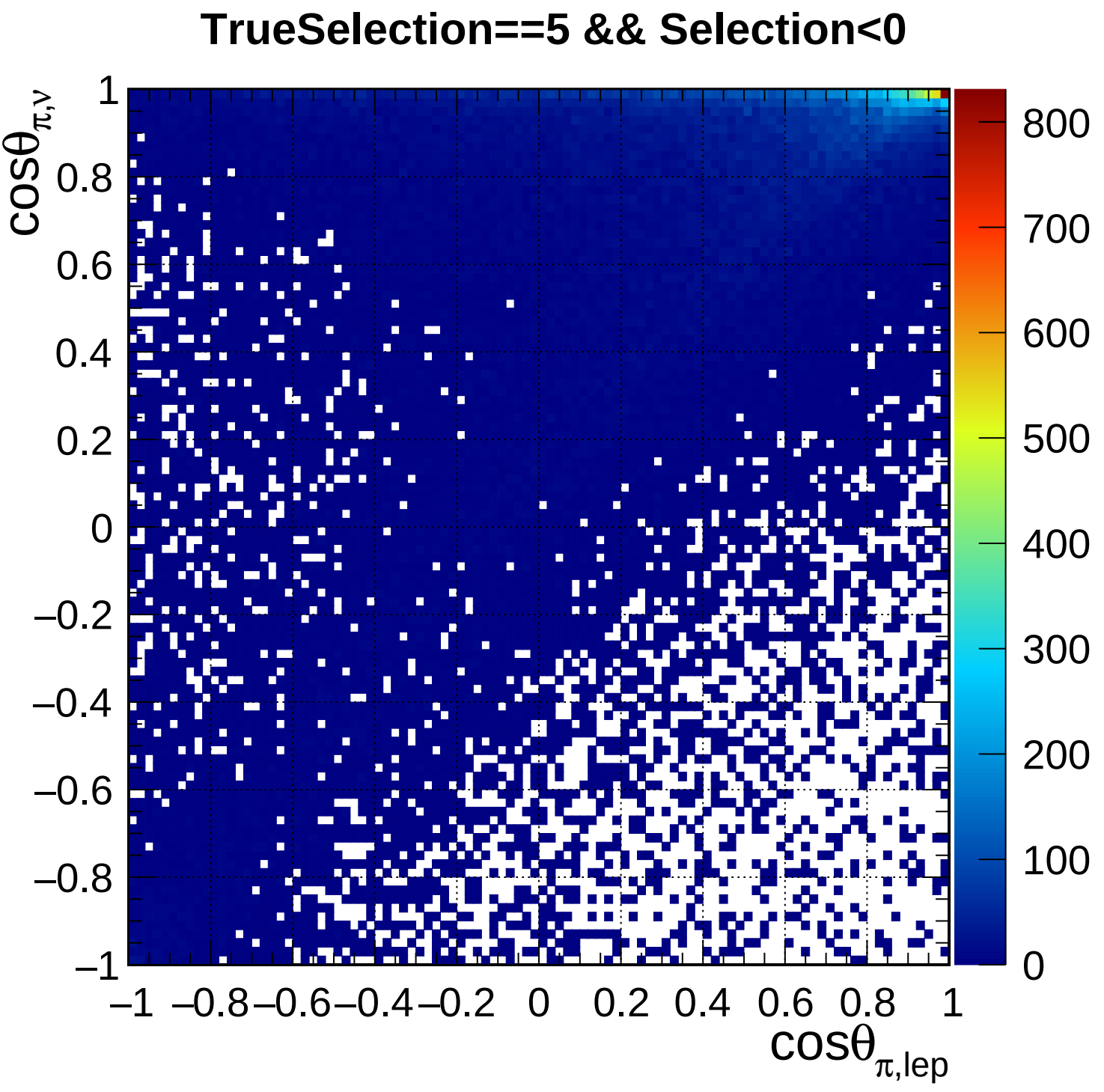

(TrueSelection==4 && Selection==20)/(TrueSelection==4)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

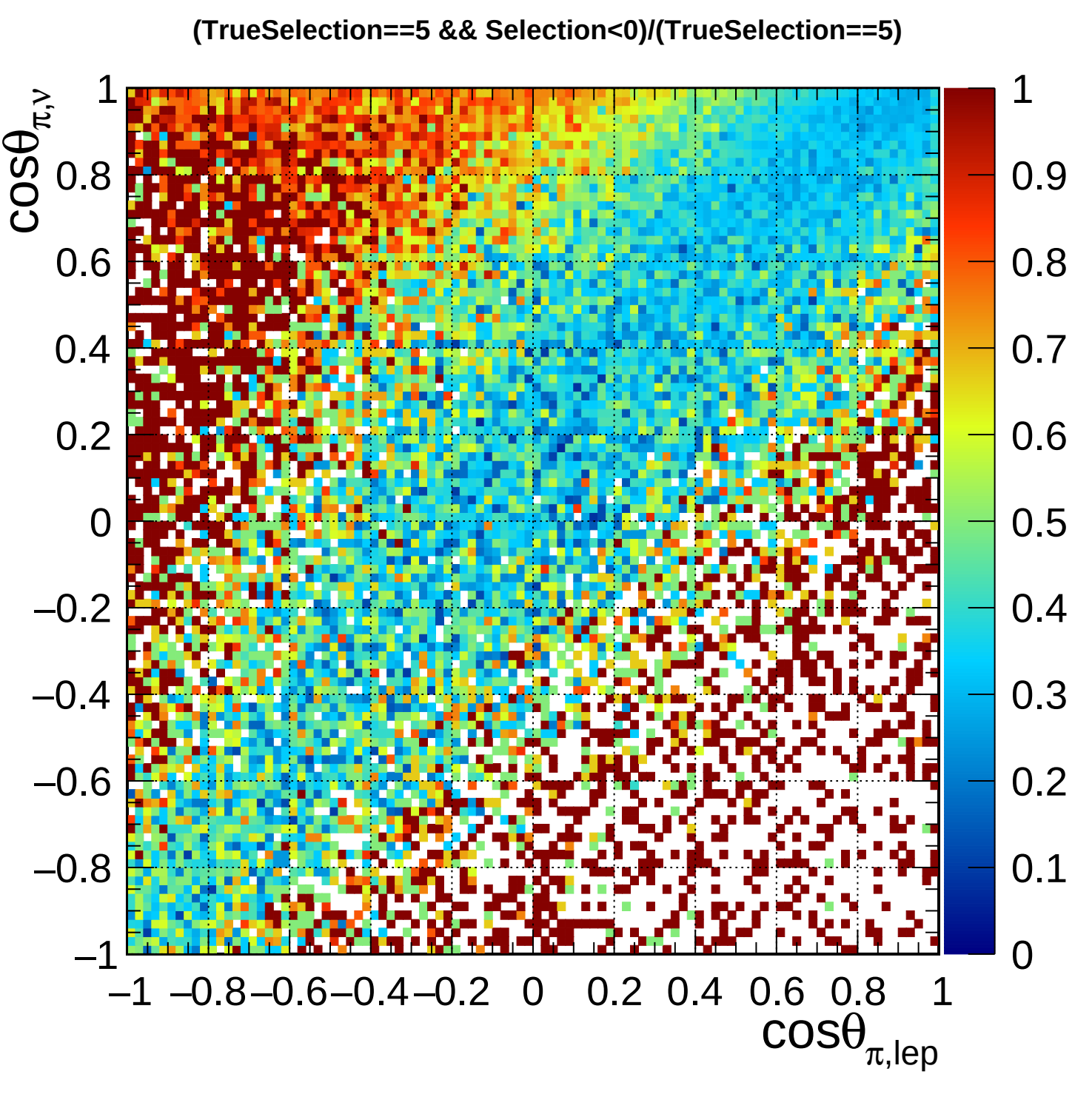

TrueSelection==4 && Selection==21
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
4
3.5
3
2.5
2
1.5
1
0.5
0

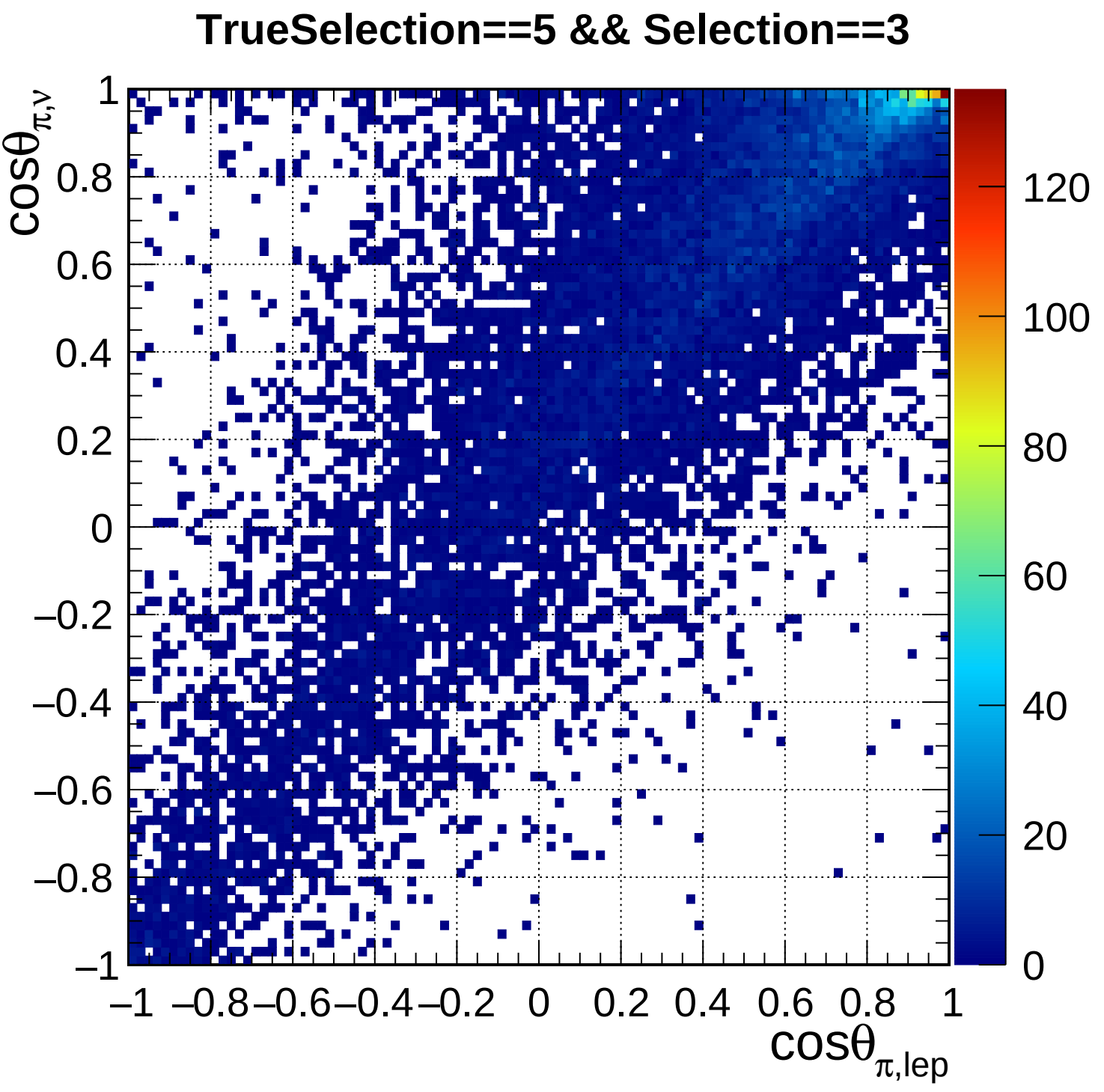

(TrueSelection==4 && Selection==21)/(TrueSelection==4)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

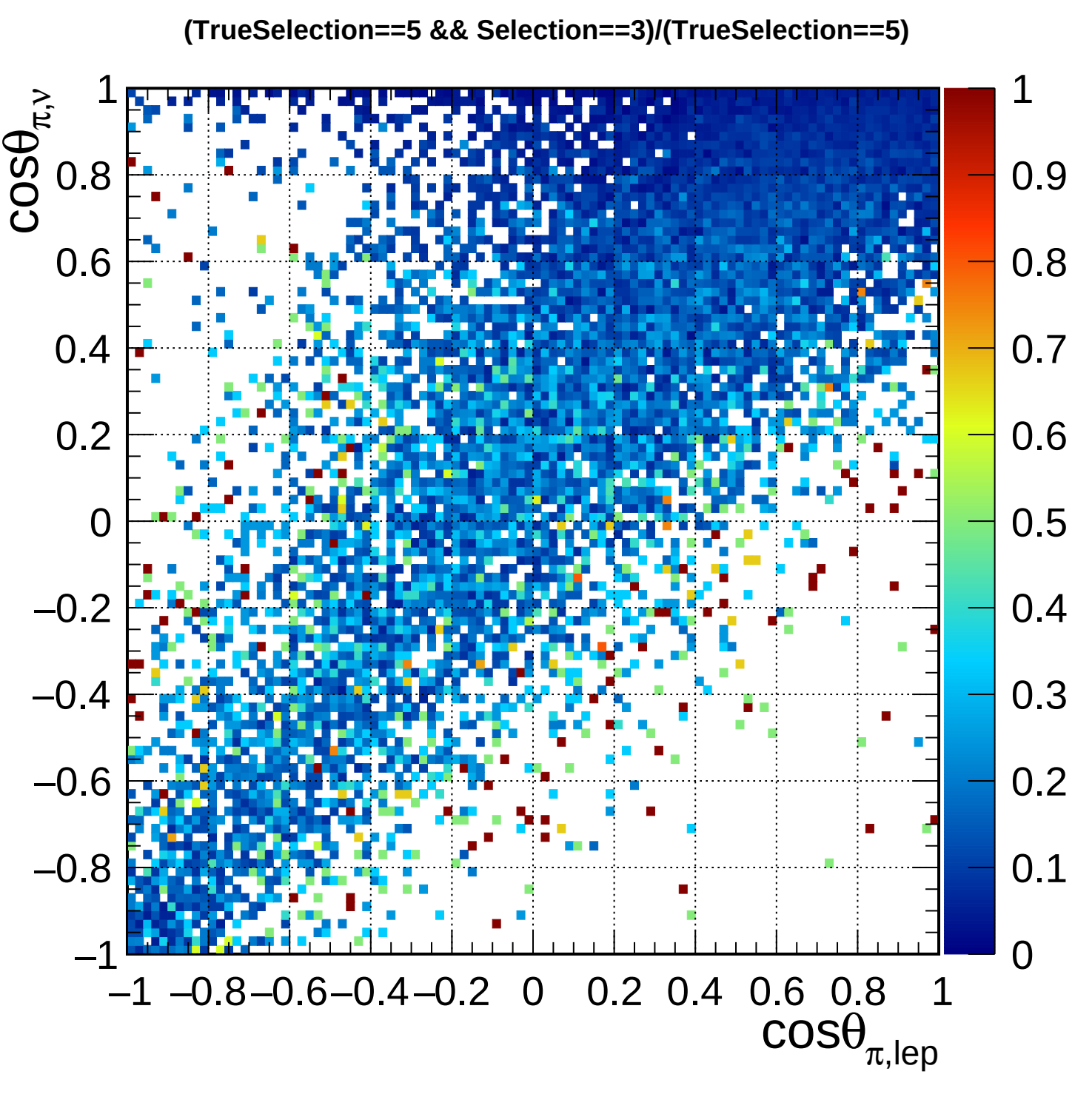

TrueSelection==4 && Selection>0
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
900
800
700
600
500
400
300
200
100
0

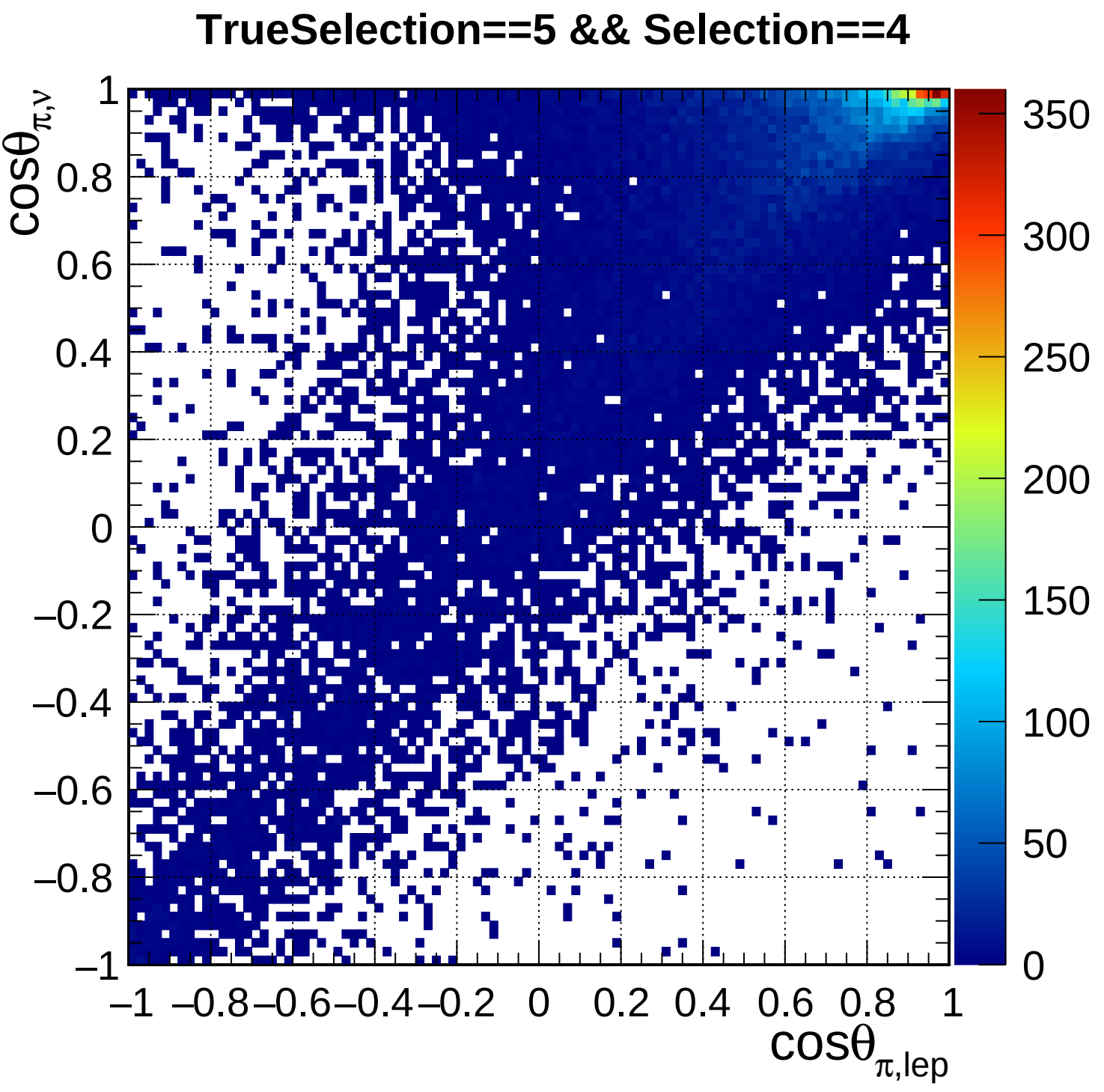

(TrueSelection==4 && Selection>0)/(TrueSelection==4)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

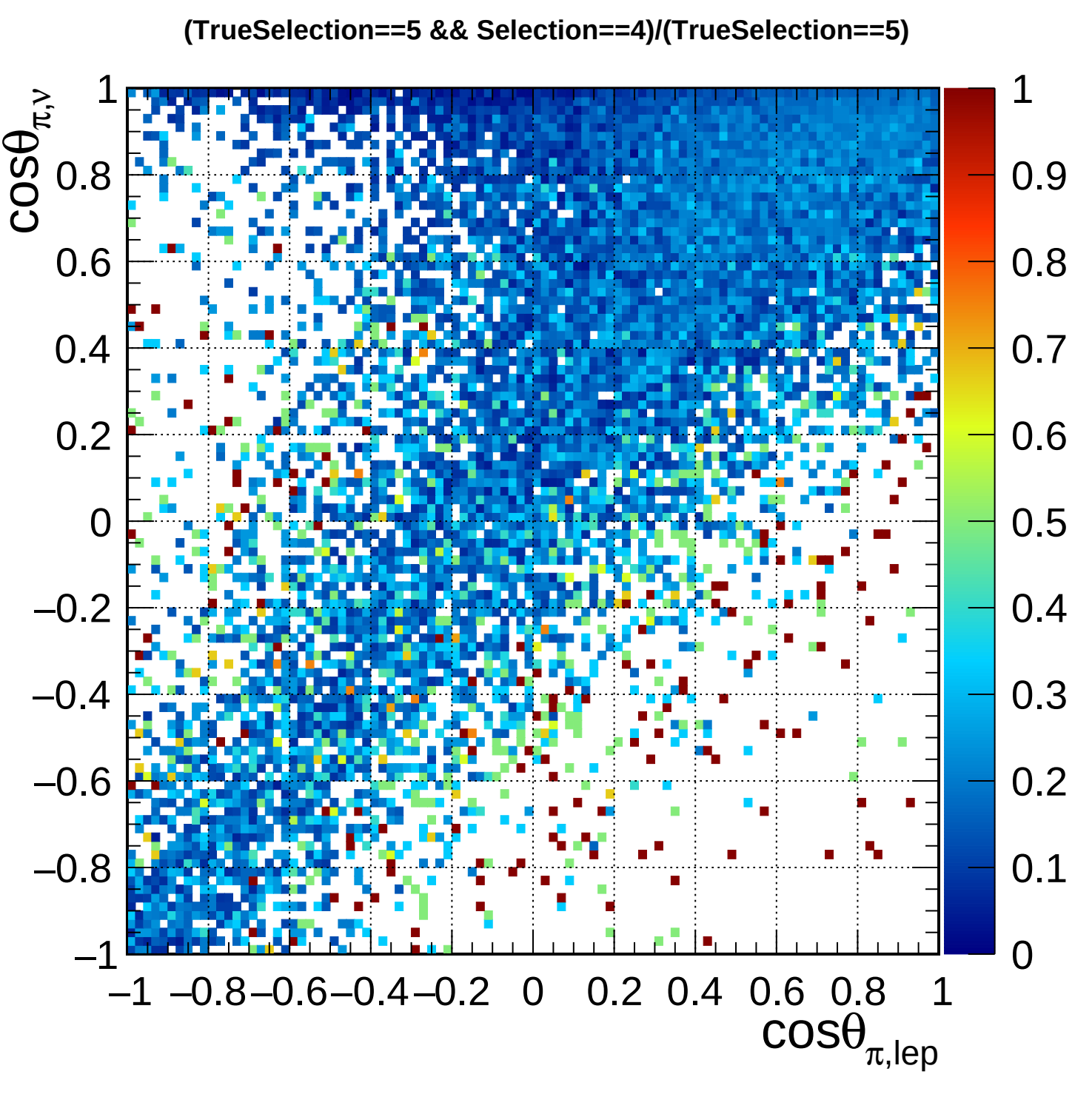

TrueSelection==5 && Selection<0
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
800
700
600
500
400
300
200
100
0

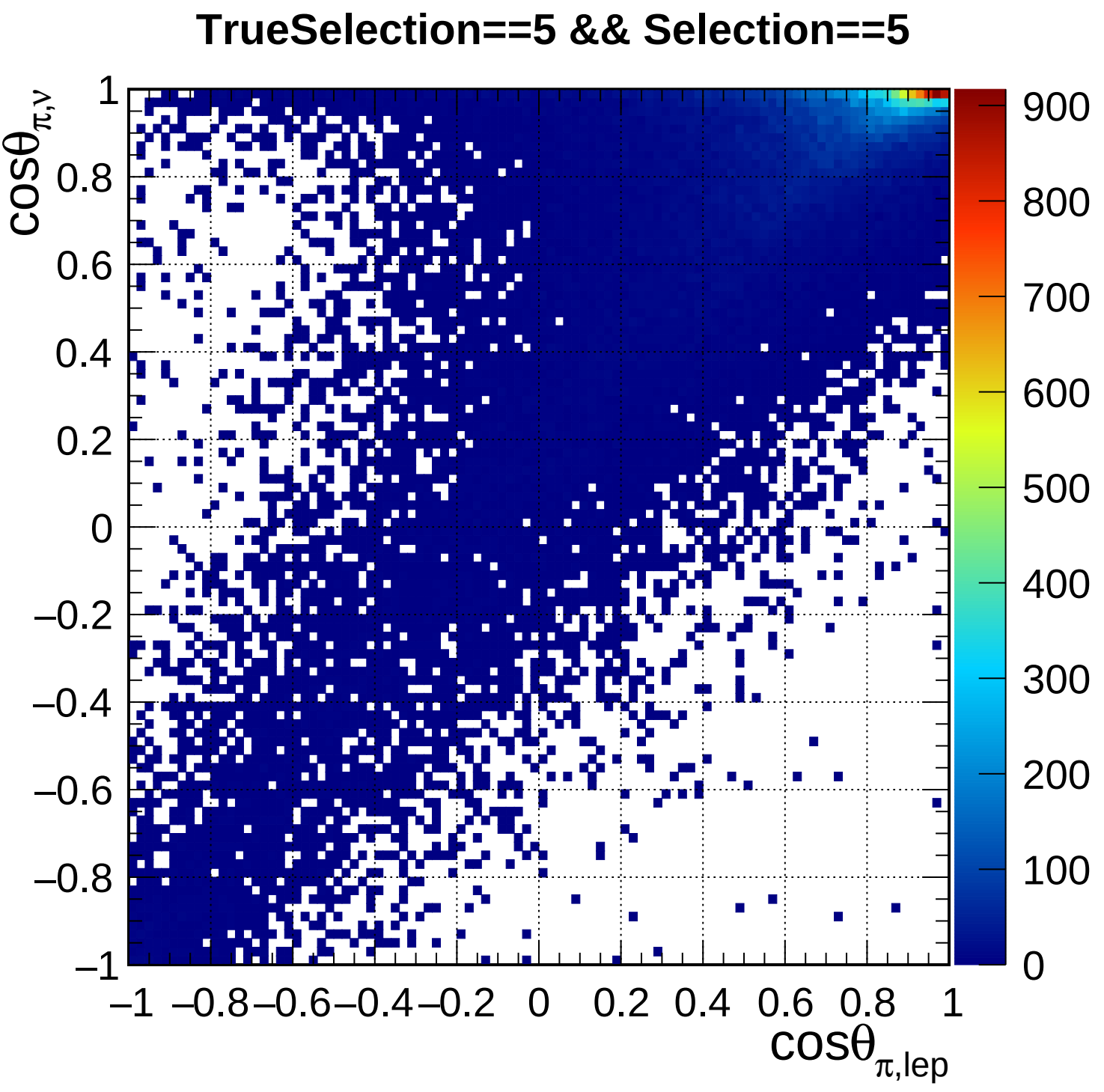

(TrueSelection==5 && Selection<0)/(TrueSelection==5)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

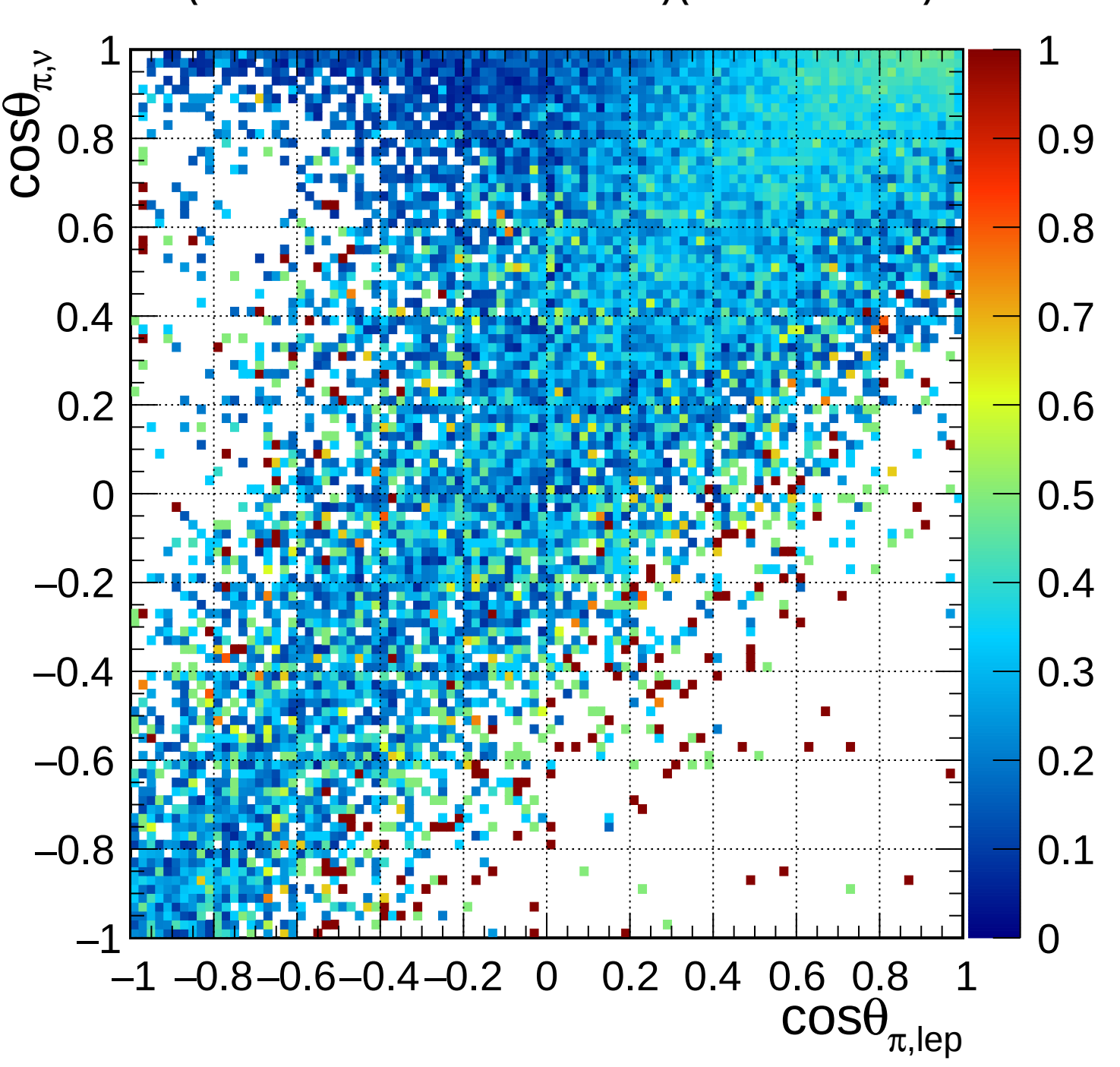

TrueSelection==5 && Selection==3
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
120
100
80
60
40
20
0

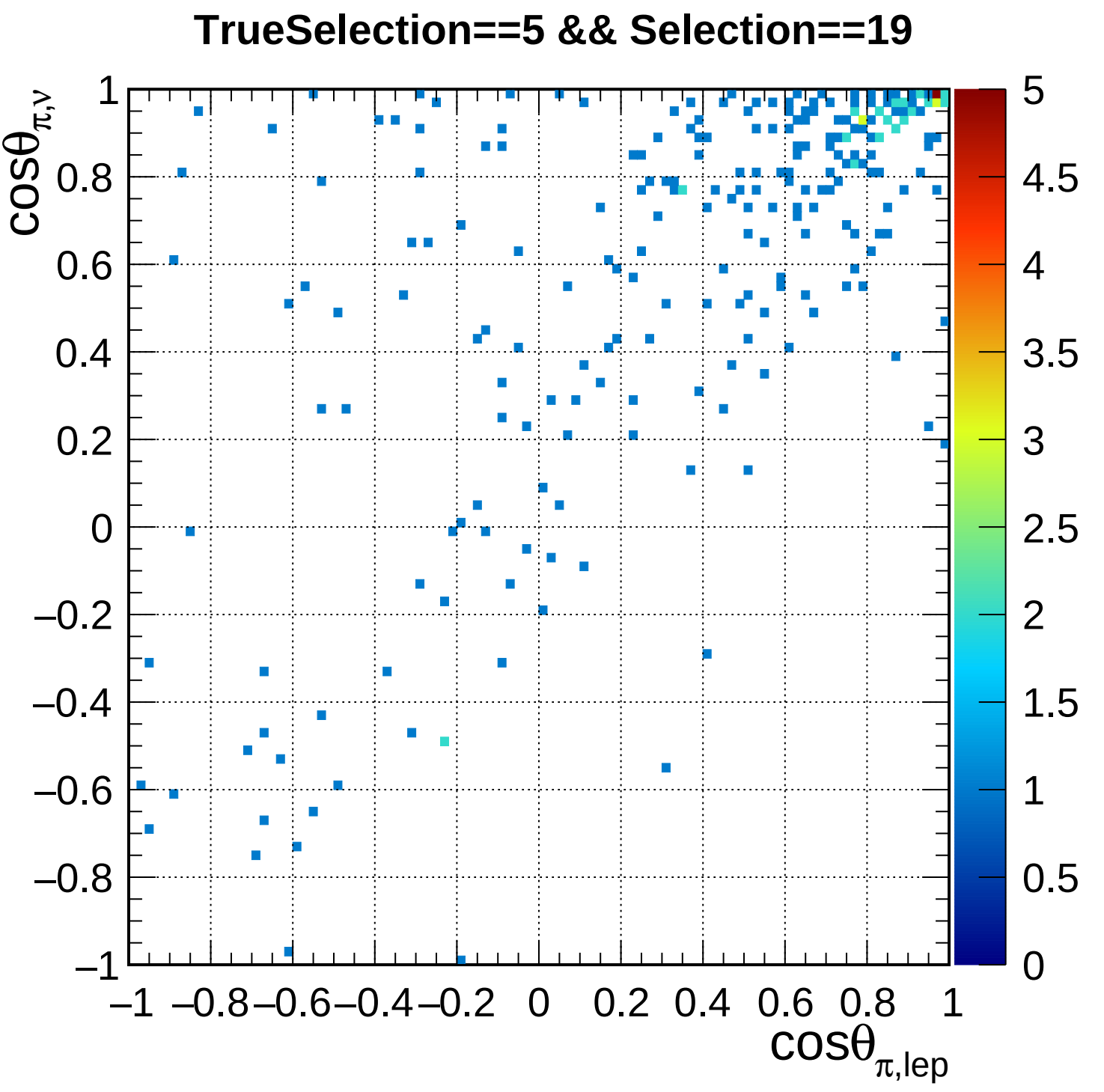

(TrueSelection==5 && Selection==3)/(TrueSelection==5)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

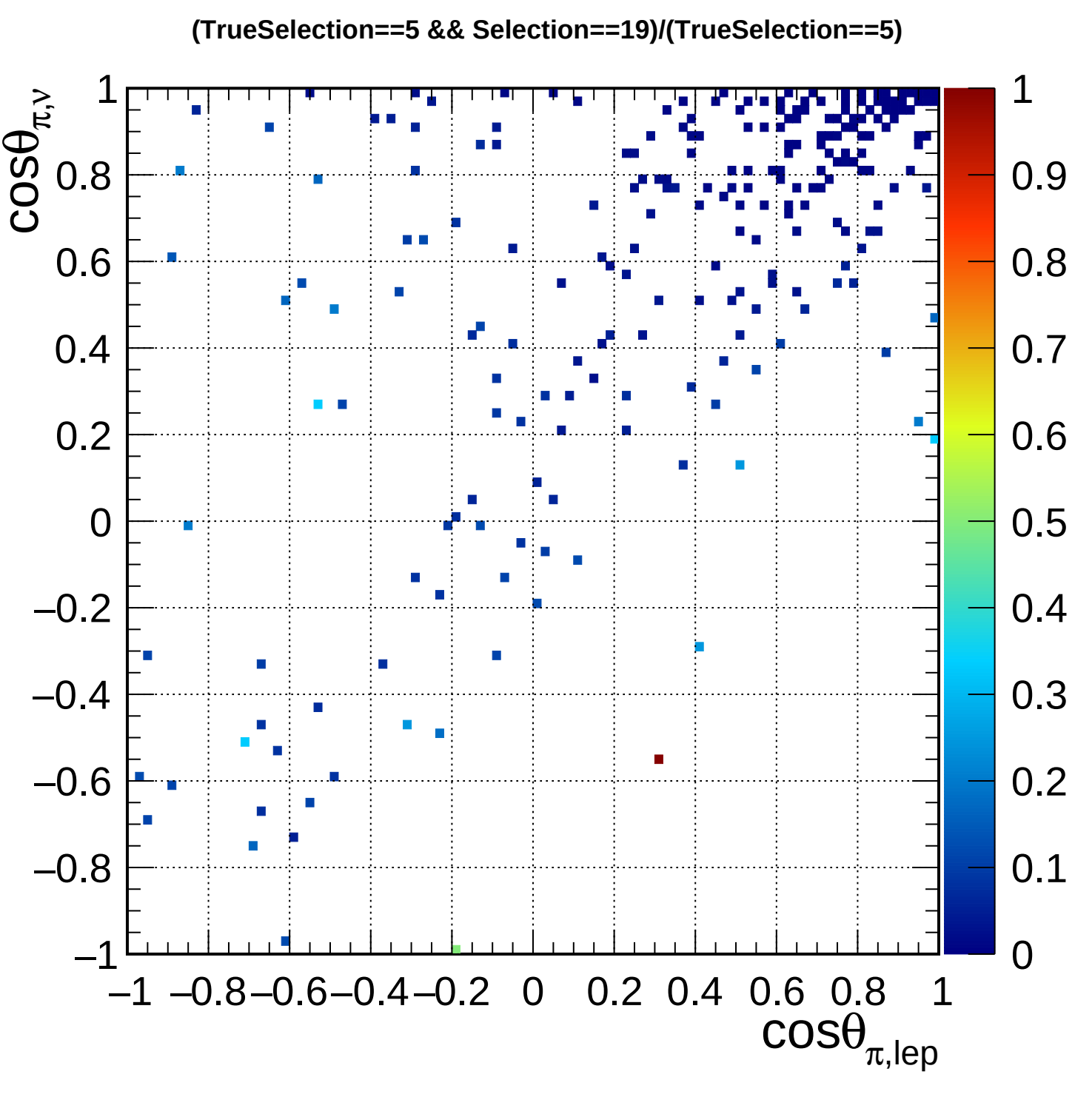

TrueSelection==5 && Selection==4
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
350
300
250
200
150
100
50
0

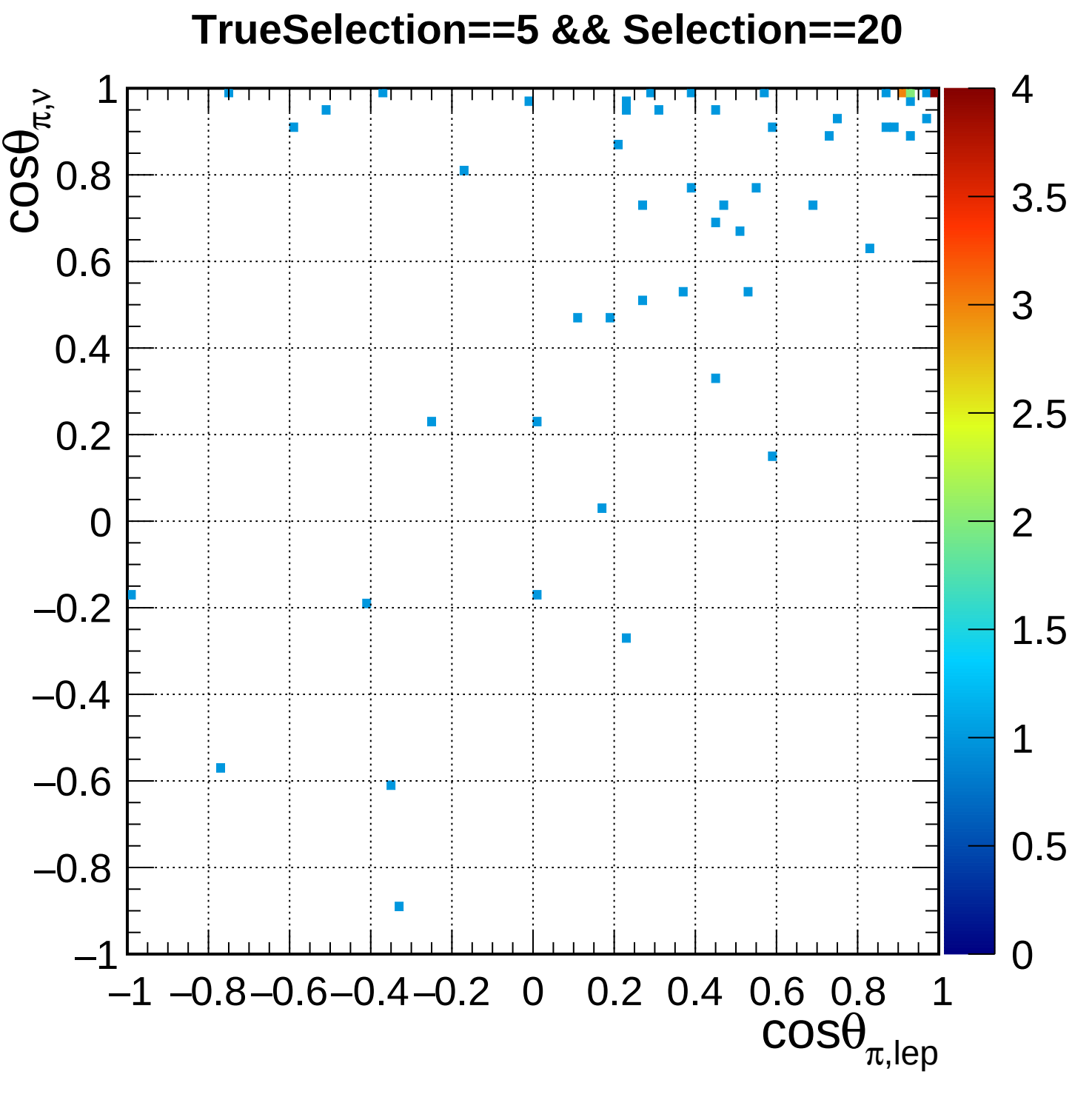

(TrueSelection==5 && Selection==4)/(TrueSelection==5)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

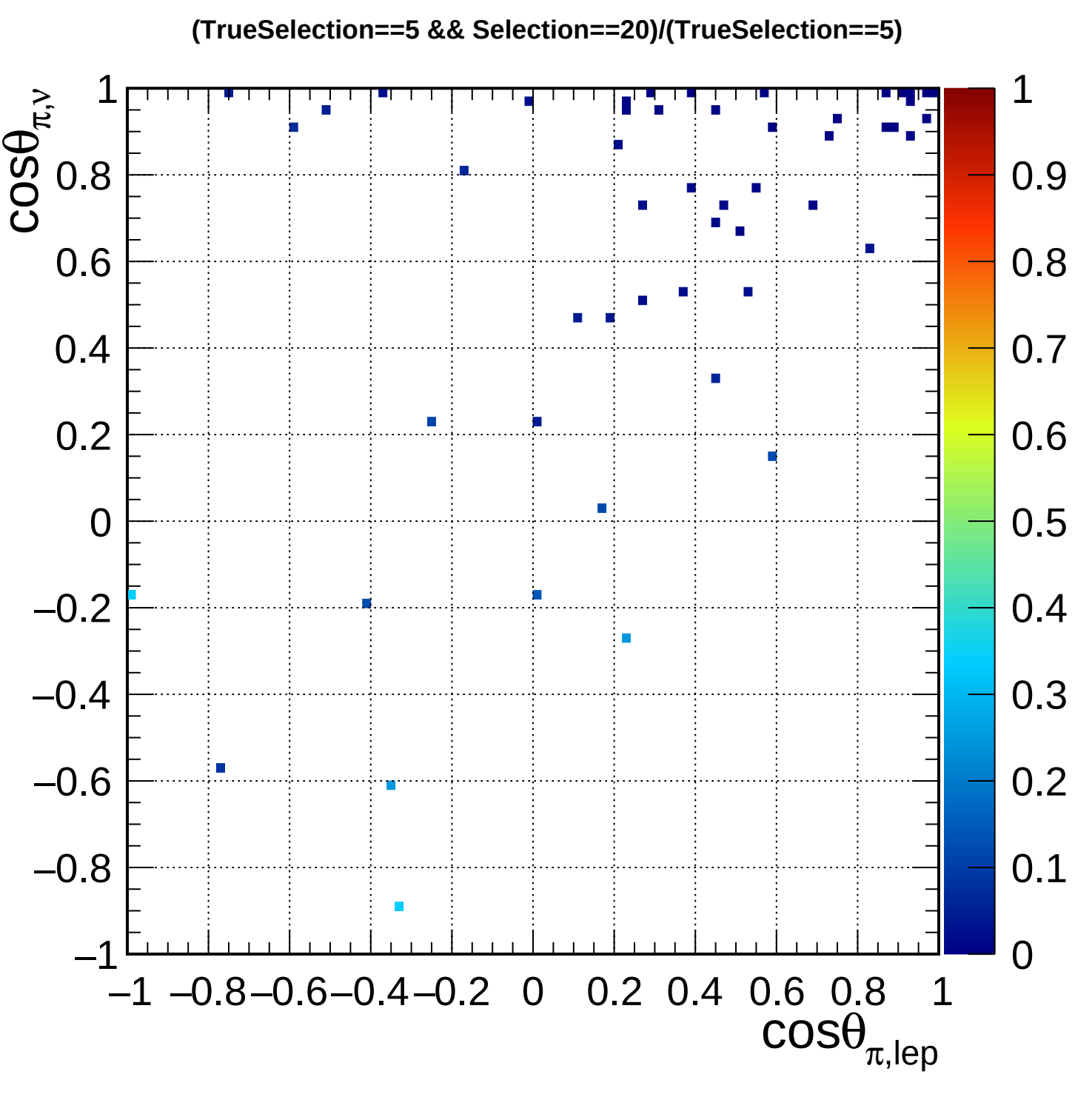

TrueSelection==5 && Selection==5
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
900
800
700
600
500
400
300
200
100
0

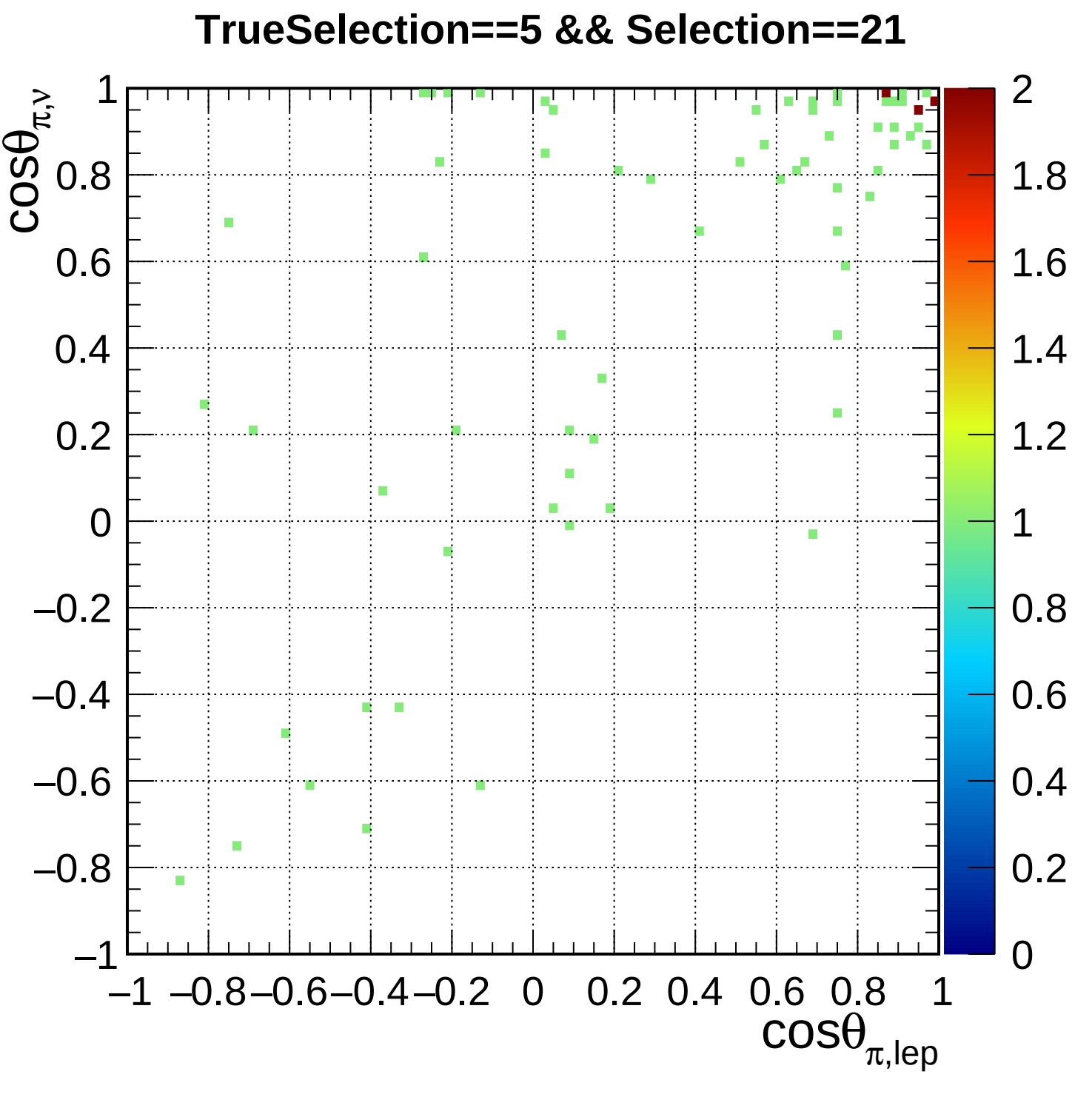

(TrueSelection==5 && Selection==5)/(TrueSelection==5)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

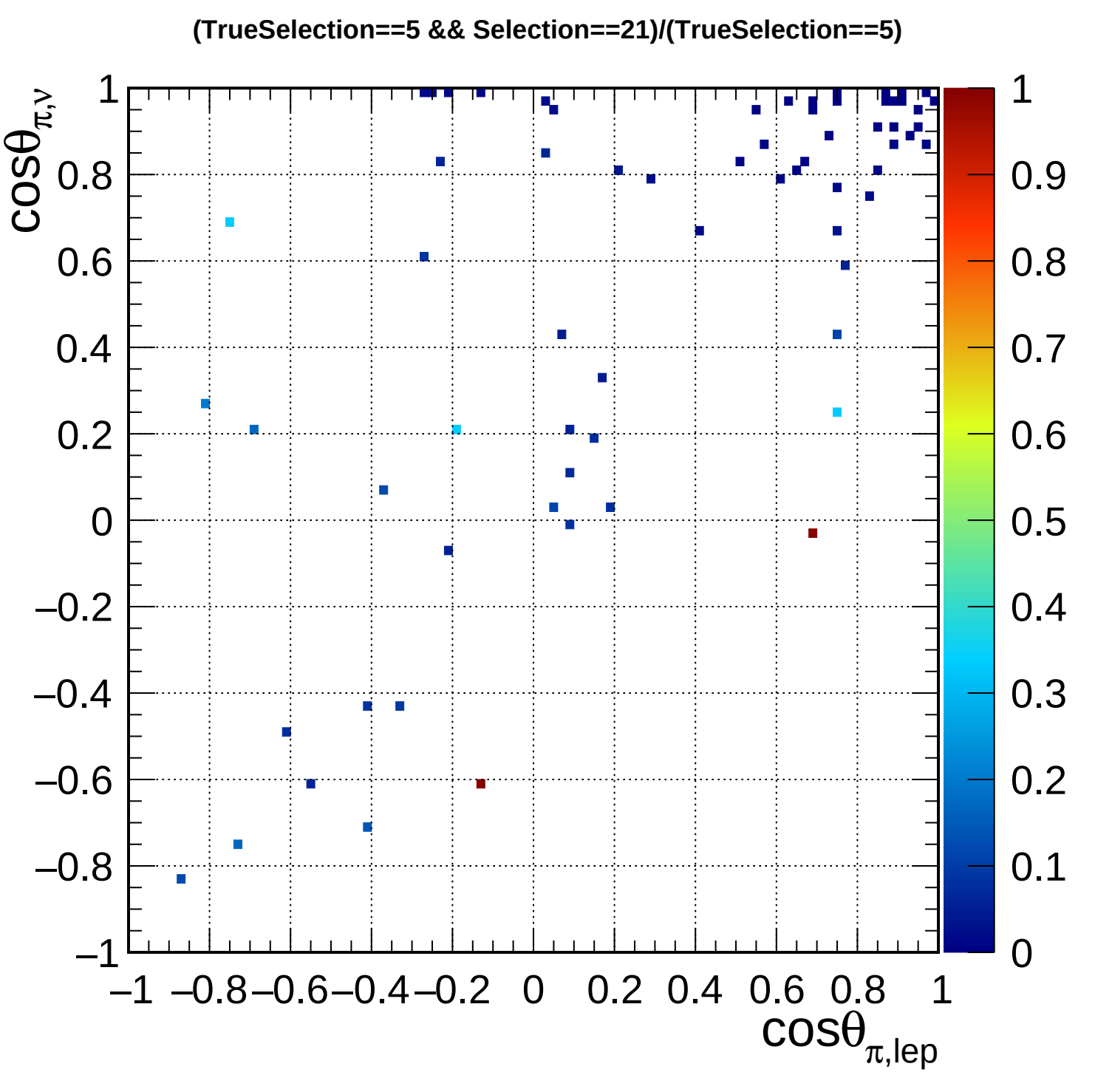

TrueSelection==5 && Selection==19
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0

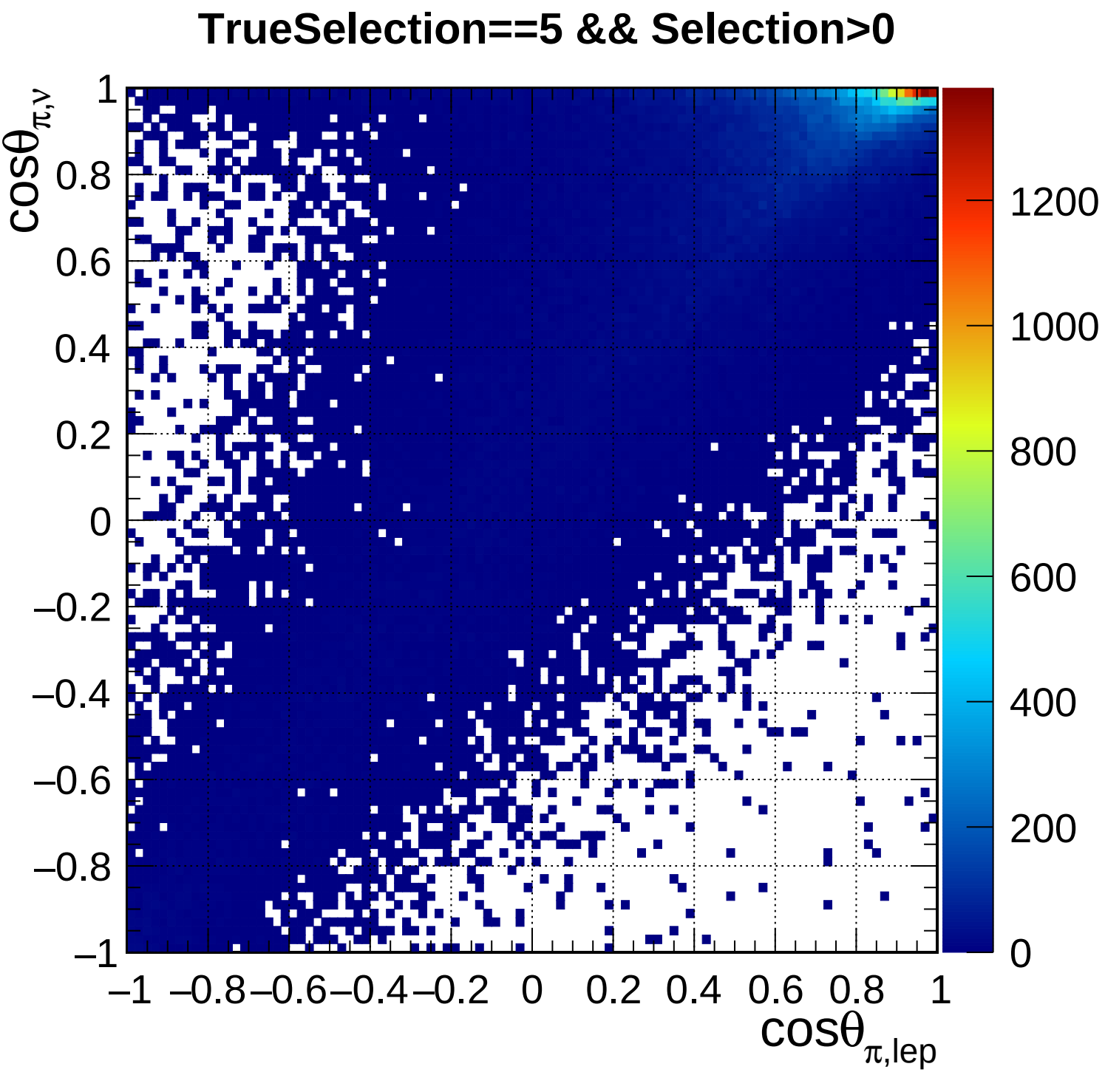

(TrueSelection==5 && Selection==19)/(TrueSelection==5)
cosθ_π,ν
cosθ_π,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

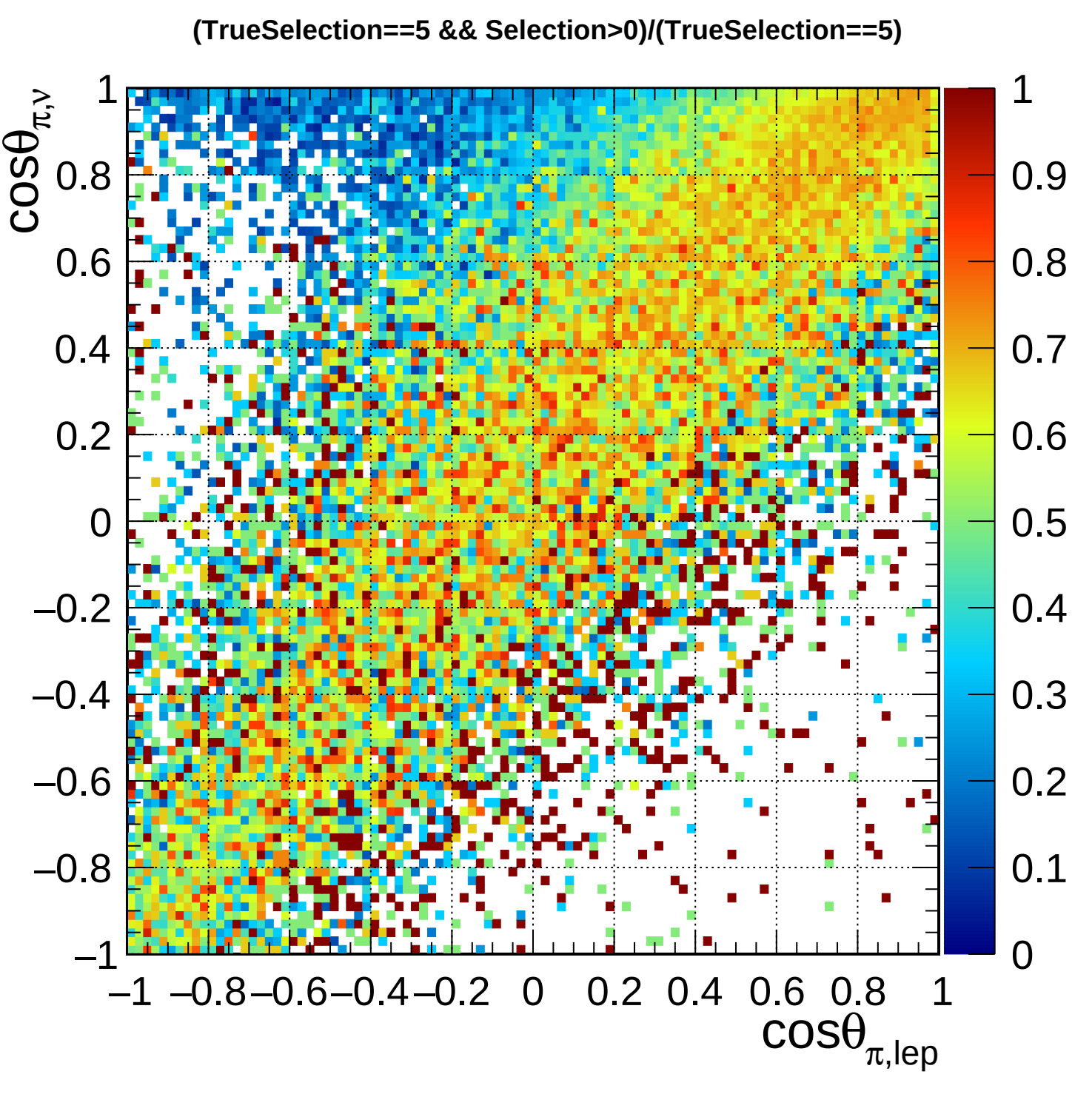

TrueSelection==5 && Selection==20
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
4
3.5
3
2.5
2
1.5
1
0.5
0

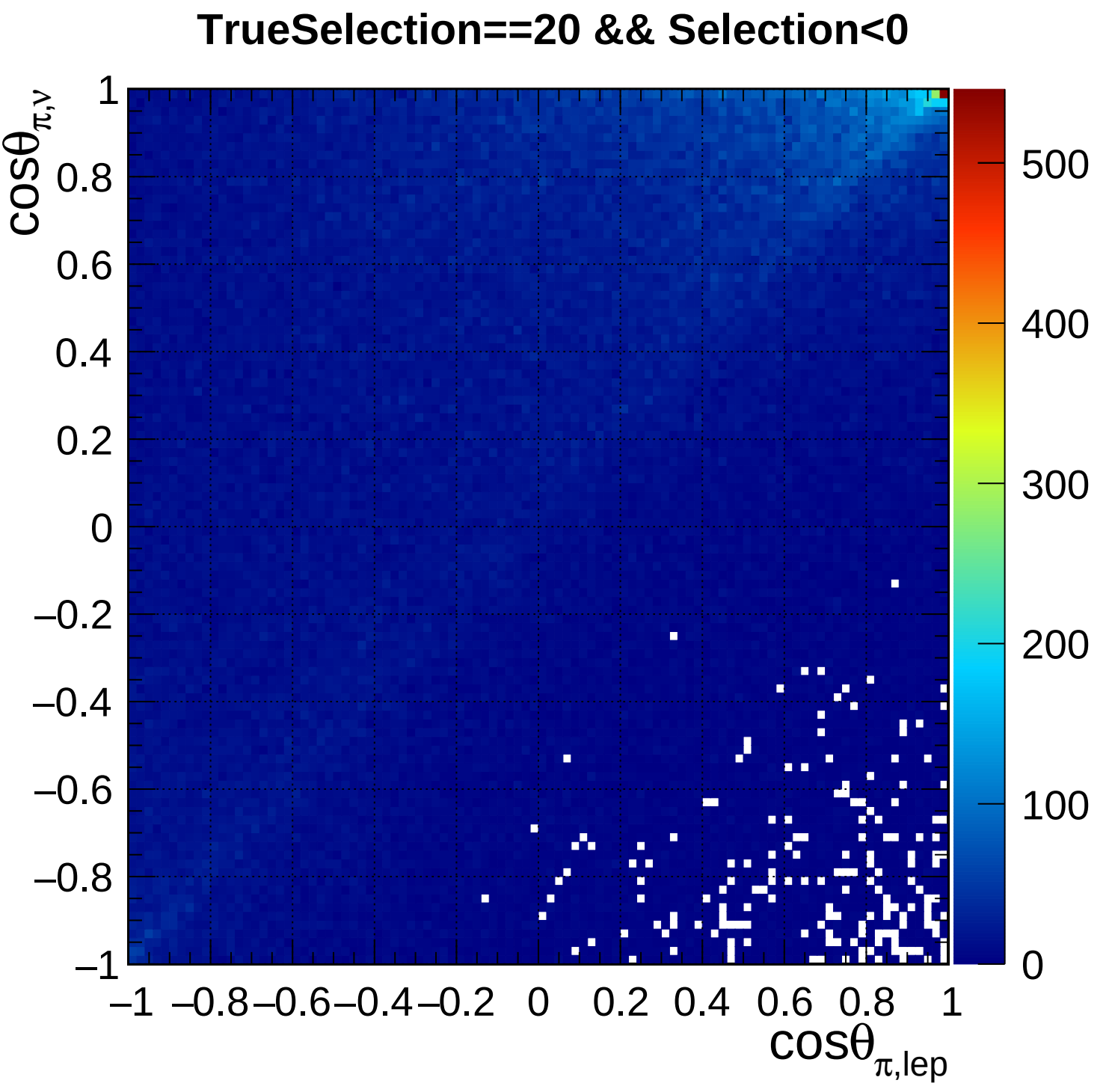

(TrueSelection==5 && Selection==20)/(TrueSelection==5)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

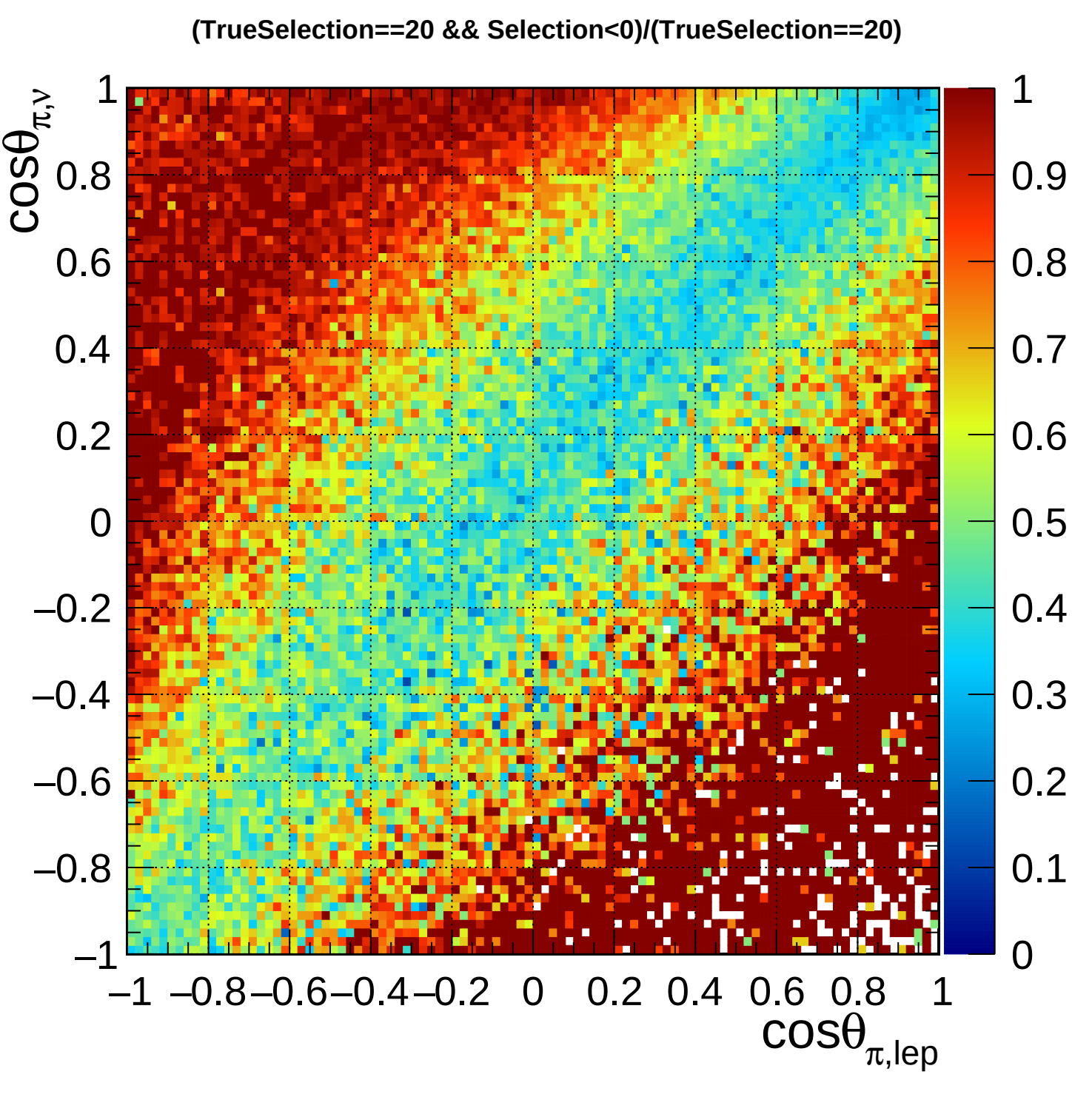

TrueSelection==5 && Selection==21
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0

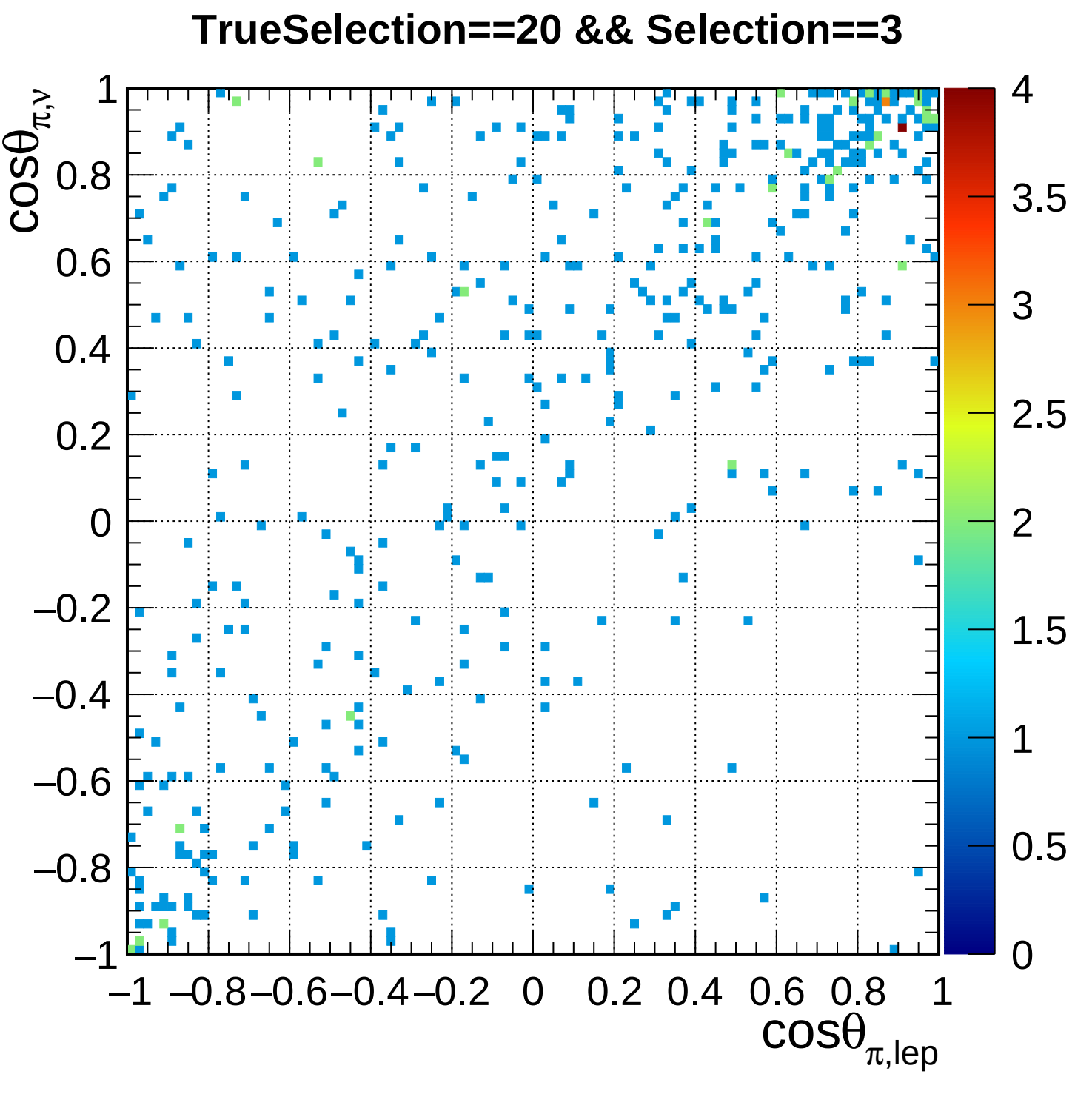

(TrueSelection==5 && Selection==21)/(TrueSelection==5)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

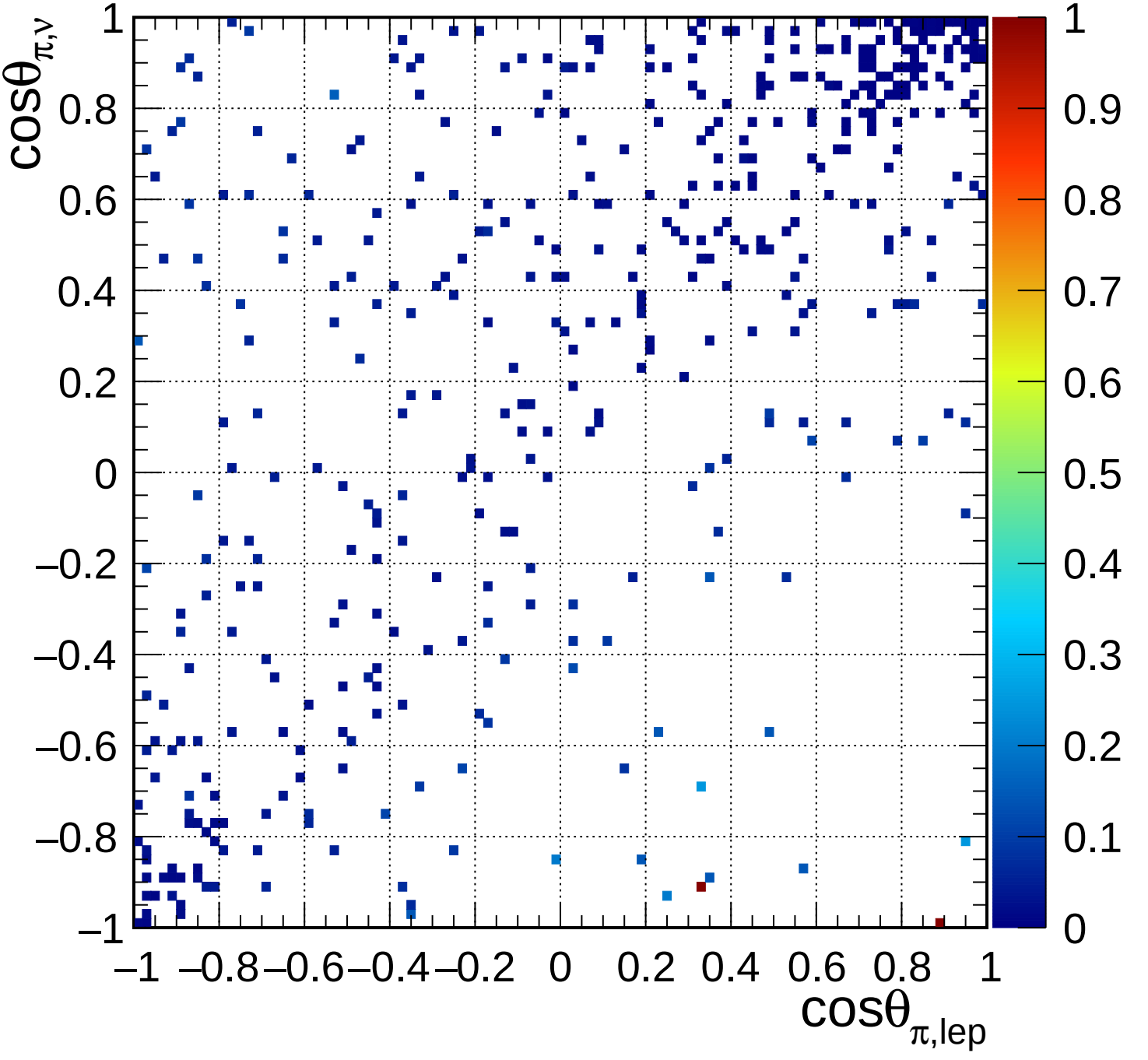

TrueSelection==5 && Selection>0
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
1200
1000
800
600
400
200
0

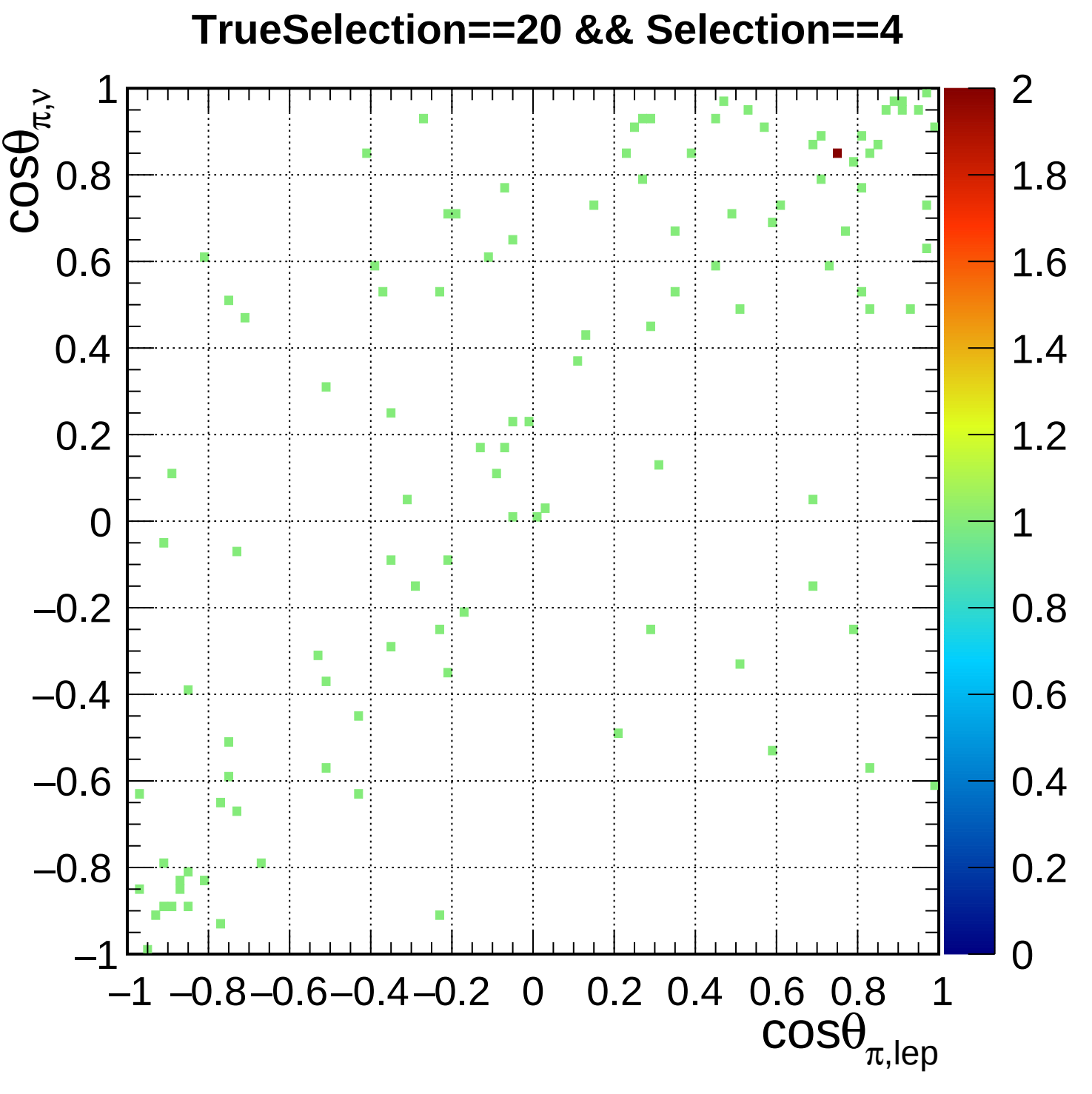

(TrueSelection==5 && Selection>0)/(TrueSelection==5)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

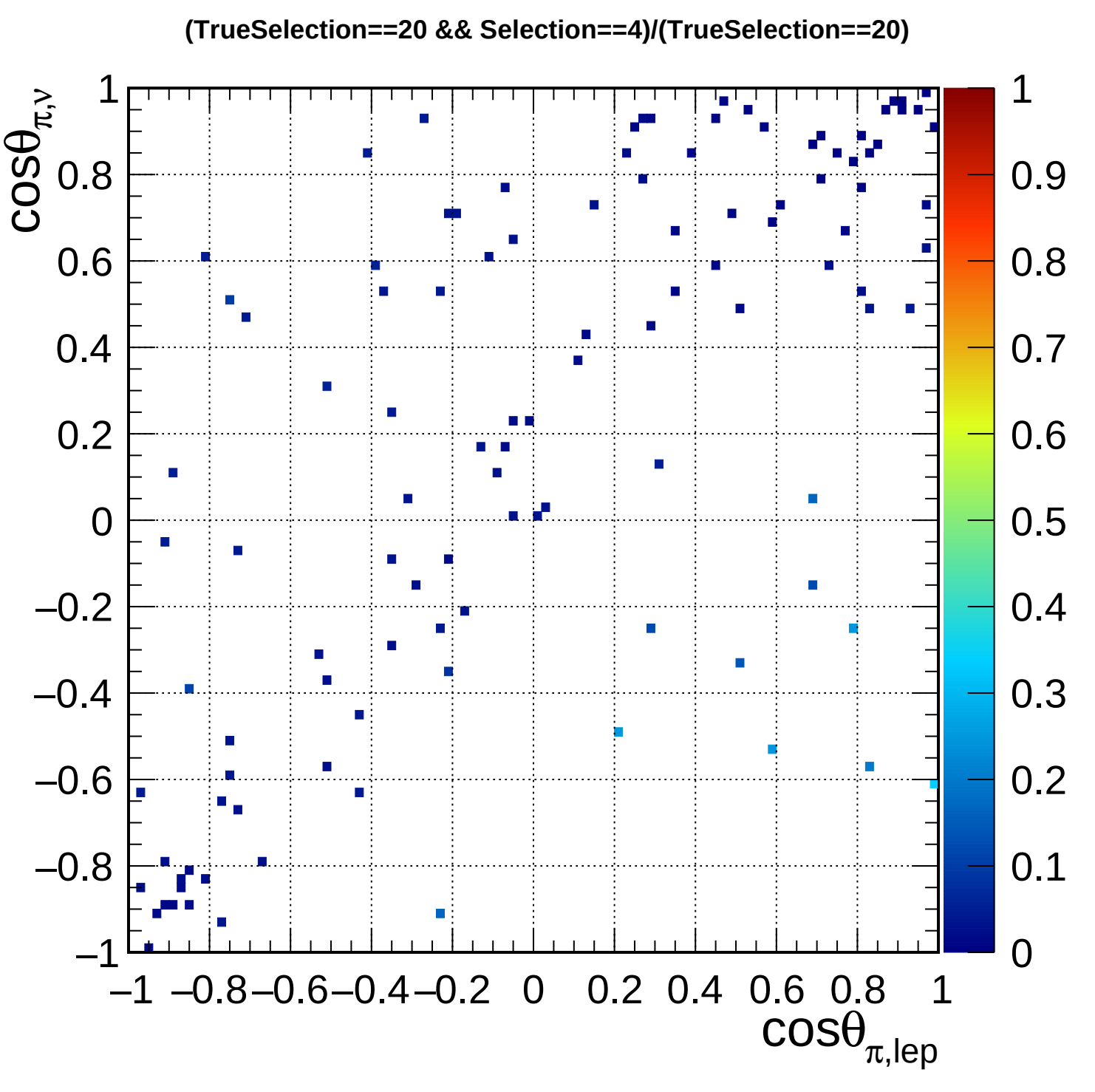

TrueSelection==20 && Selection<0
cosθπ,ν
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
–1 –0.8 –0.6 –0.4 –0.2 0 0.2 0.4 0.6 0.8 1
cosθπ,lep
500
400
300
200
100
0

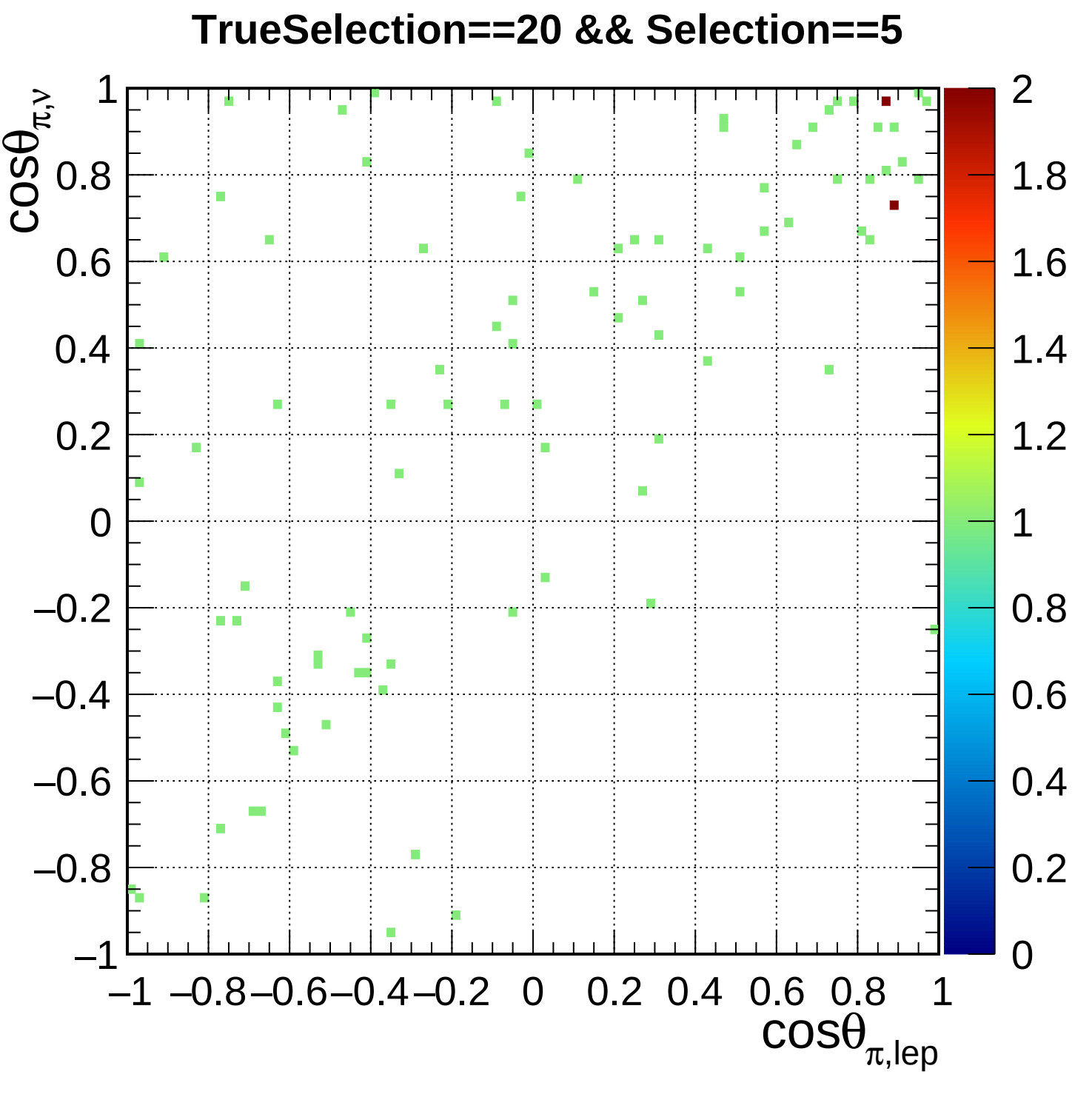

(TrueSelection==20 && Selection<0)/(TrueSelection==20)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

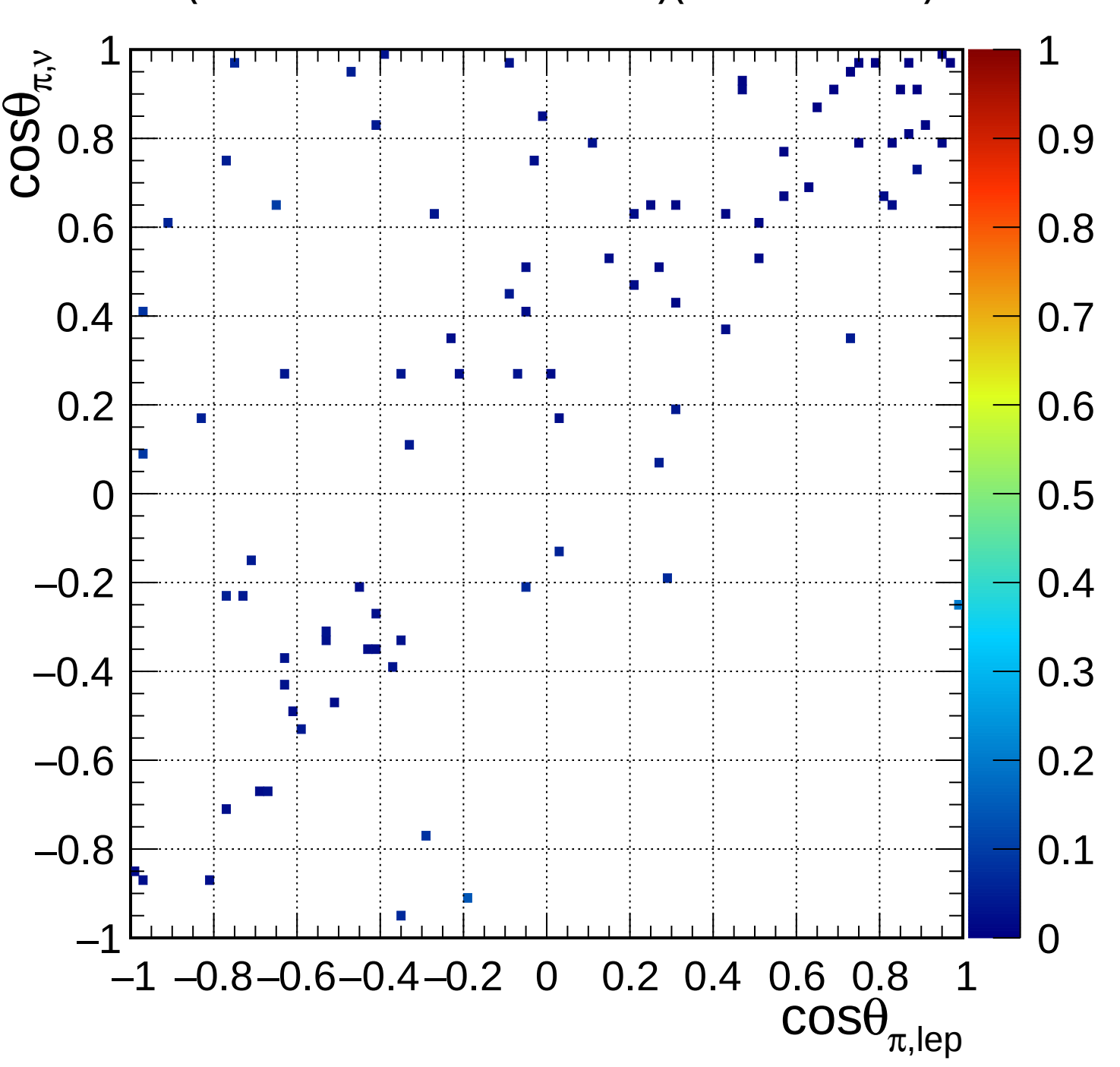

TrueSelection==20 && Selection==3
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
4
3.5
3
2.5
2
1.5
1
0.5
0

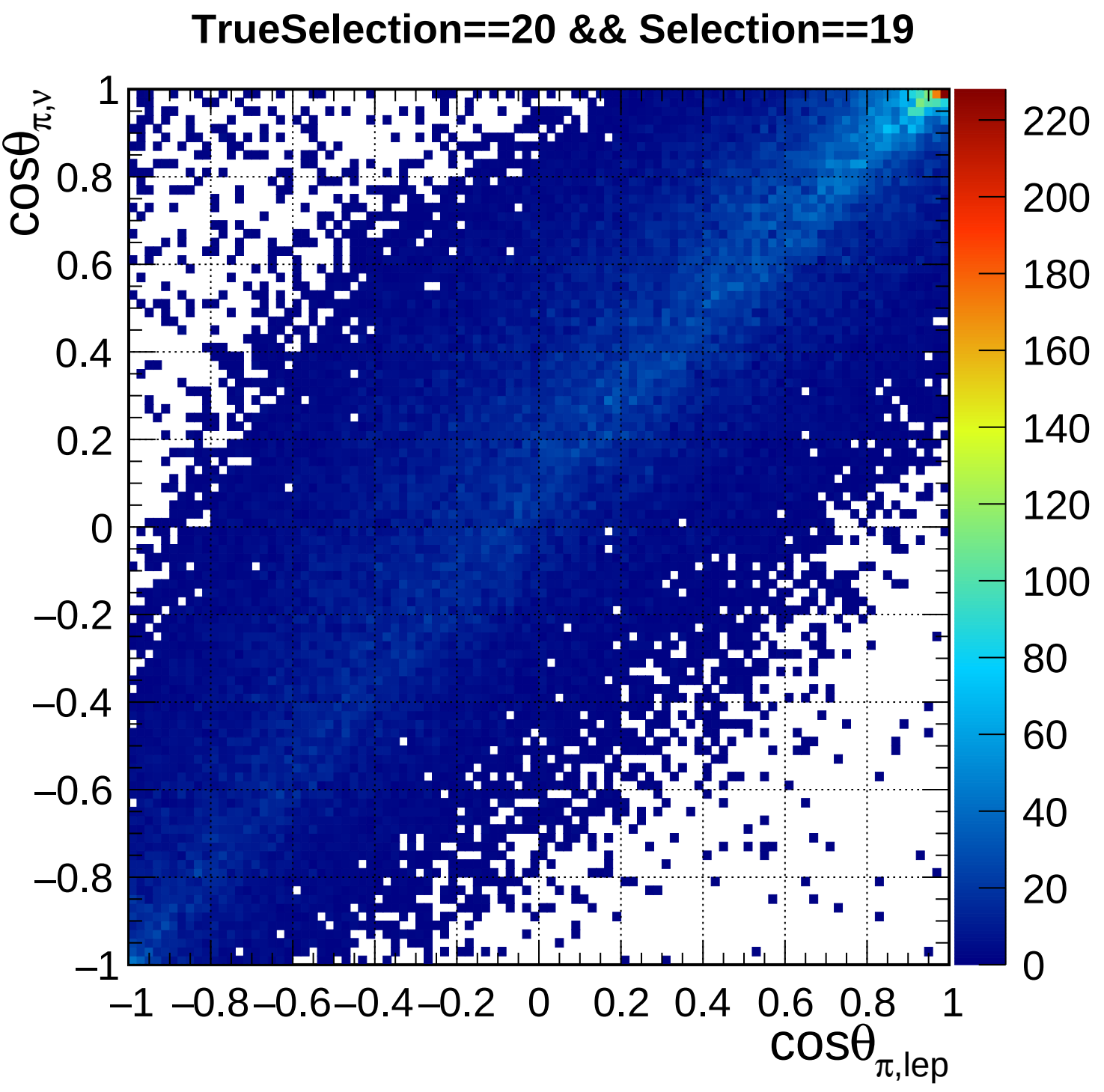

(TrueSelection==20 && Selection==3)/(TrueSelection==20)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

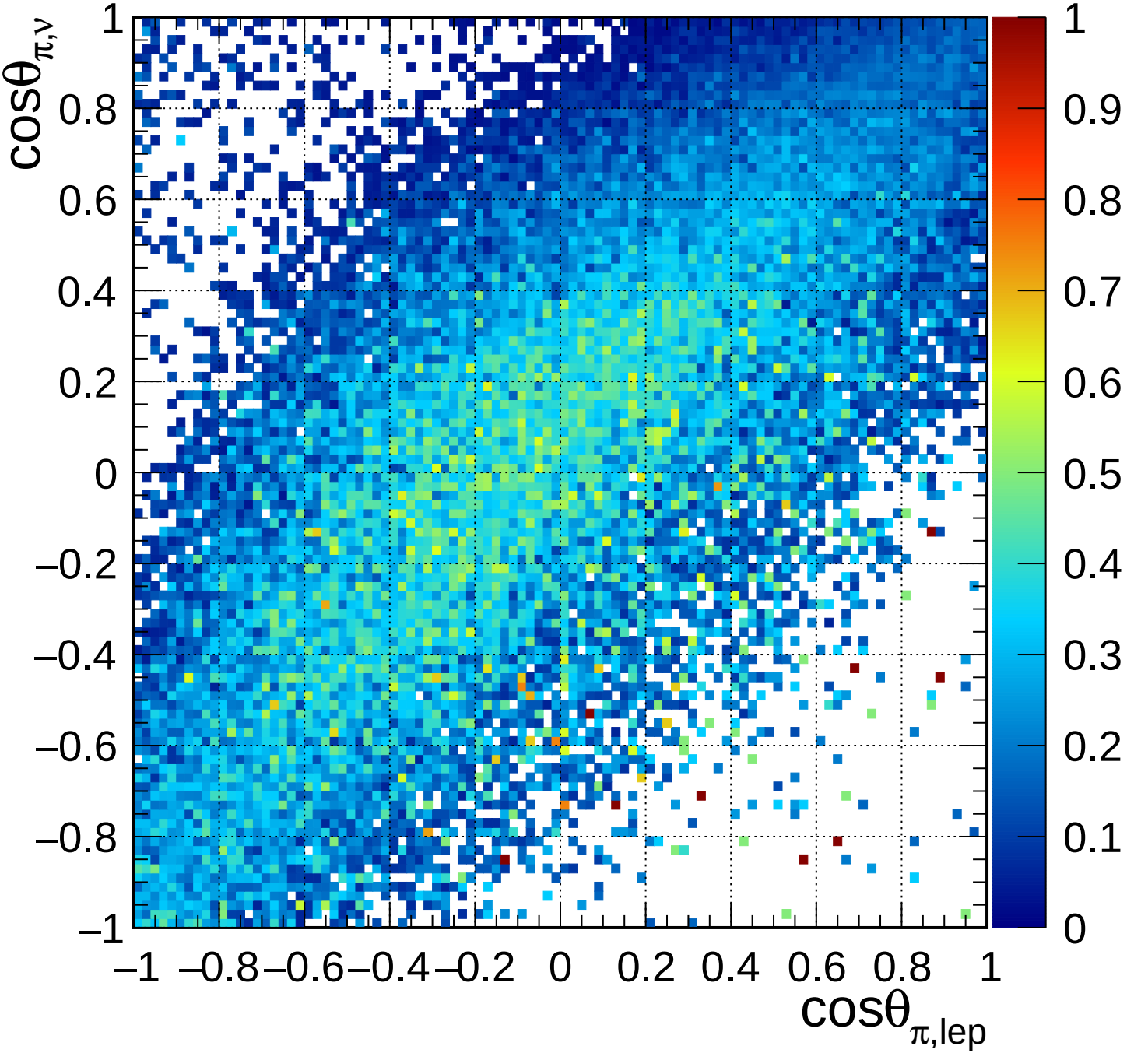

TrueSelection==20 && Selection==4
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0

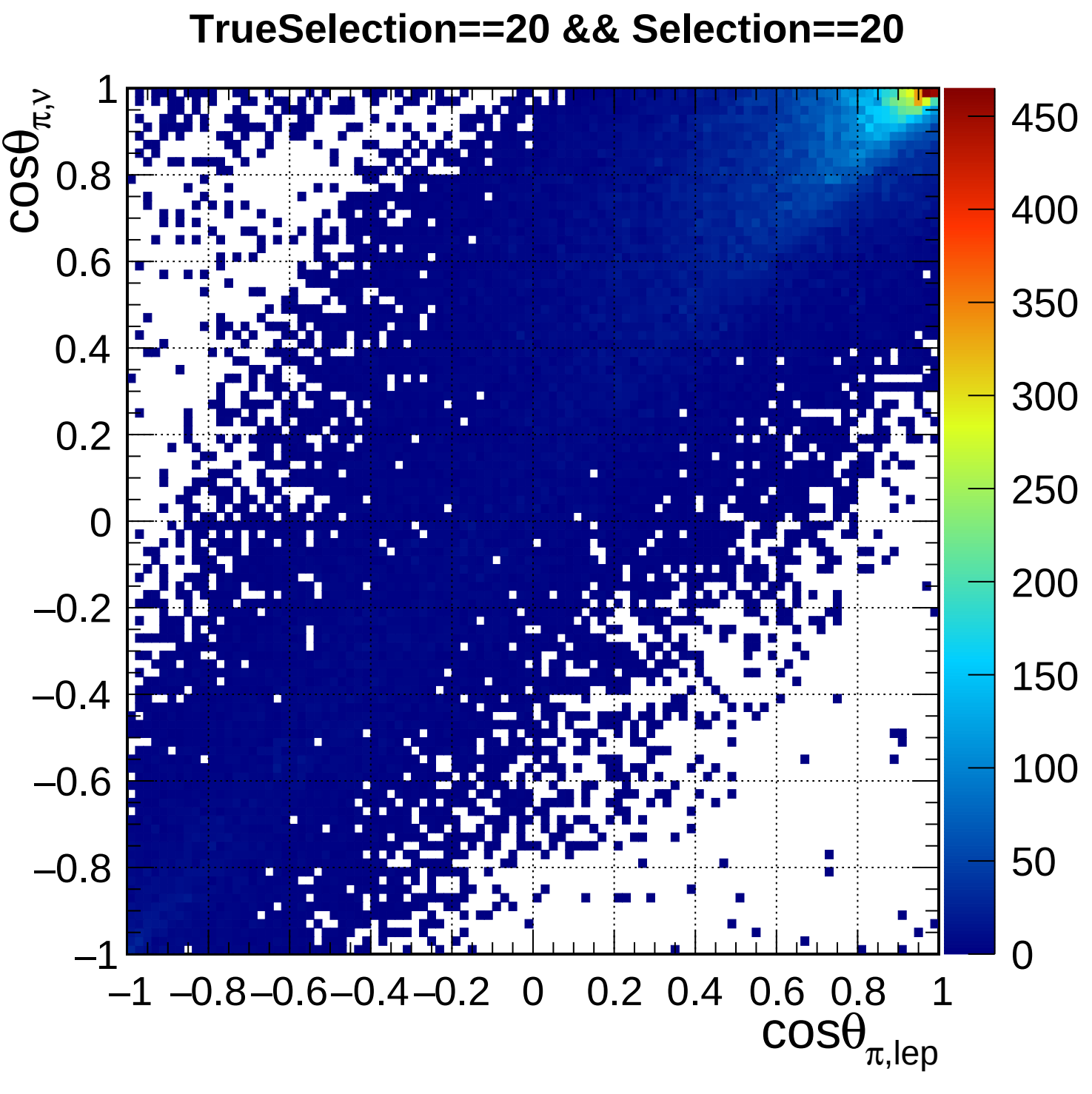

(TrueSelection==20 && Selection==4)/(TrueSelection==20)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

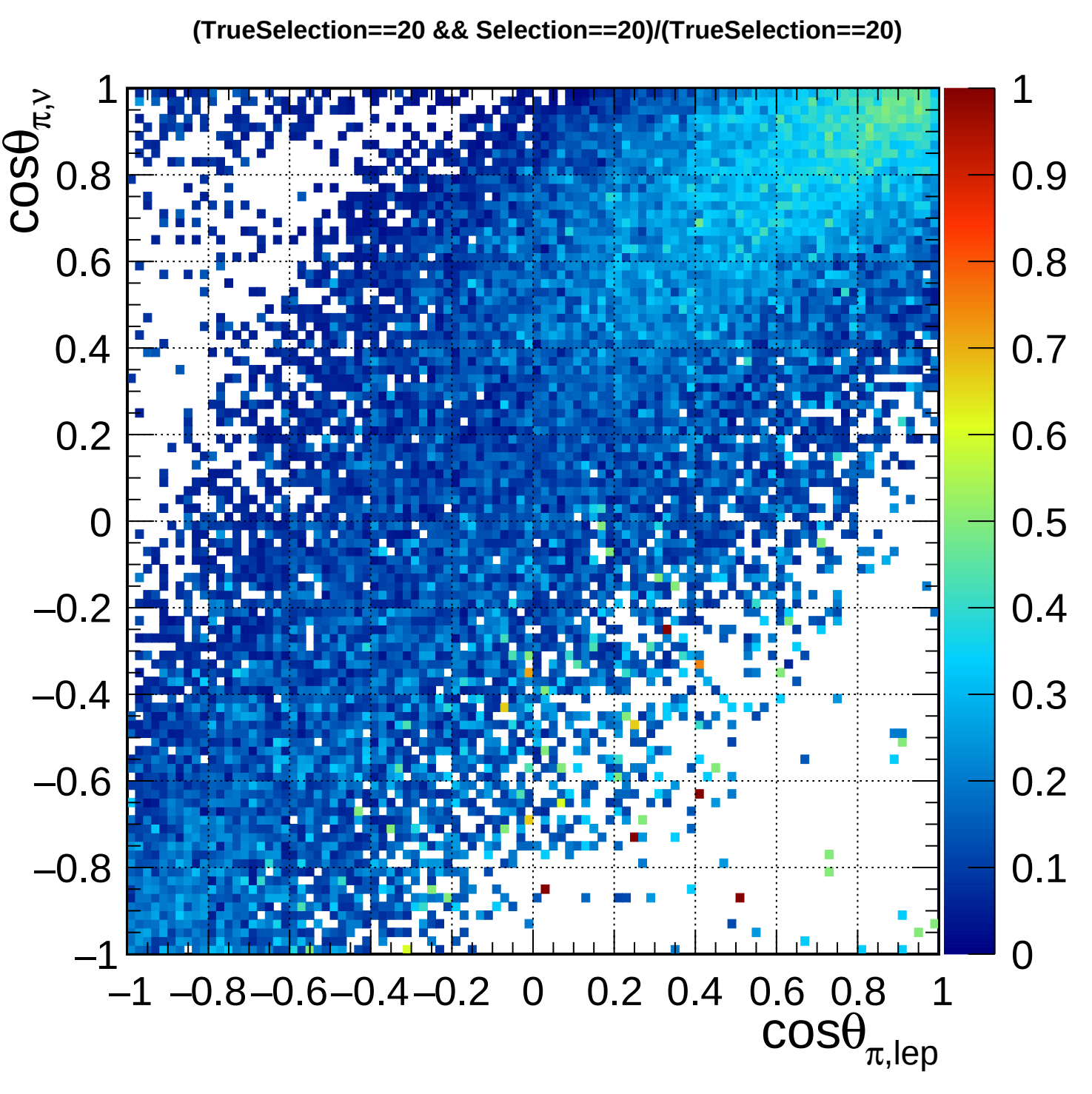

TrueSelection==20 && Selection==5
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0

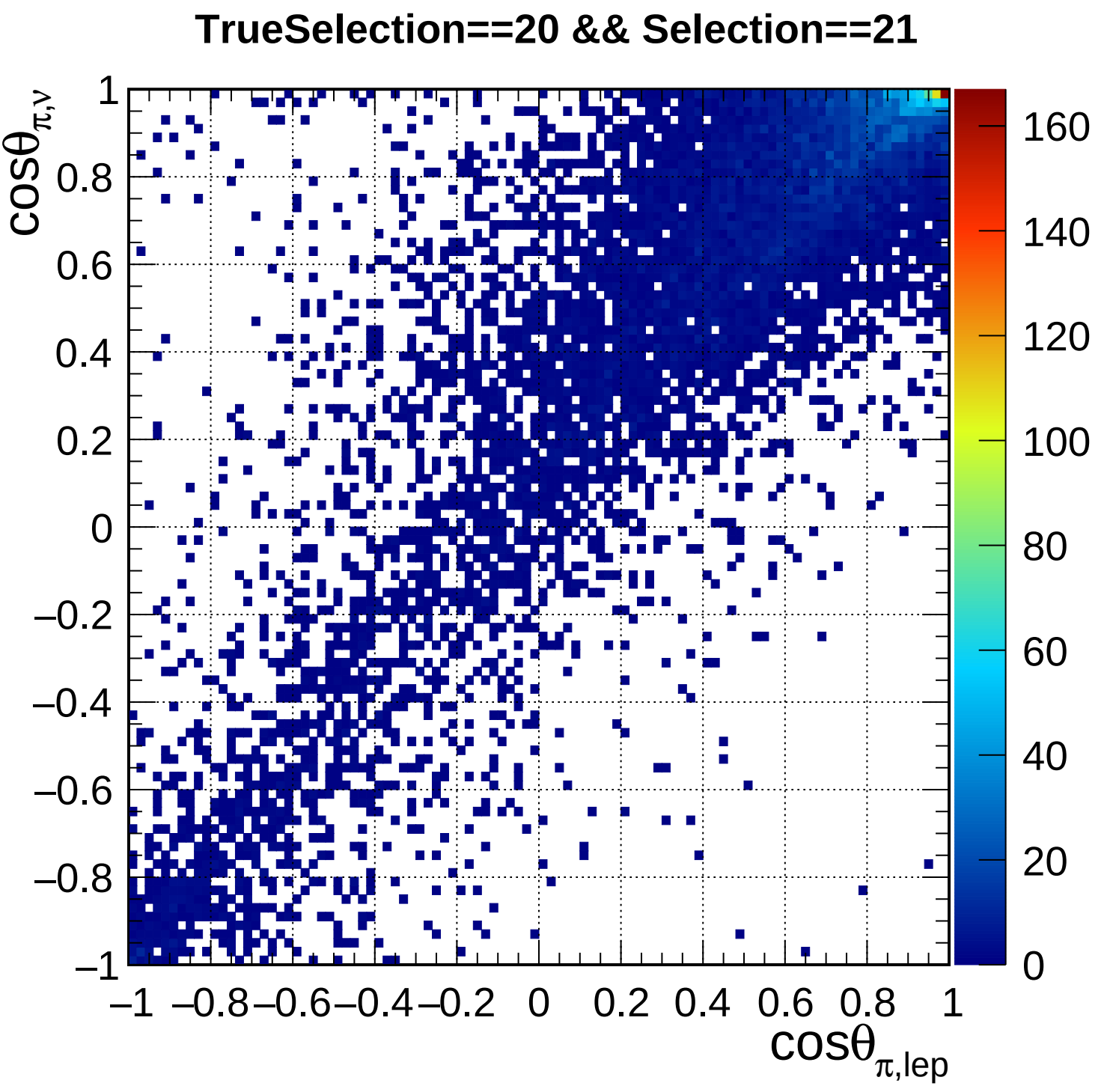

(TrueSelection==20 && Selection==5)/(TrueSelection==20)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

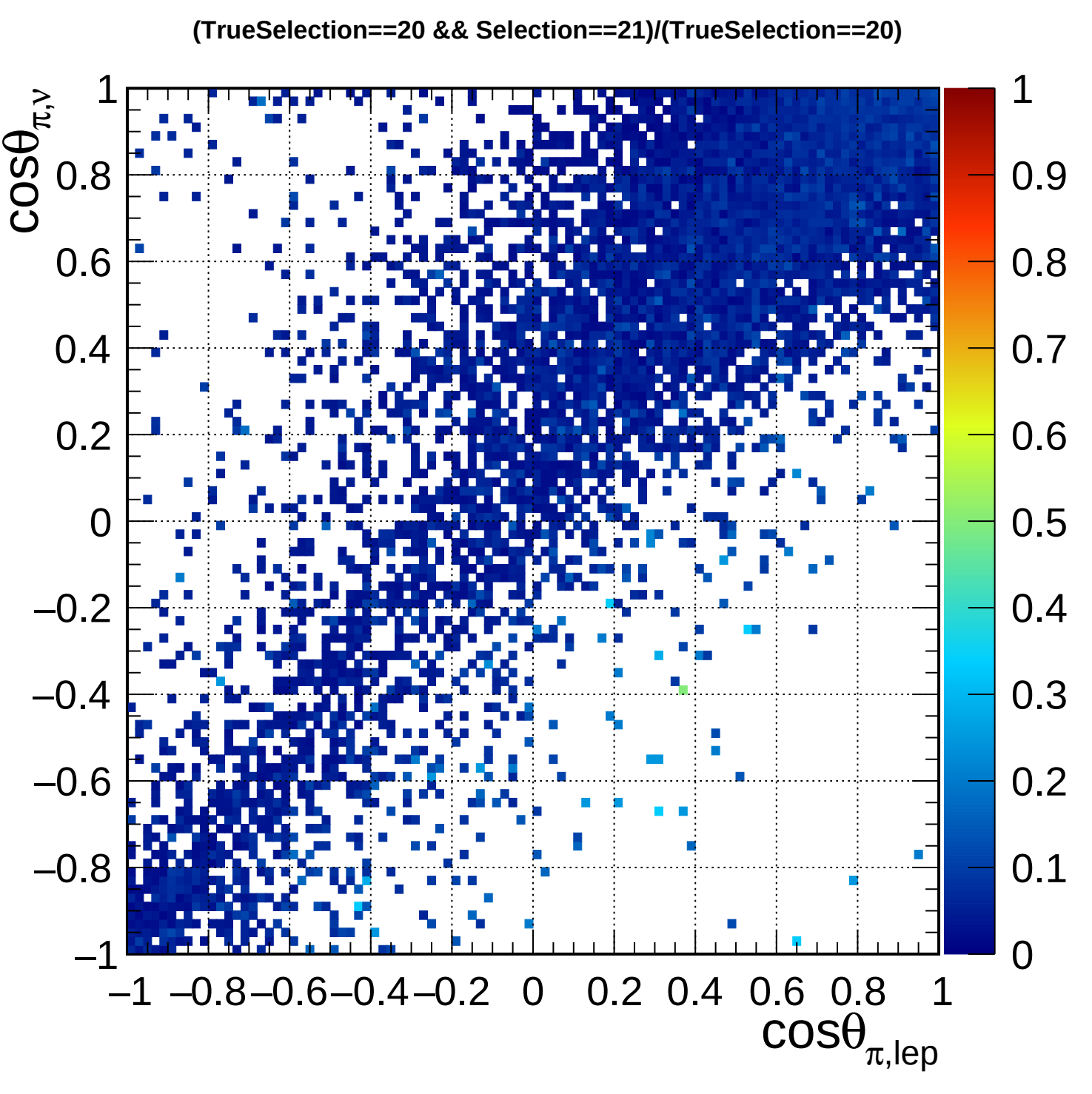

TrueSelection==20 && Selection==19
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
220
200
180
160
140
120
100
80
60
40
20
0

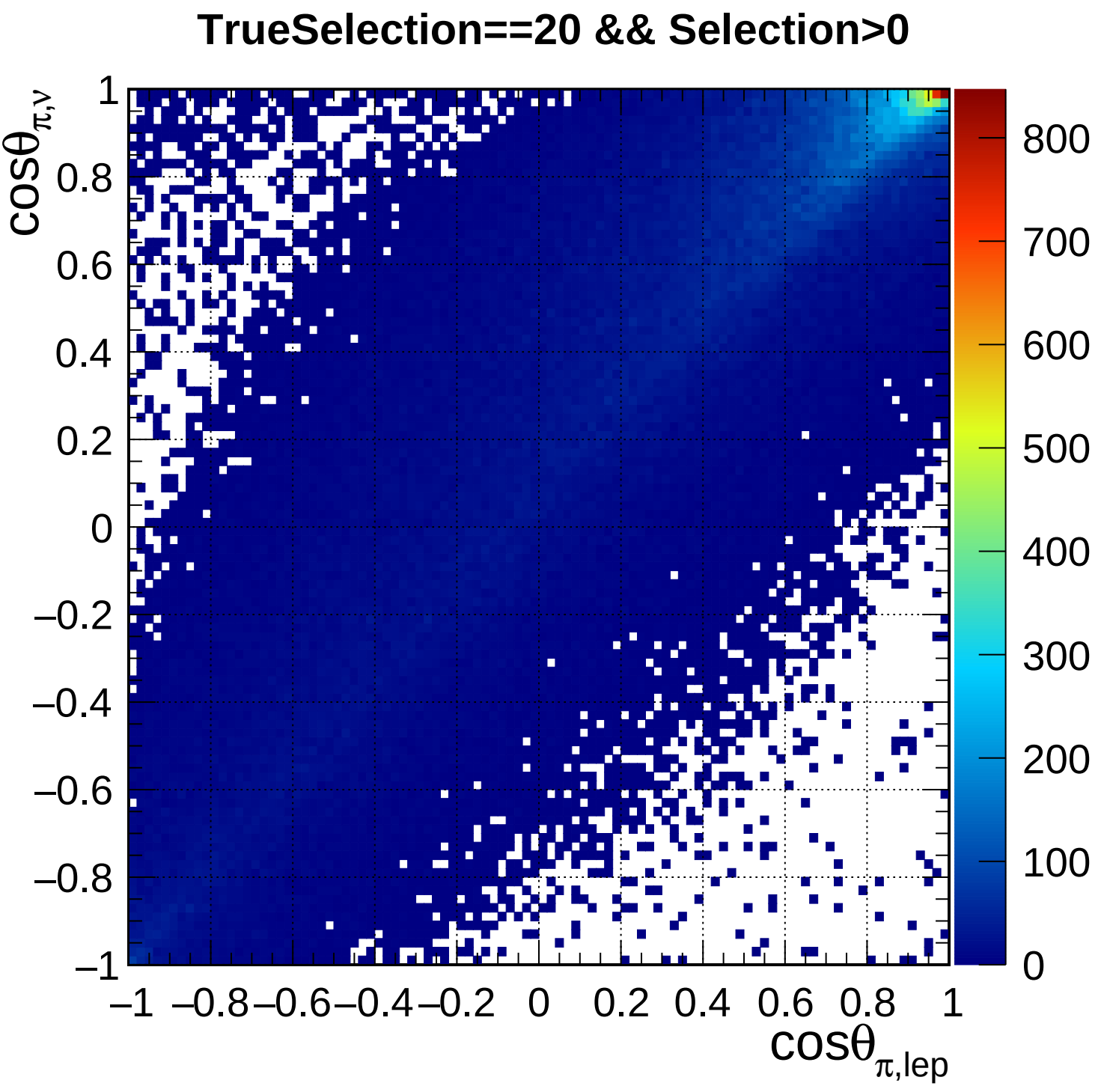

(TrueSelection==20 && Selection==19)/(TrueSelection==20)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

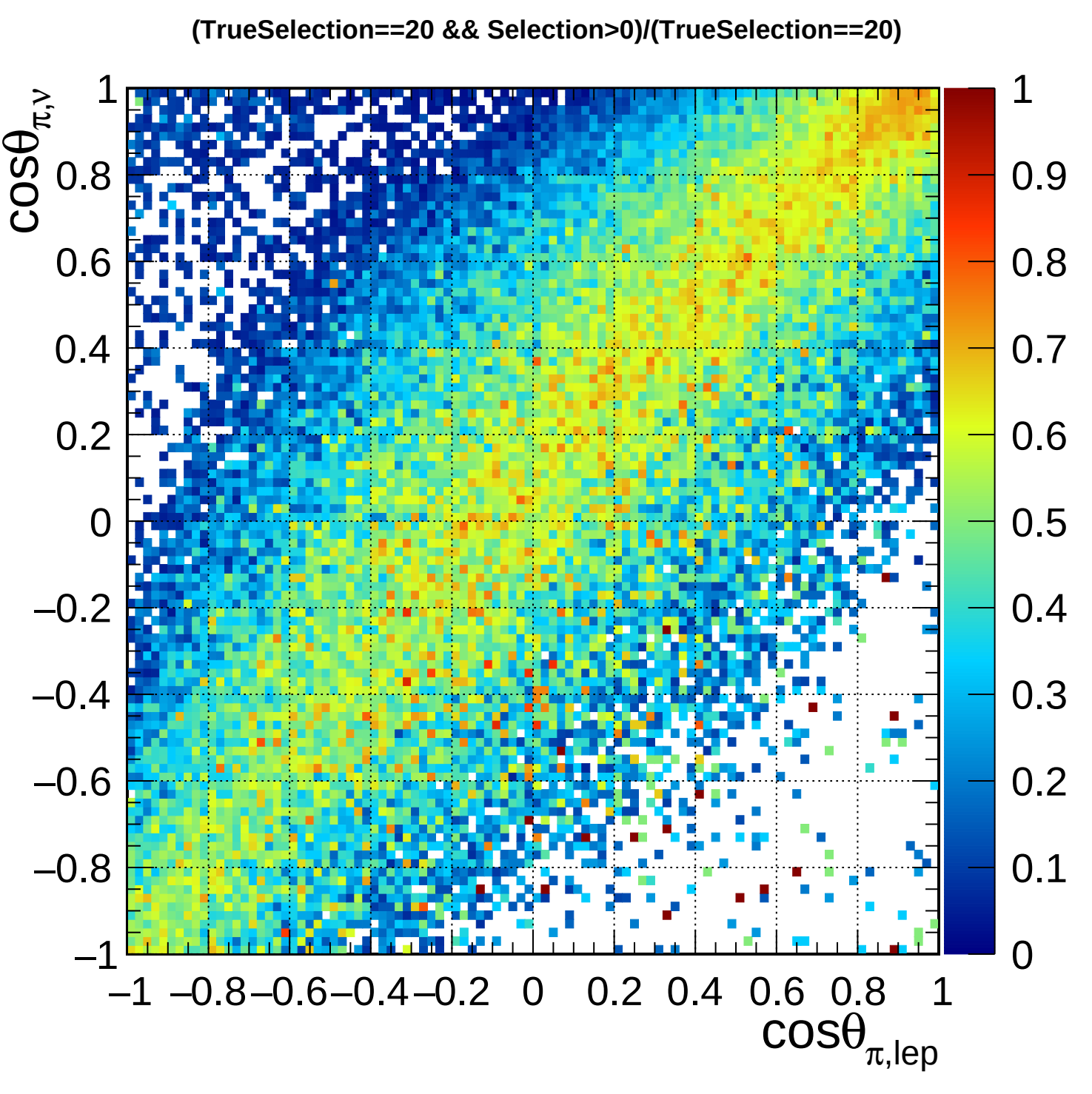

TrueSelection==20 && Selection==20
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
450
400
350
300
250
200
150
100
50
0

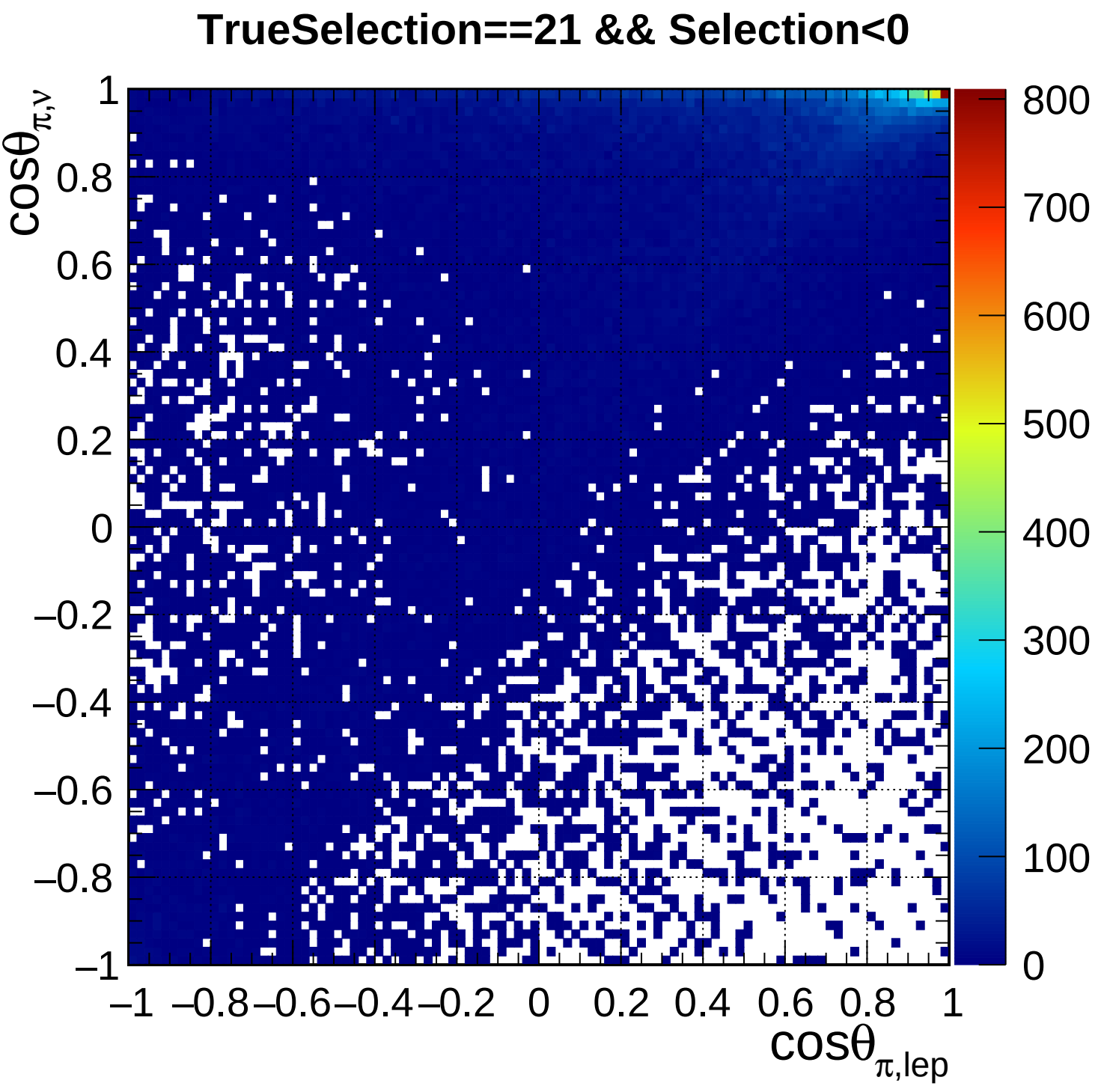

(TrueSelection==20 && Selection==20)/(TrueSelection==20)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

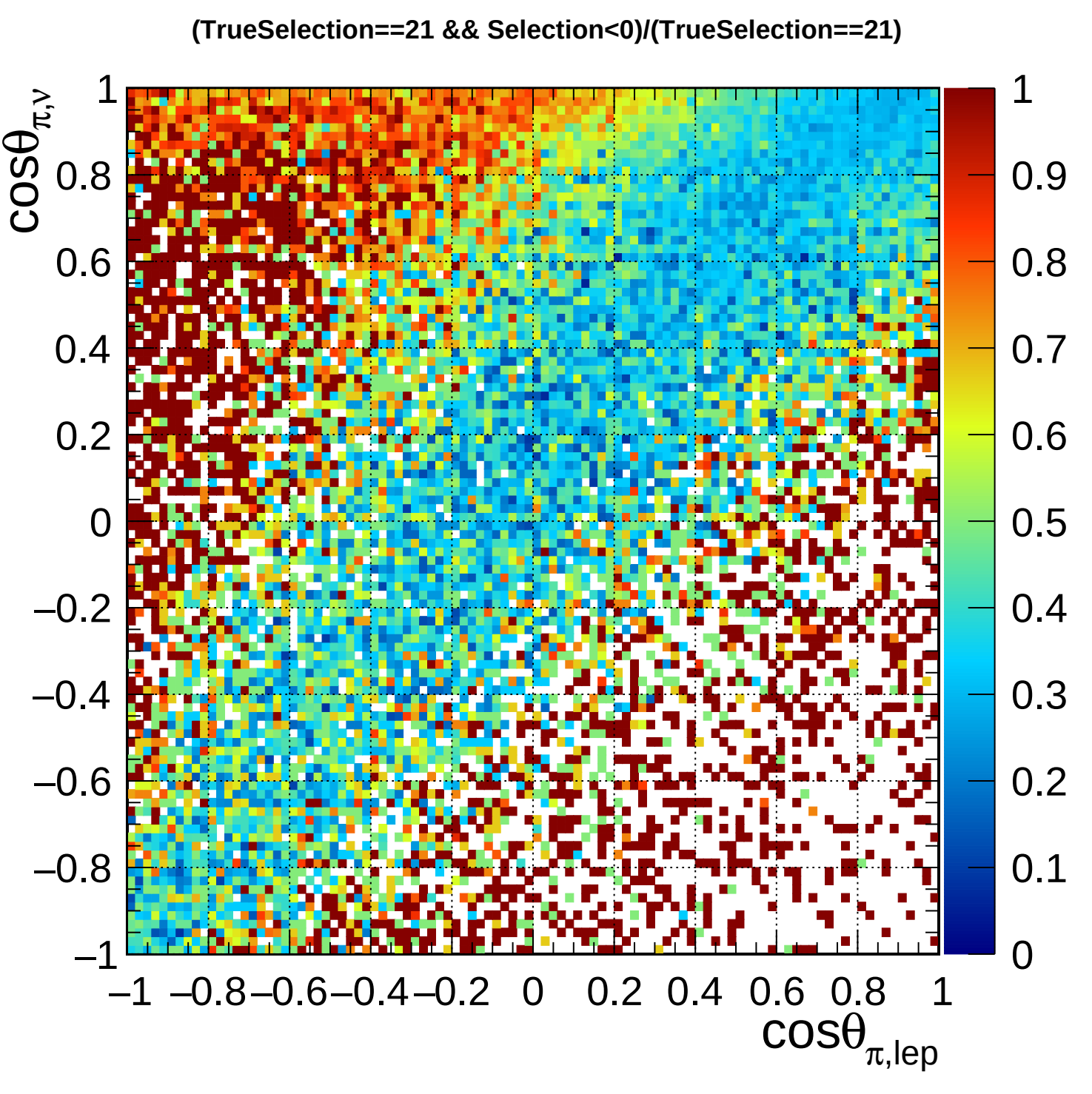

TrueSelection==20 && Selection==21
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
160
140
120
100
80
60
40
20
0

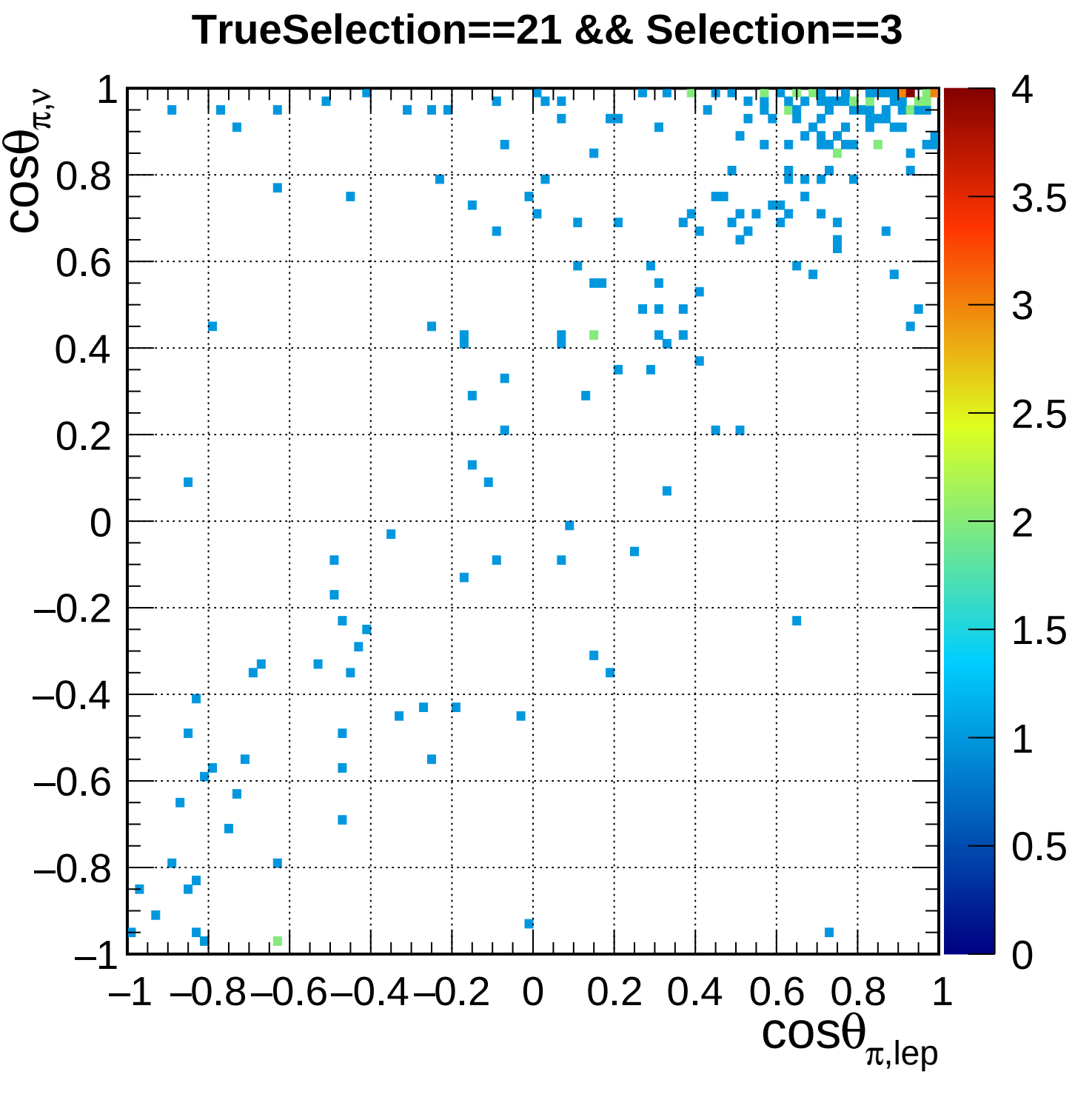

(TrueSelection==20 && Selection==21)/(TrueSelection==20)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

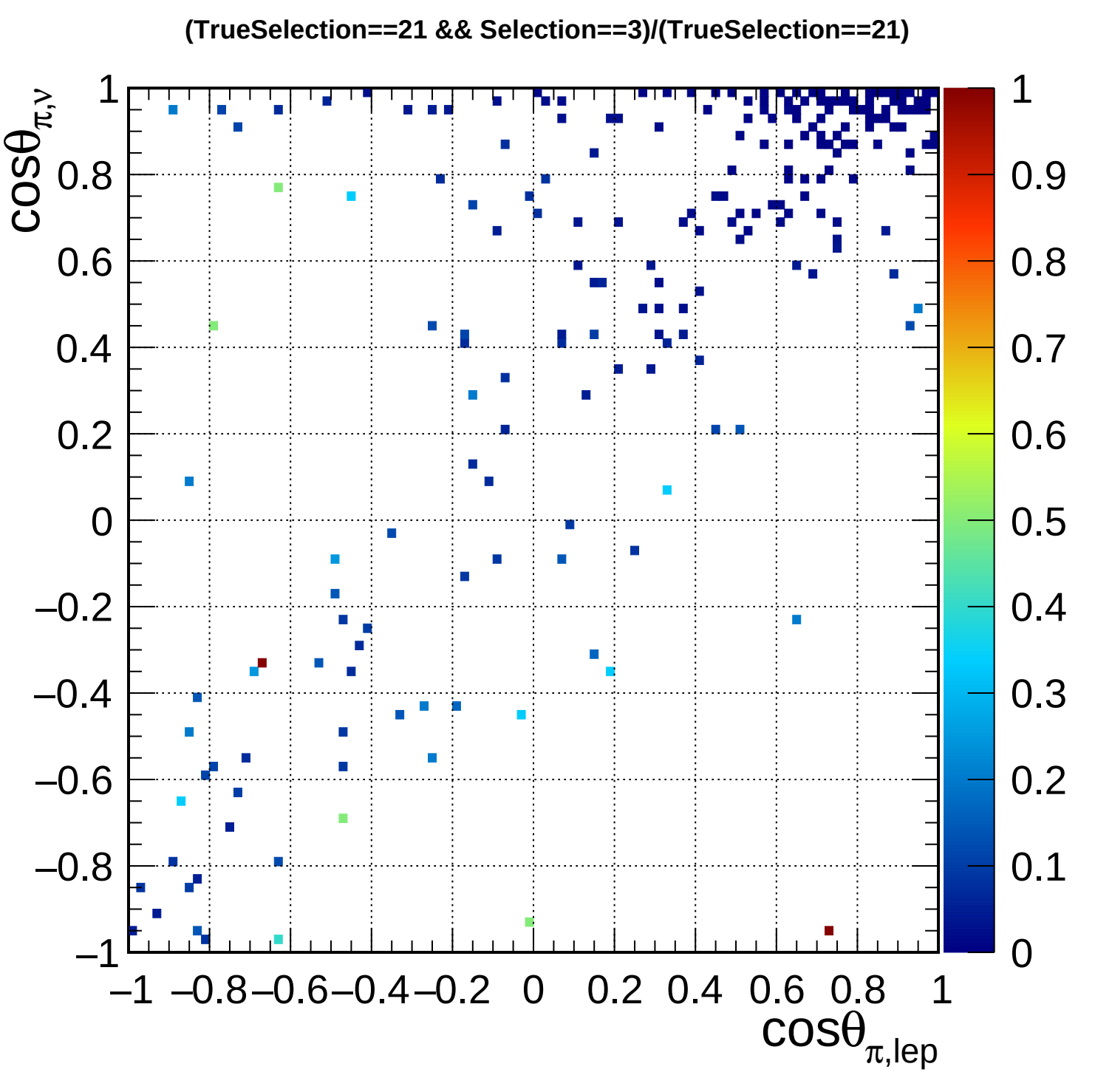

TrueSelection==20 && Selection>0
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
800
700
600
500
400
300
200
100
0

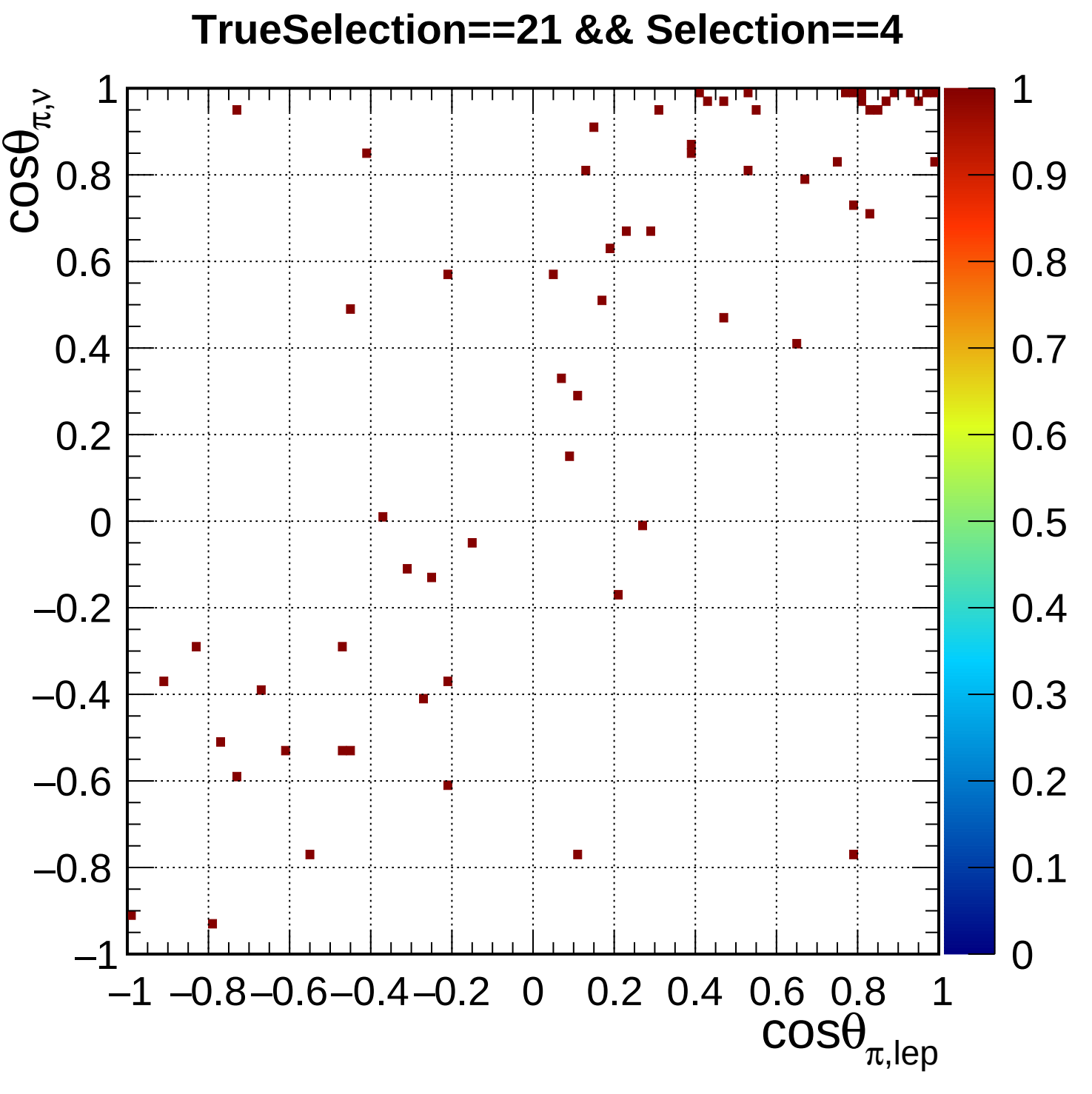

(TrueSelection==20 && Selection>0)/(TrueSelection==20)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

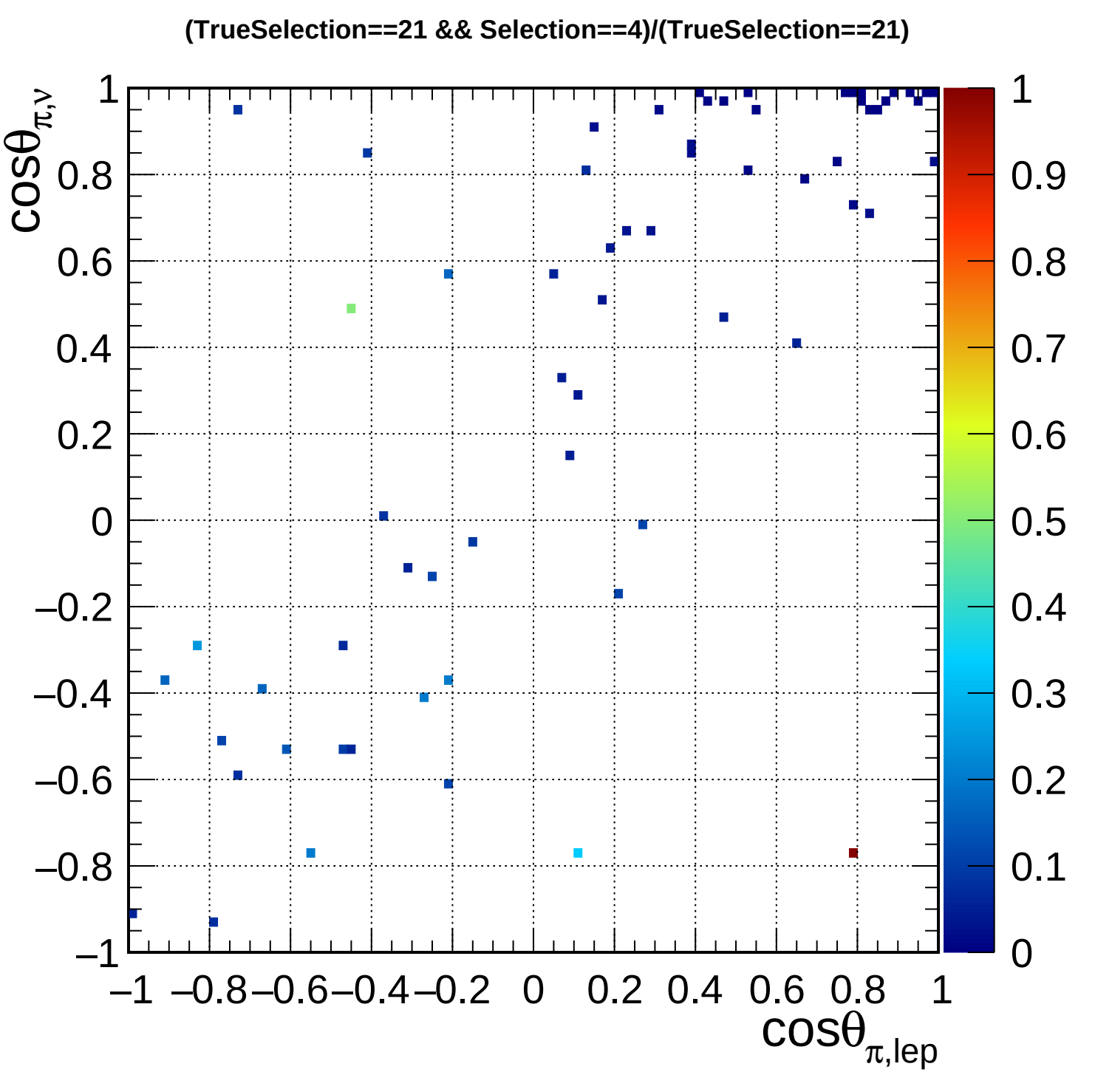

TrueSelection==21 && Selection<0
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
800
700
600
500
400
300
200
100
0

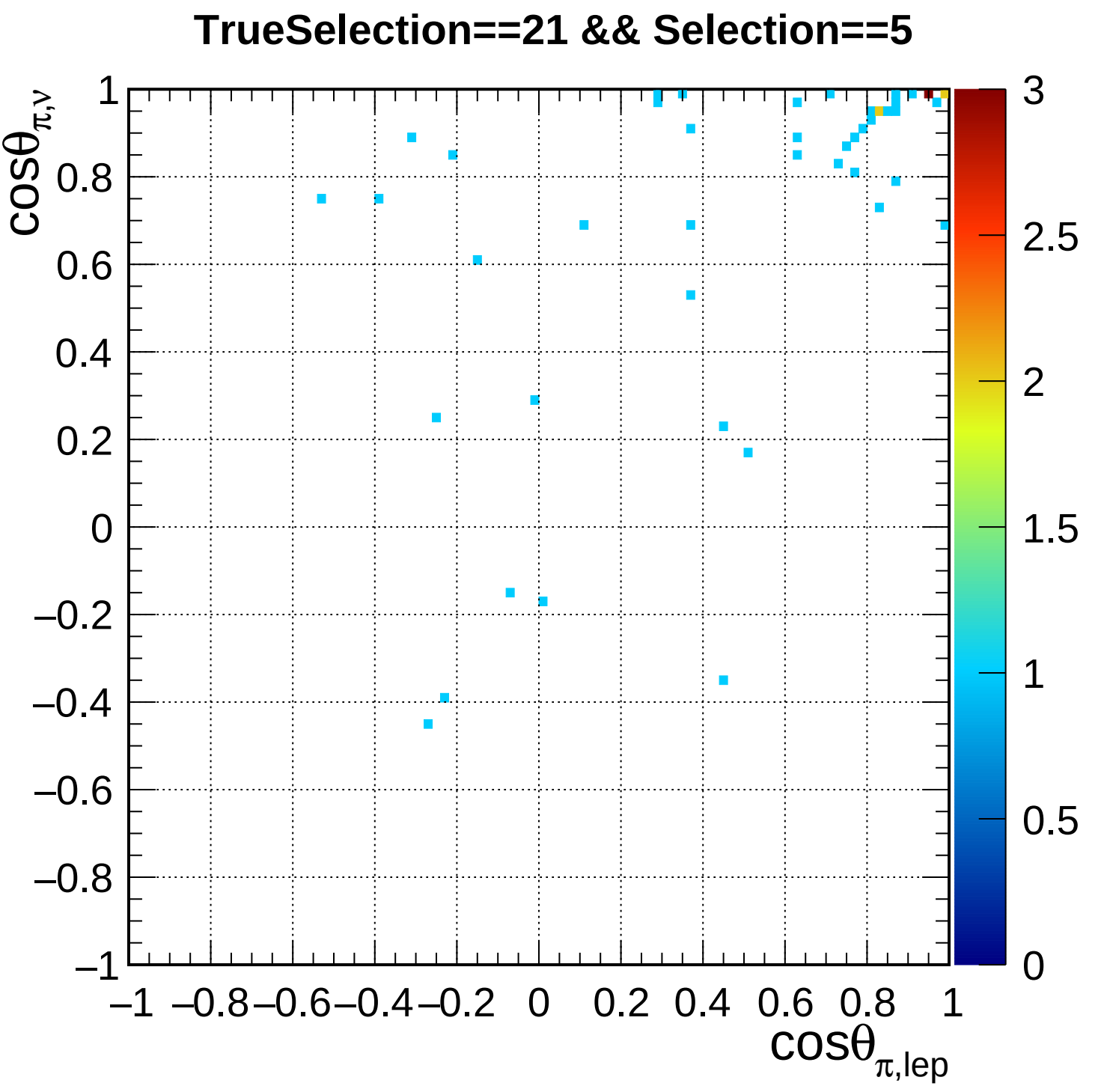

(TrueSelection==21 && Selection<0)/(TrueSelection==21)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

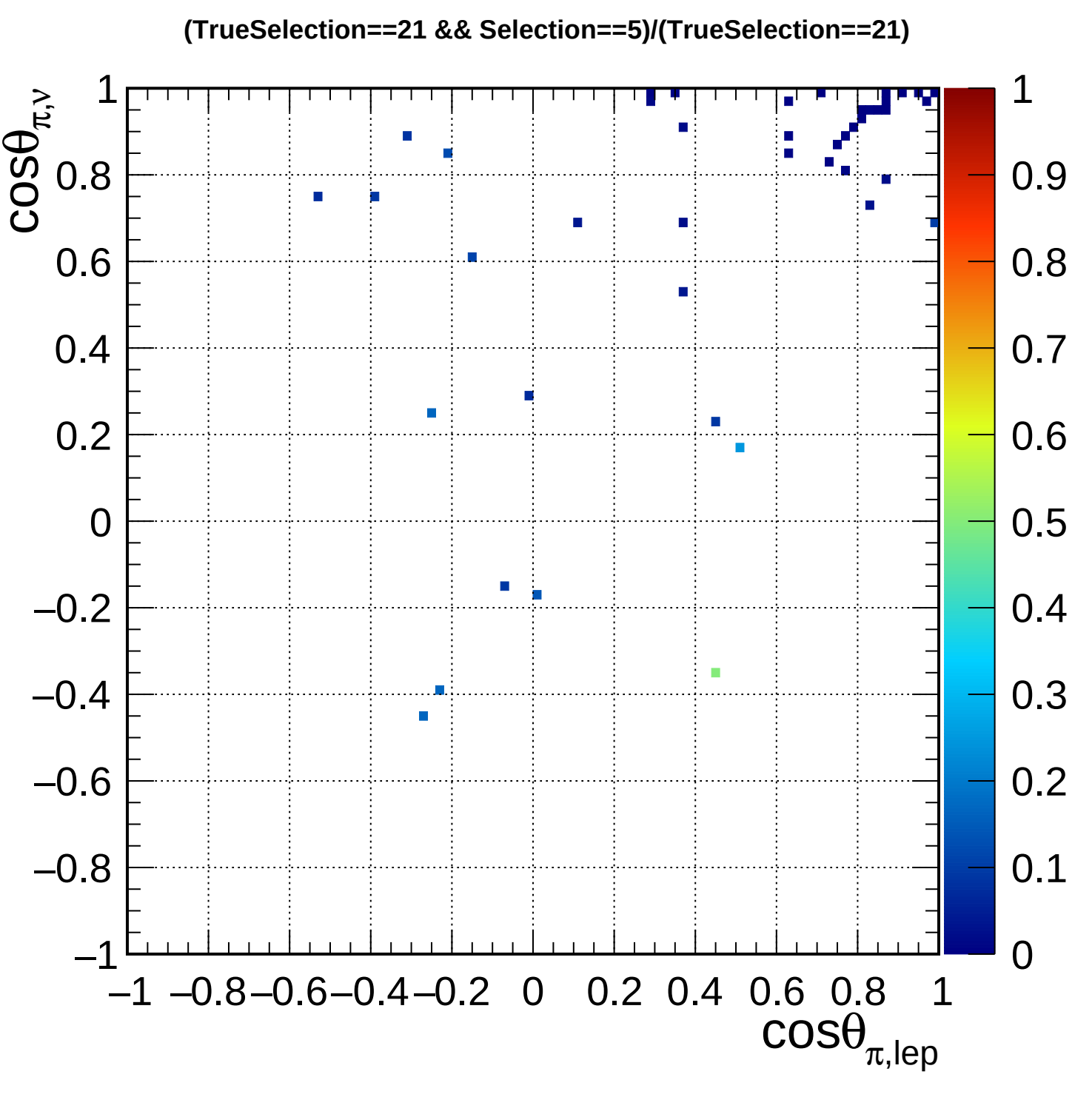

TrueSelection==21 && Selection==3
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
4
3.5
3
2.5
2
1.5
1
0.5
0

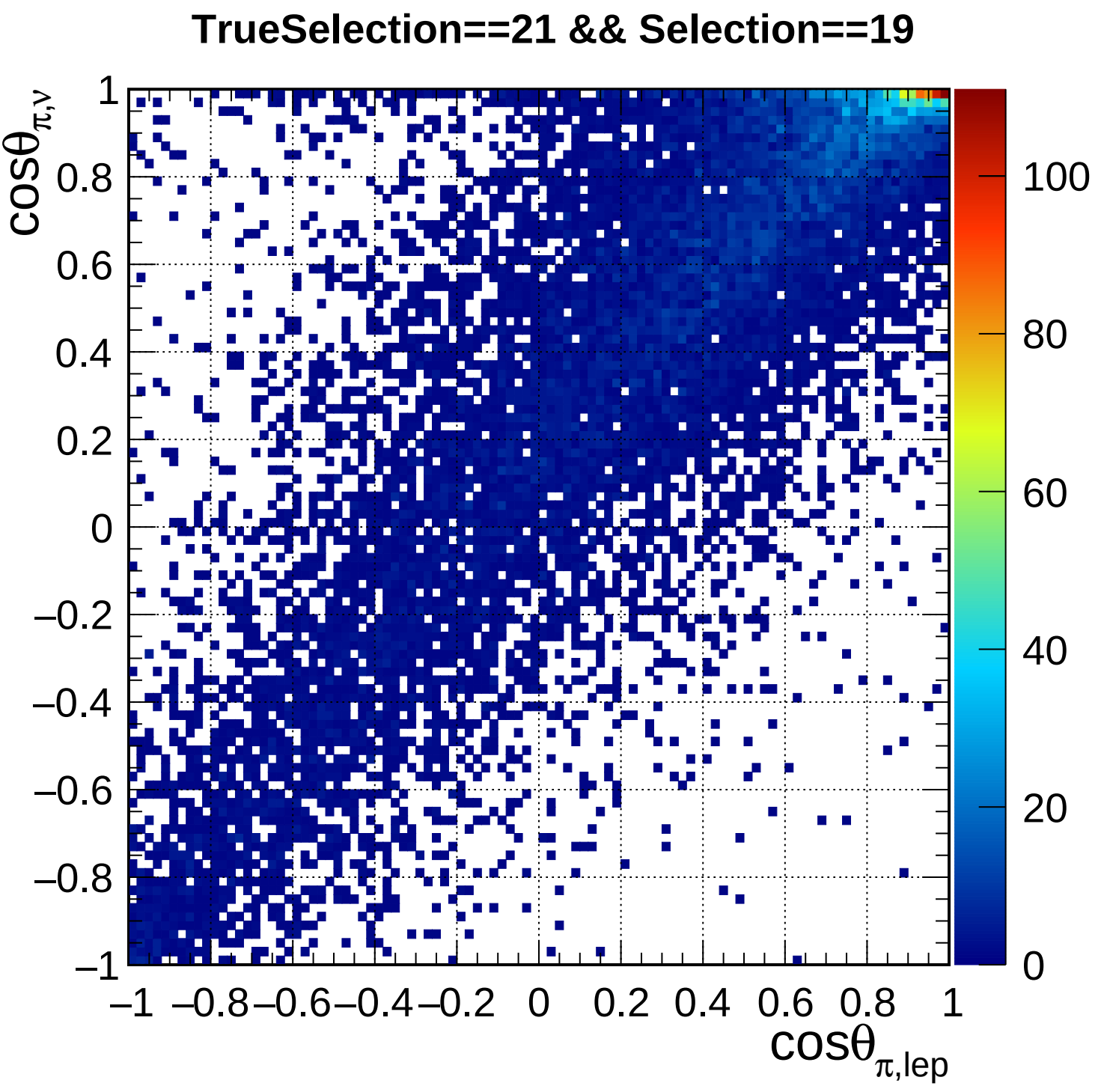

(TrueSelection==21 && Selection==3)/(TrueSelection==21)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

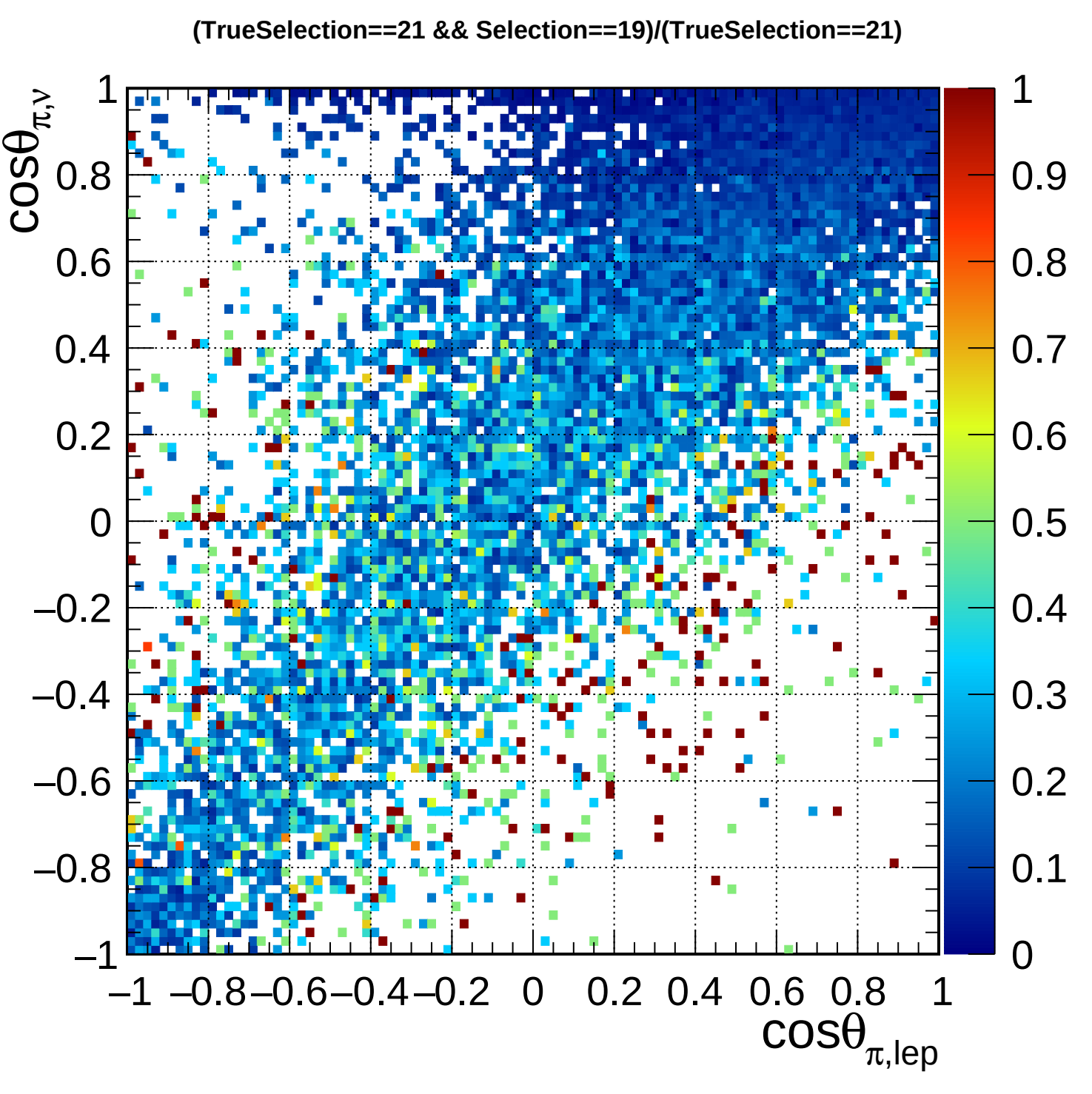

TrueSelection==21 && Selection==4
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

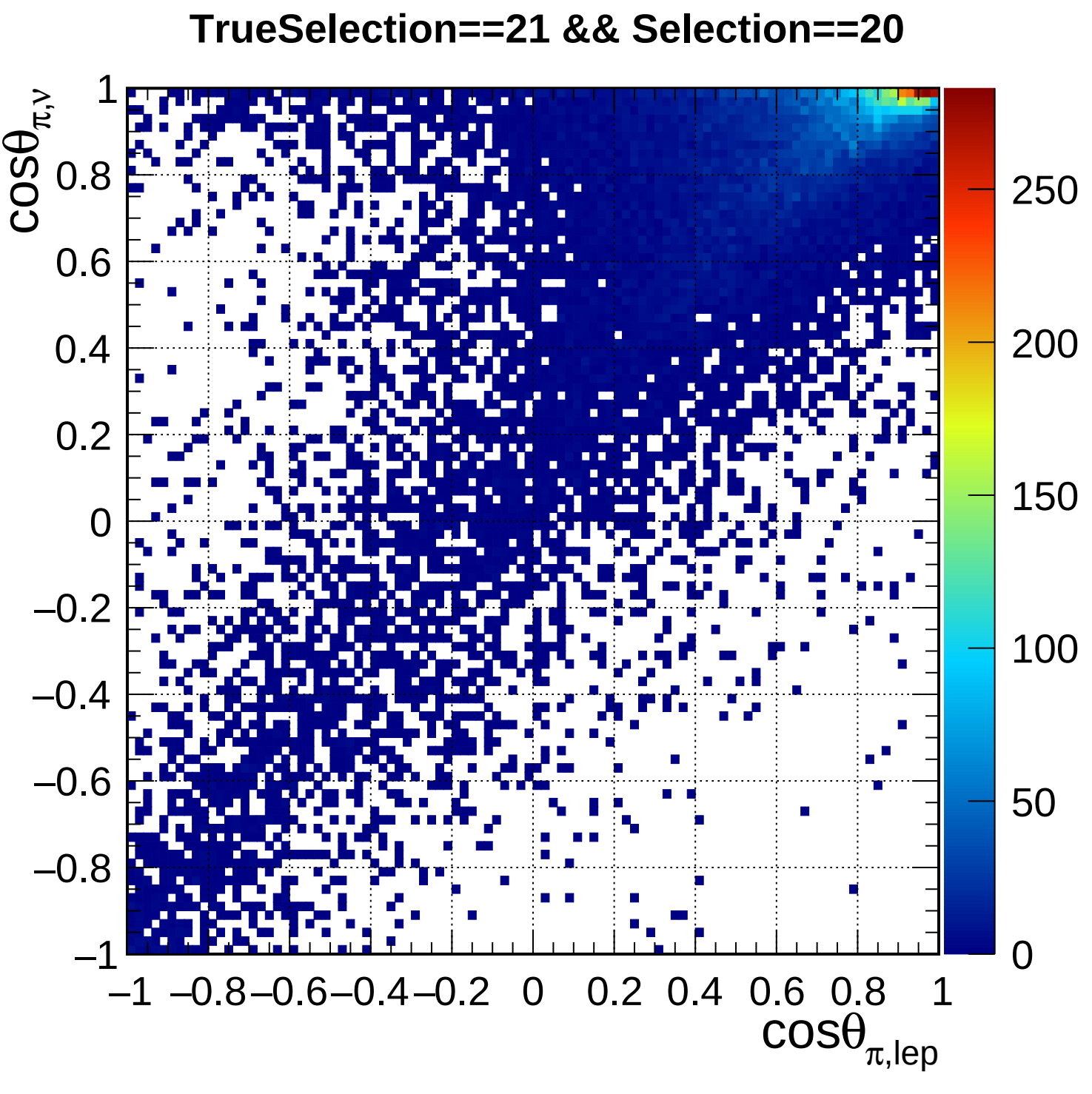

(TrueSelection==21 && Selection==4)/(TrueSelection==21)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

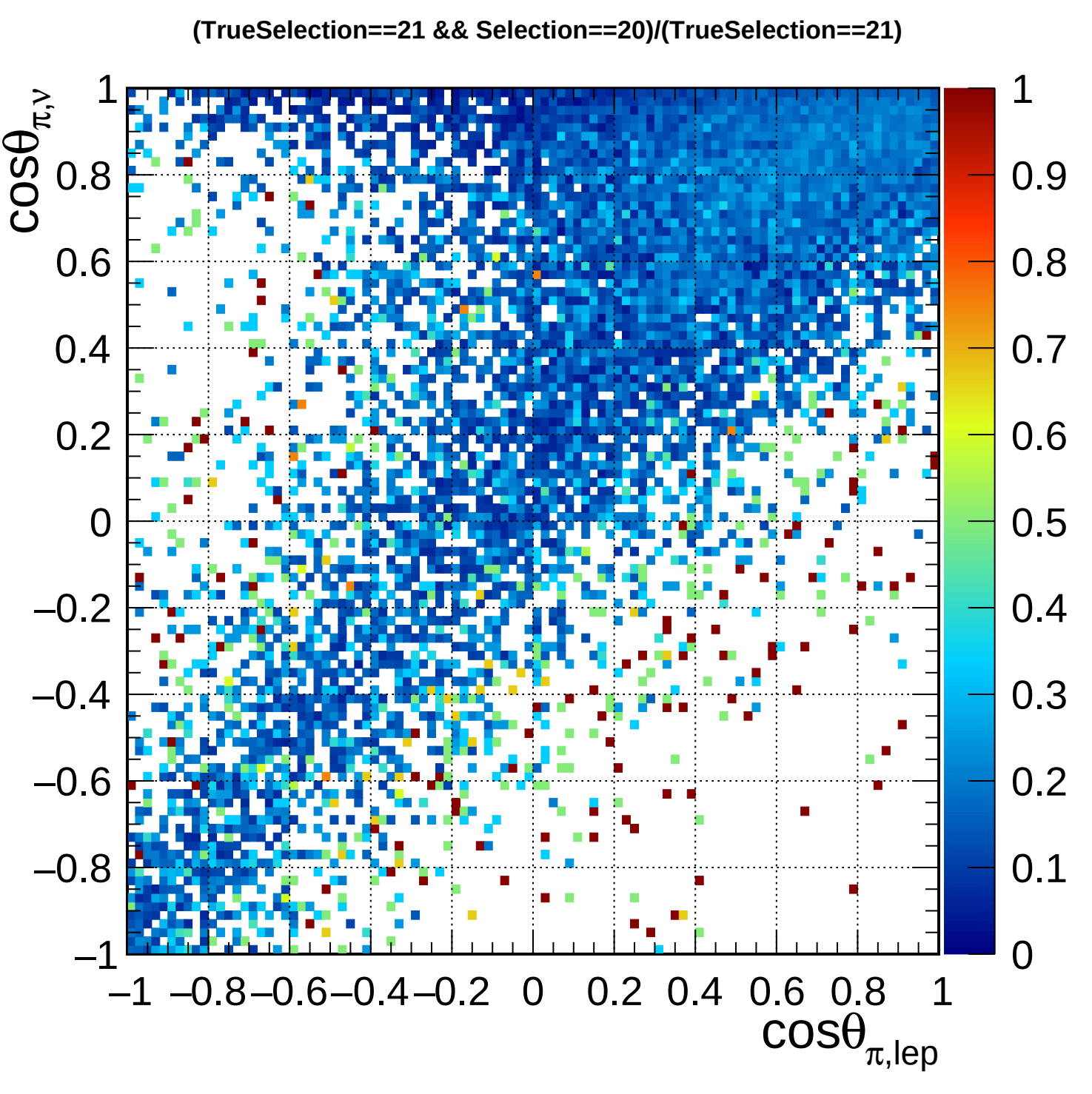

TrueSelection==21 && Selection==5
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
3
2.5
2
1.5
1
0.5
0

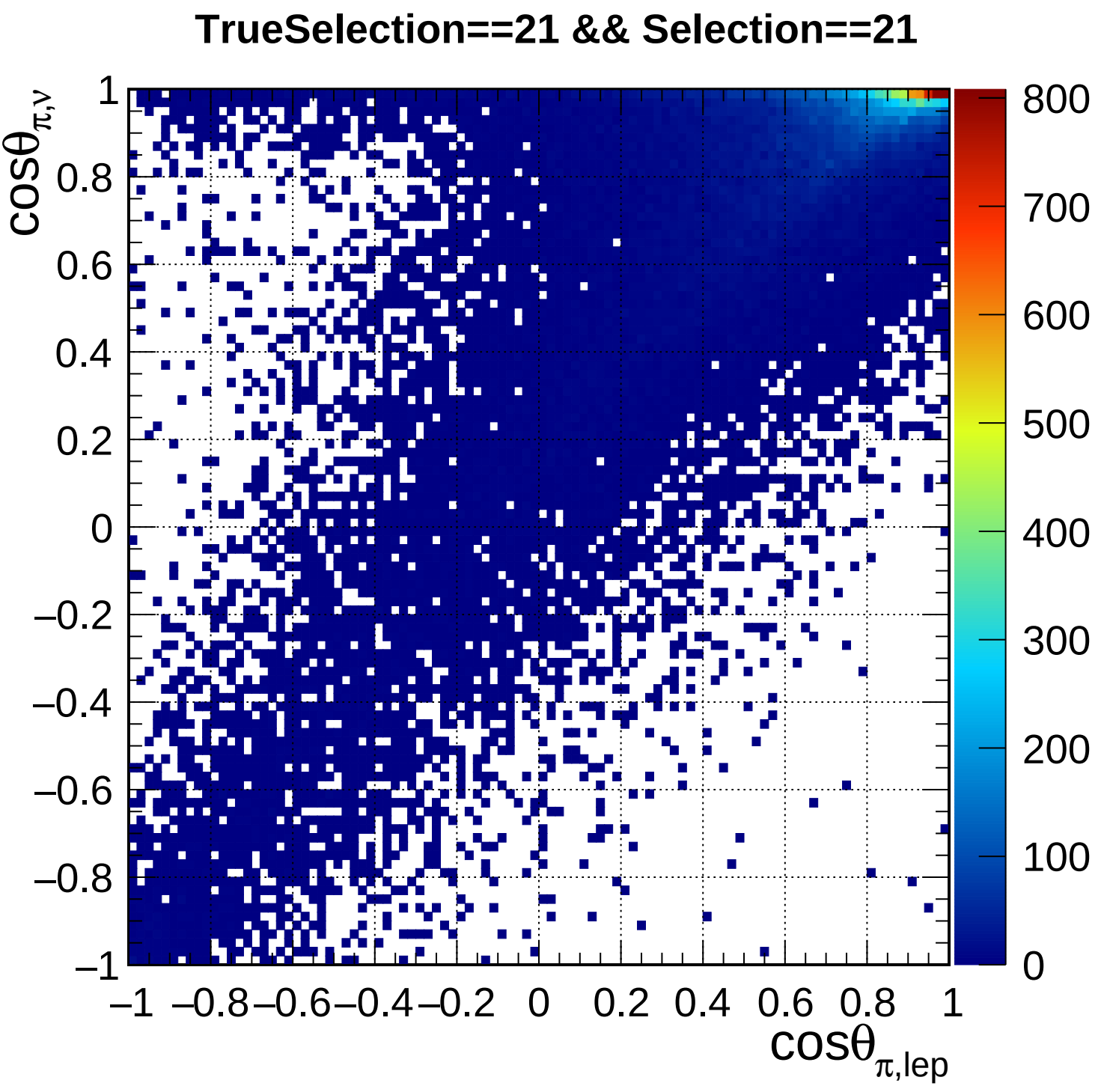

(TrueSelection==21 && Selection==5)/(TrueSelection==21)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

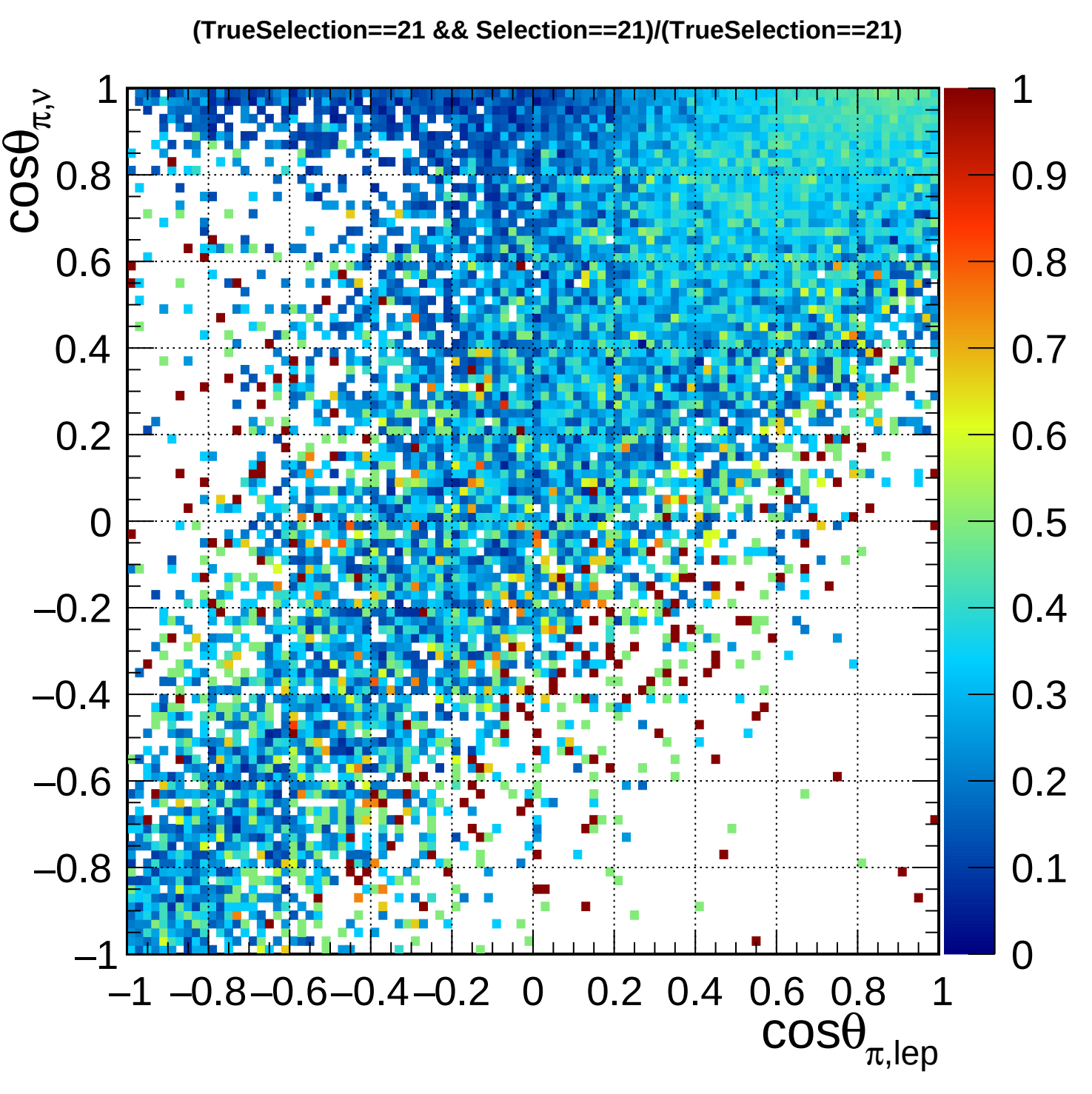

TrueSelection==21 && Selection==19
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
100
80
60
40
20
0

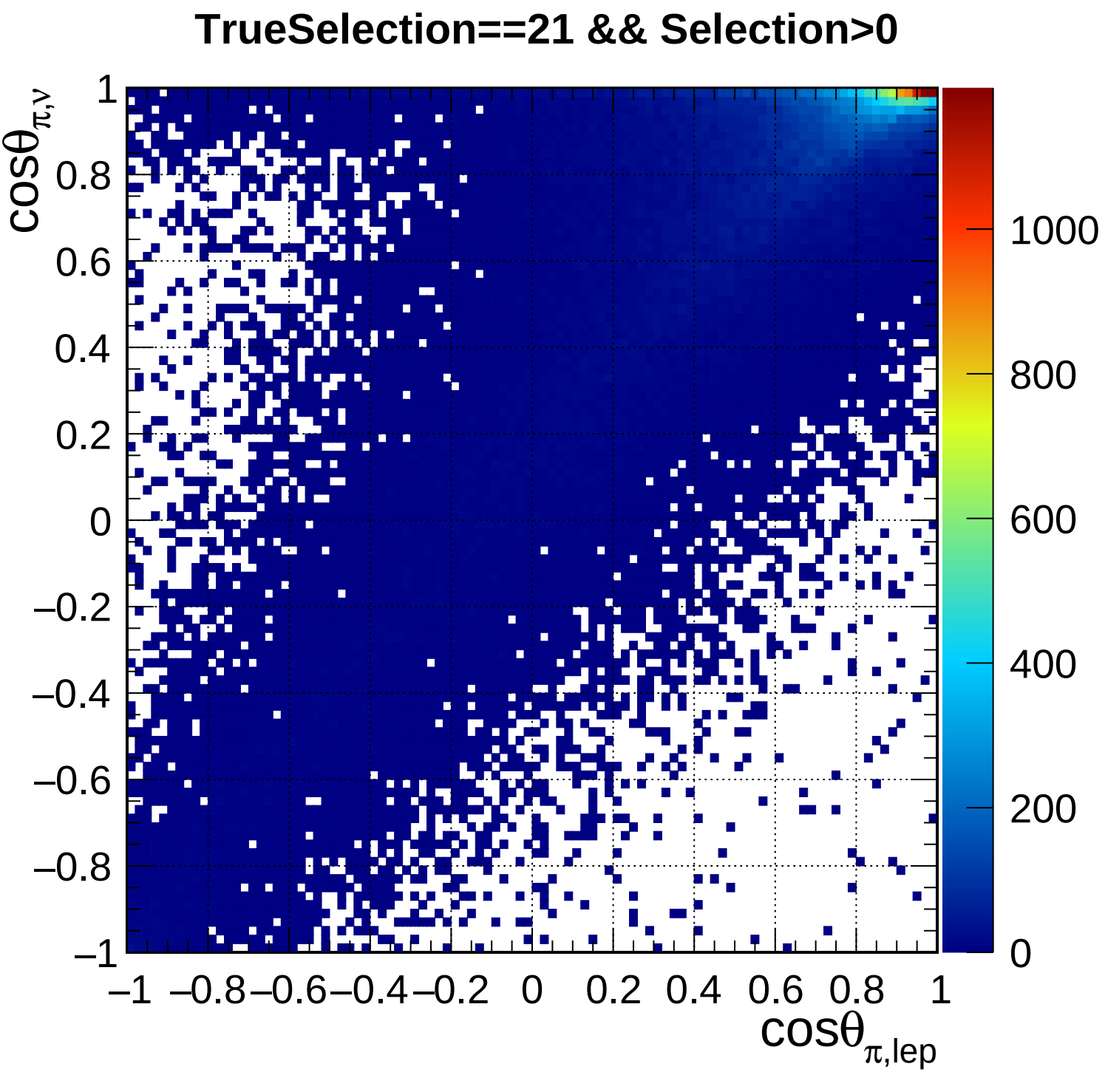

(TrueSelection==21 && Selection==19)/(TrueSelection==21)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

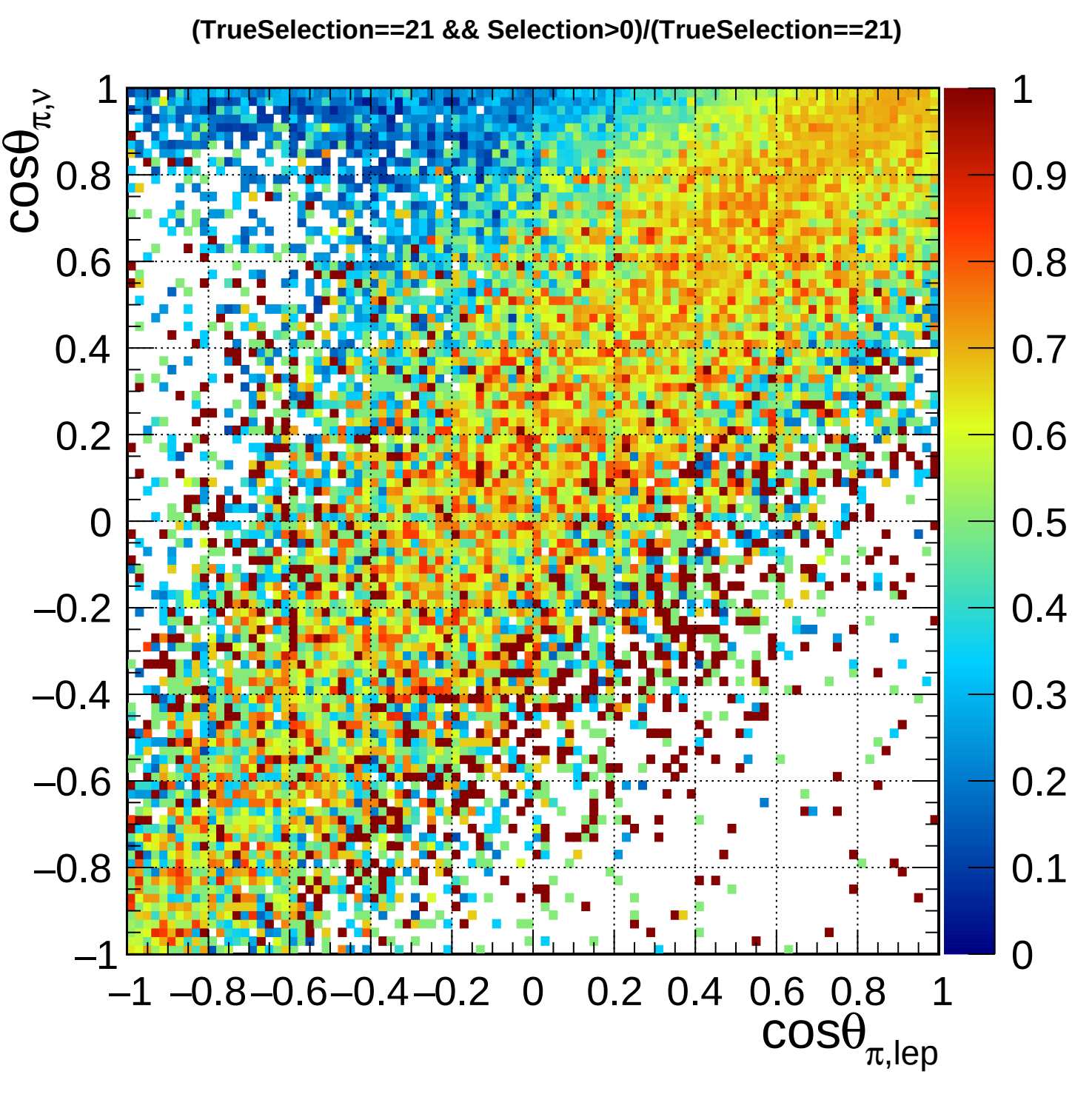

TrueSelection==21 && Selection==20
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
250
200
150
100
50
0

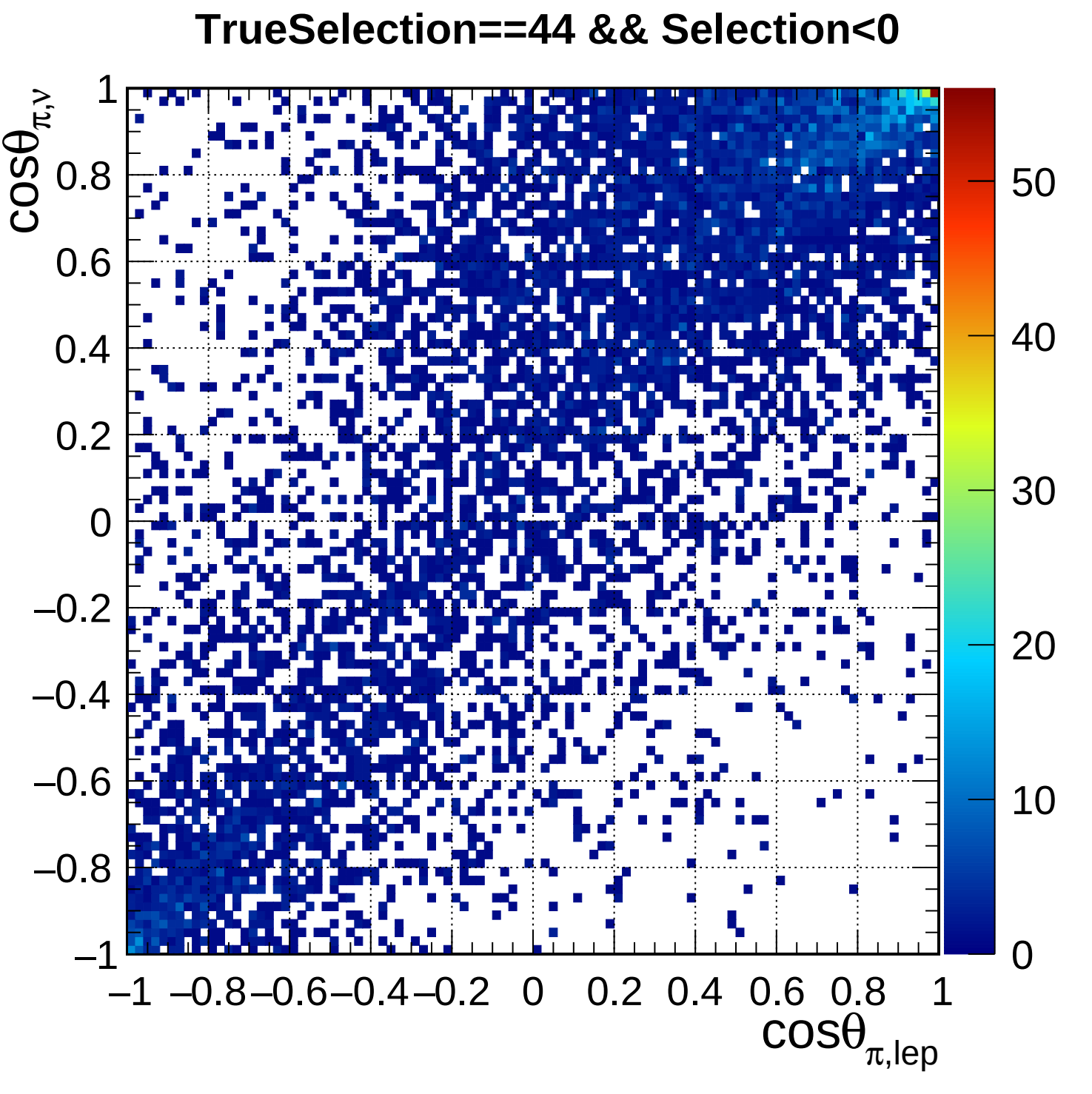

(TrueSelection==21 && Selection==20)/(TrueSelection==21)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

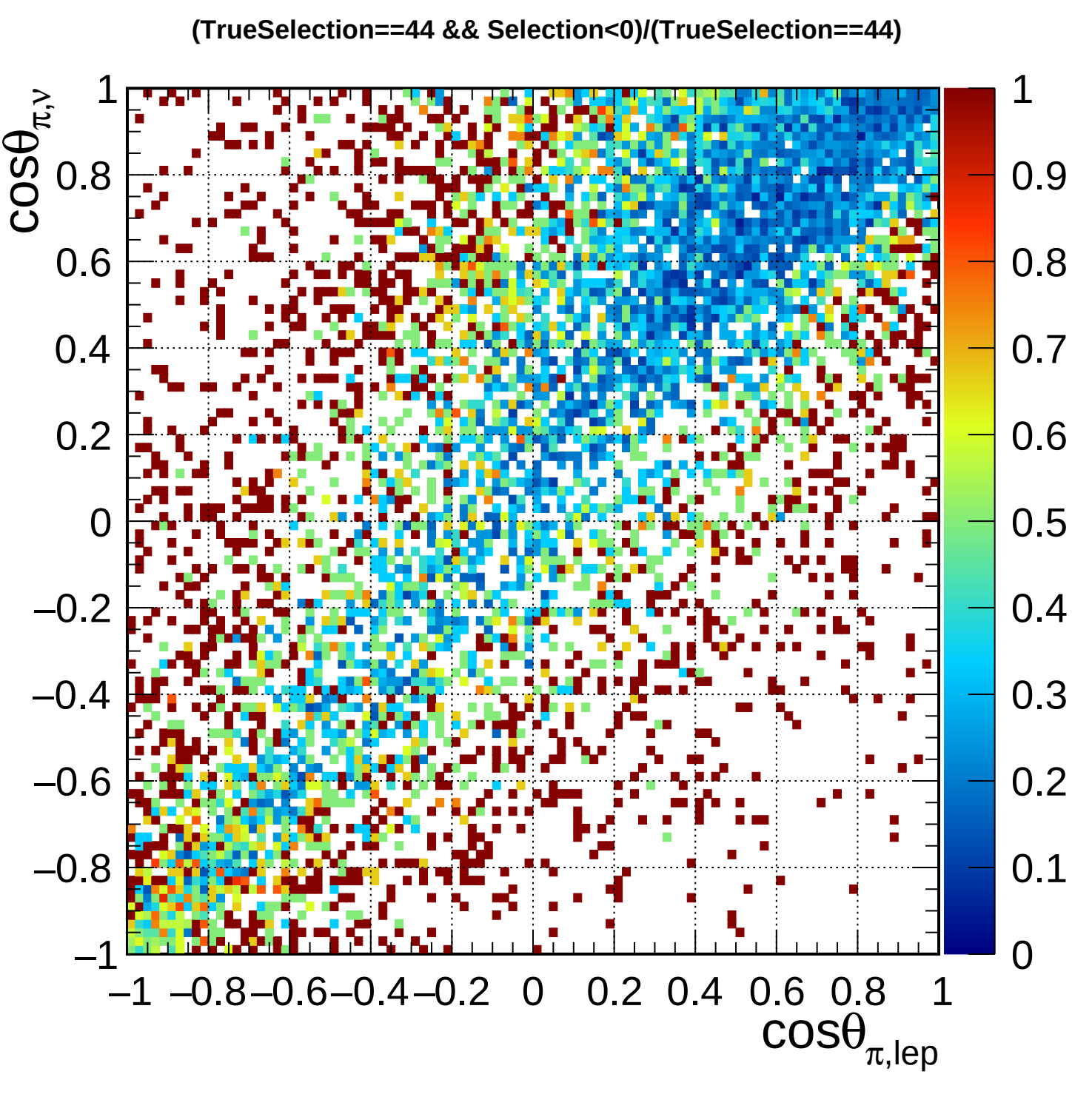

TrueSelection==21 && Selection==21
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
800
700
600
500
400
300
200
100
0

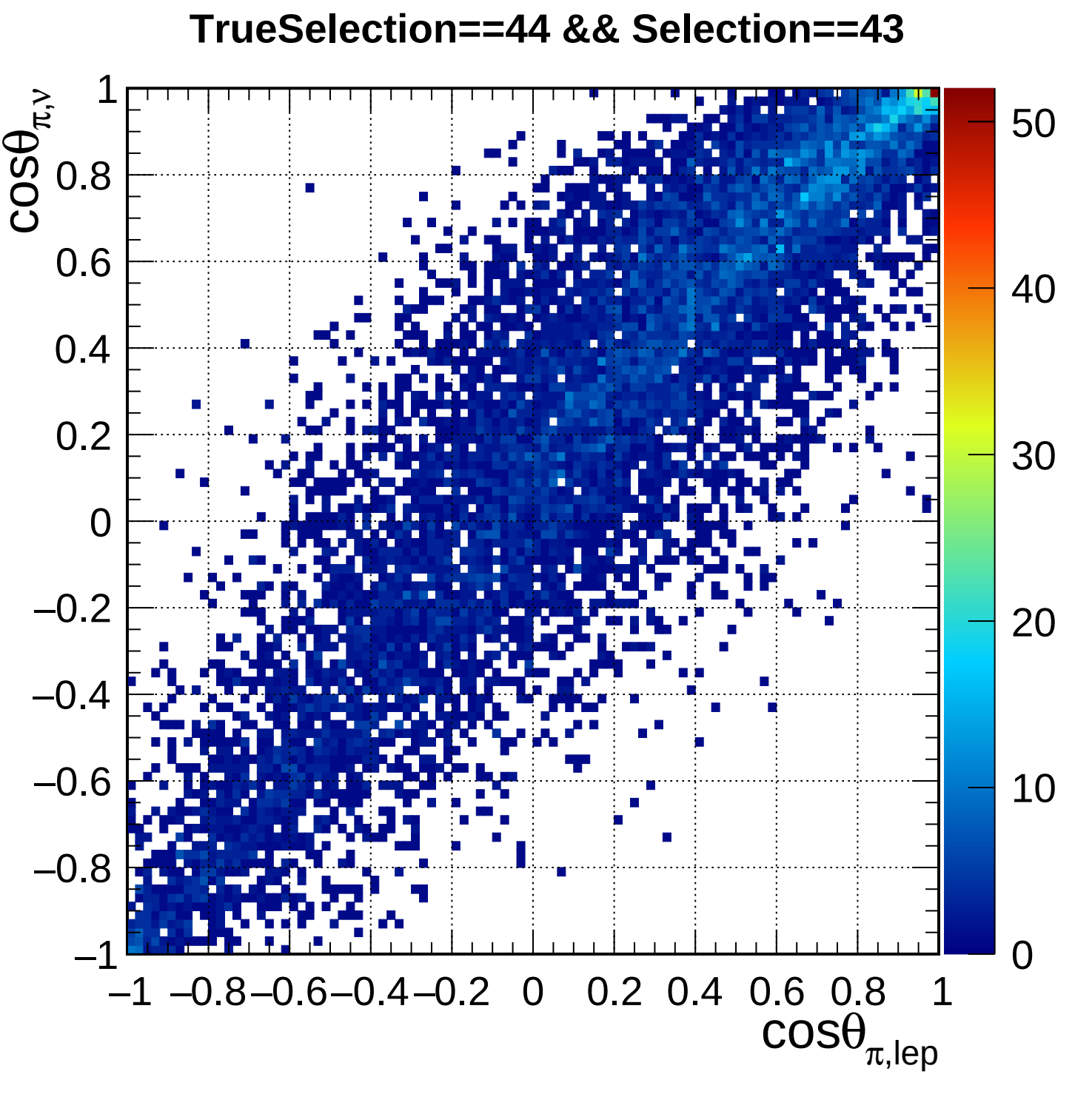

(TrueSelection==21 && Selection==21)/(TrueSelection==21)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

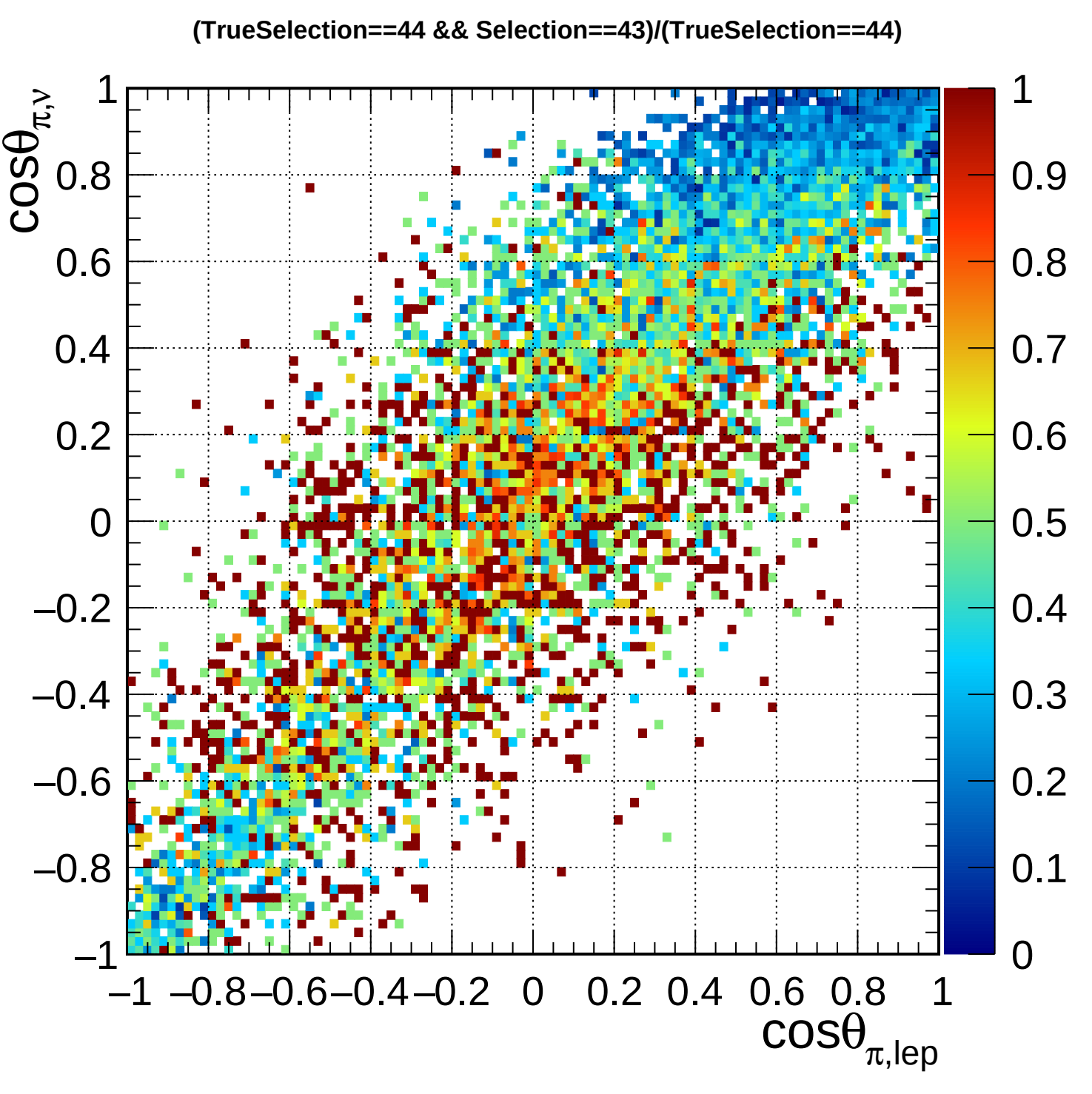

TrueSelection==21 && Selection>0
cosθπ,ν
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
–1 –0.8 –0.6 –0.4 –0.2 0 0.2 0.4 0.6 0.8 1
cosθπ,lep
1000
800
600
400
200
0

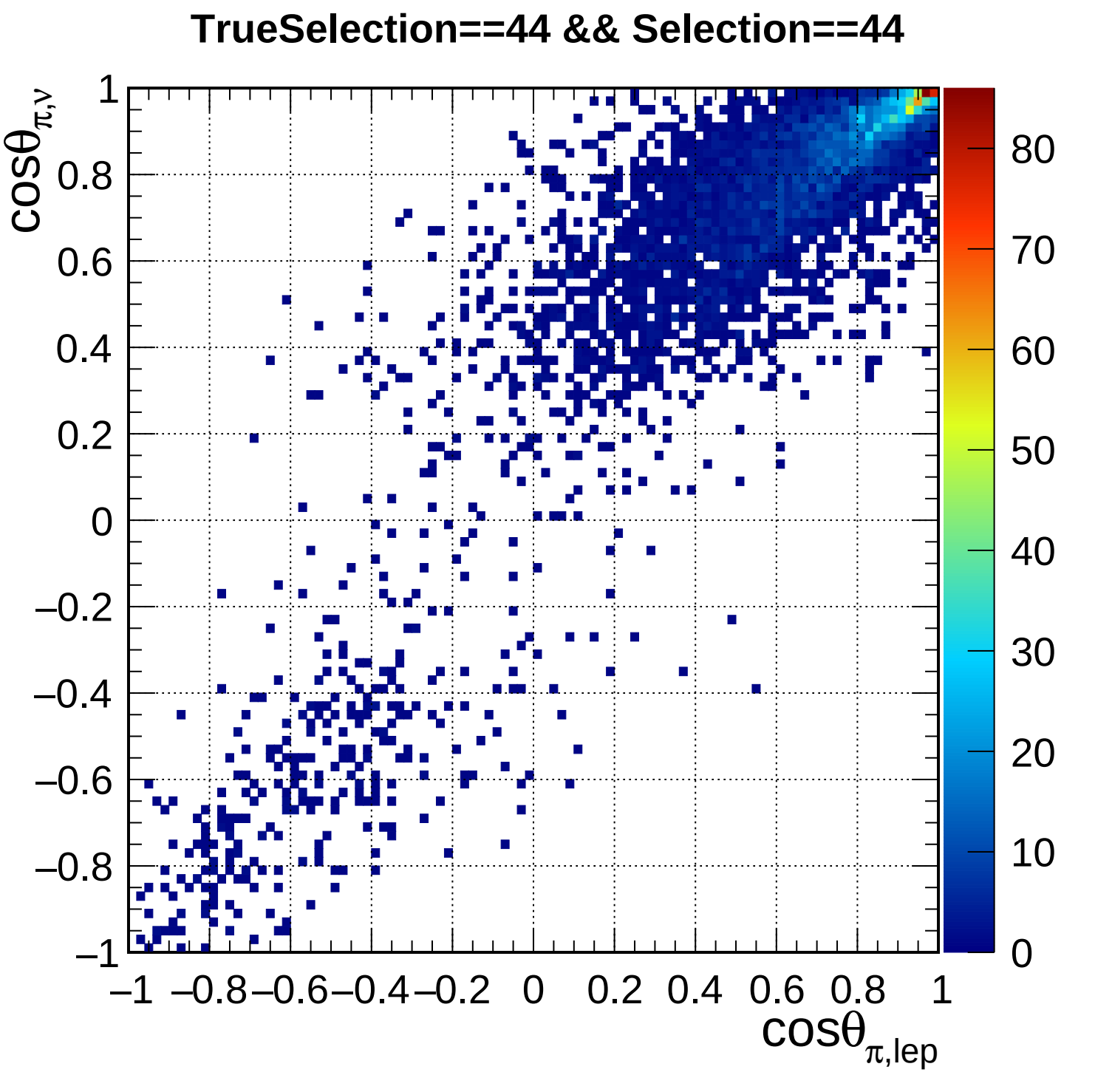

(TrueSelection==21 && Selection>0)/(TrueSelection==21)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

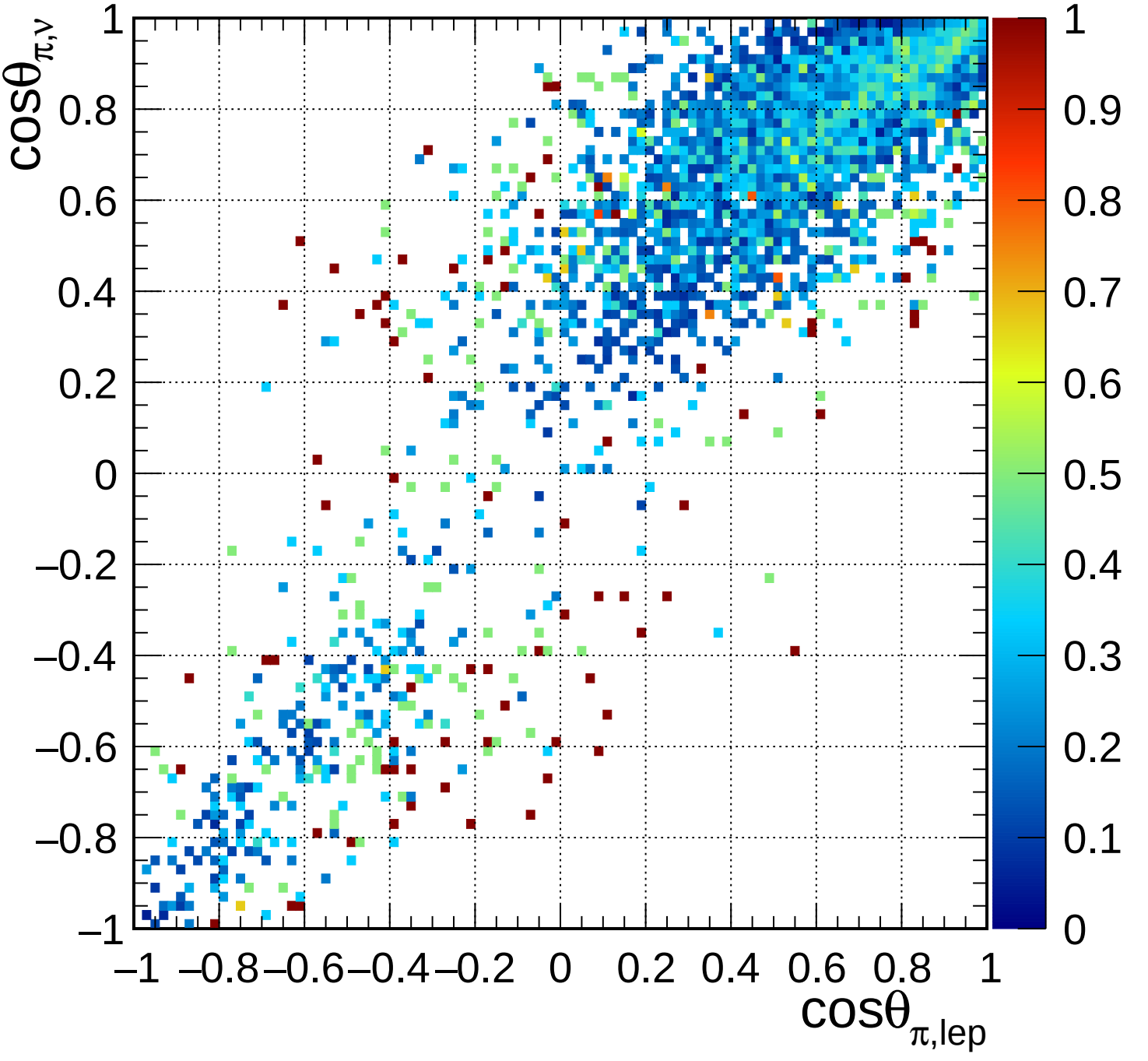

TrueSelection==44 && Selection<0
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
50
40
30
20
10
0

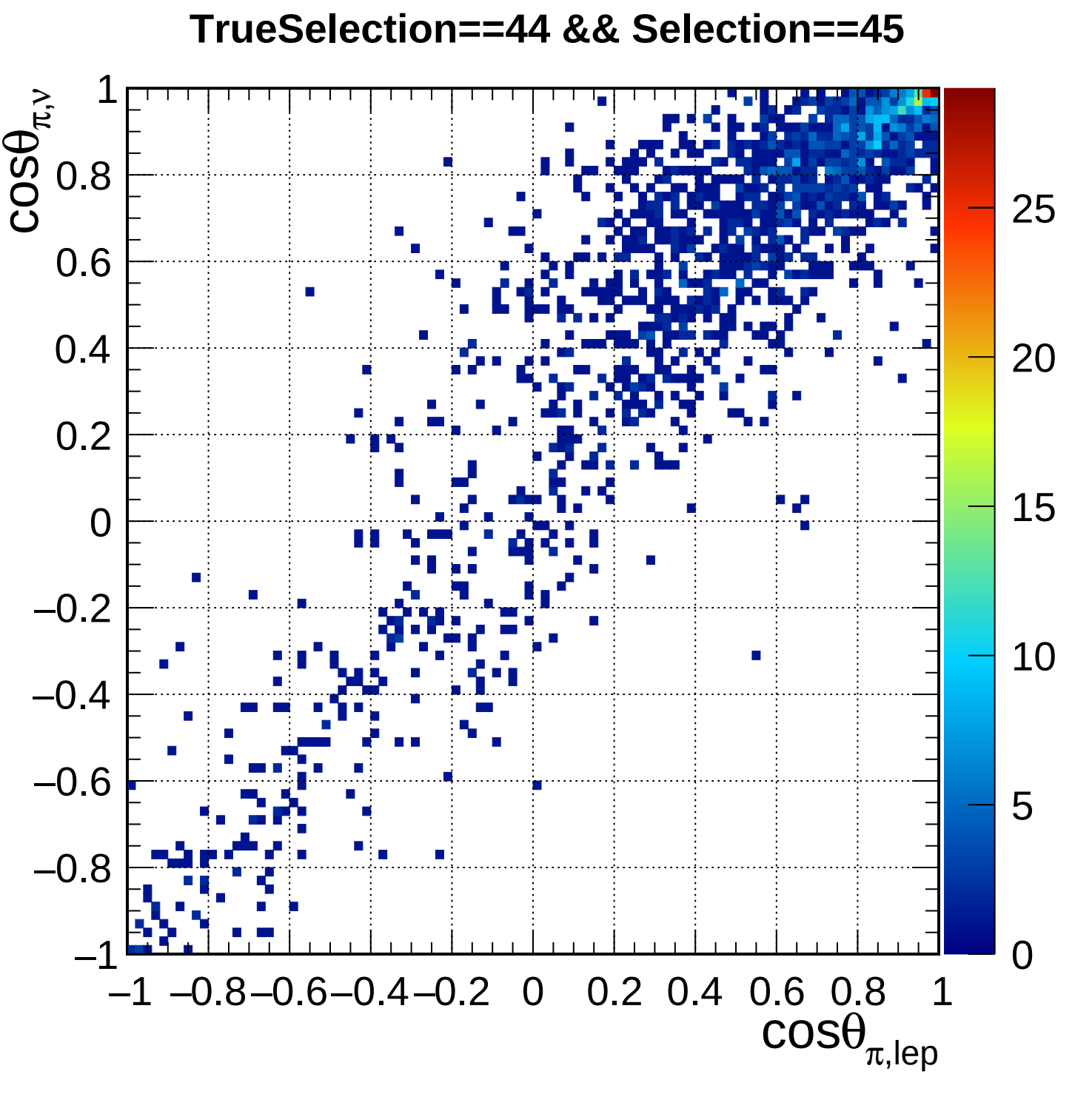

(TrueSelection==44 && Selection<0)/(TrueSelection==44)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

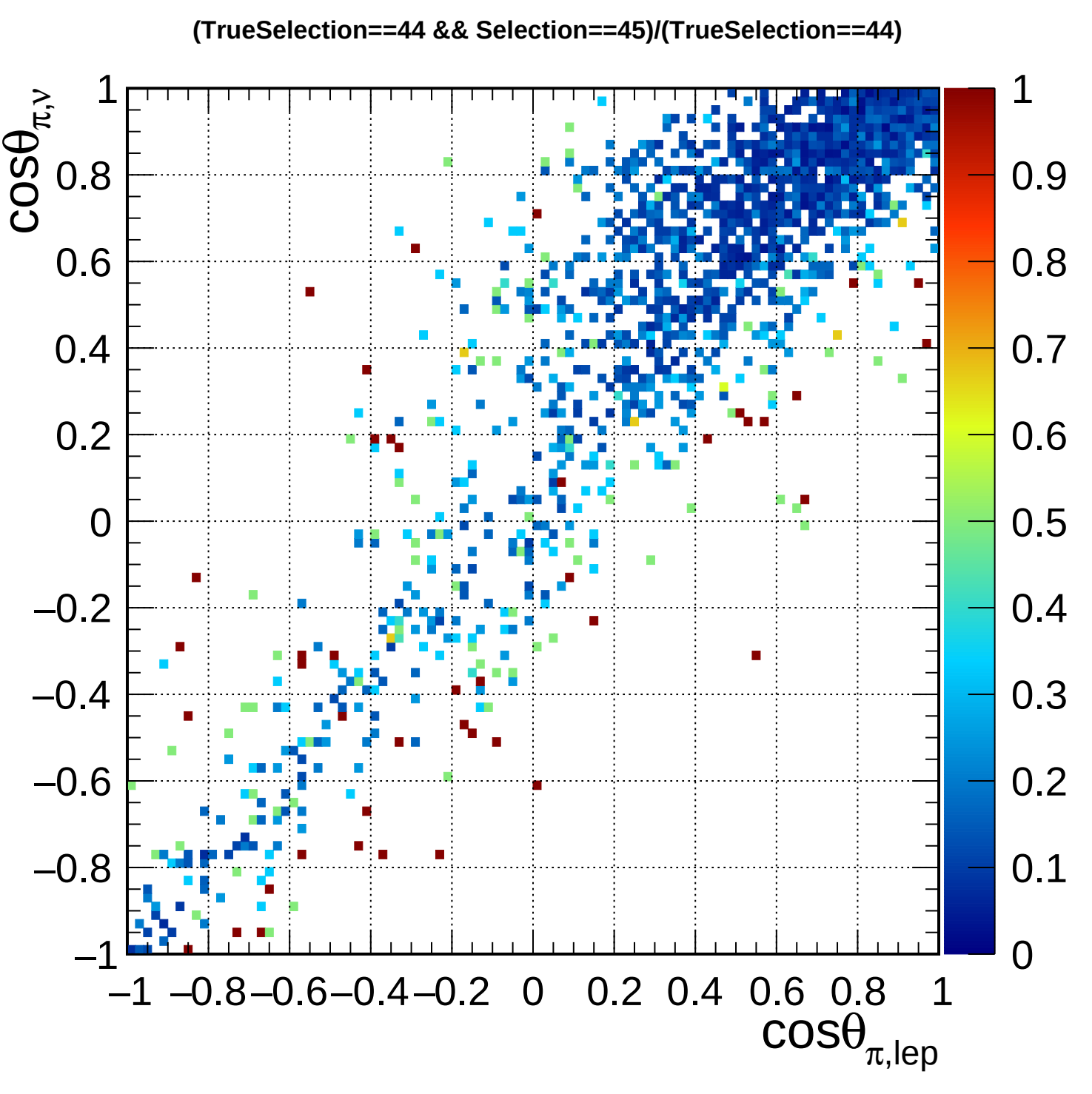

TrueSelection==44 && Selection==43
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
50
40
30
20
10
0

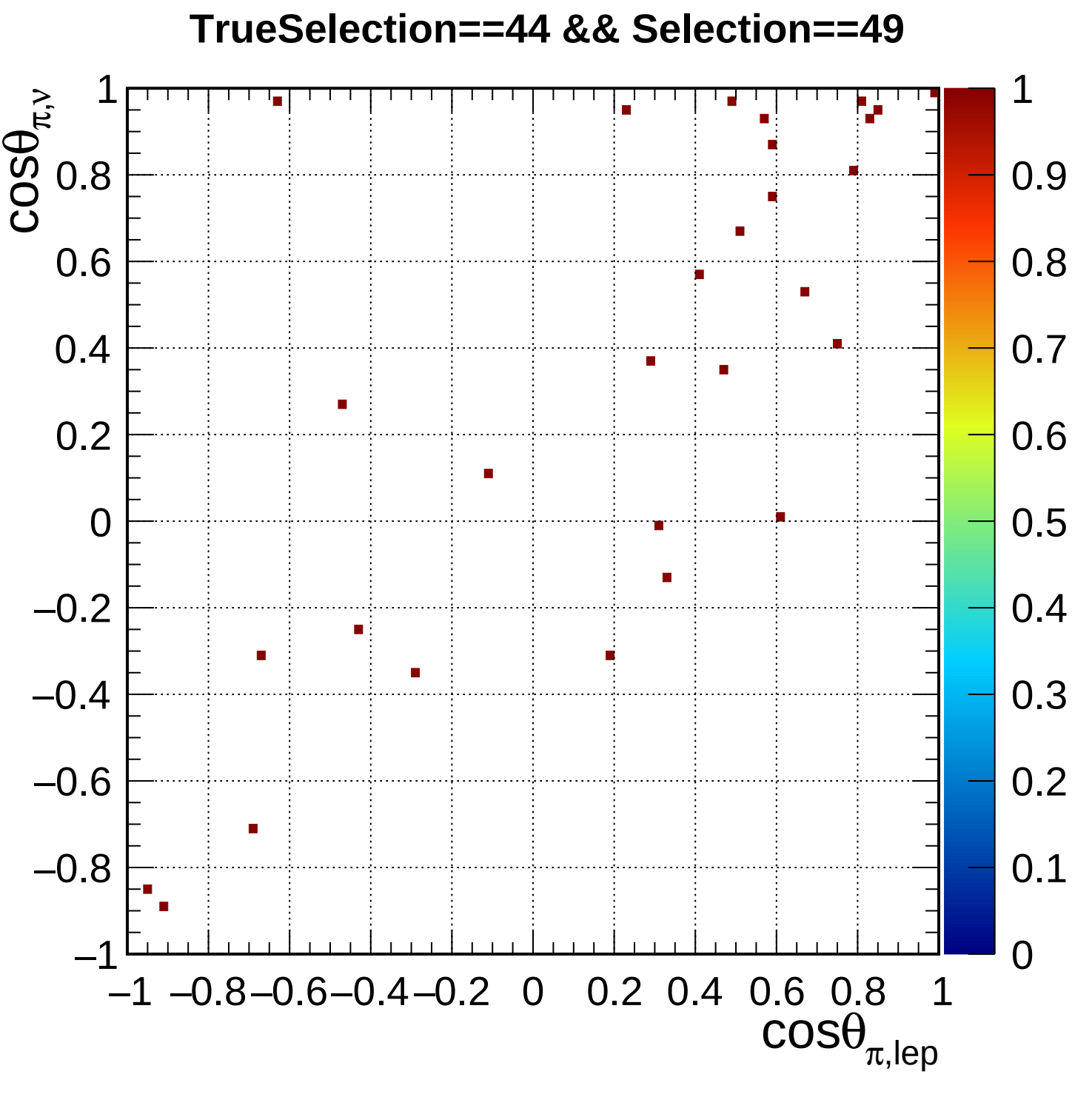

(TrueSelection==44 && Selection==43)/(TrueSelection==44)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

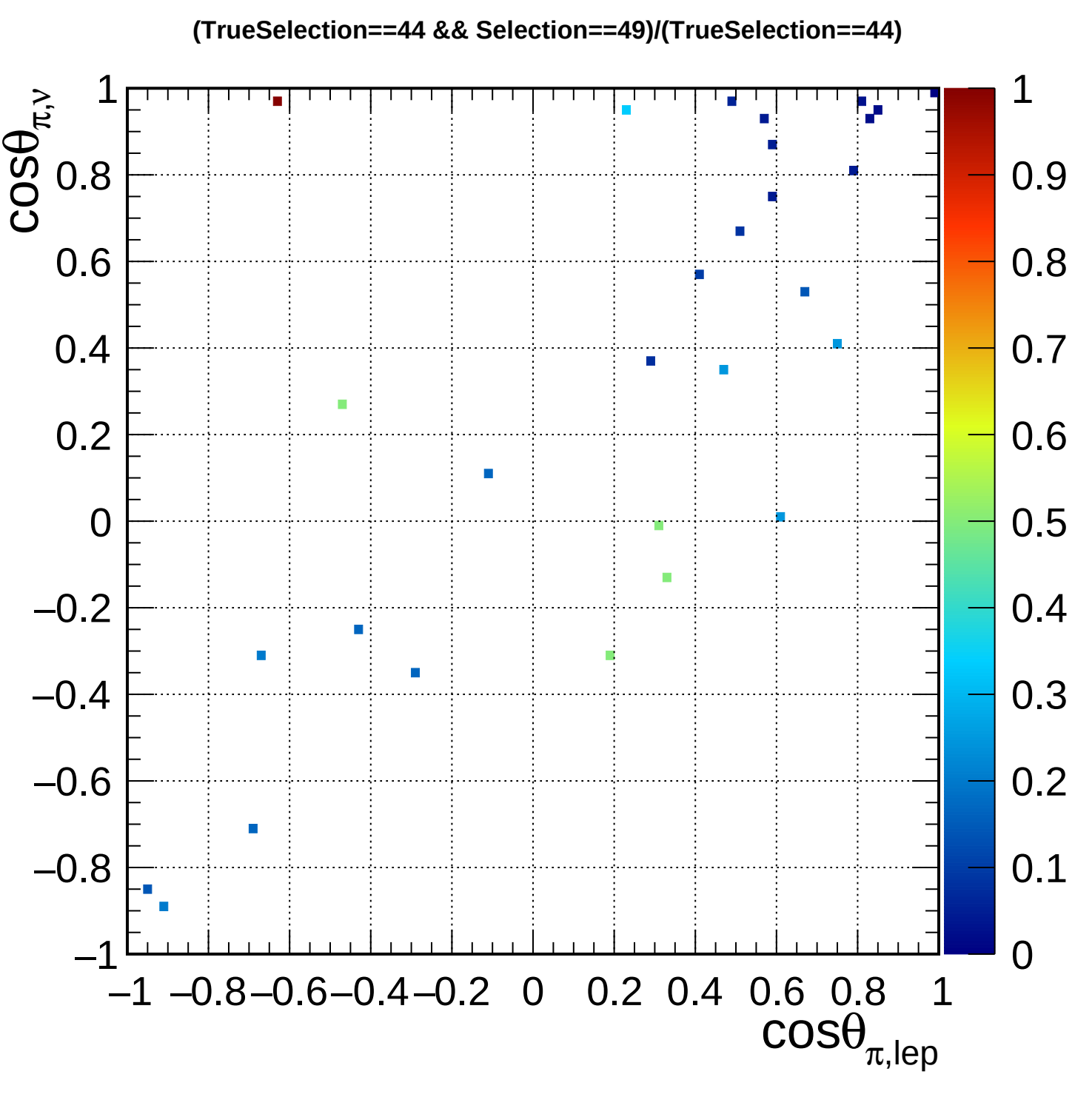

TrueSelection==44 && Selection==44
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
–1 –0.8 –0.6 –0.4 –0.2 0 0.2 0.4 0.6 0.8 1
80
70
60
50
40
30
20
10
0

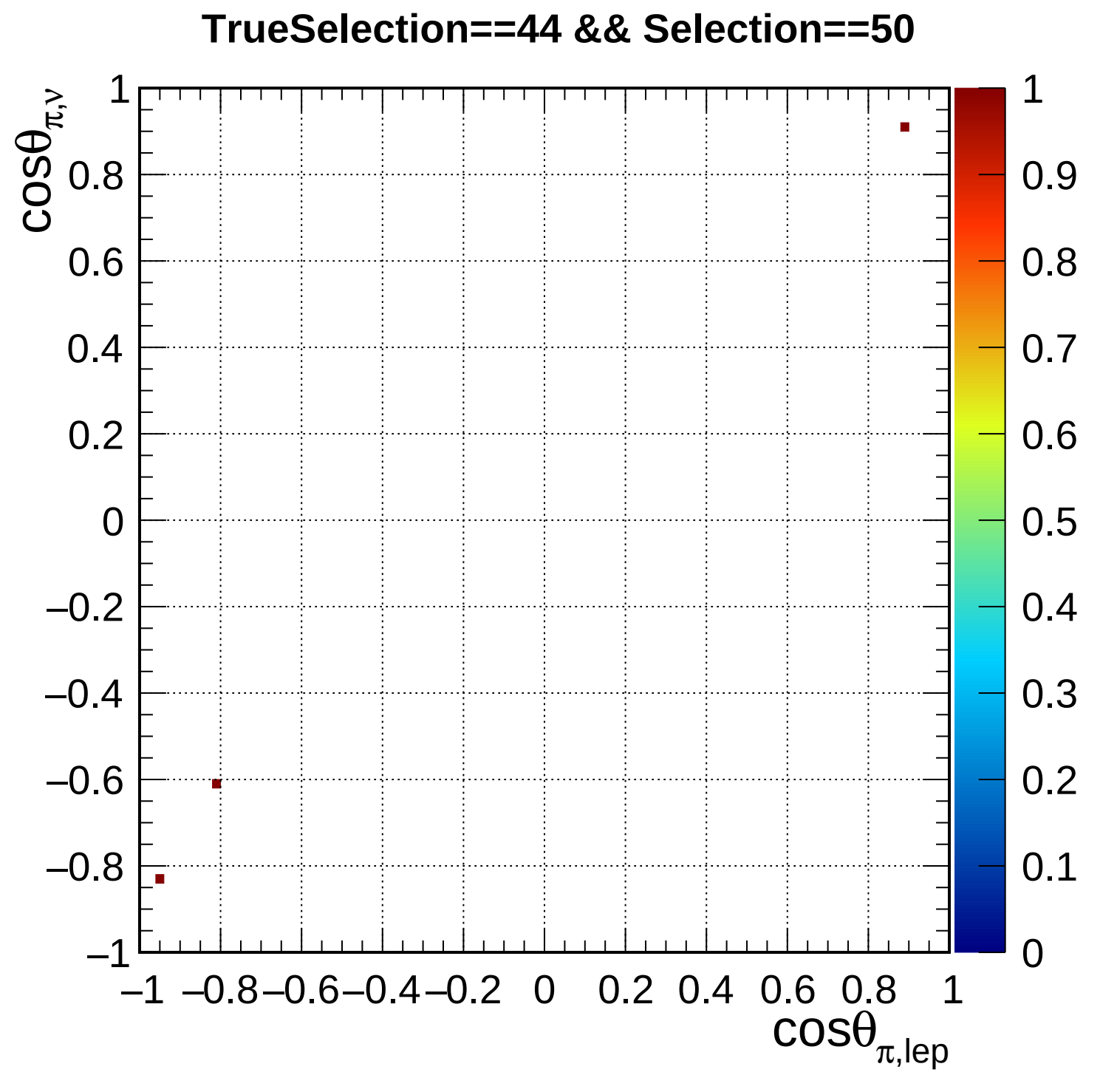

(TrueSelection==44 && Selection==44)/(TrueSelection==44)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

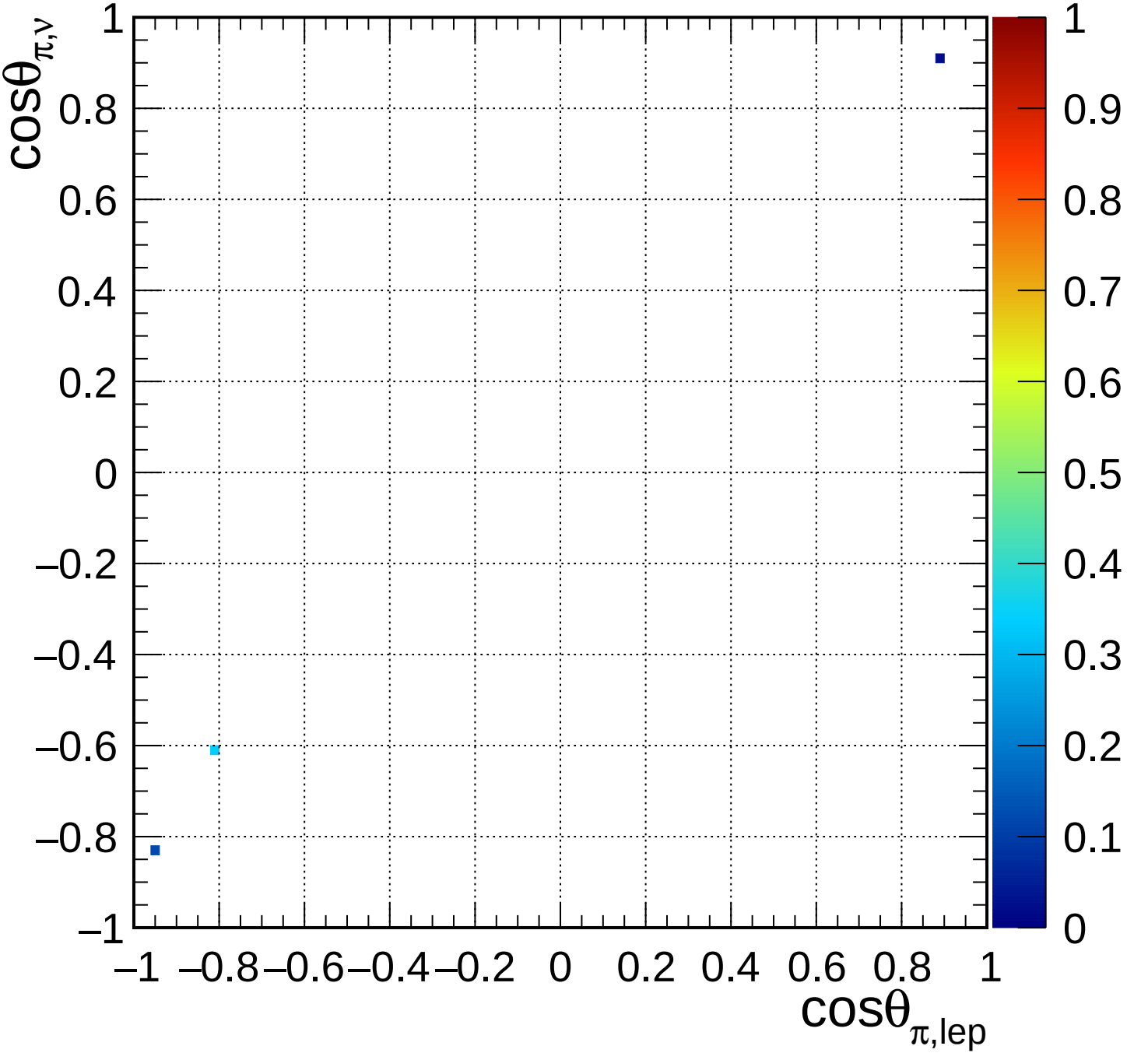

TrueSelection==44 && Selection==45
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
25
20
15
10
5
0

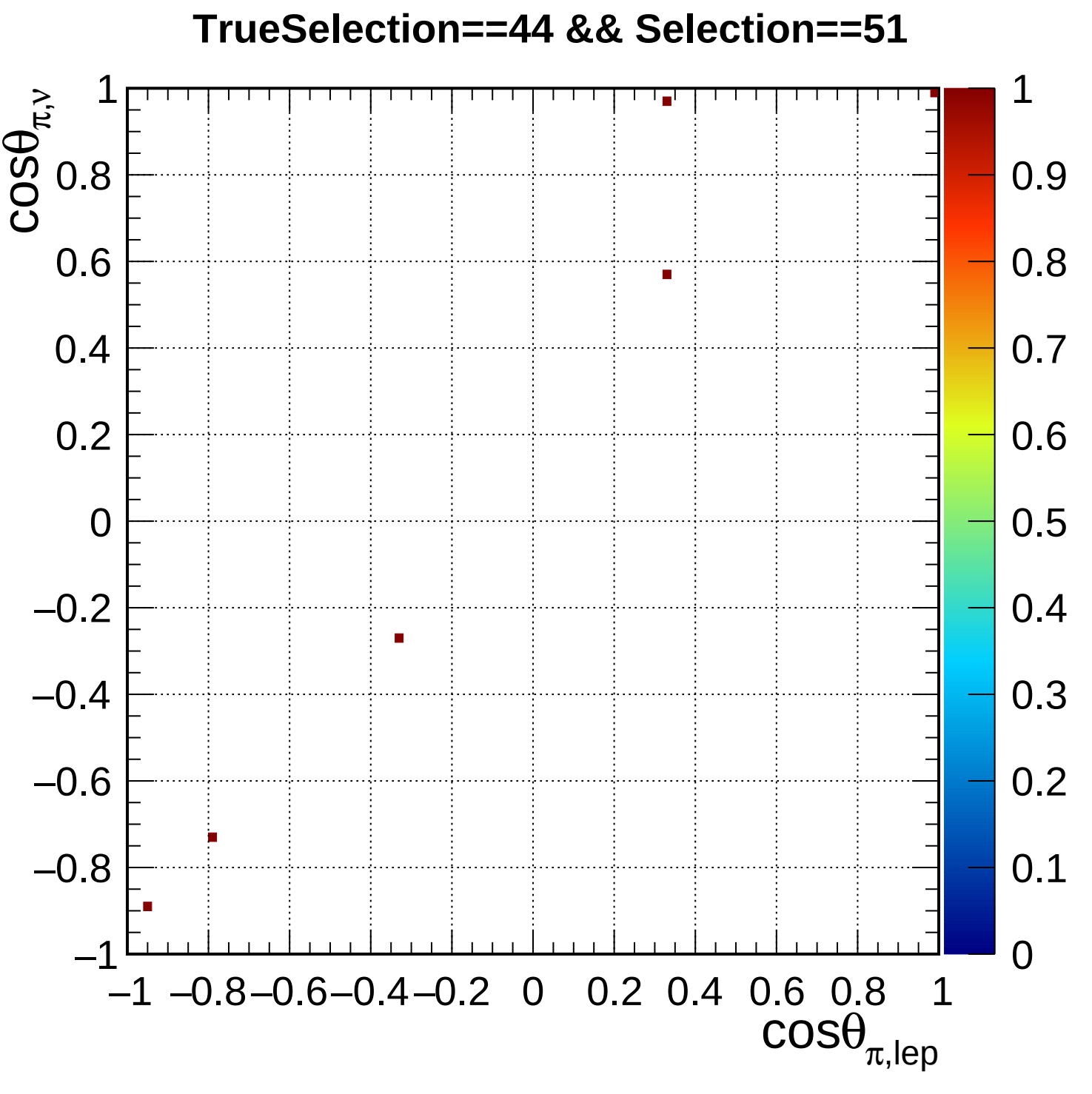

(TrueSelection==44 && Selection==45)/(TrueSelection==44)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

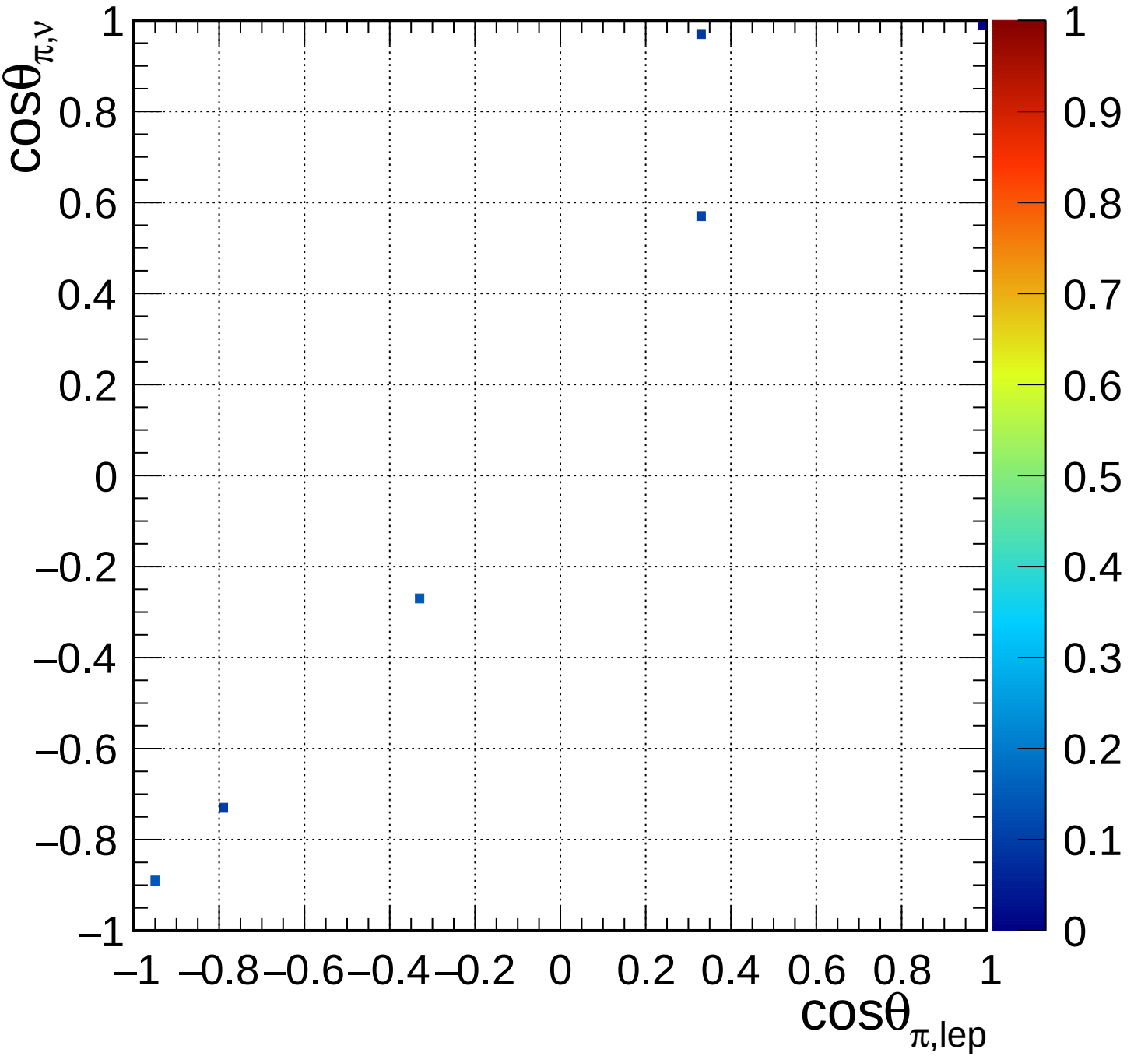

TrueSelection==44 && Selection==49
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

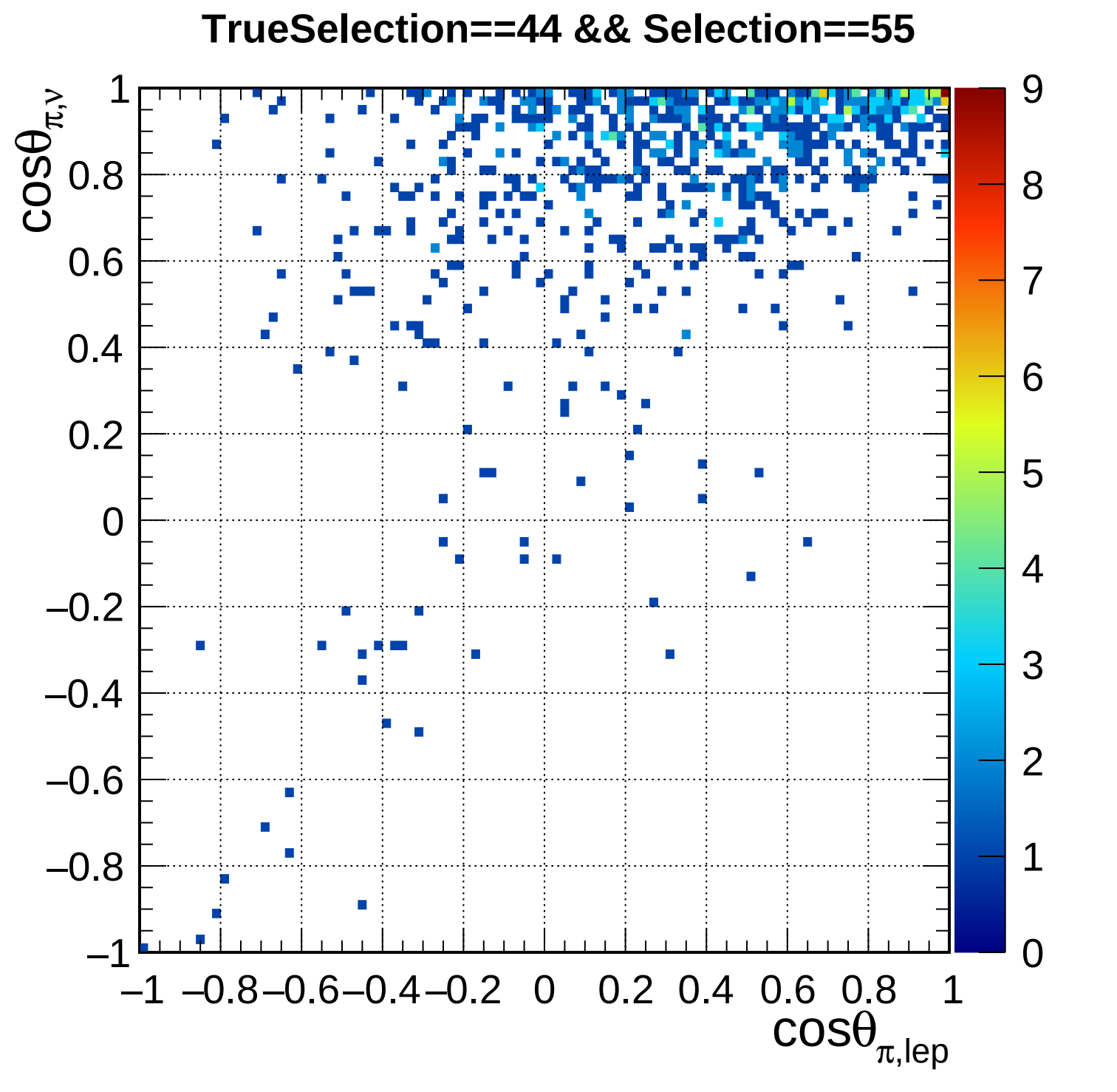

(TrueSelection==44 && Selection==49)/(TrueSelection==44)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

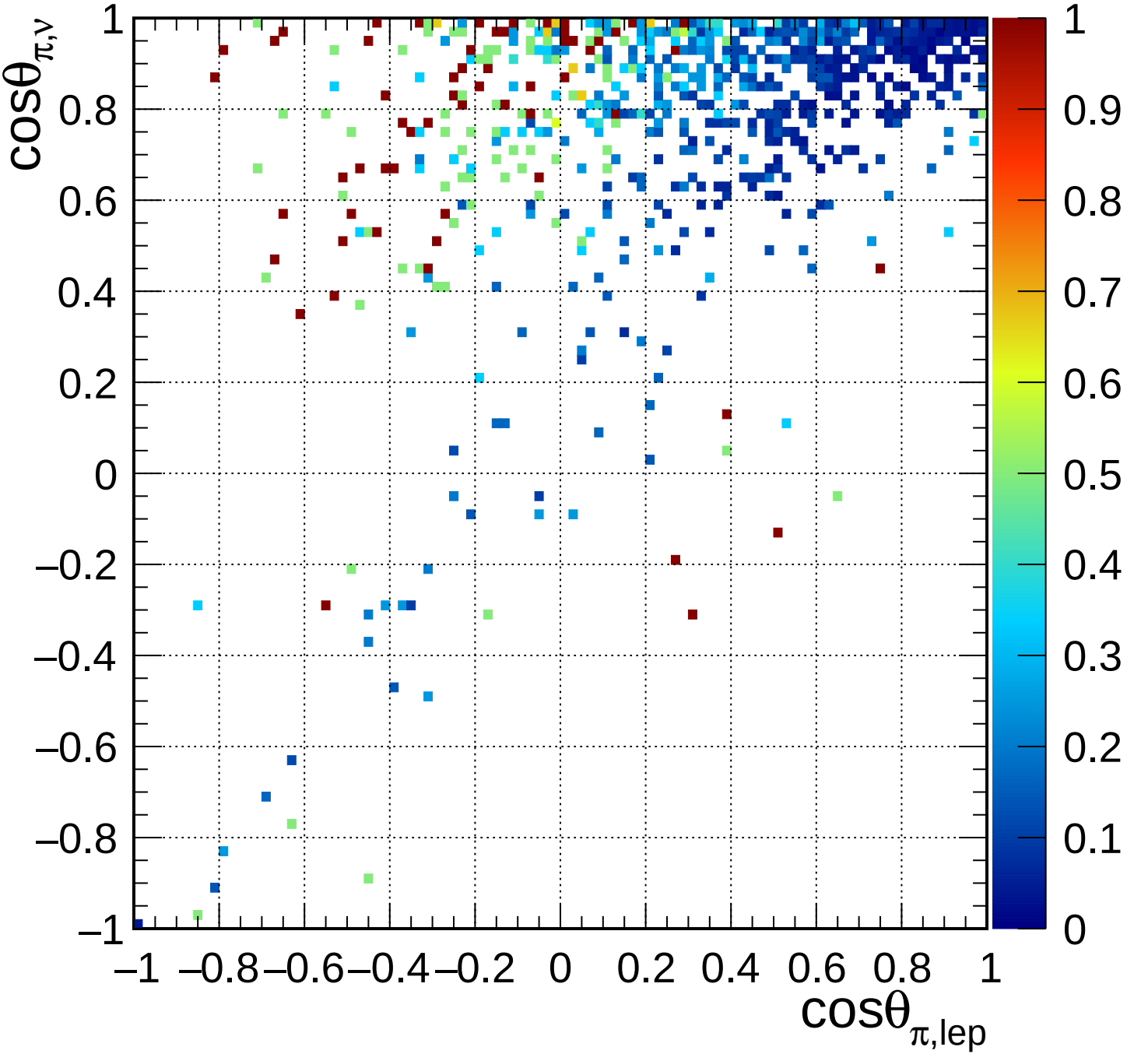

TrueSelection==44 && Selection==50
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

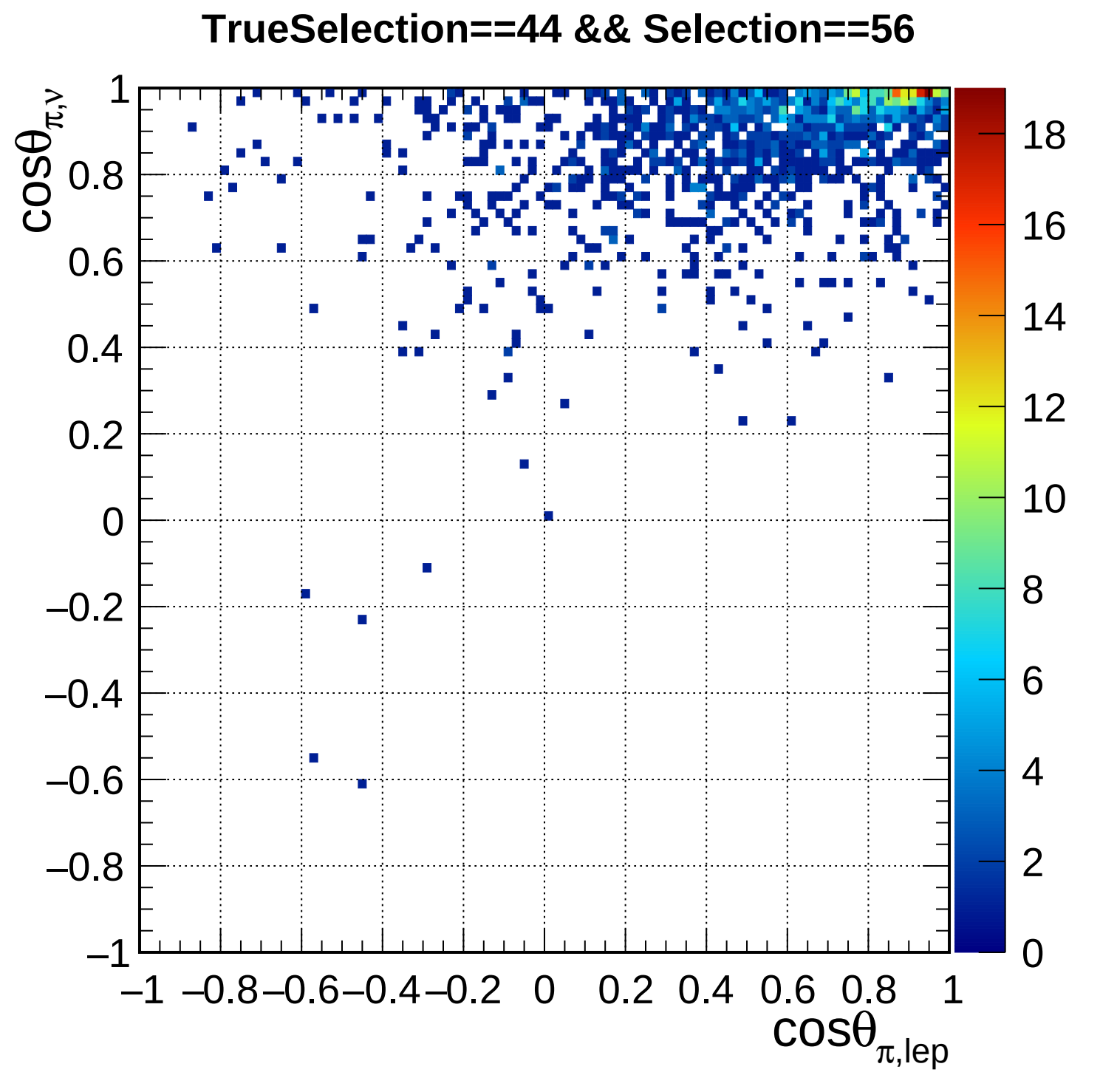

(TrueSelection==44 && Selection==50)/(TrueSelection==44)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
–1 –0.8 –0.6 –0.4 –0.2 0 0.2 0.4 0.6 0.8 1
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0

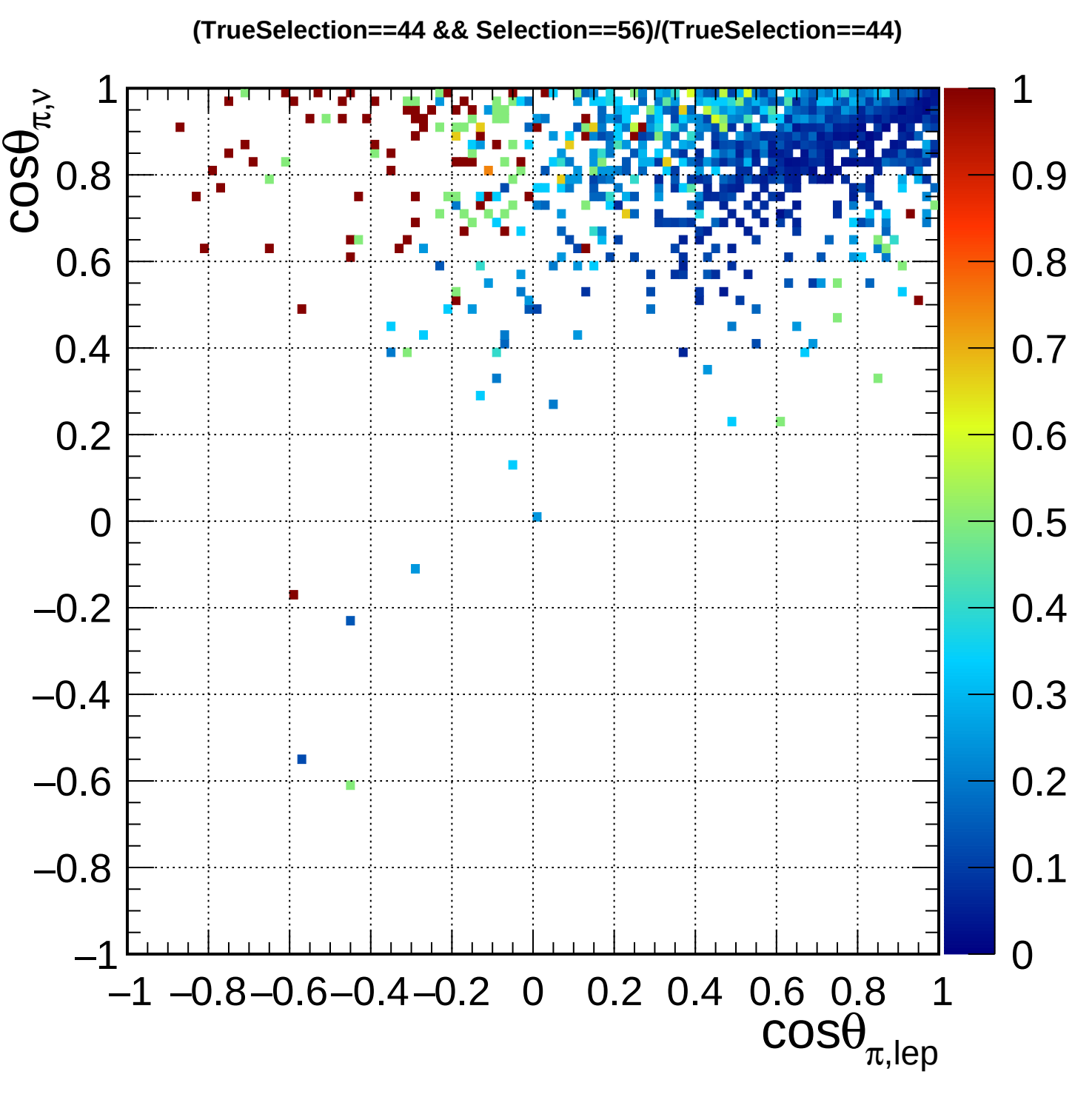

TrueSelection==44 && Selection==51
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

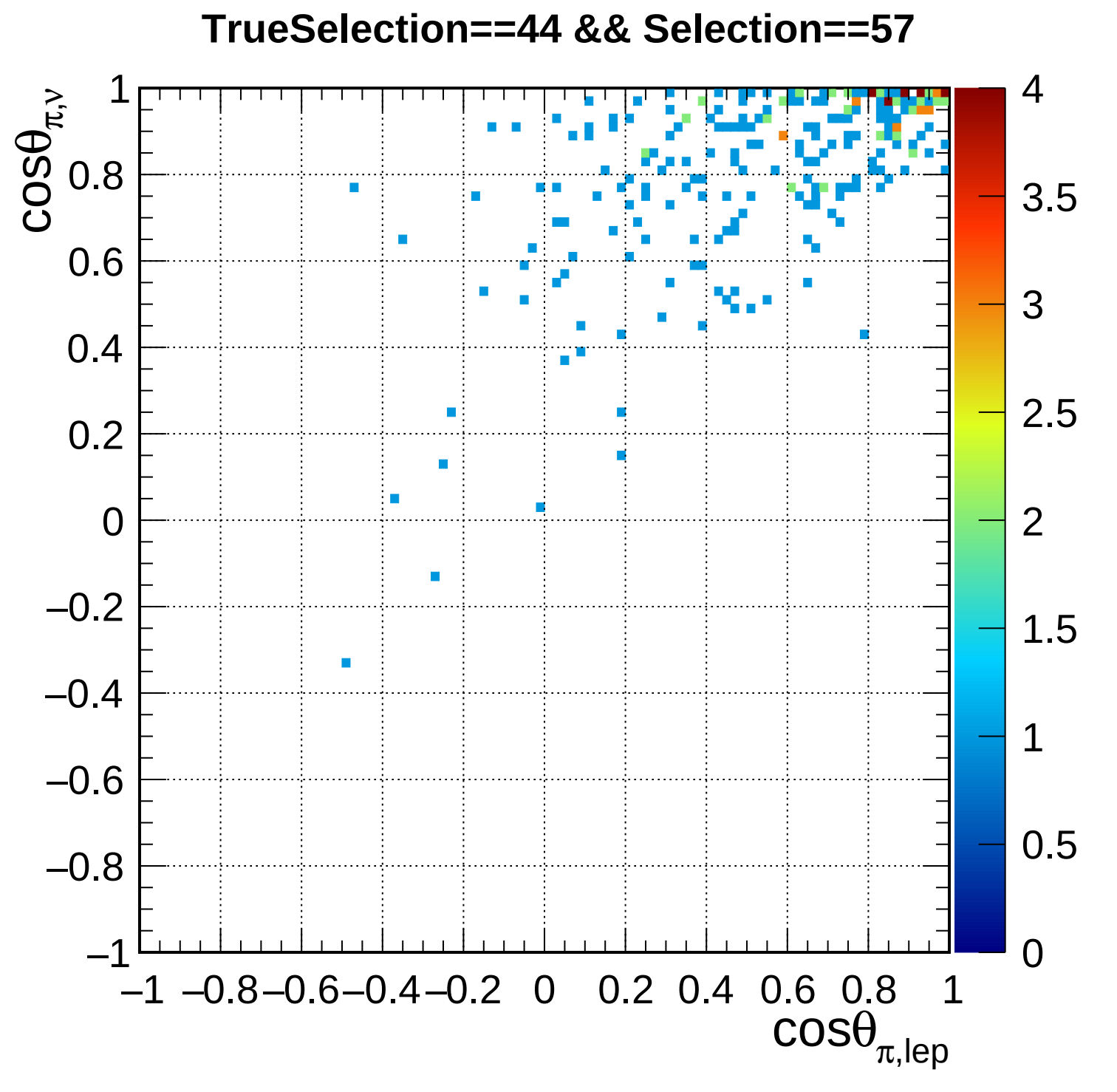

(TrueSelection==44 && Selection==51)/(TrueSelection==44)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

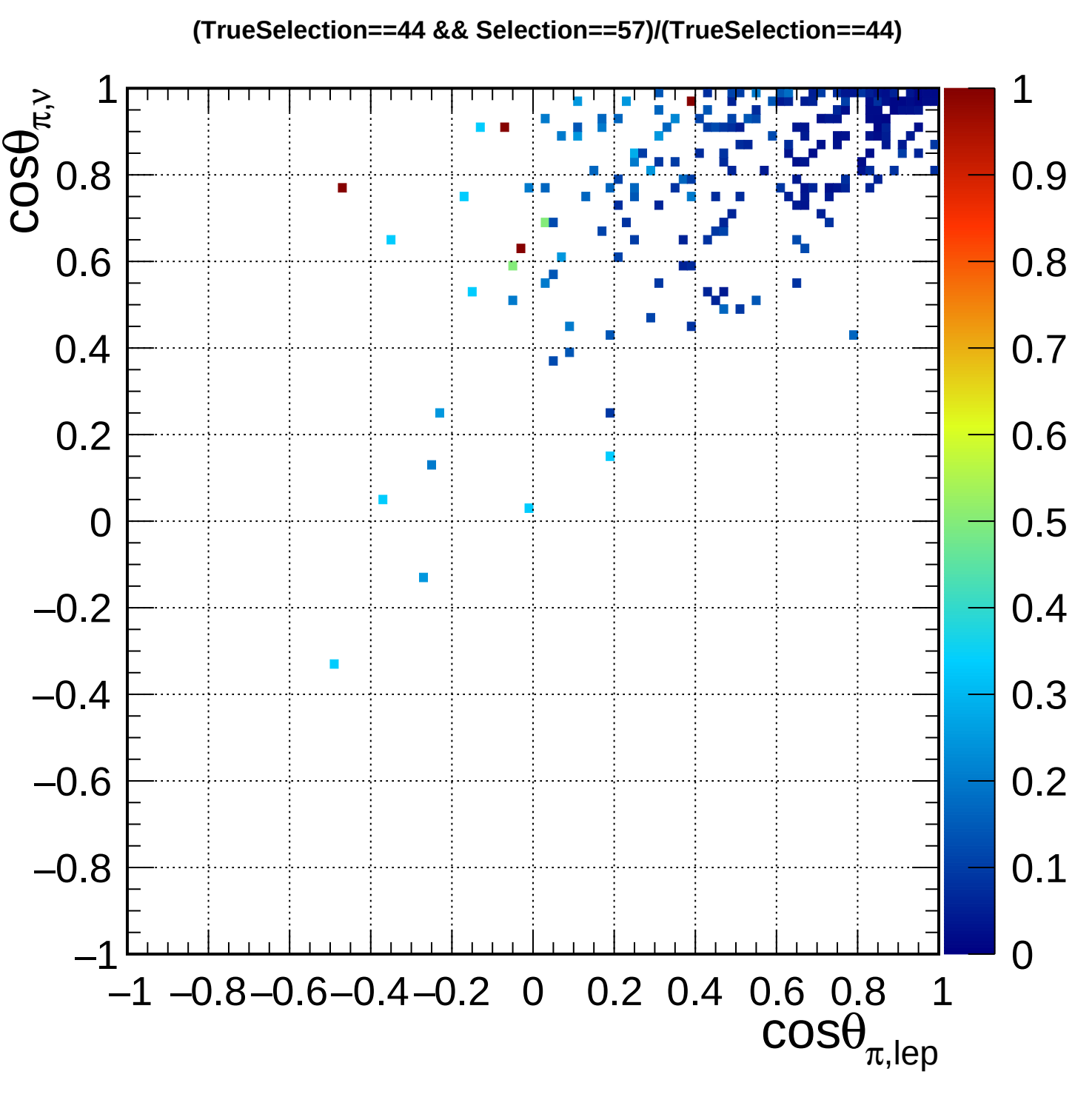

TrueSelection==44 && Selection==55
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
–1 –0.8 –0.6 –0.4 –0.2 0 0.2 0.4 0.6 0.8 1
9
8
7
6
5
4
3
2
1
0

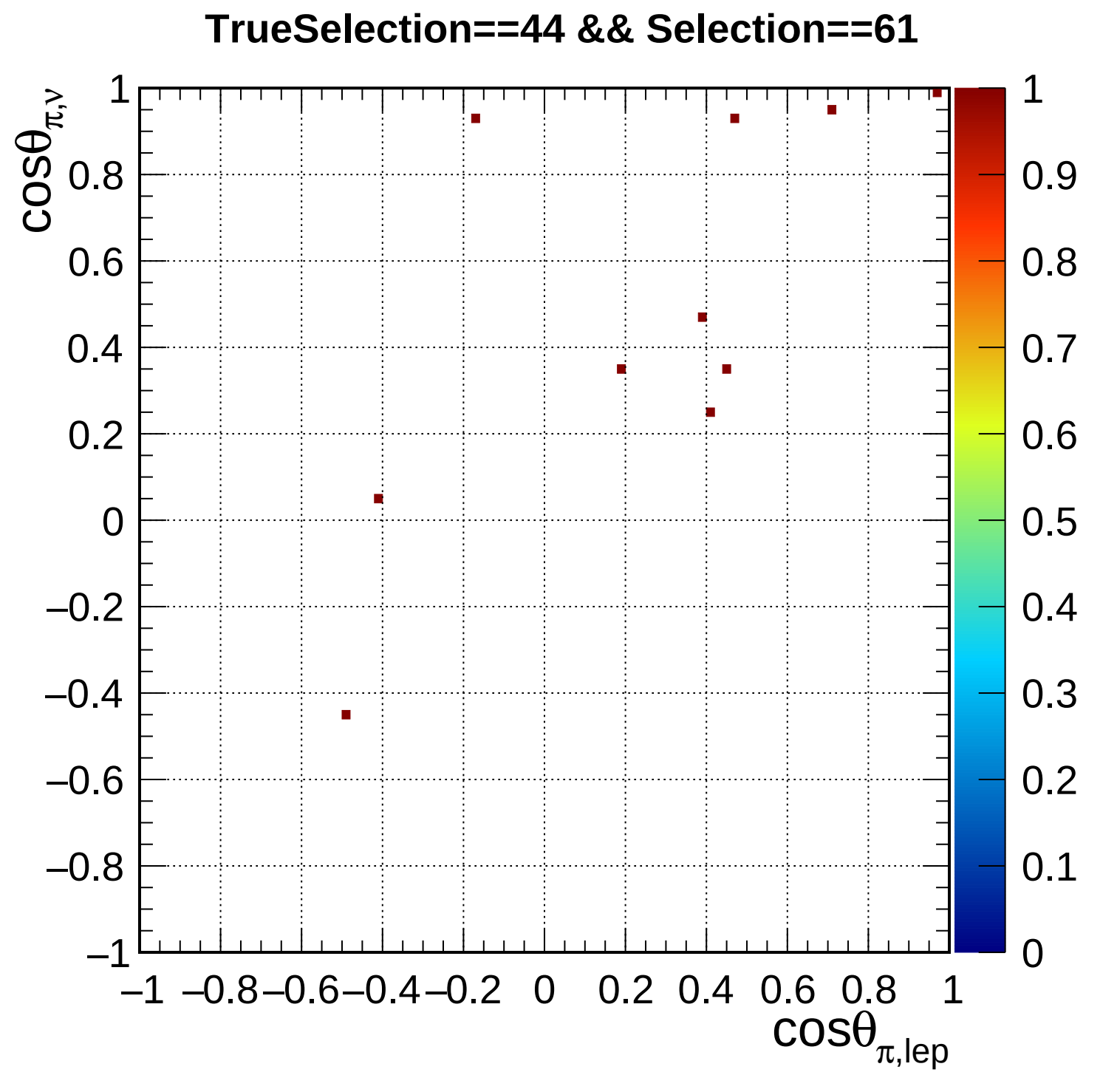

(TrueSelection==44 && Selection==55)/(TrueSelection==44)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

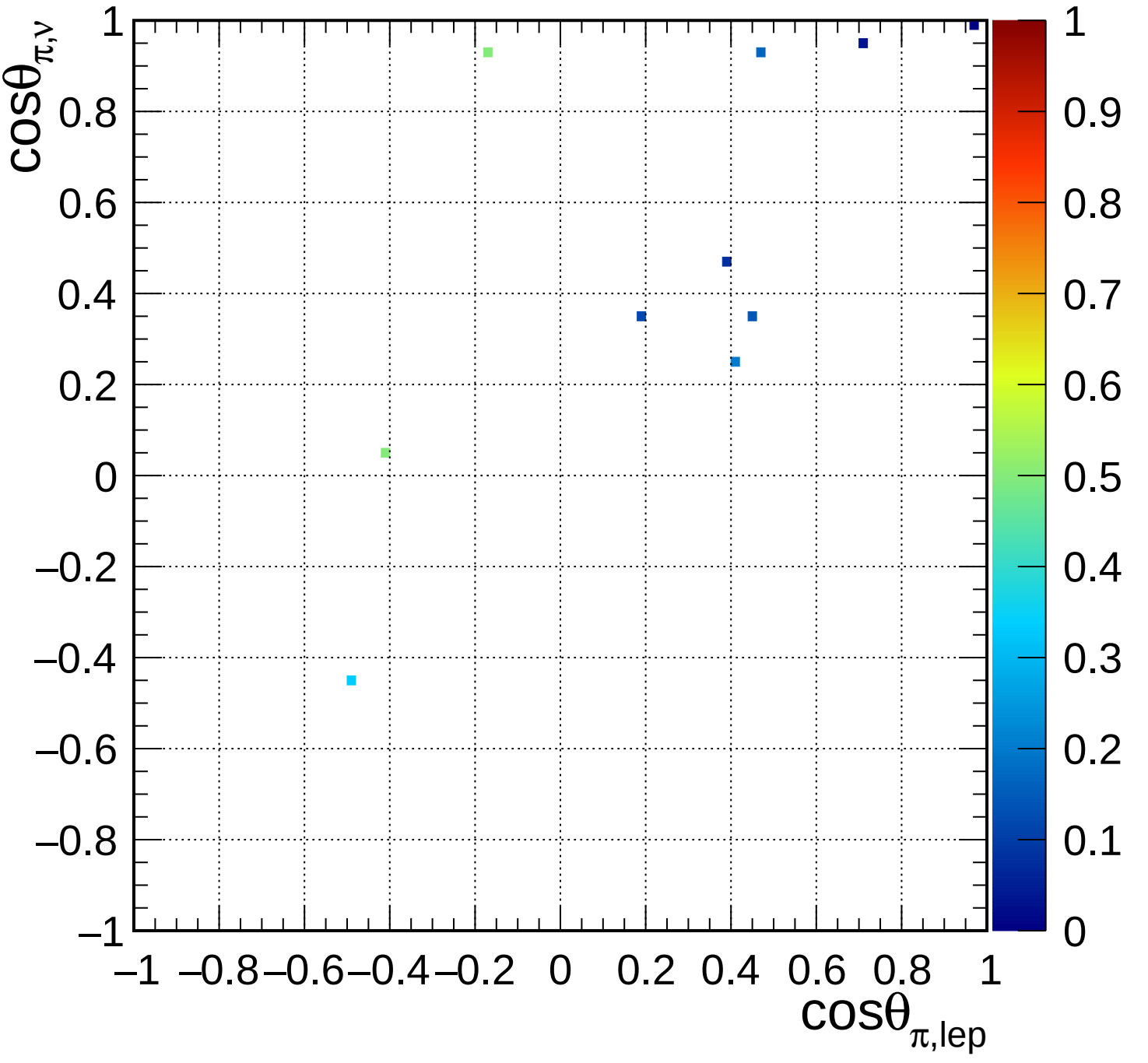

TrueSelection==44 && Selection==56
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
–1 –0.8 –0.6 –0.4 –0.2 0 0.2 0.4 0.6 0.8 1
18
16
14
12
10
8
6
4
2
0

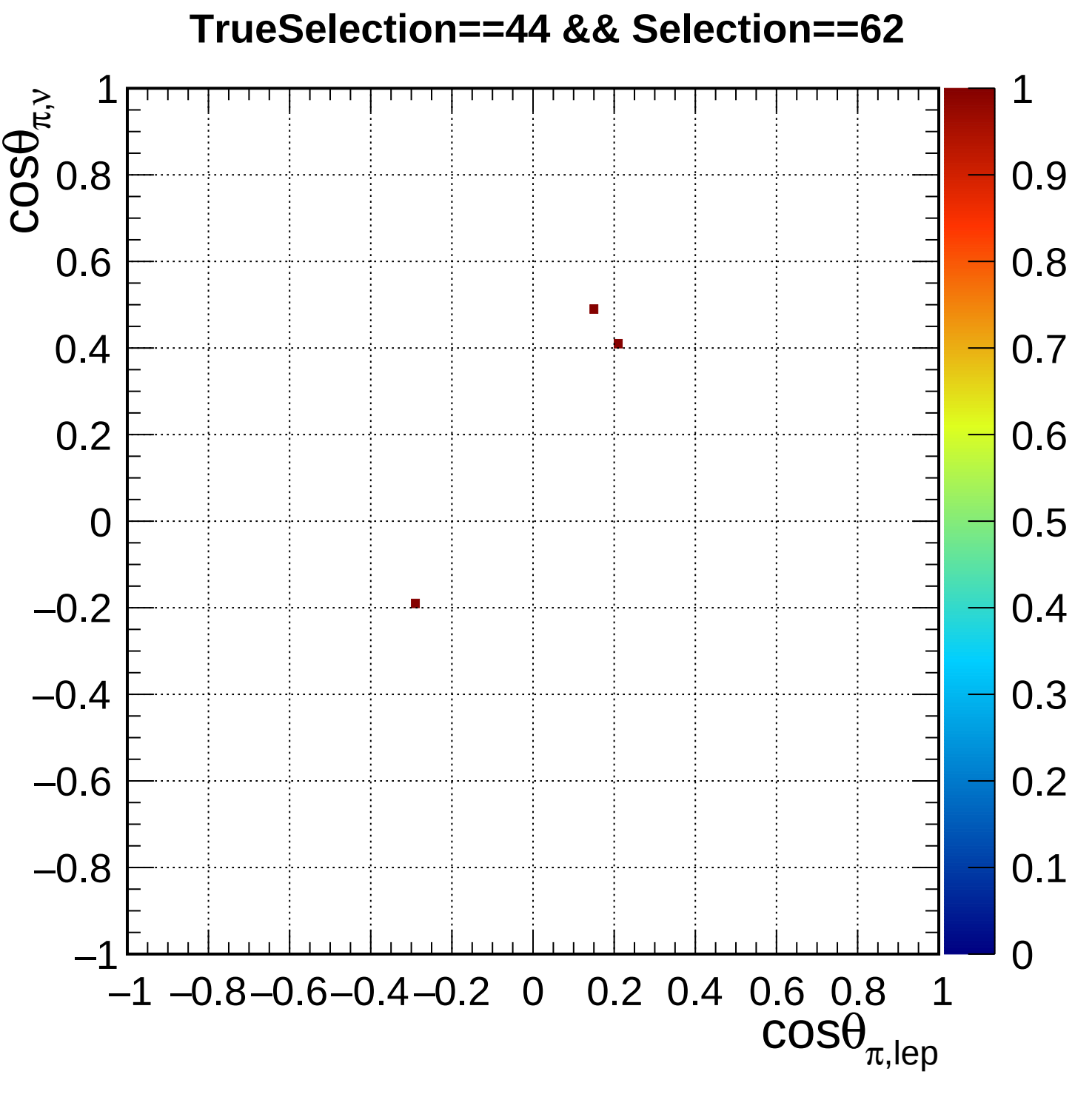

(TrueSelection==44 && Selection==56)/(TrueSelection==44)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

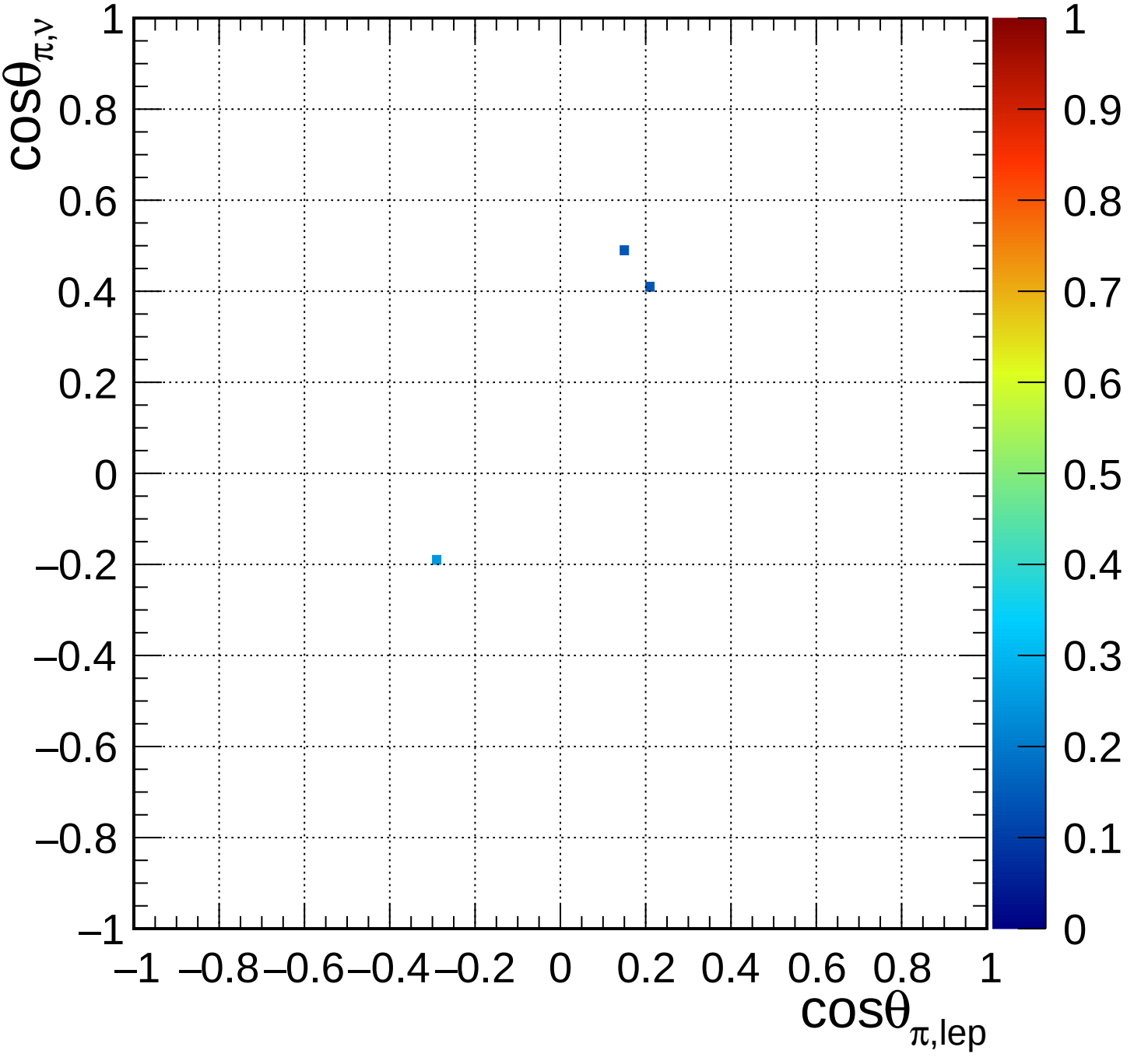

TrueSelection==44 && Selection==57
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
4
3.5
3
2.5
2
1.5
1
0.5
0

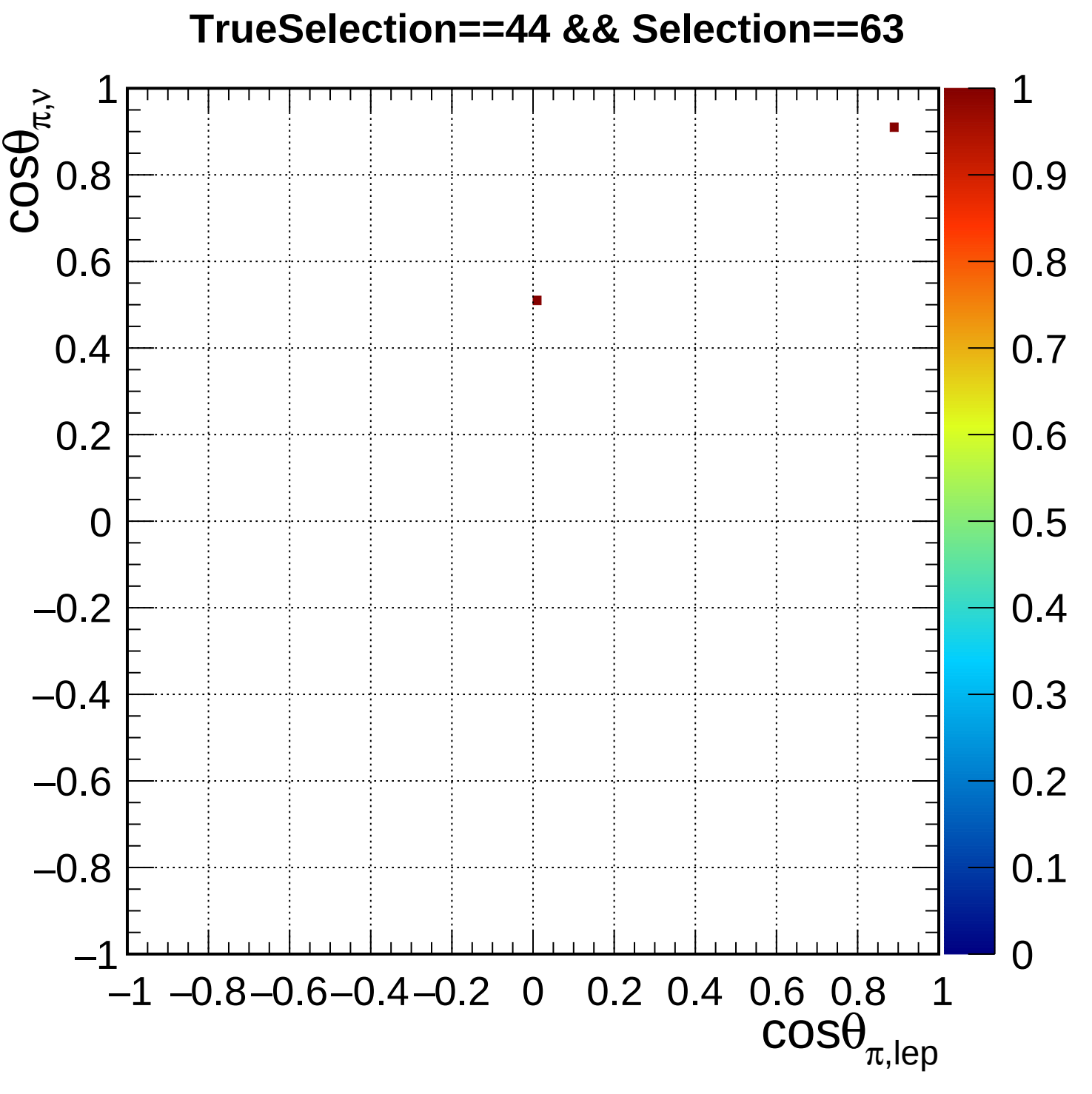

(TrueSelection==44 && Selection==57)/(TrueSelection==44)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

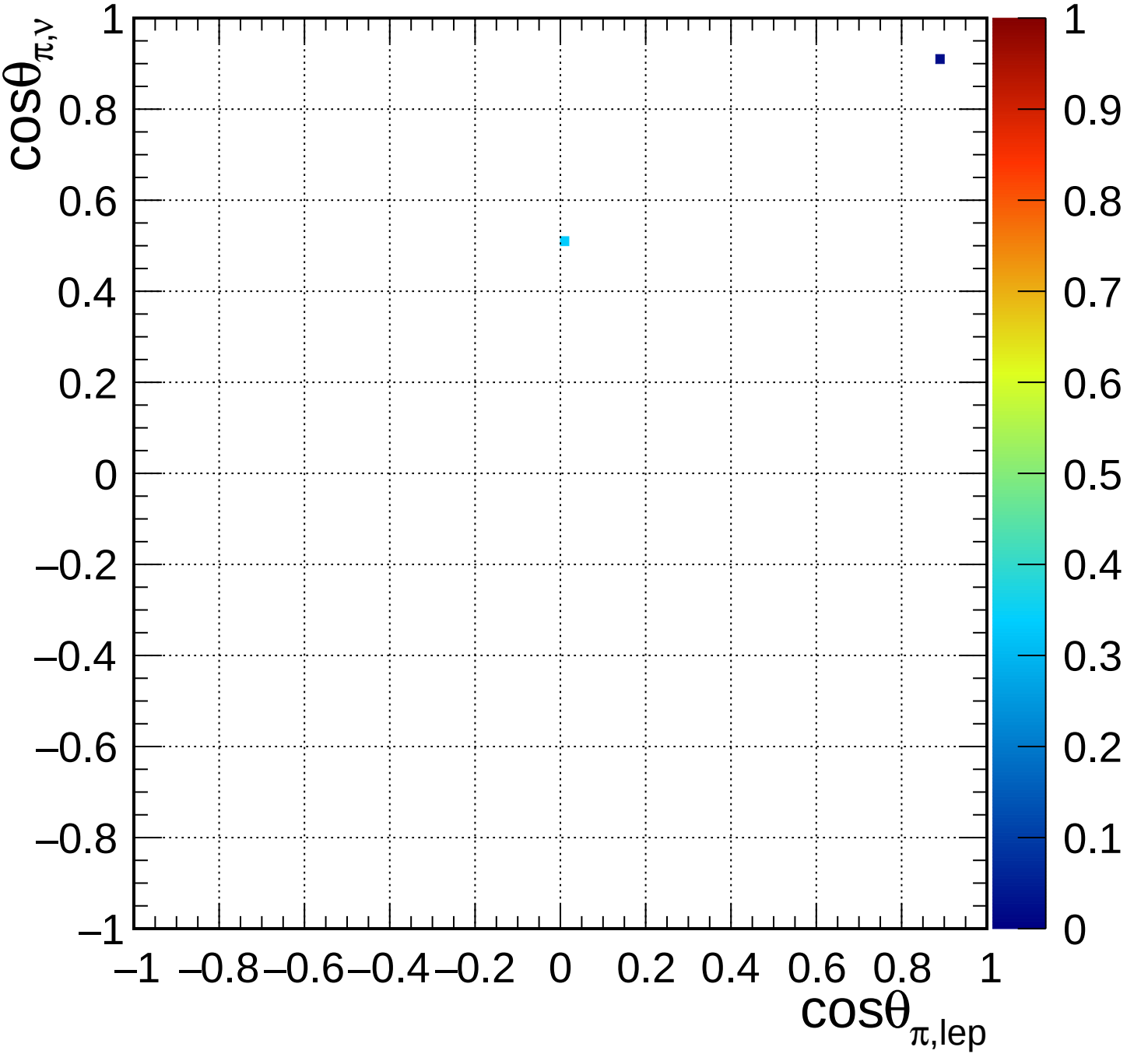

TrueSelection==44 && Selection==61
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

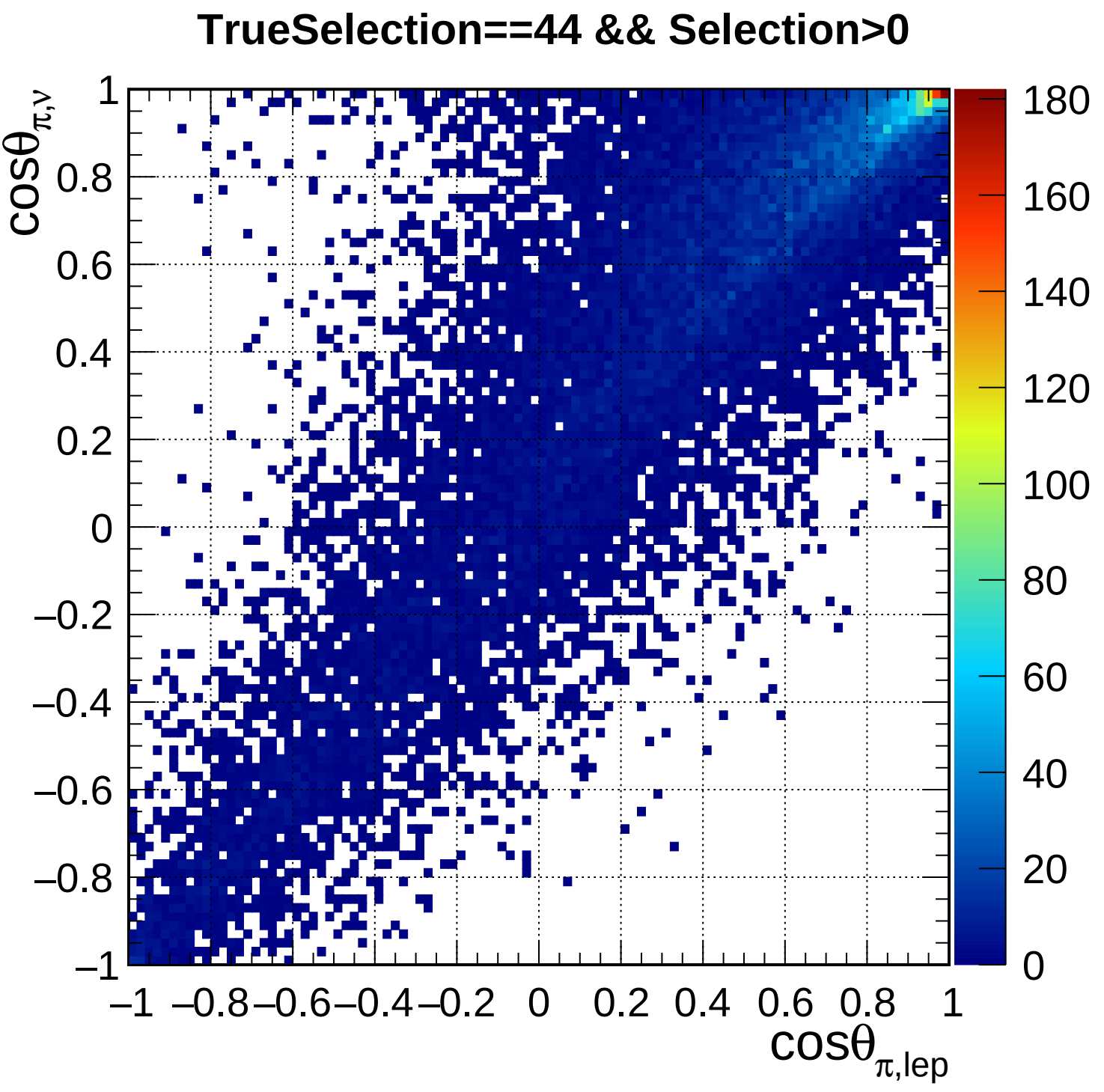

(TrueSelection==44 && Selection==61)/(TrueSelection==44)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

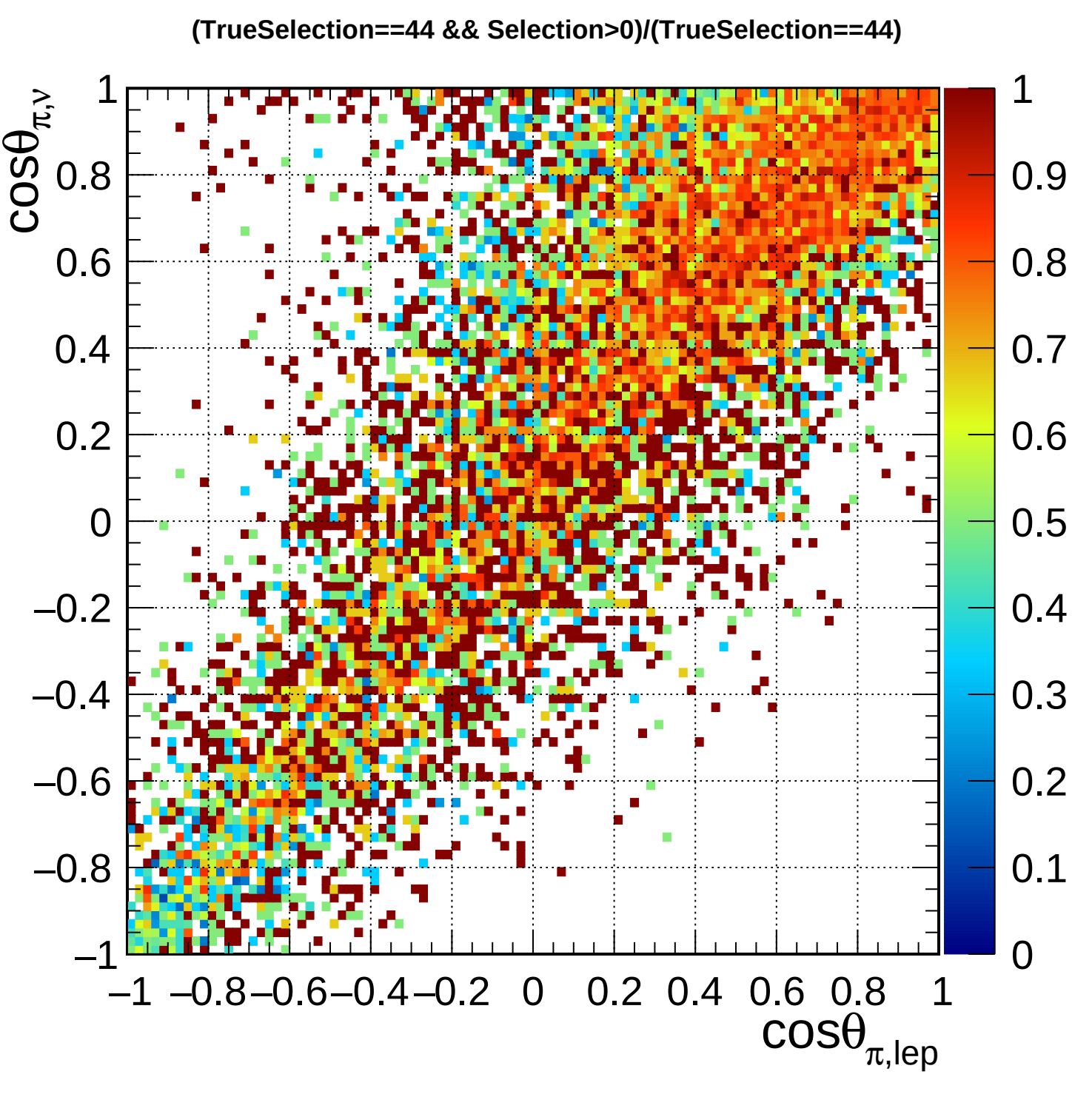

TrueSelection==44 && Selection==62
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

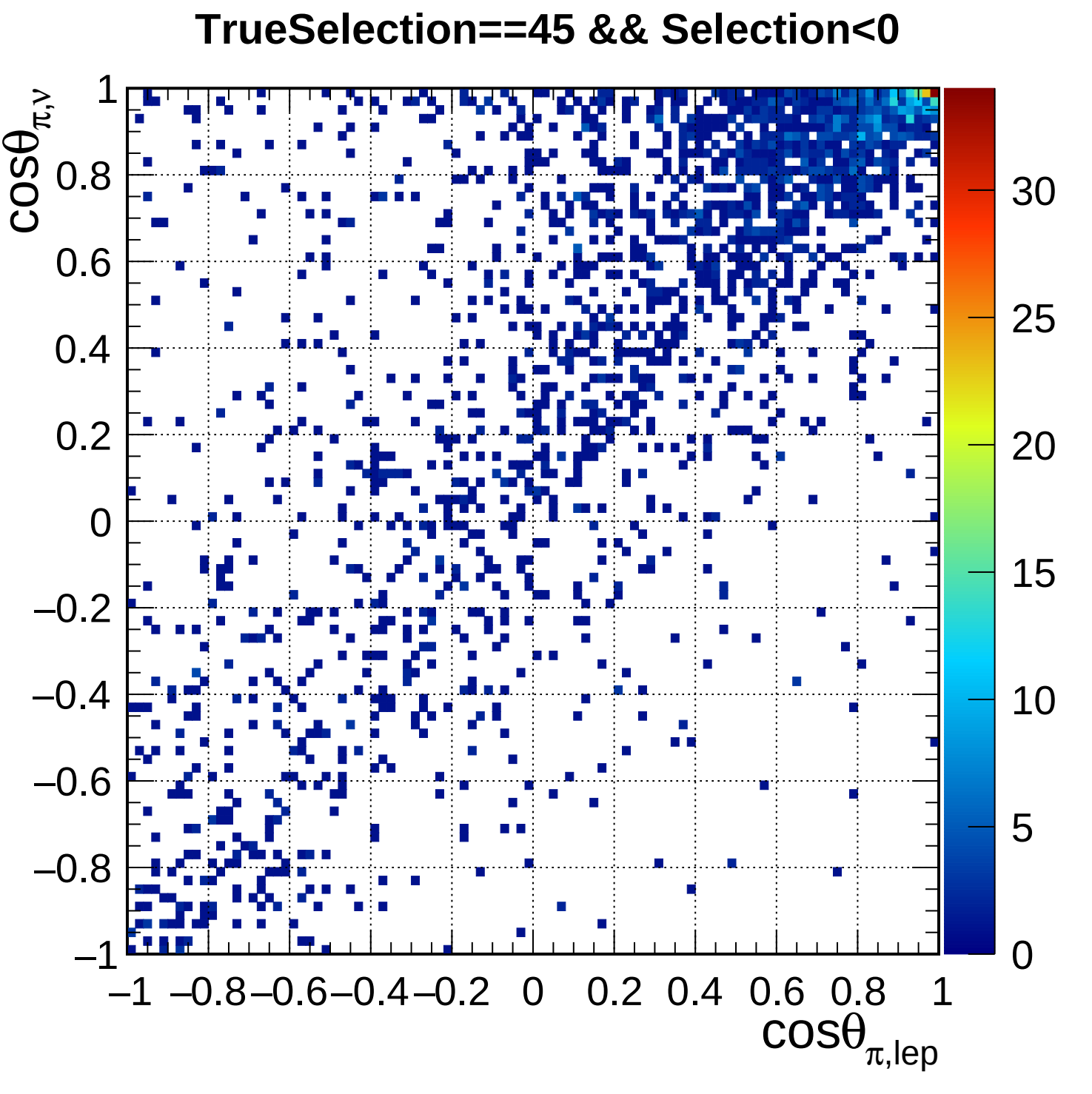

(TrueSelection==44 && Selection==62)/(TrueSelection==44)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

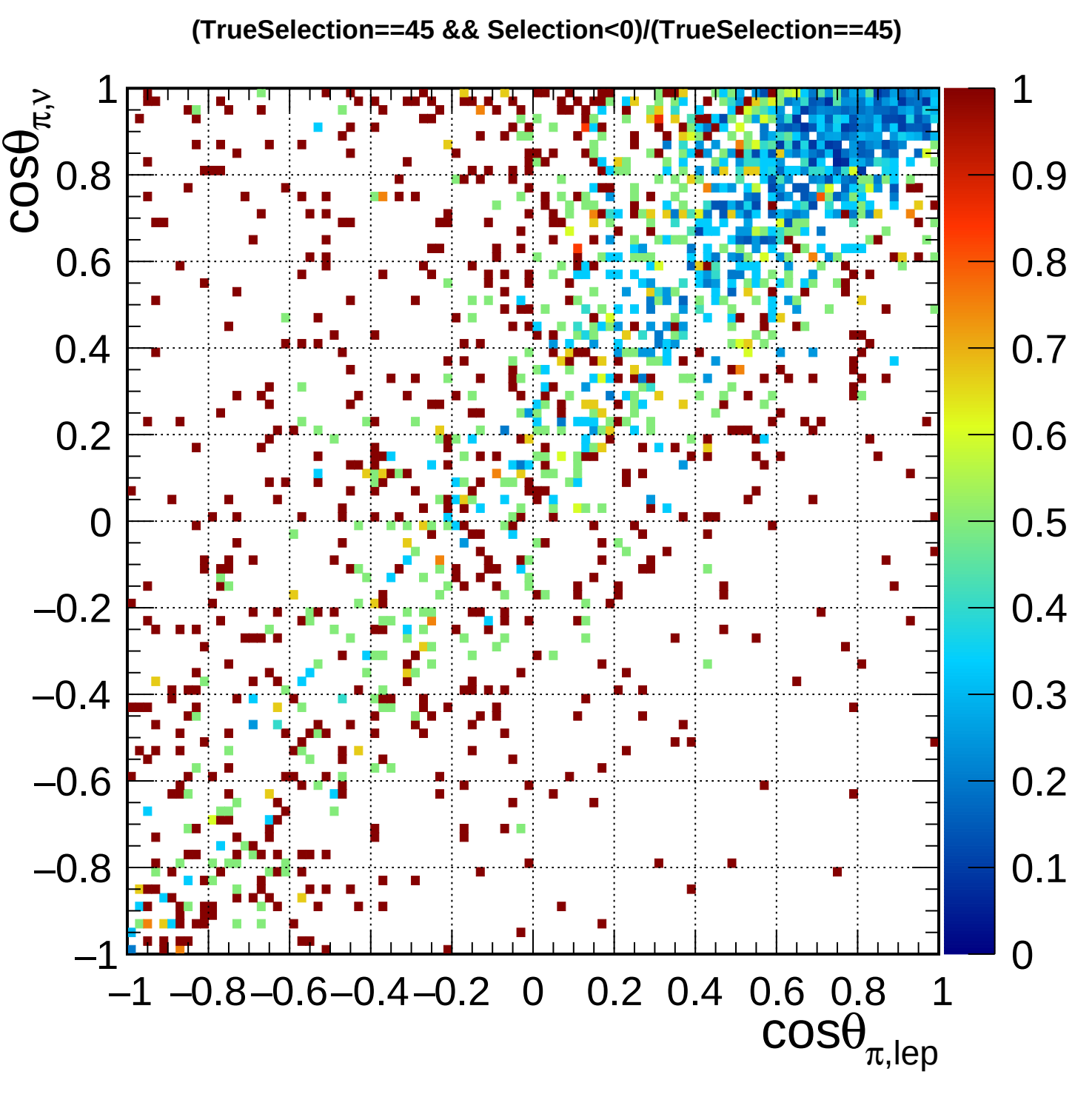

TrueSelection==44 && Selection==63
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

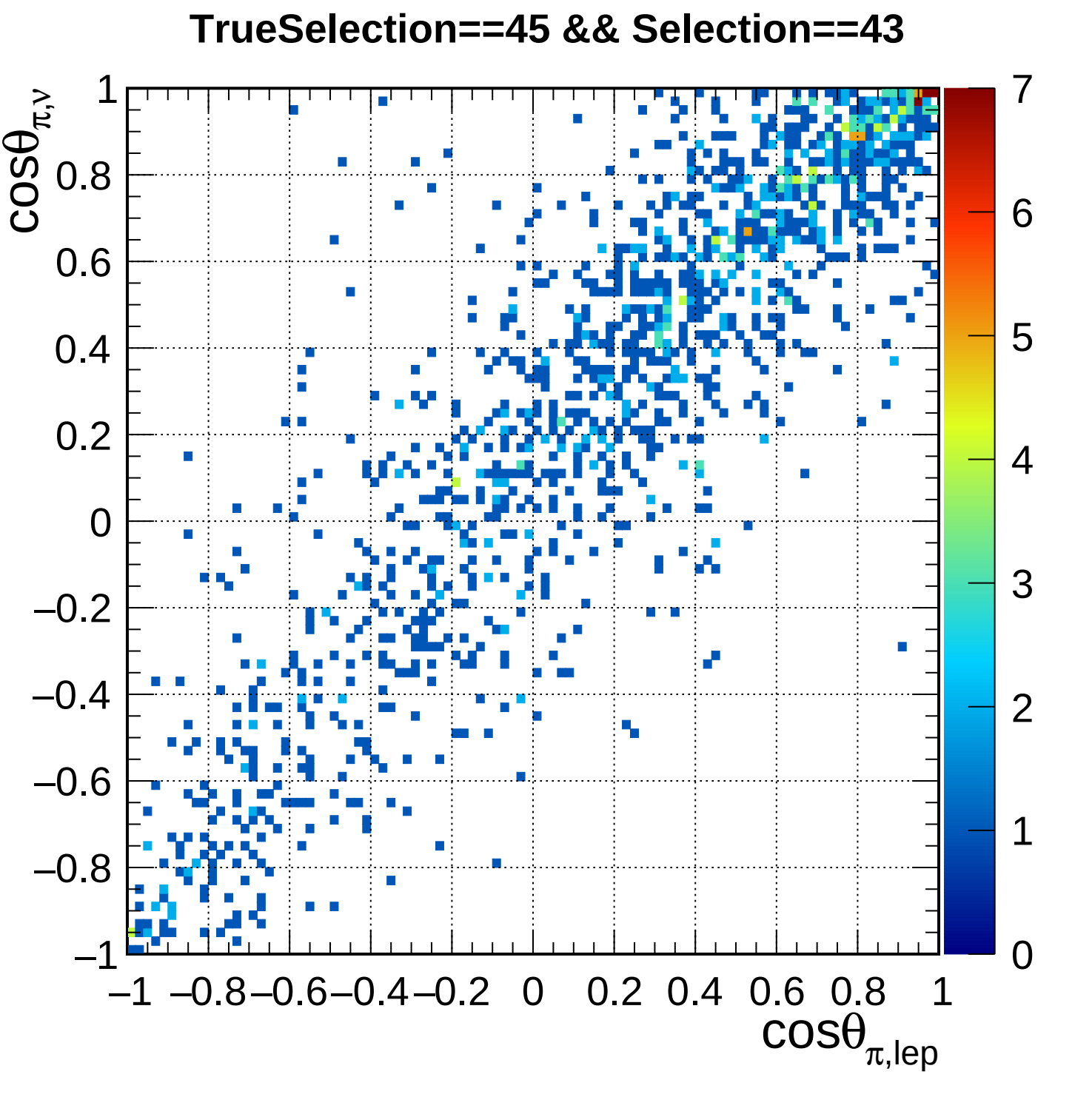

(TrueSelection==44 && Selection==63)/(TrueSelection==44)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

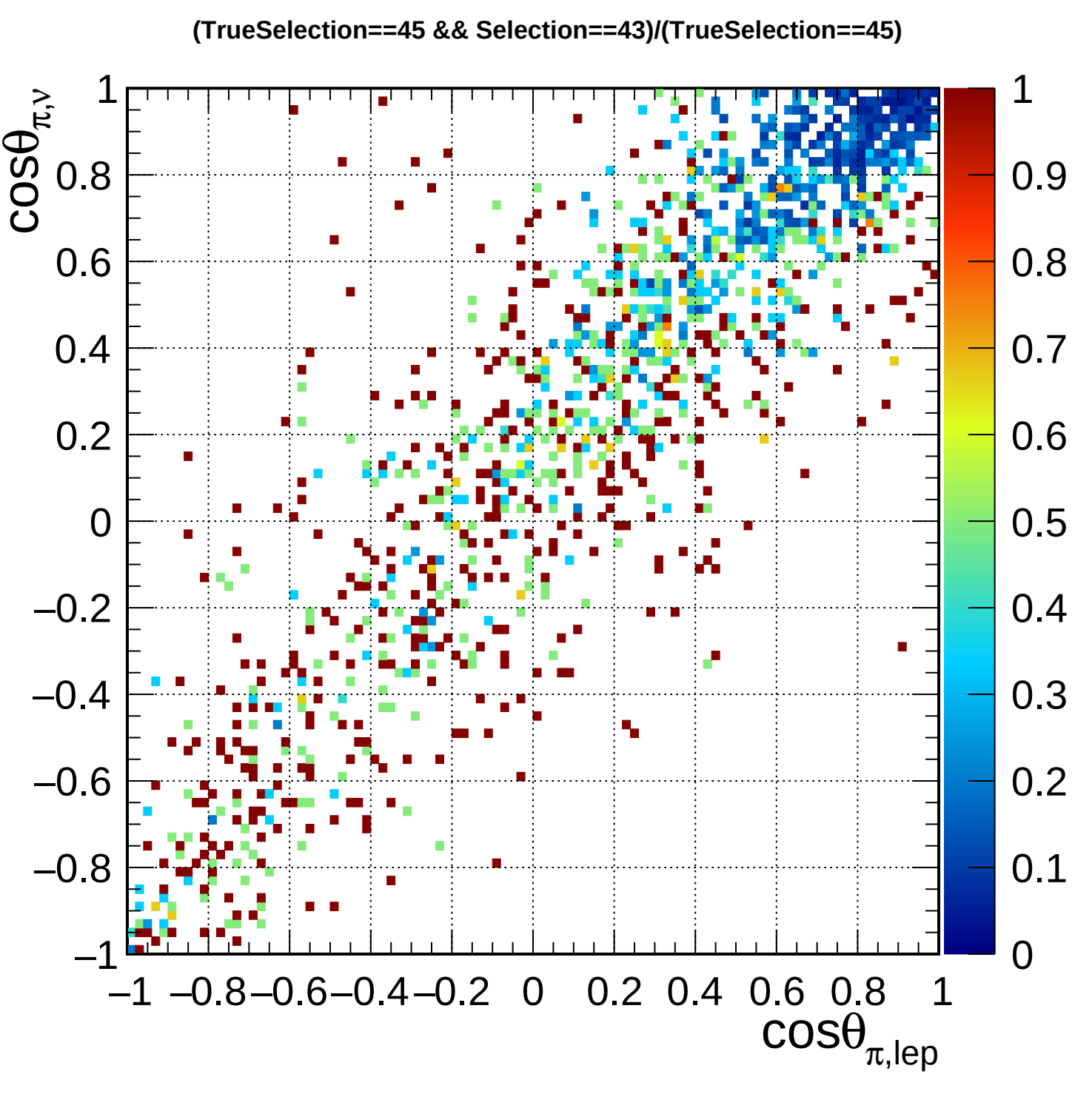

TrueSelection==44 && Selection>0
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
180
160
140
120
100
80
60
40
20
0

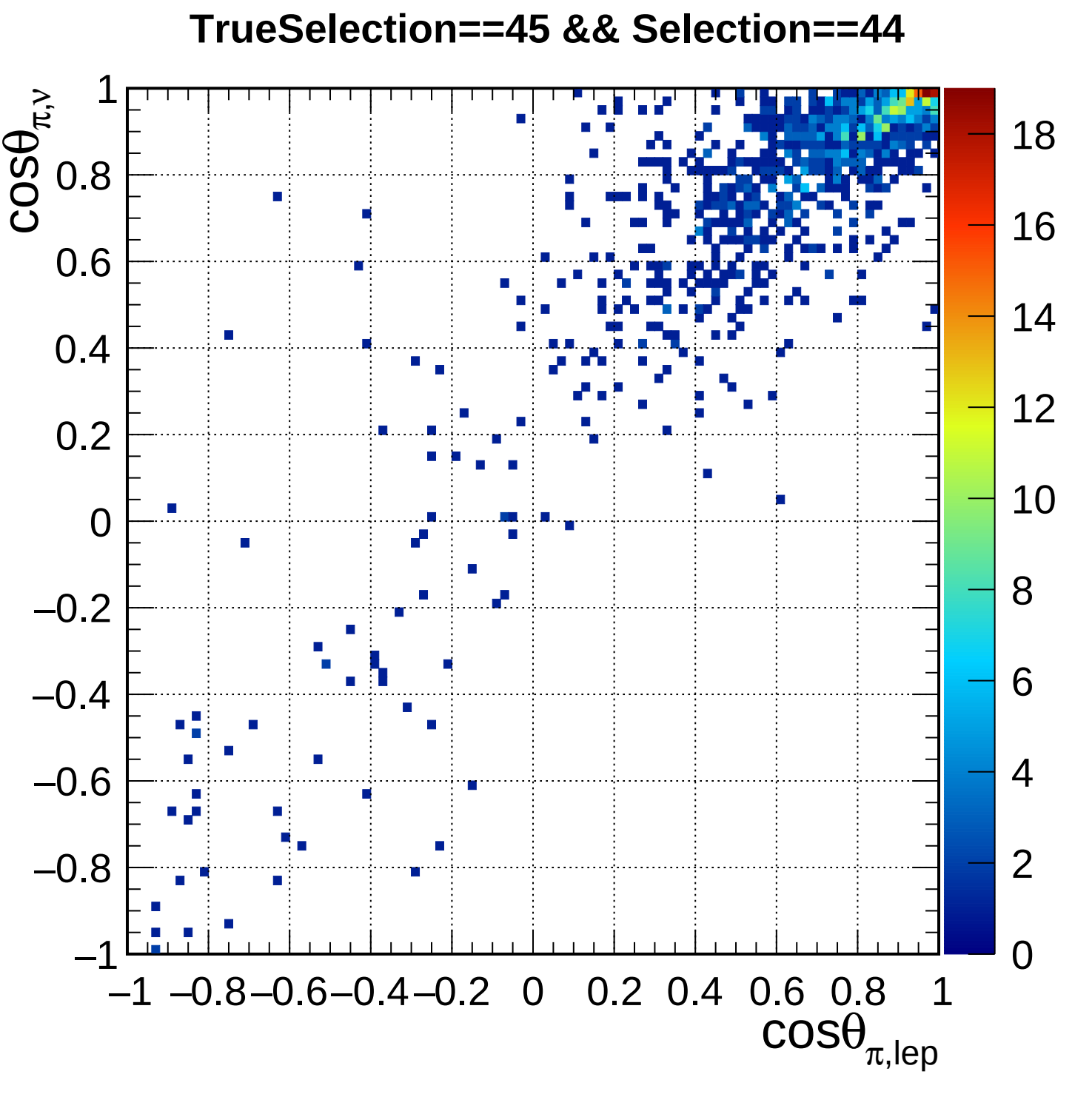

(TrueSelection==44 && Selection>0)/(TrueSelection==44)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

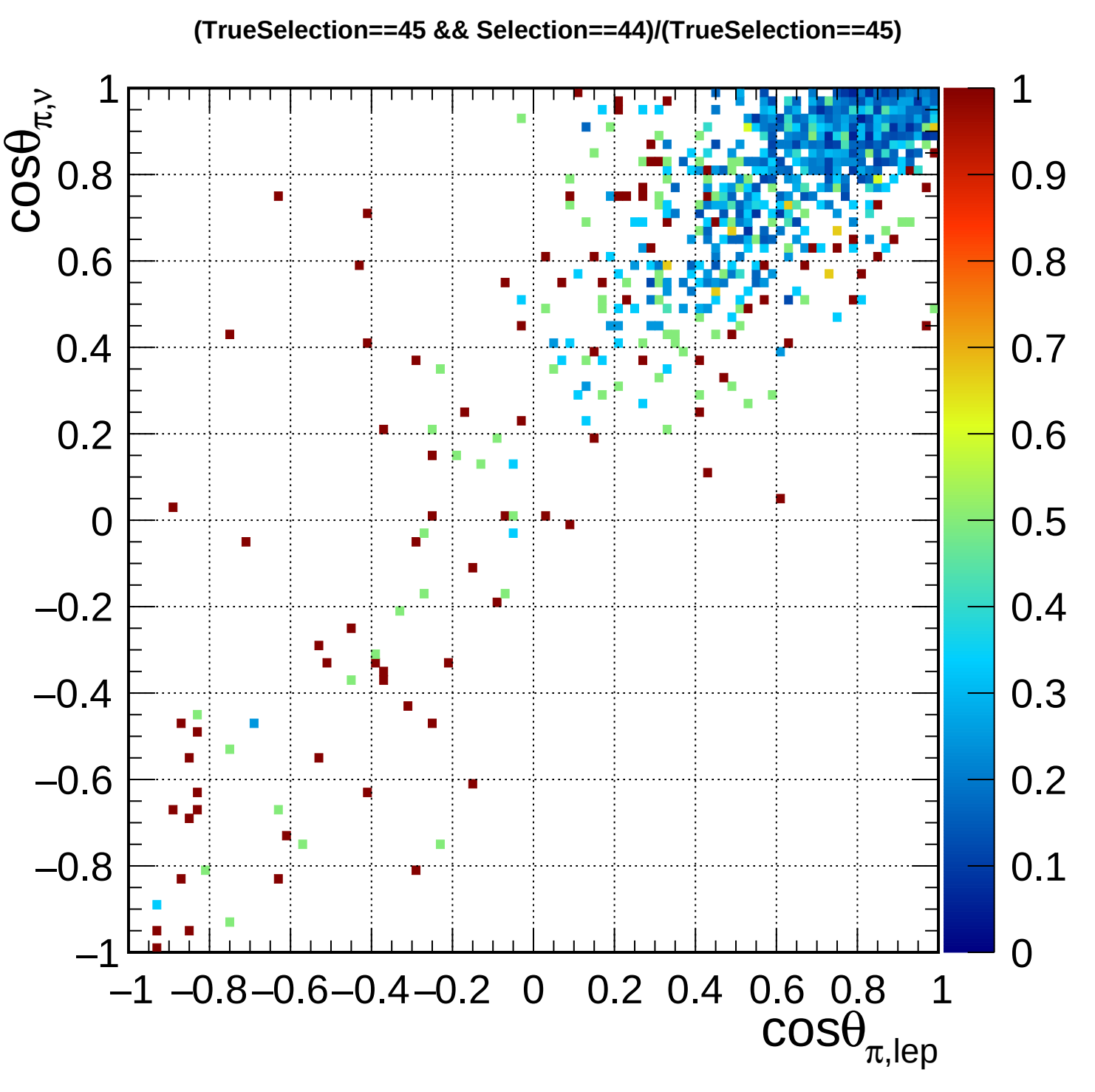

TrueSelection==45 && Selection<0
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
30
25
20
15
10
5
0

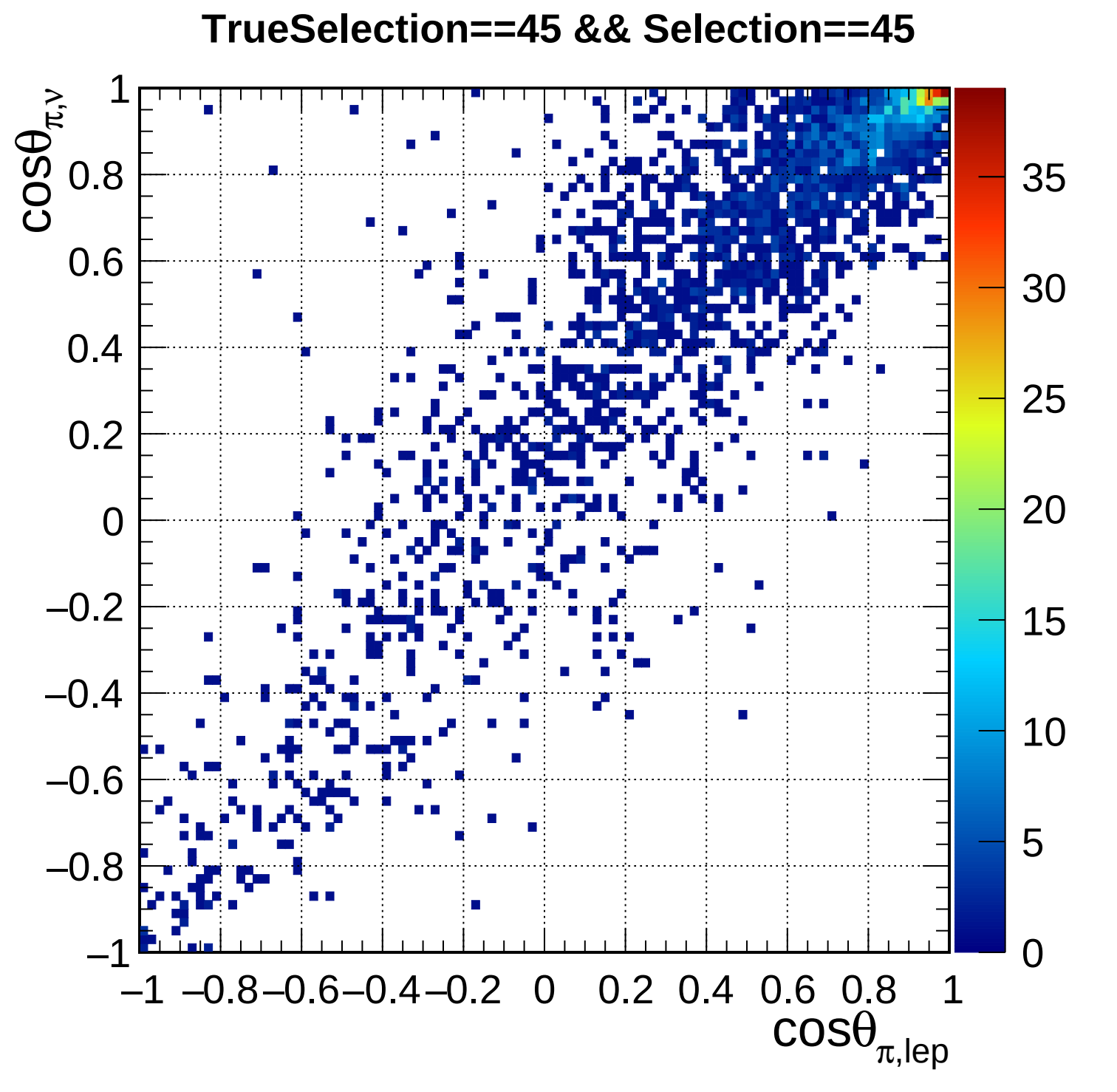

(TrueSelection==45 && Selection<0)/(TrueSelection==45)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

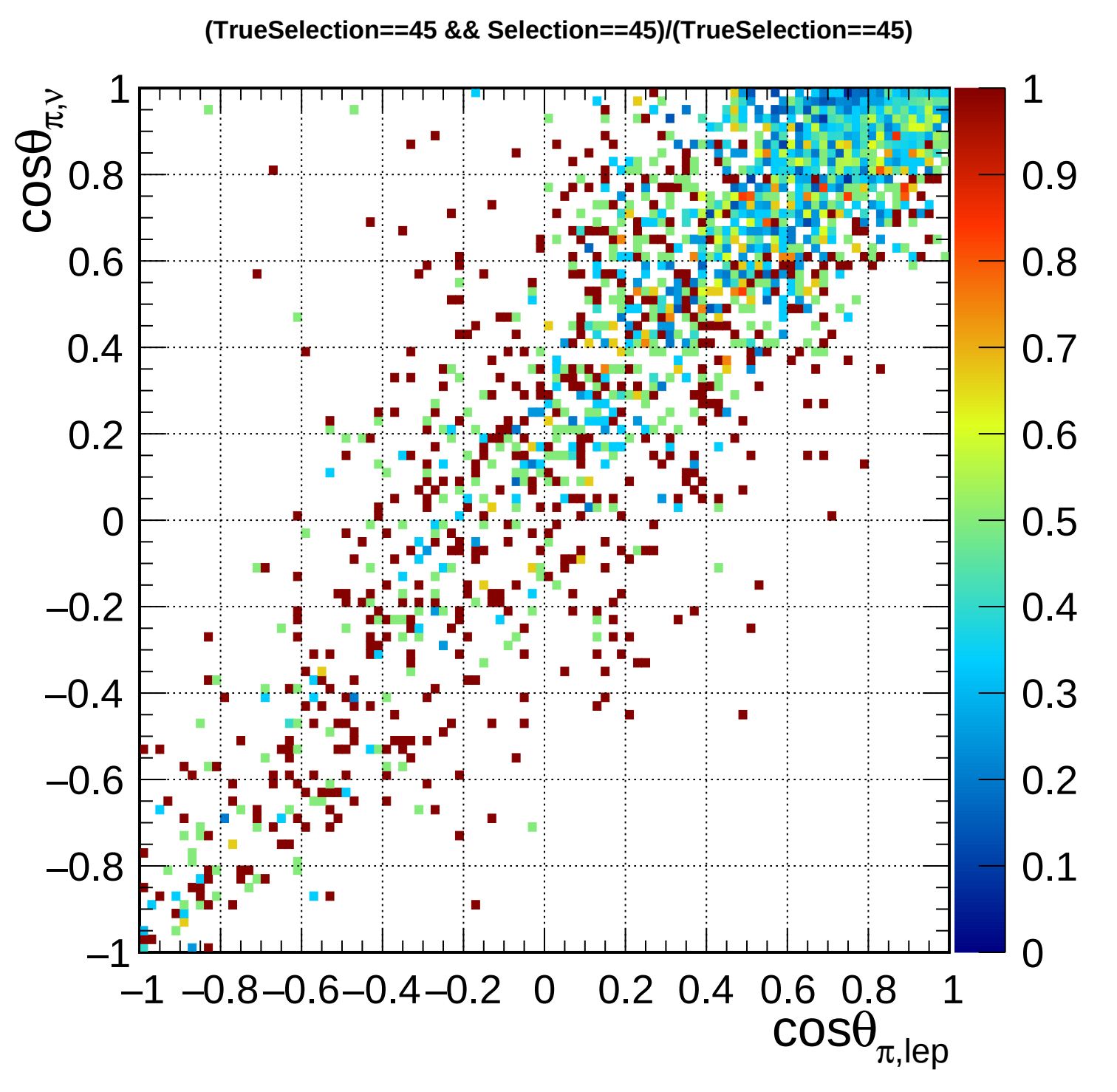

TrueSelection==45 && Selection==43
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
7
6
5
4
3
2
1
0

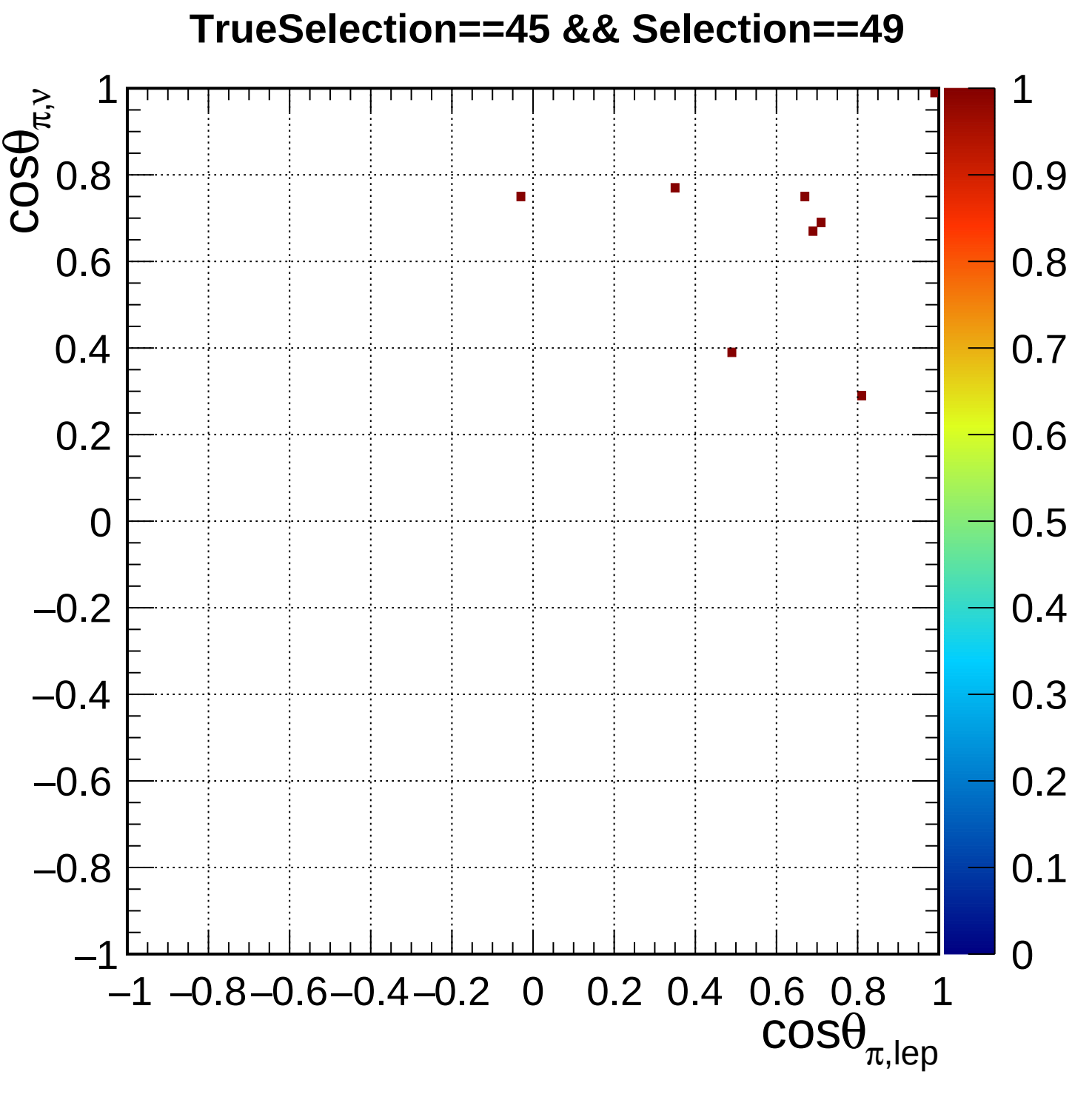

(TrueSelection==45 && Selection==43)/(TrueSelection==45)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

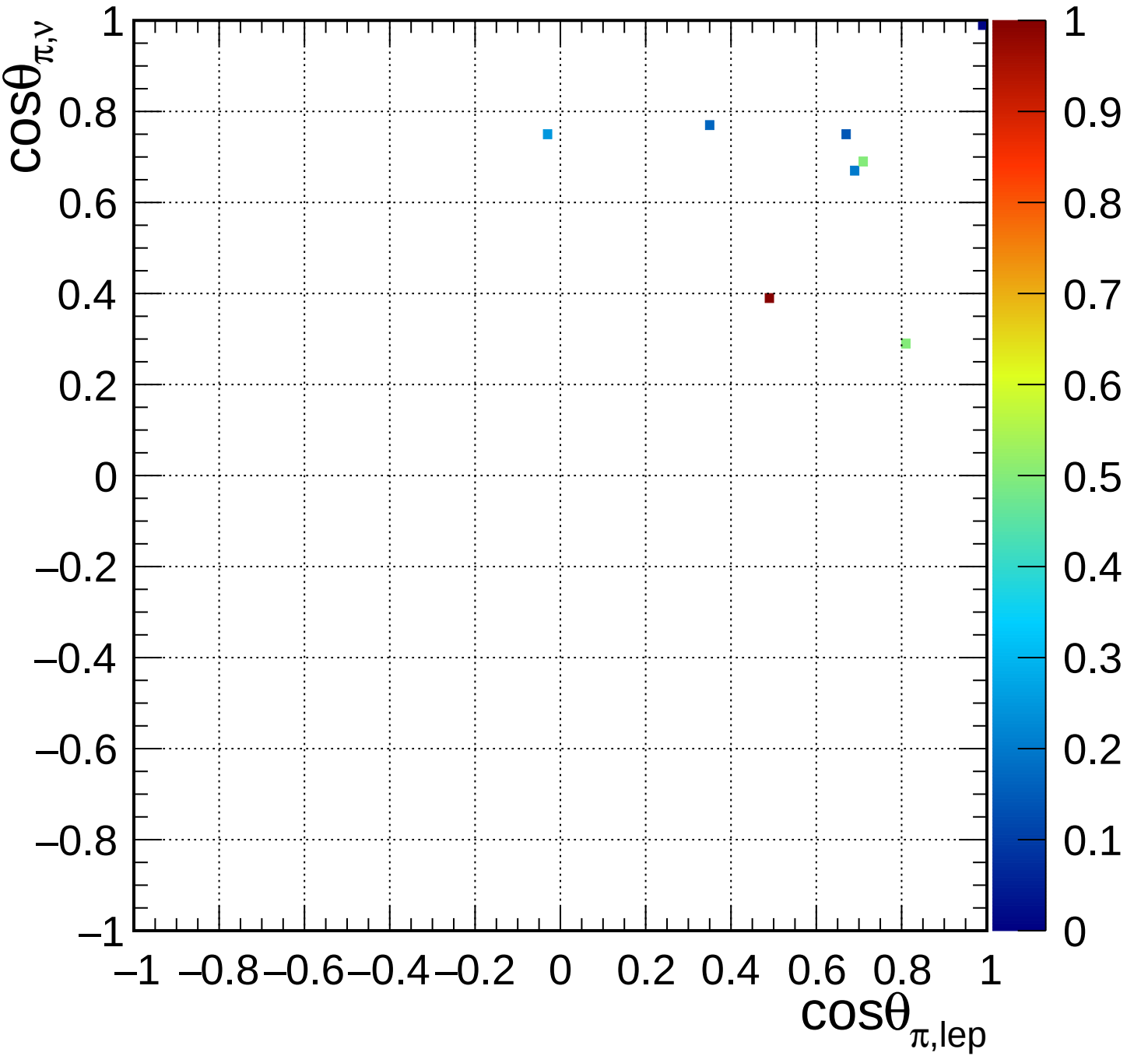

TrueSelection==45 && Selection==44
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
18
16
14
12
10
8
6
4
2
0

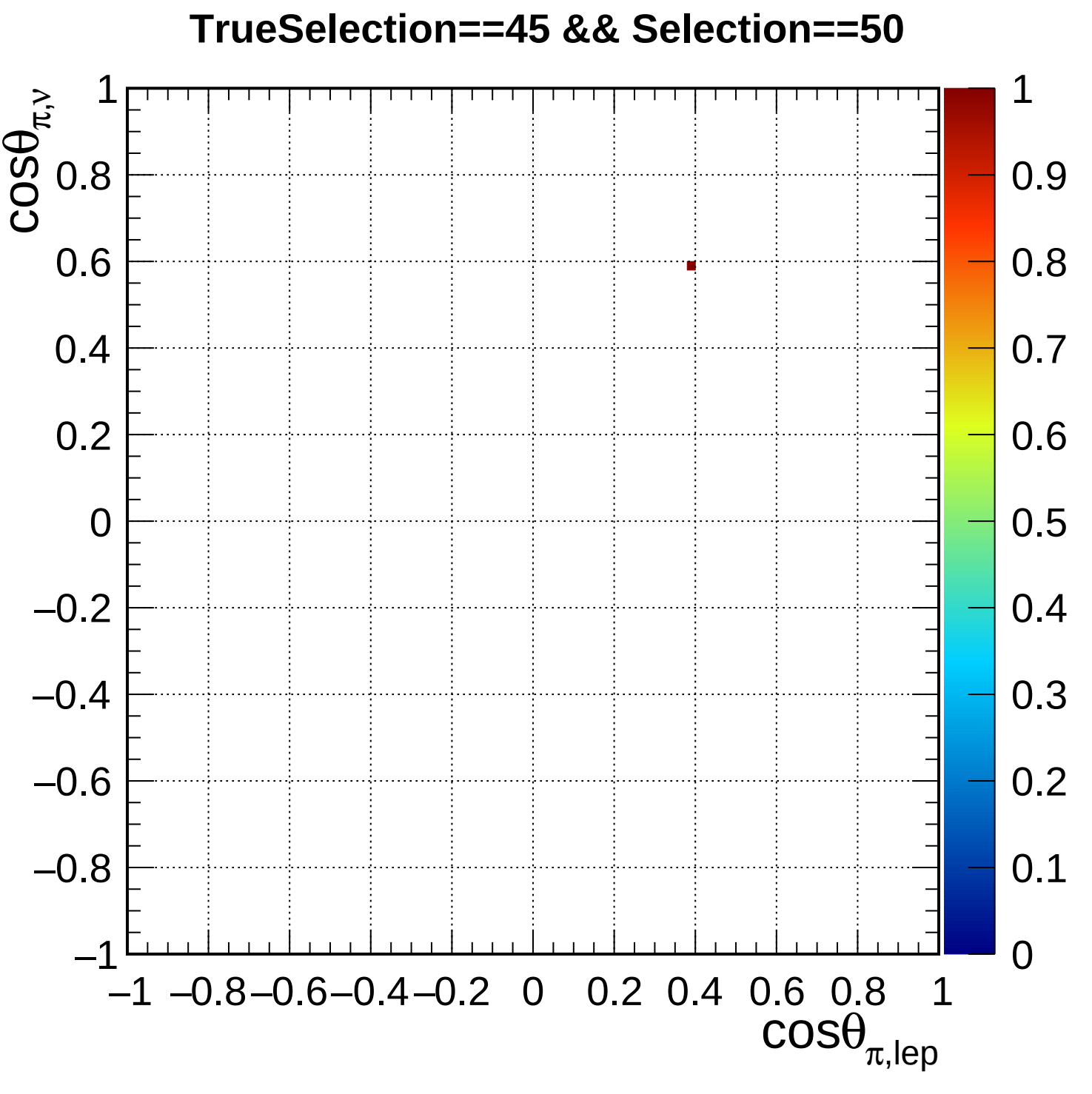

(TrueSelection==45 && Selection==44)/(TrueSelection==45)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

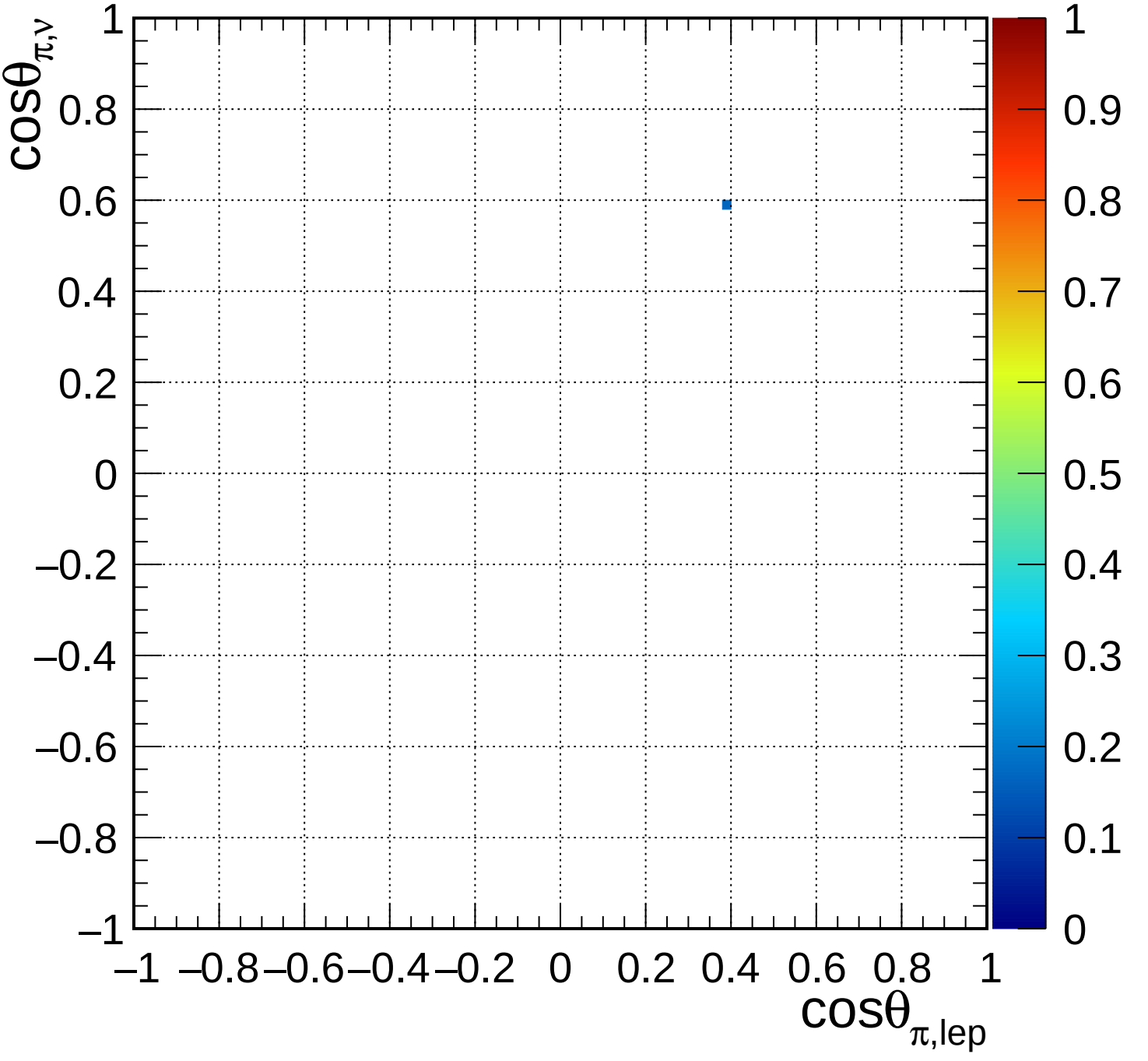

TrueSelection==45 && Selection==45
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
35
30
25
20
15
10
5
0

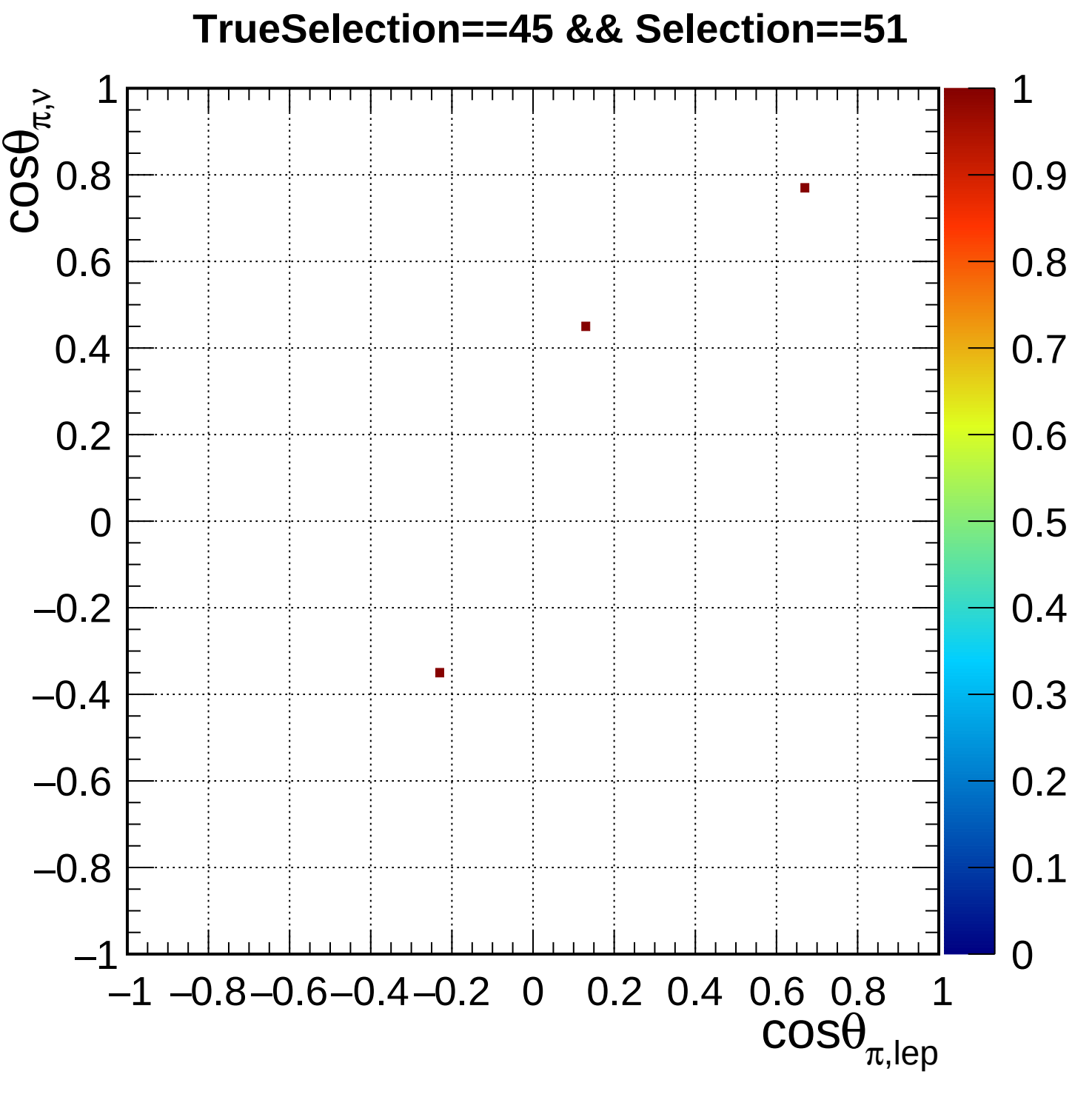

(TrueSelection==45 && Selection==45)/(TrueSelection==45)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

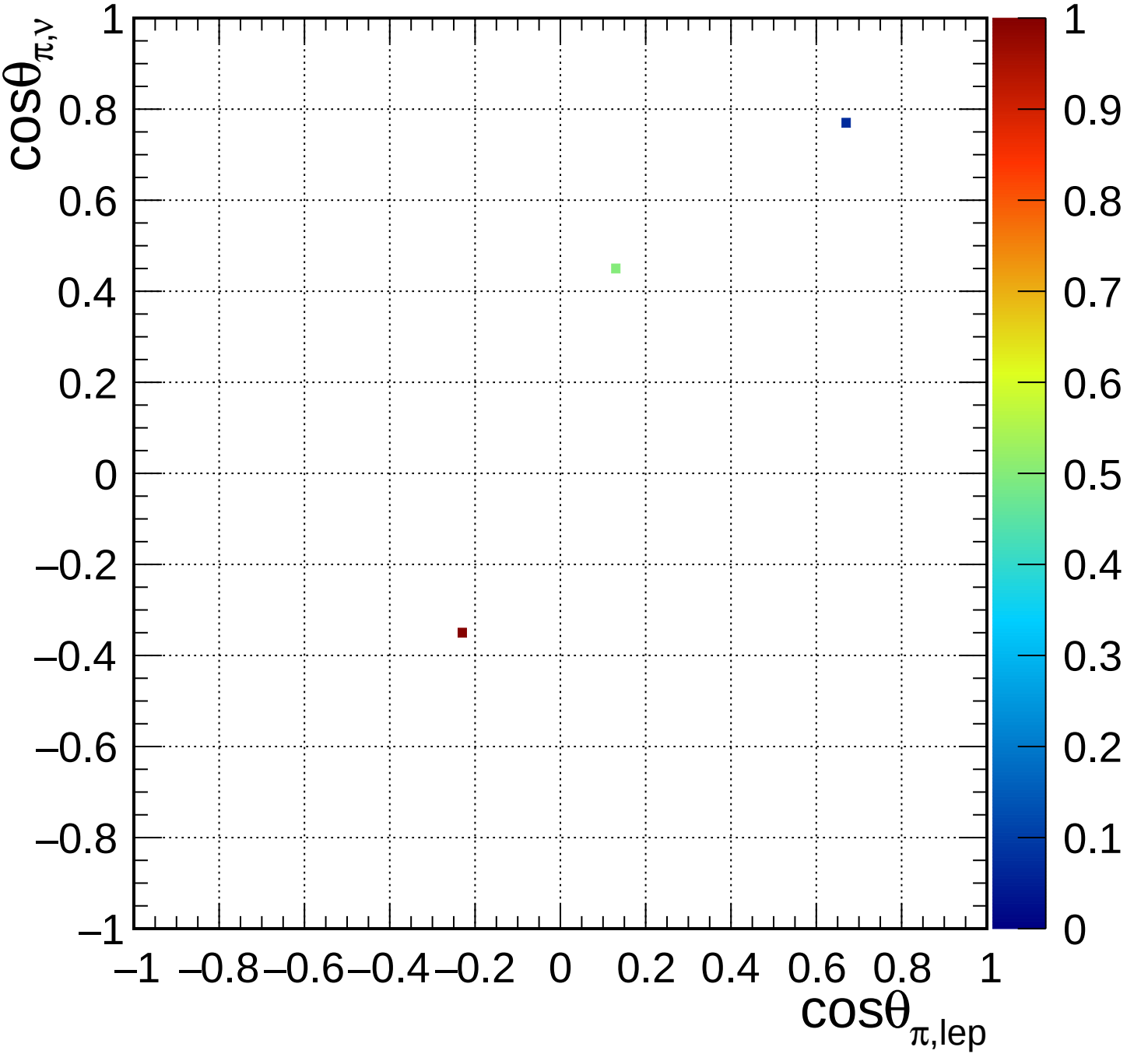

TrueSelection==45 && Selection==49
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

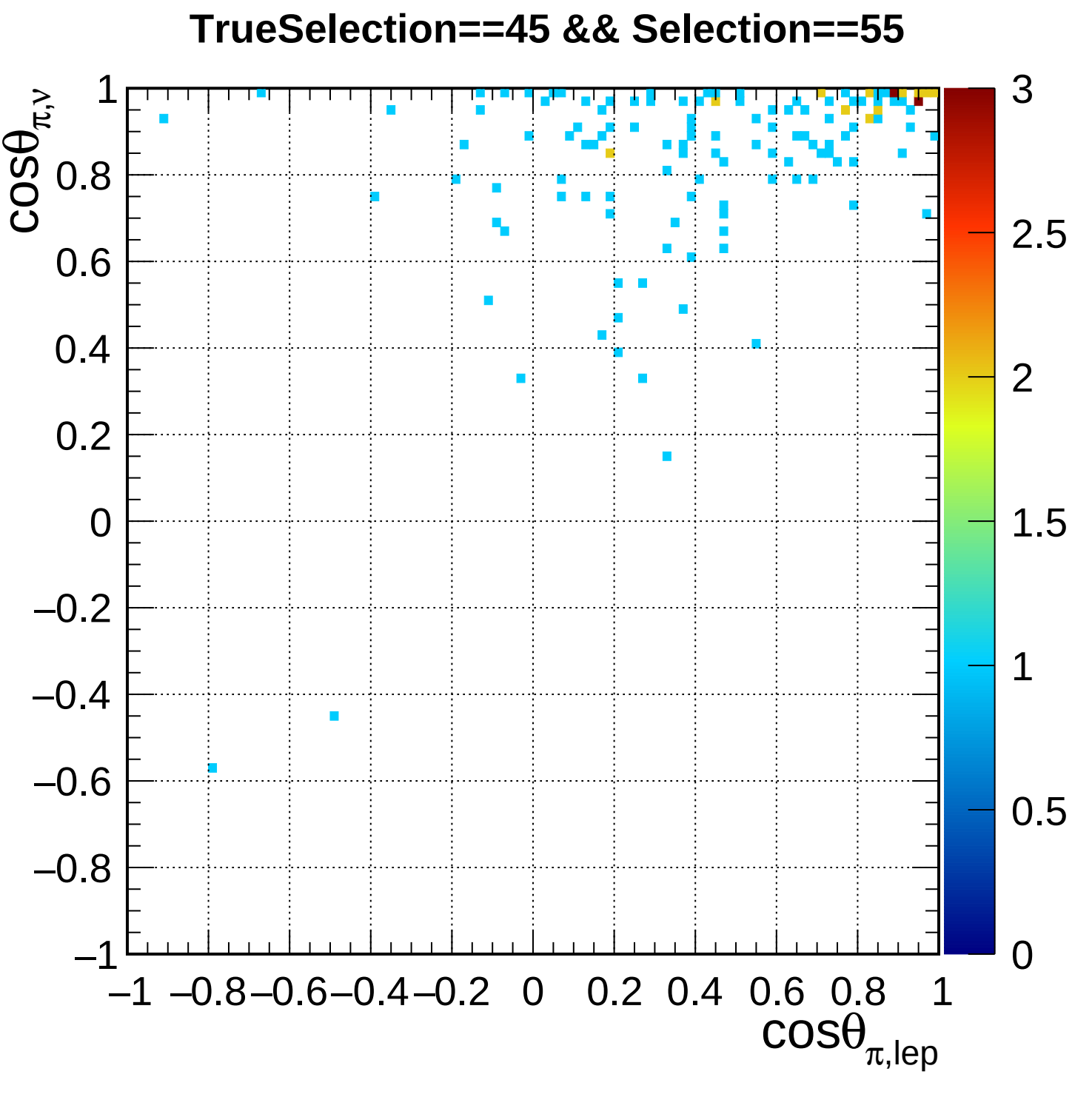

(TrueSelection==45 && Selection==49)/(TrueSelection==45)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

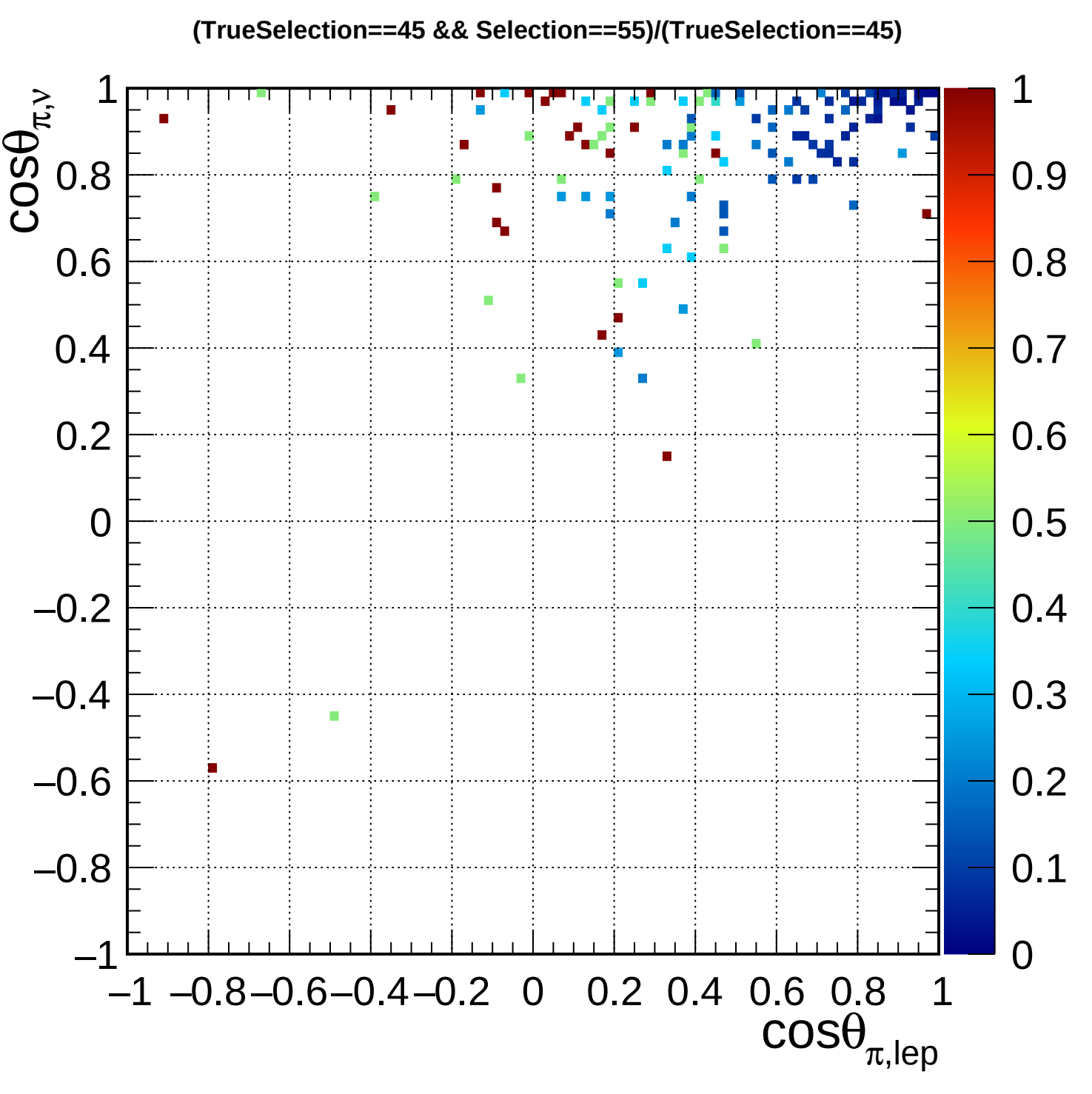

TrueSelection==45 && Selection==50
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

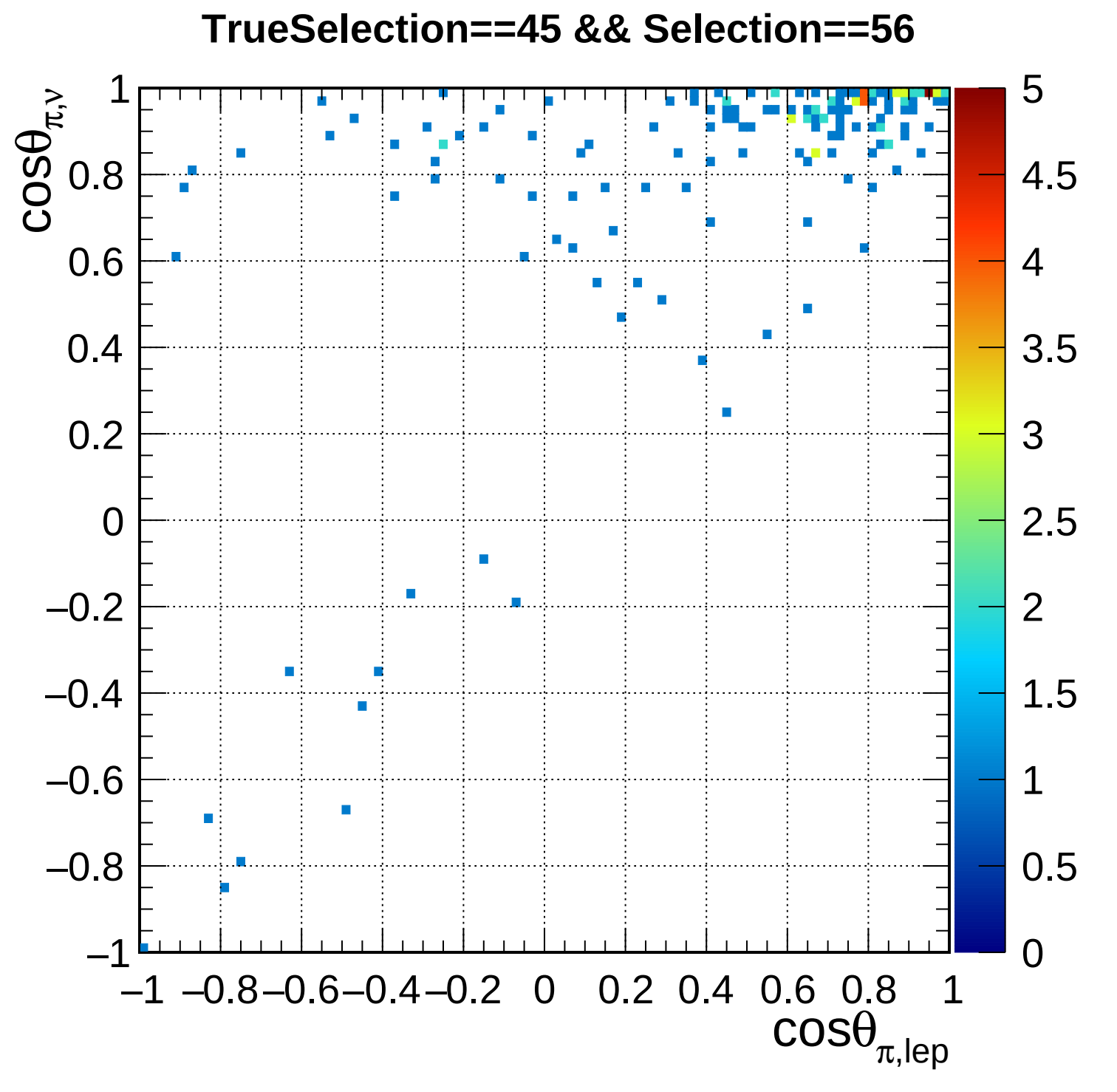

(TrueSelection==45 && Selection==50)/(TrueSelection==45)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

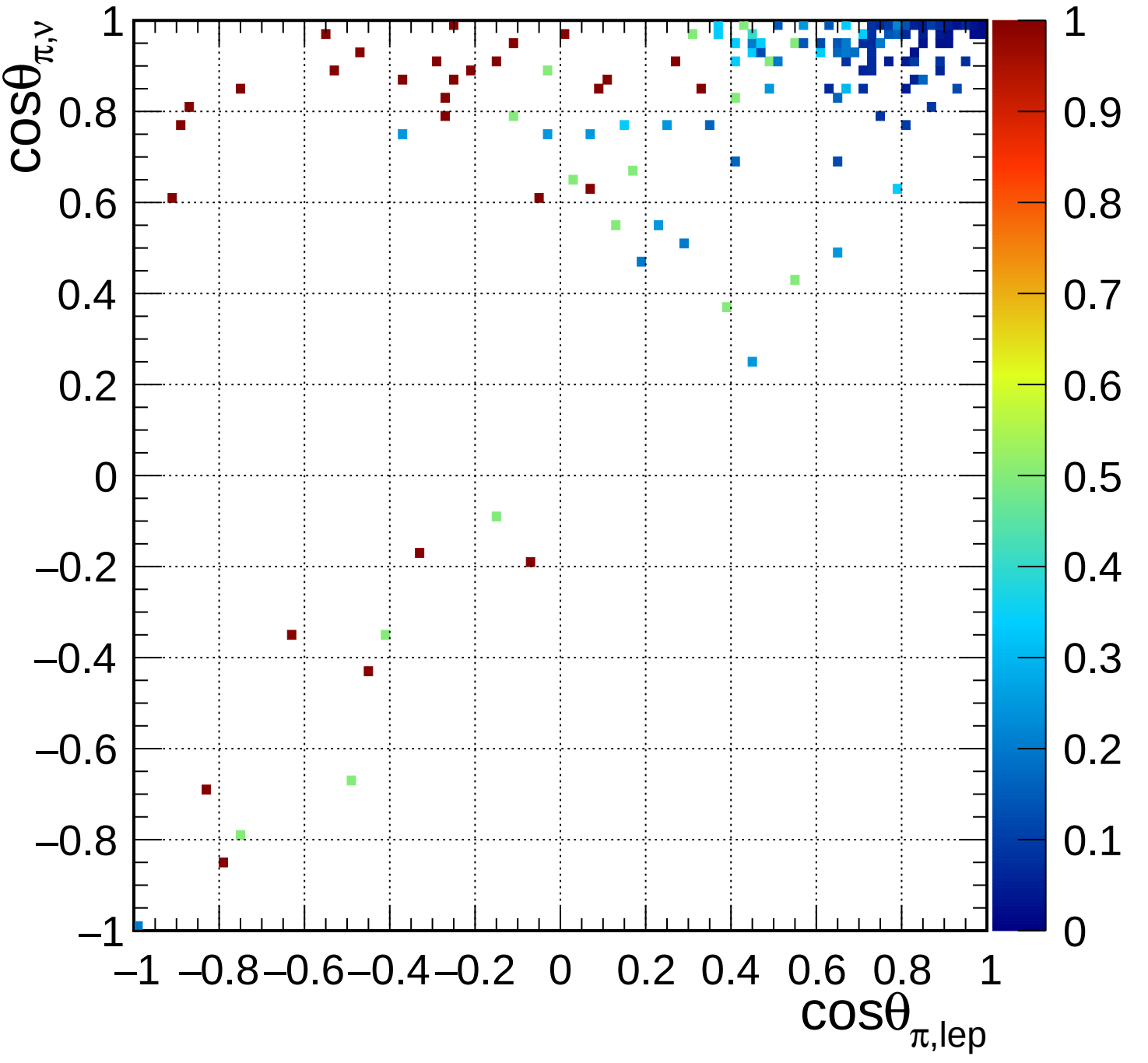

TrueSelection==45 && Selection==51
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

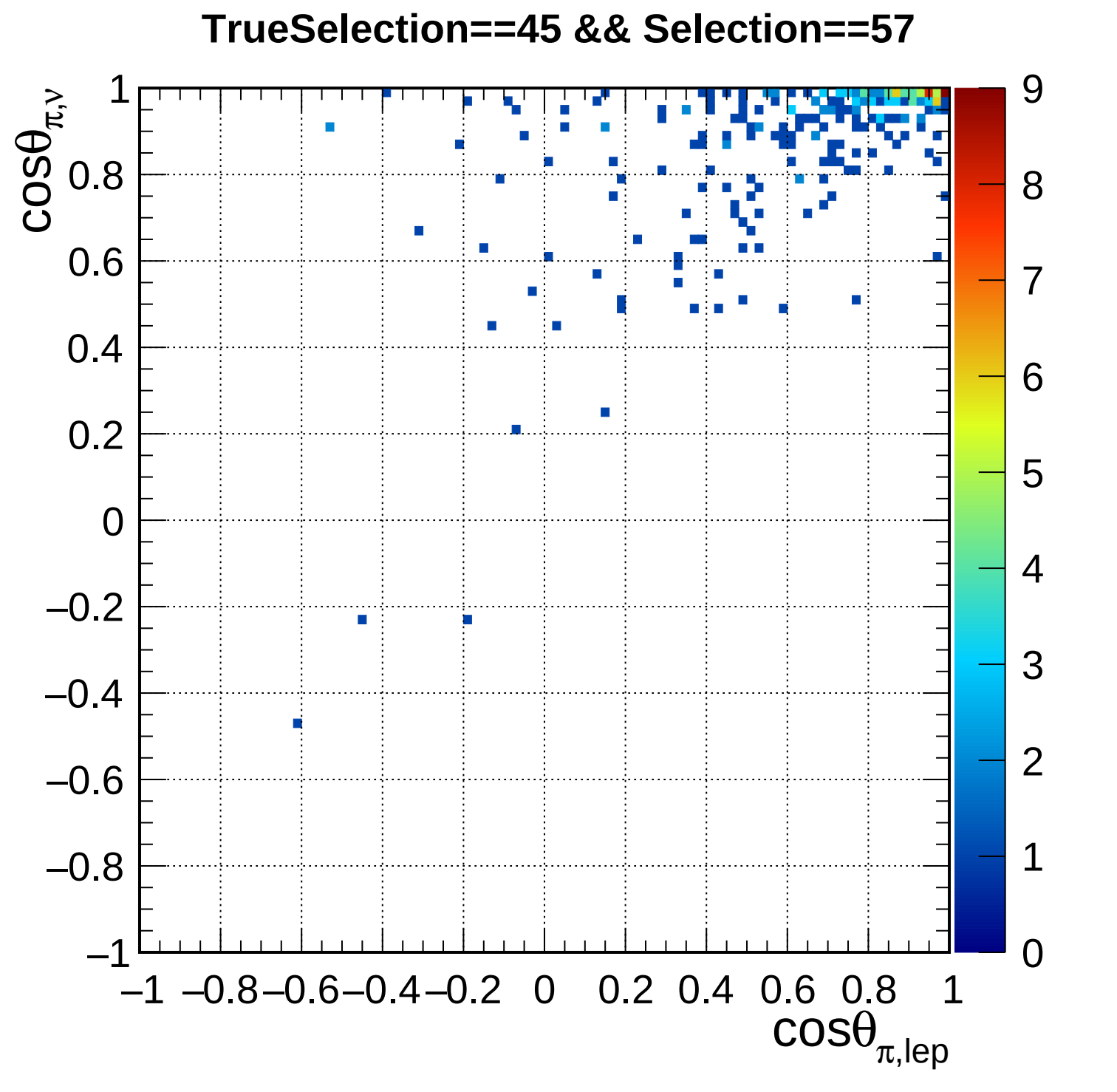

(TrueSelection==45 && Selection==51)/(TrueSelection==45)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

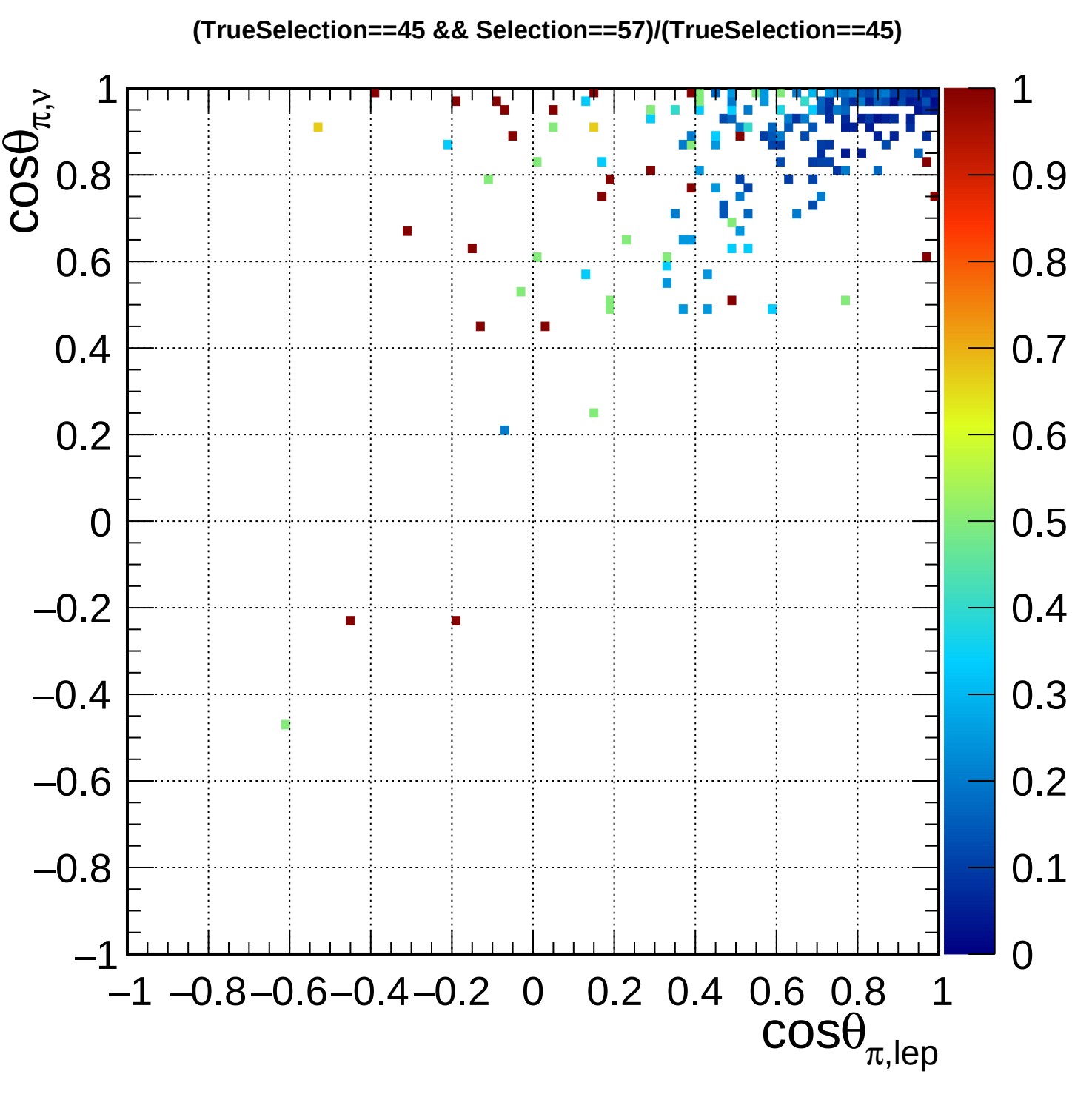

TrueSelection==45 && Selection==55
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
3
2.5
2
1.5
1
0.5
0

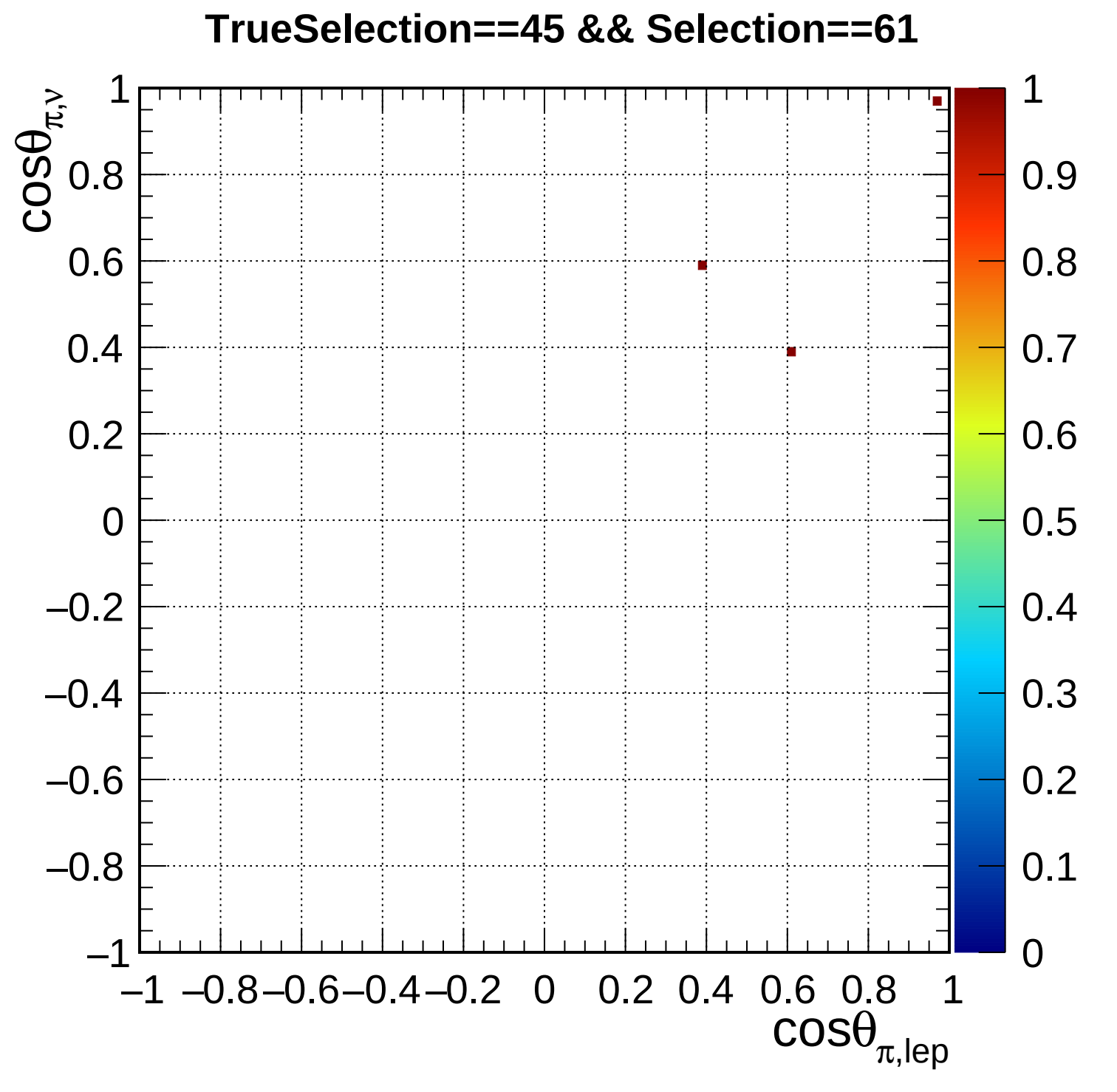

(TrueSelection==45 && Selection==55)/(TrueSelection==45)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

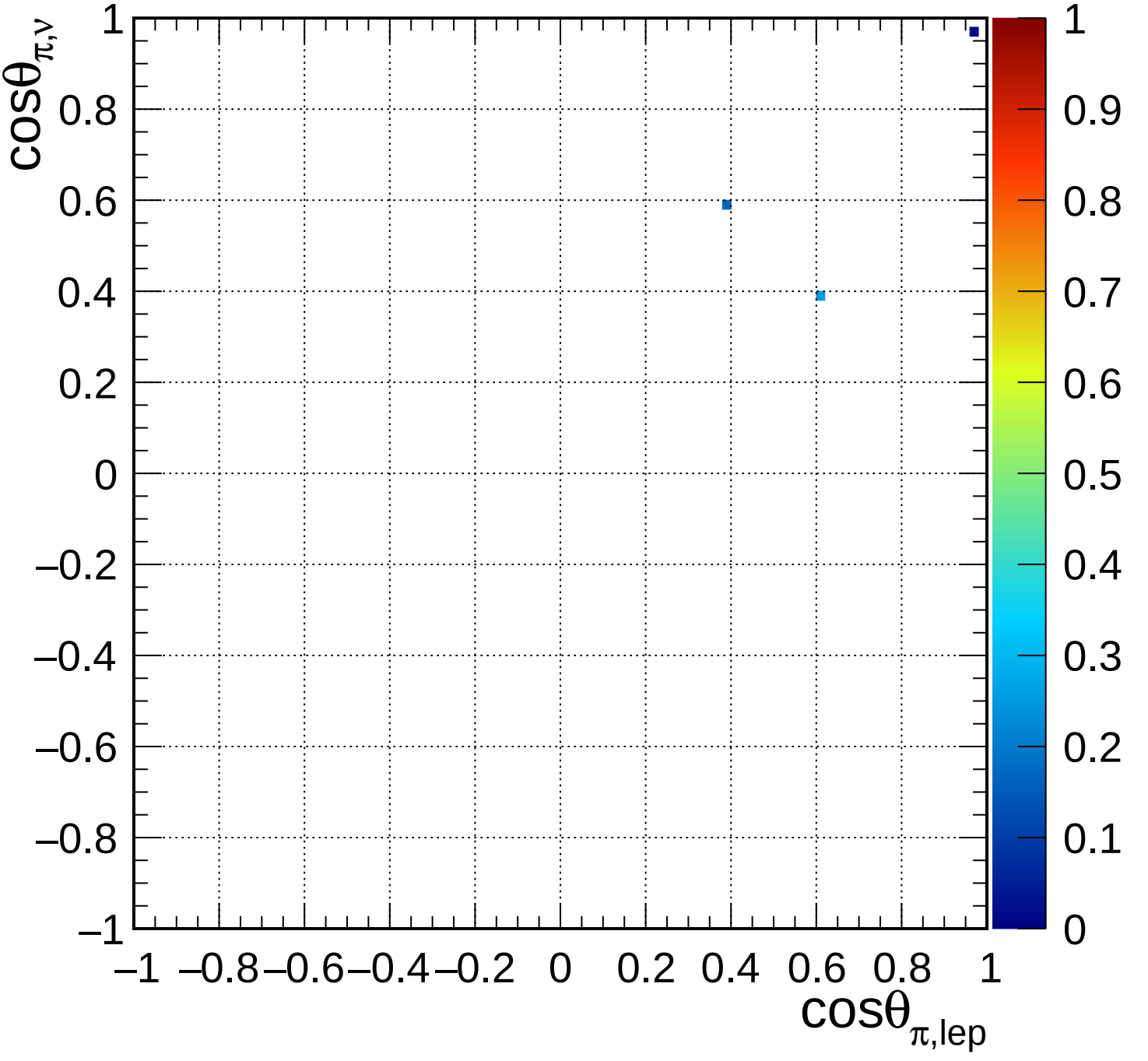

TrueSelection==45 && Selection==56
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0

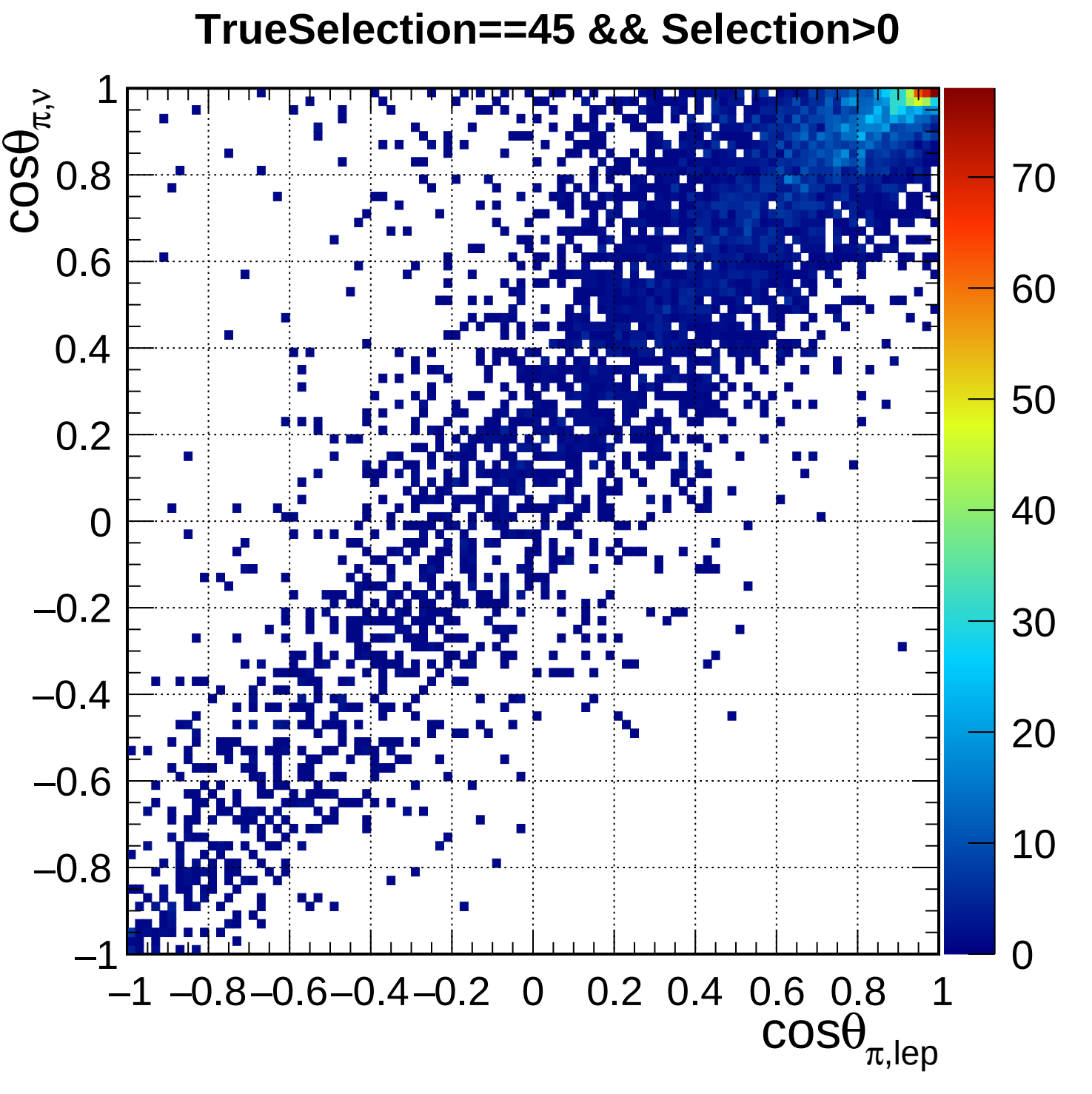

(TrueSelection==45 && Selection==56)/(TrueSelection==45)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

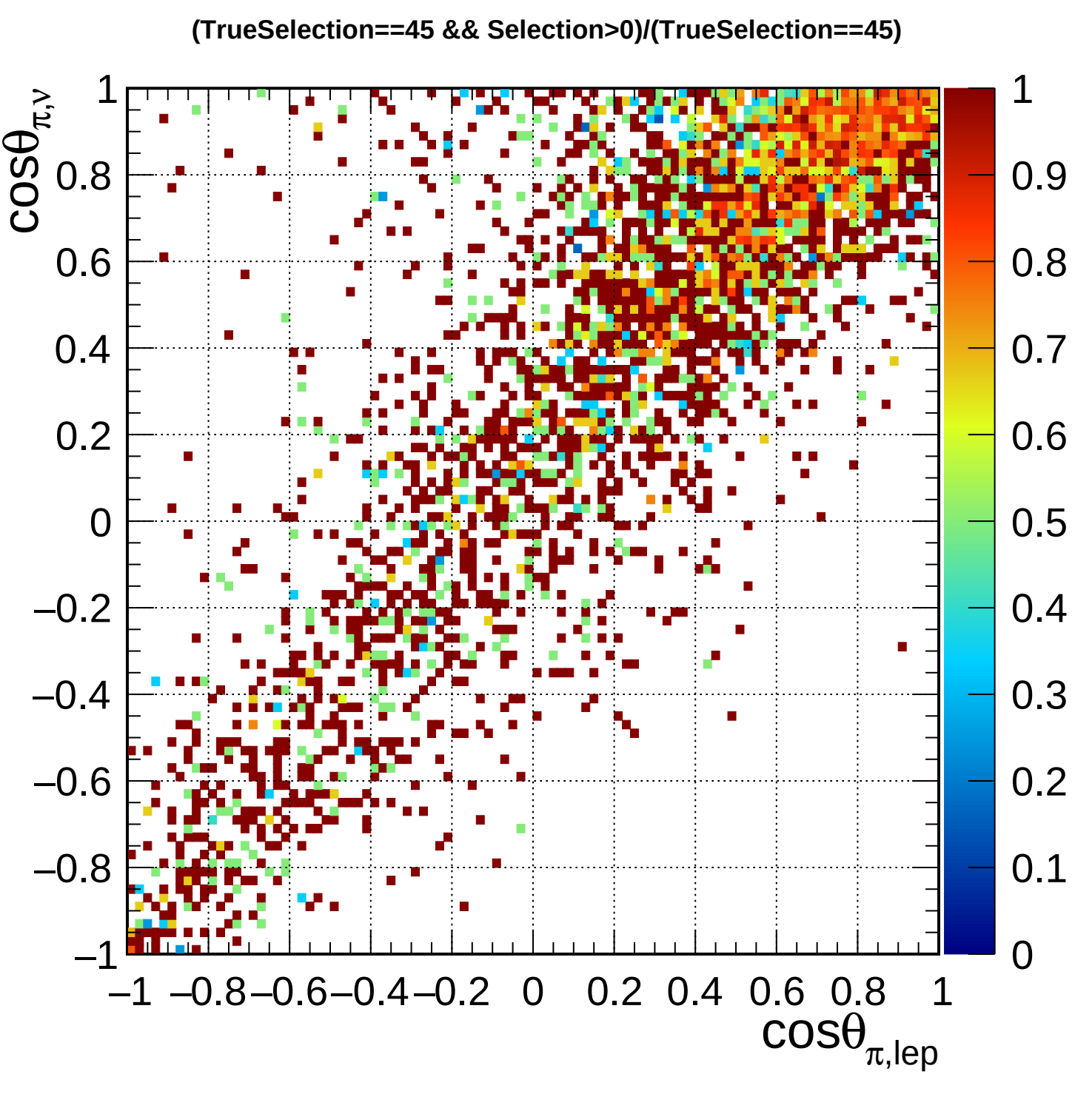

TrueSelection==45 && Selection==57
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
9
8
7
6
5
4
3
2
1
0

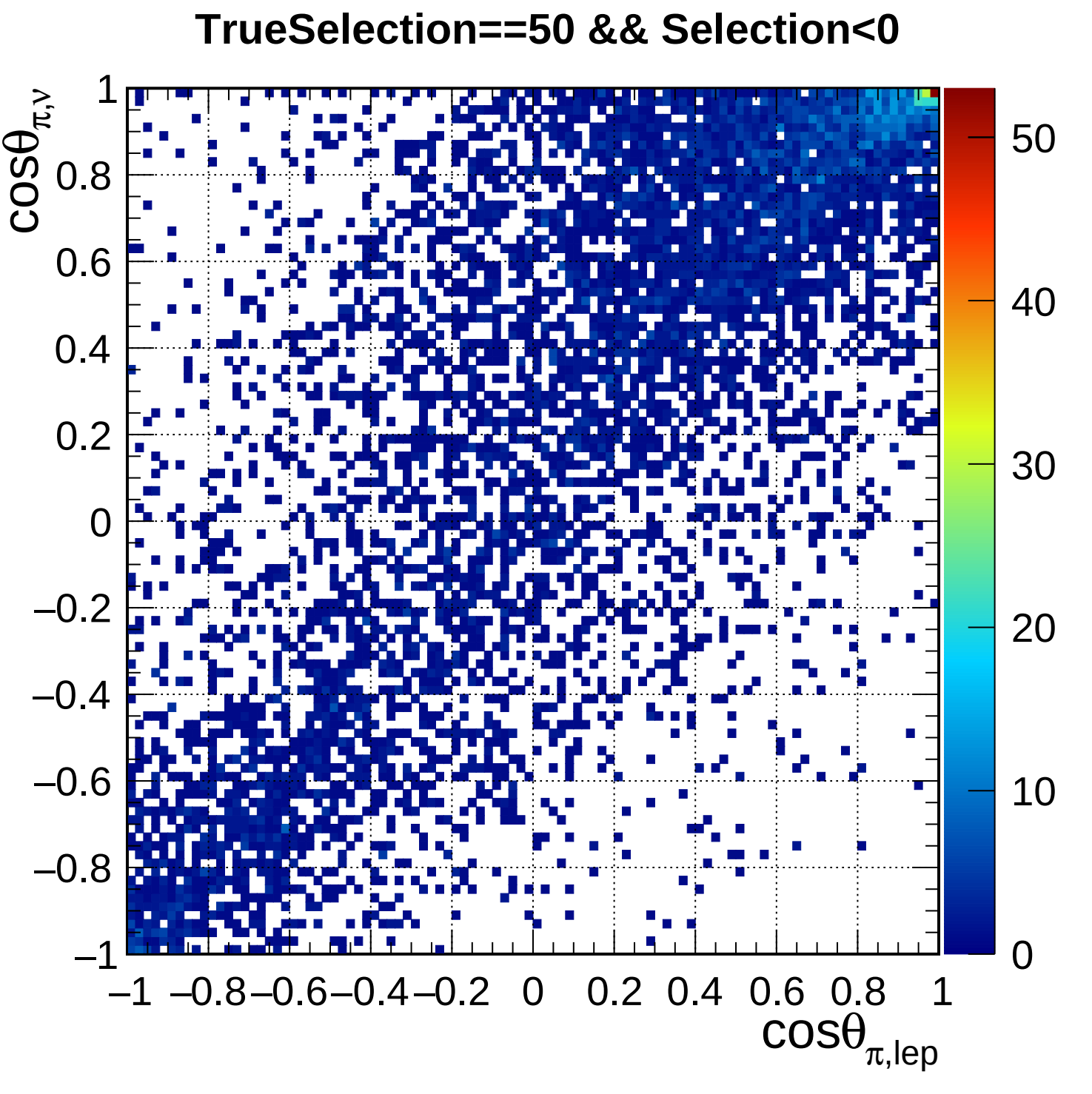

(TrueSelection==45 && Selection==57)/(TrueSelection==45)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

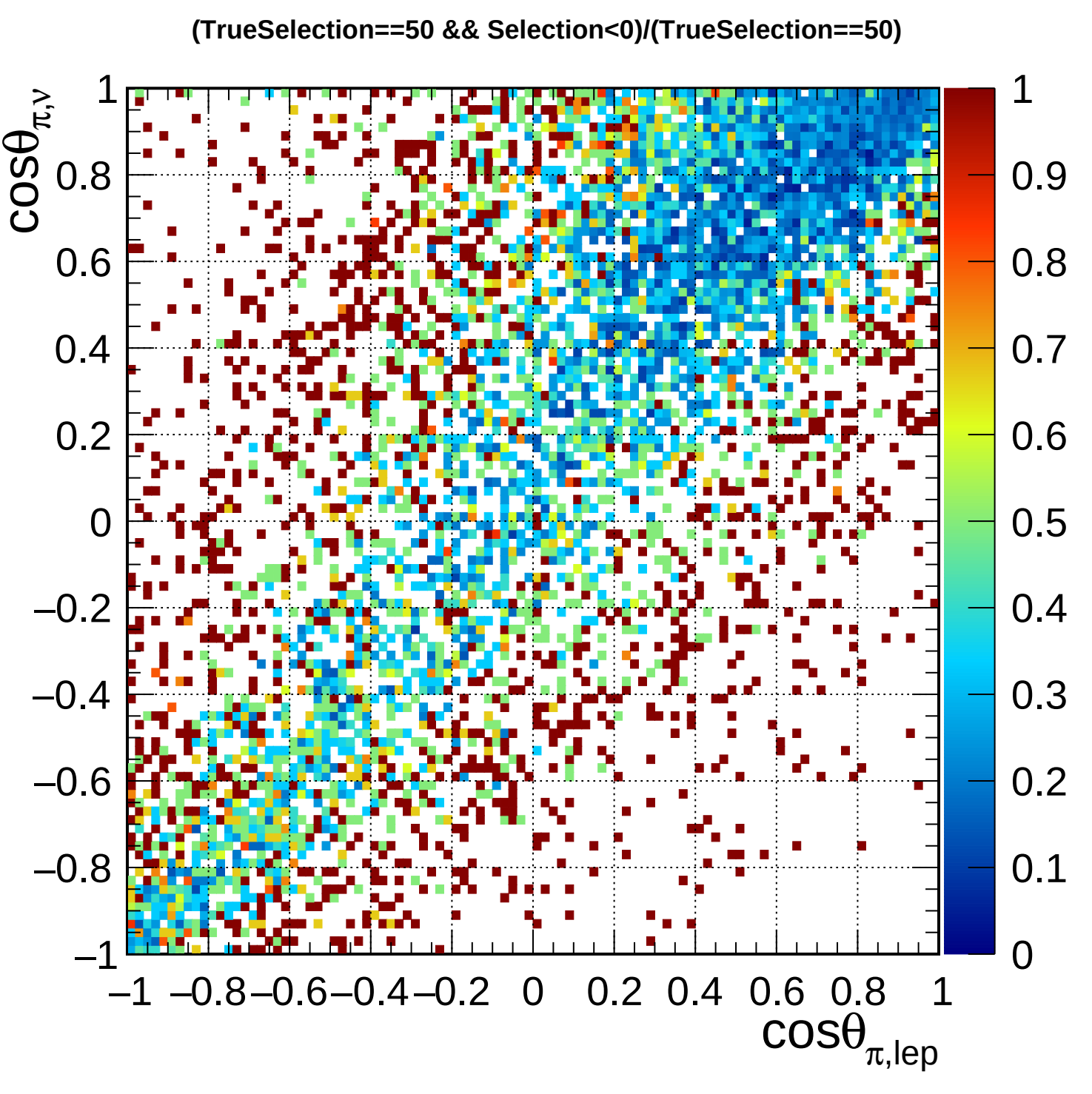

TrueSelection==45 && Selection==61
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

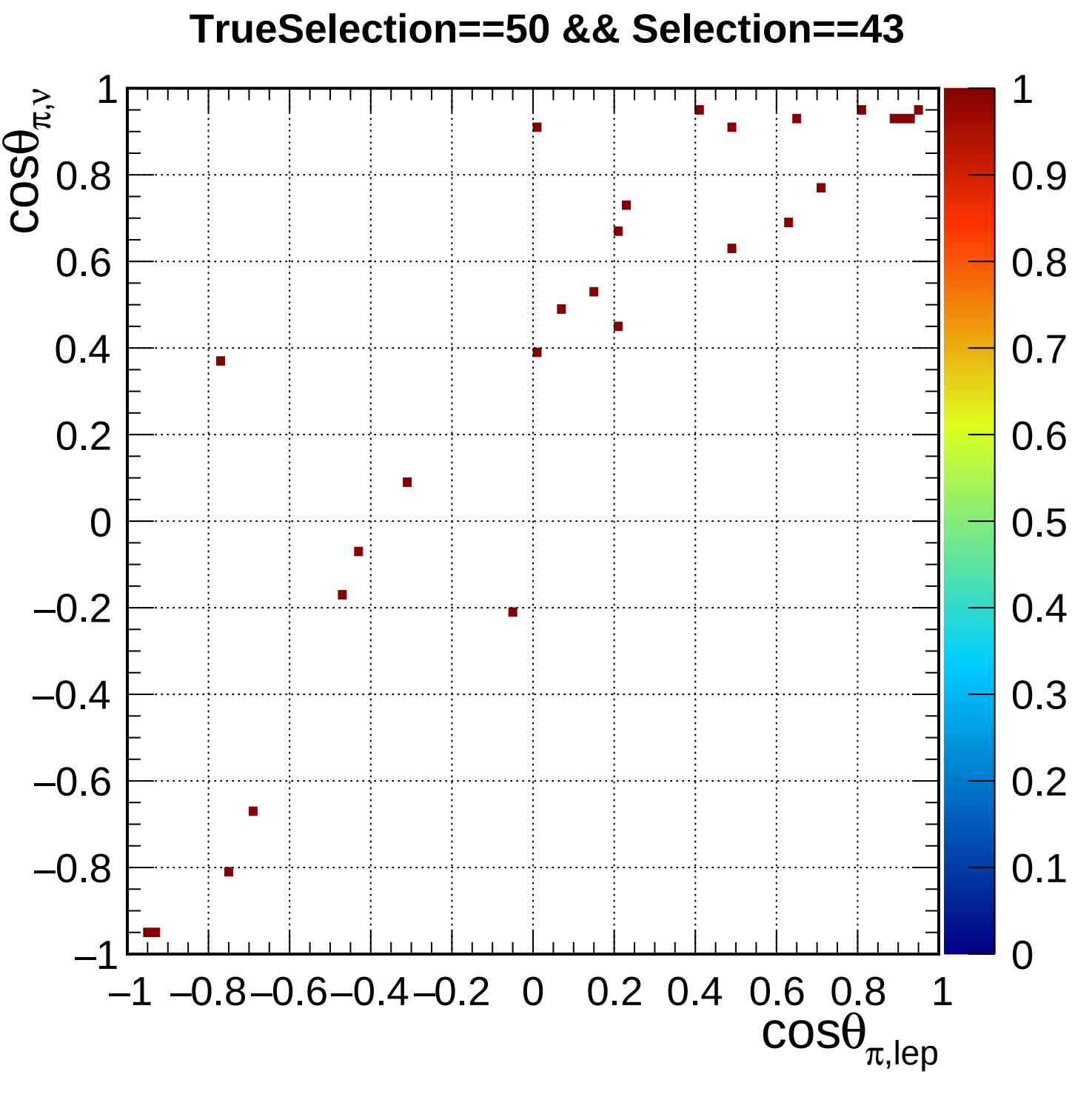

(TrueSelection==45 && Selection==61)/(TrueSelection==45)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

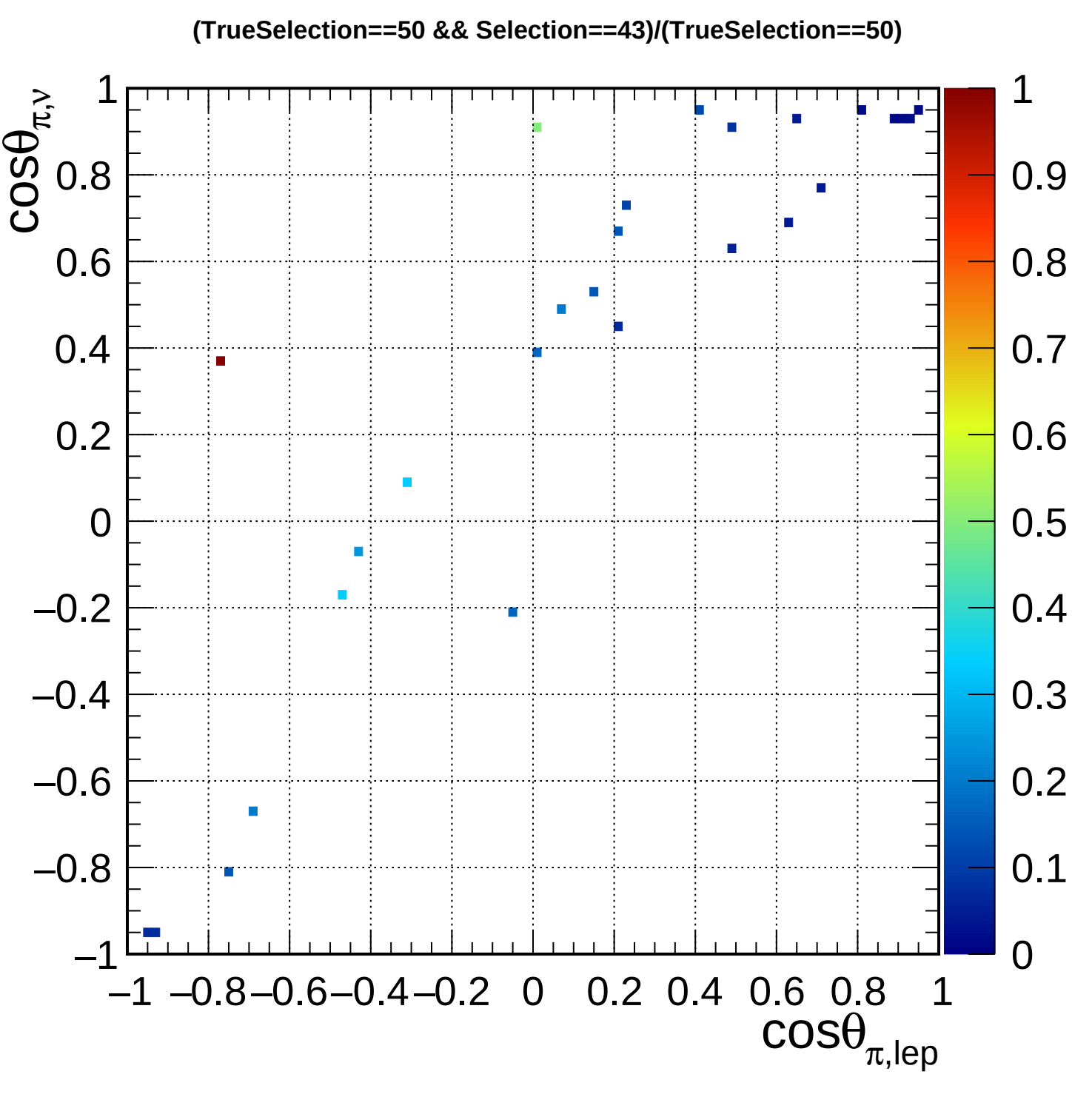

TrueSelection==45 && Selection>0
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
70
60
50
40
30
20
10
0

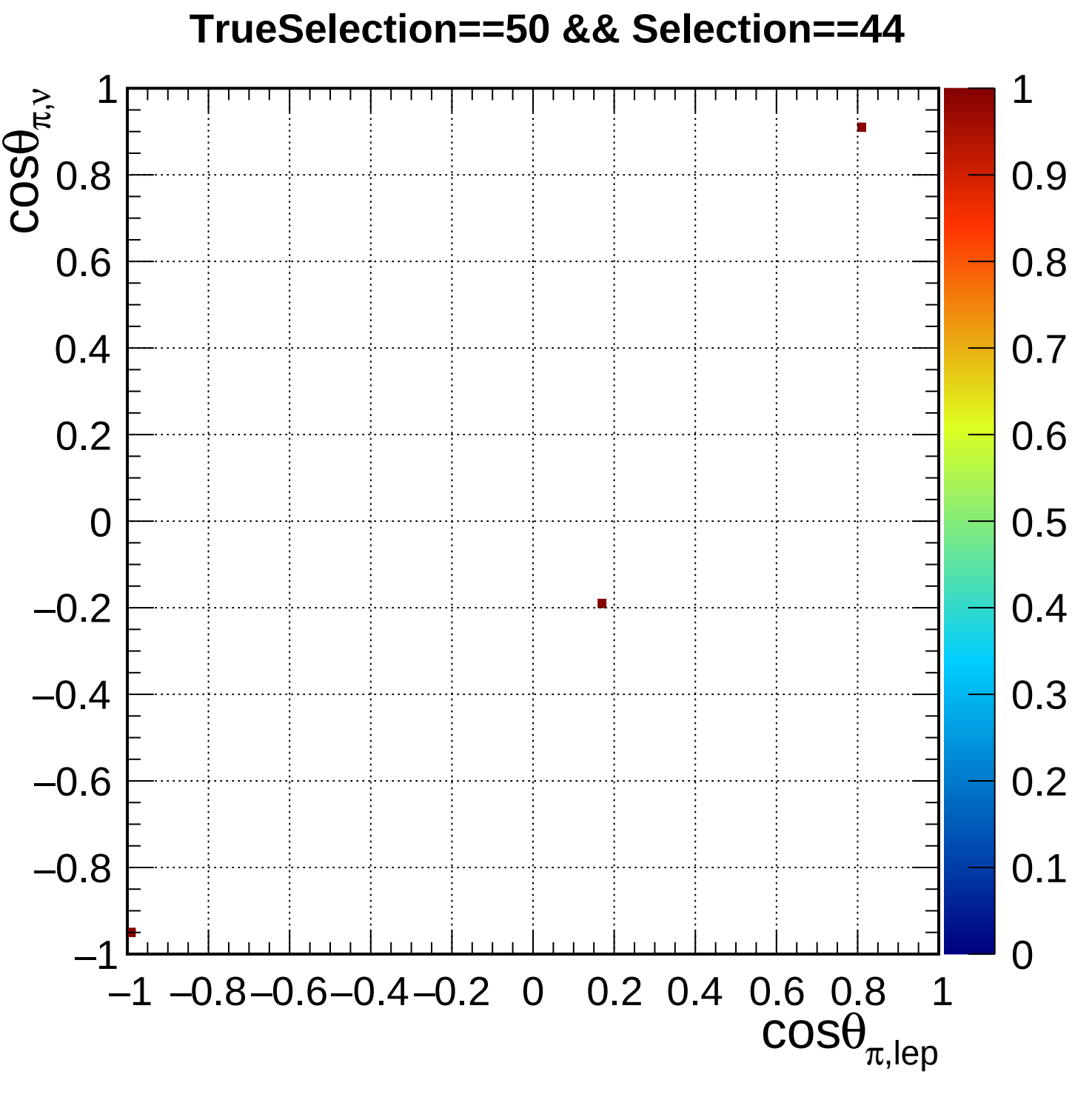

(TrueSelection==45 && Selection>0)/(TrueSelection==45)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

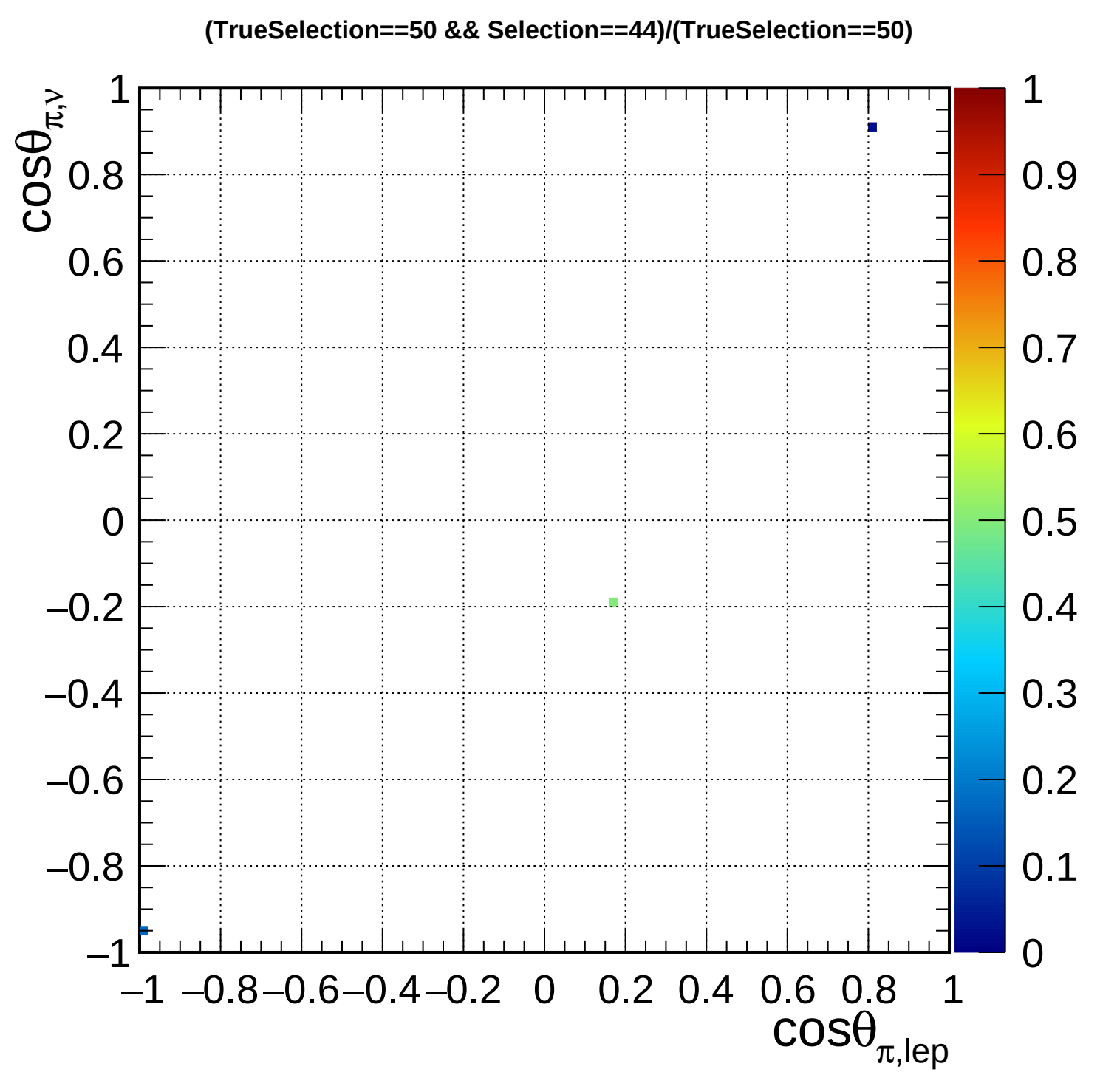

TrueSelection==50 && Selection<0
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
50
40
30
20
10
0

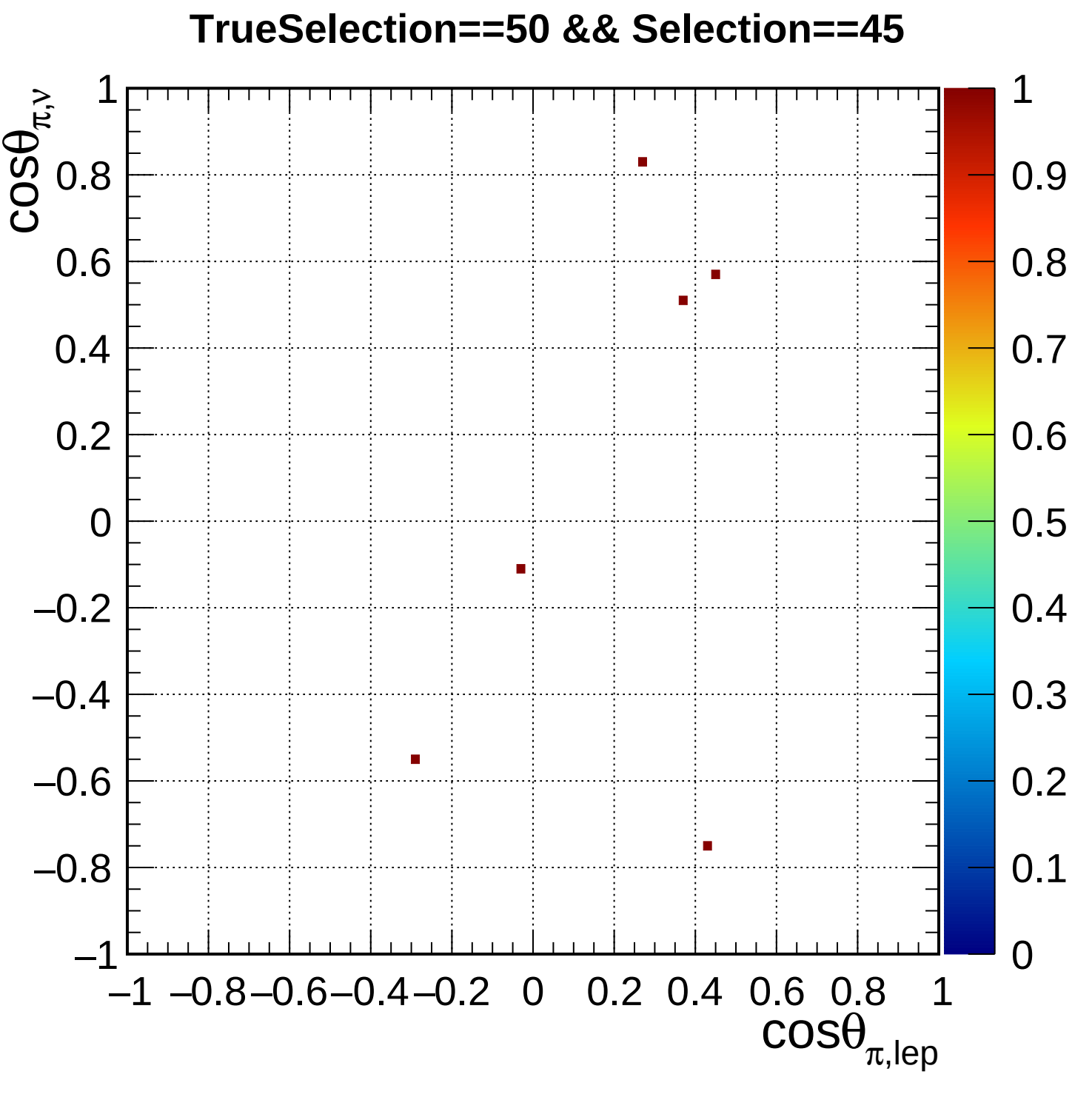

(TrueSelection==50 && Selection<0)/(TrueSelection==50)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

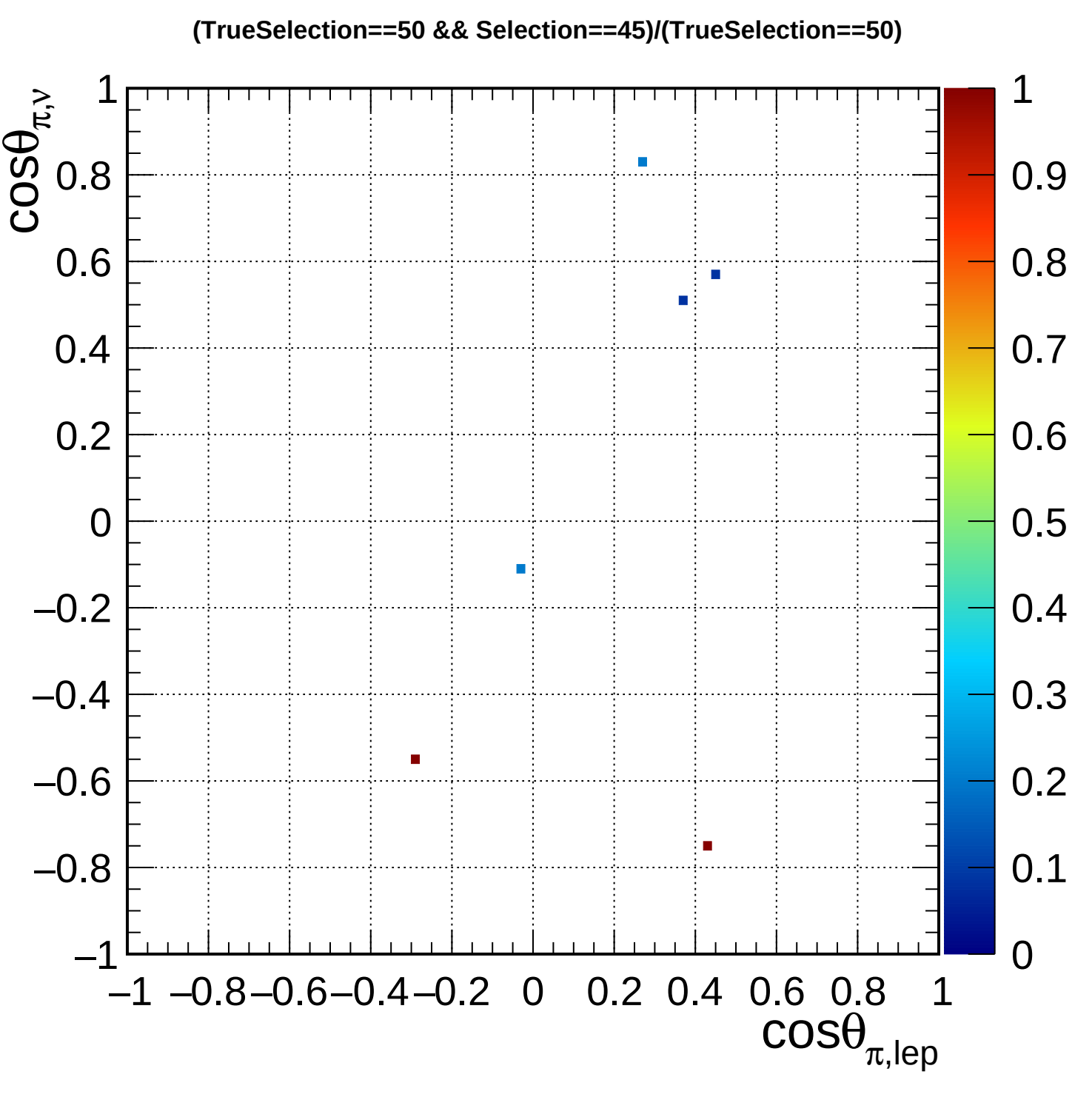

TrueSelection==50 && Selection==43
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

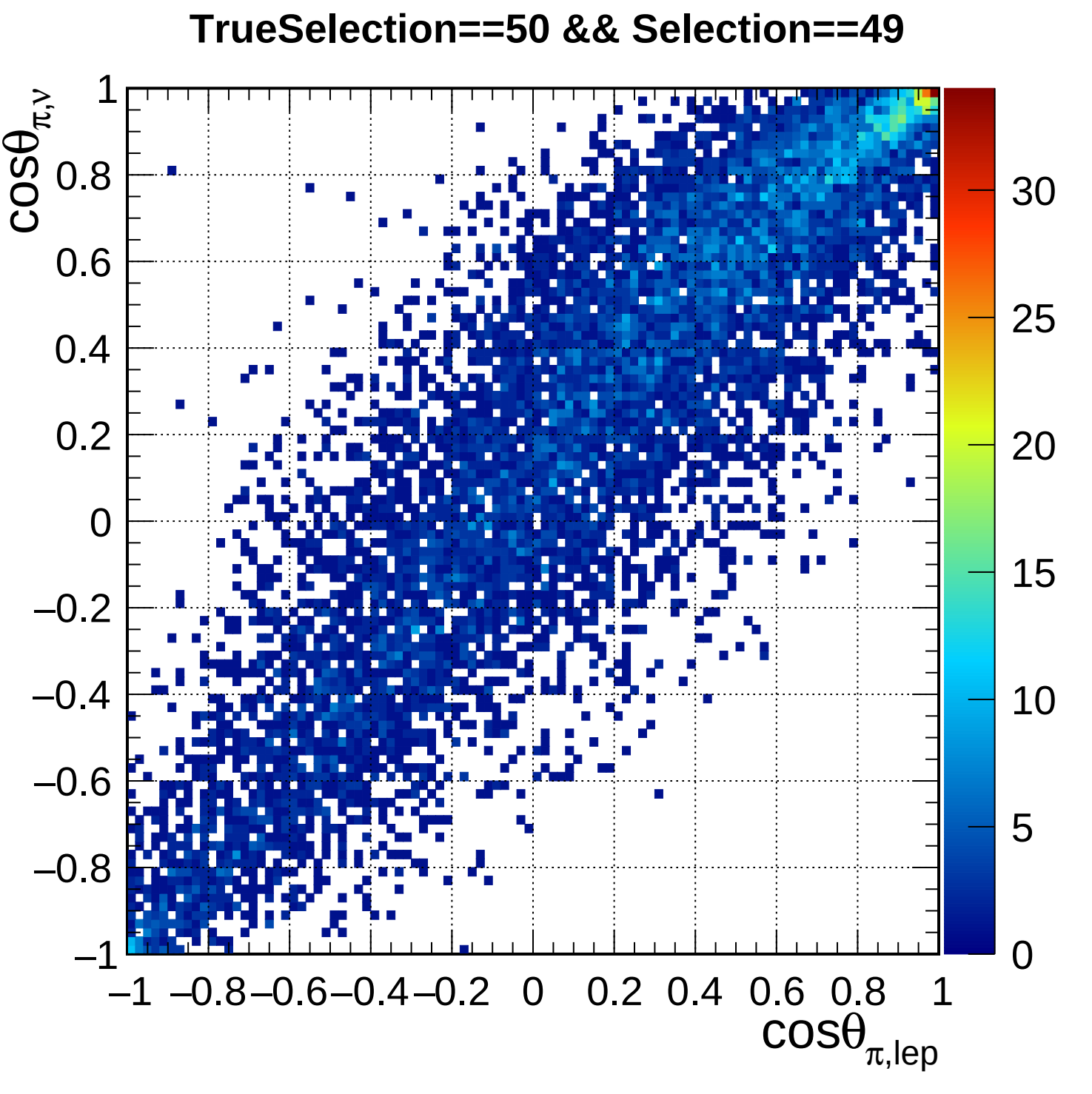

(TrueSelection==50 && Selection==43)/(TrueSelection==50)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

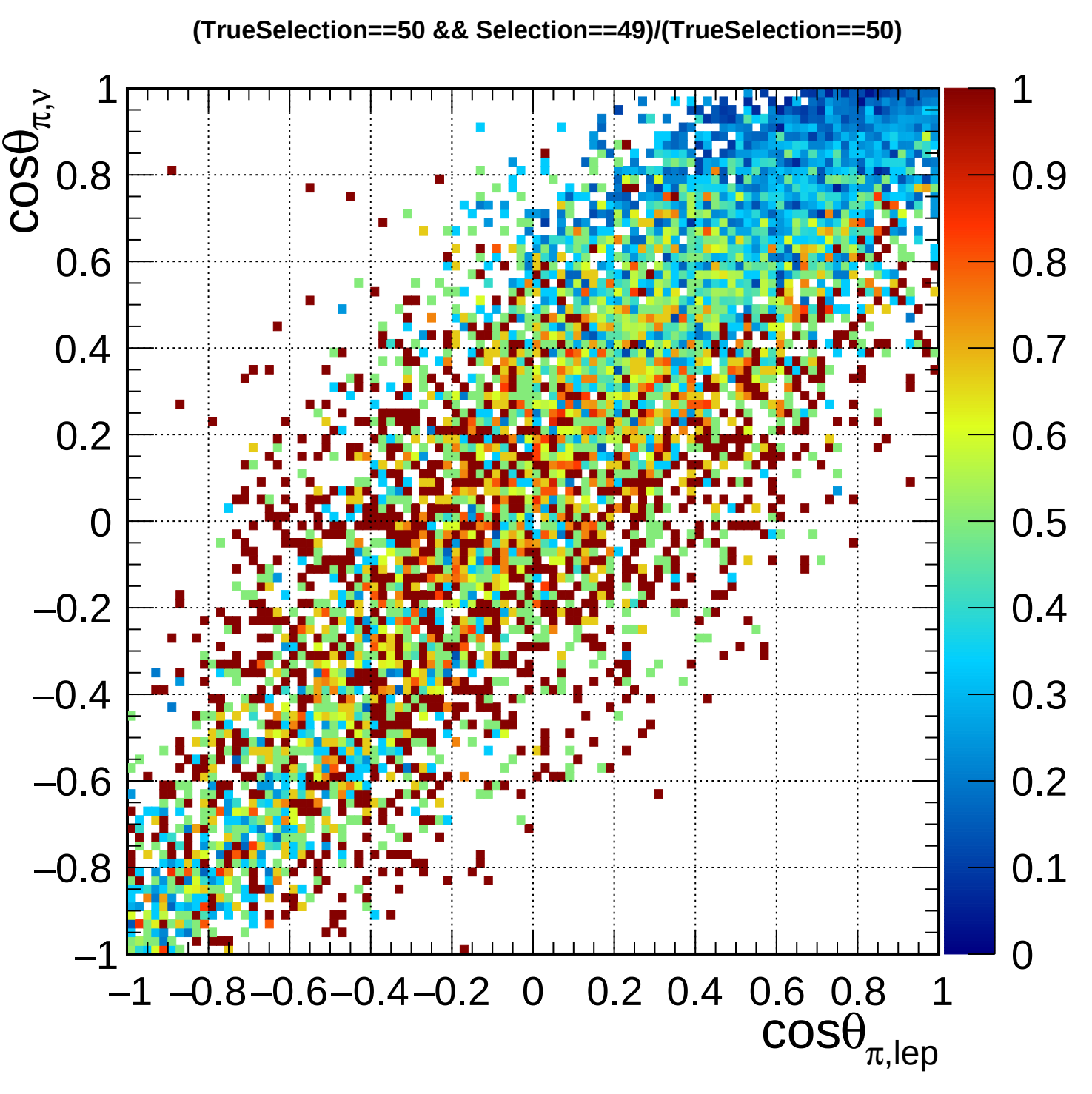

TrueSelection==50 && Selection==44
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

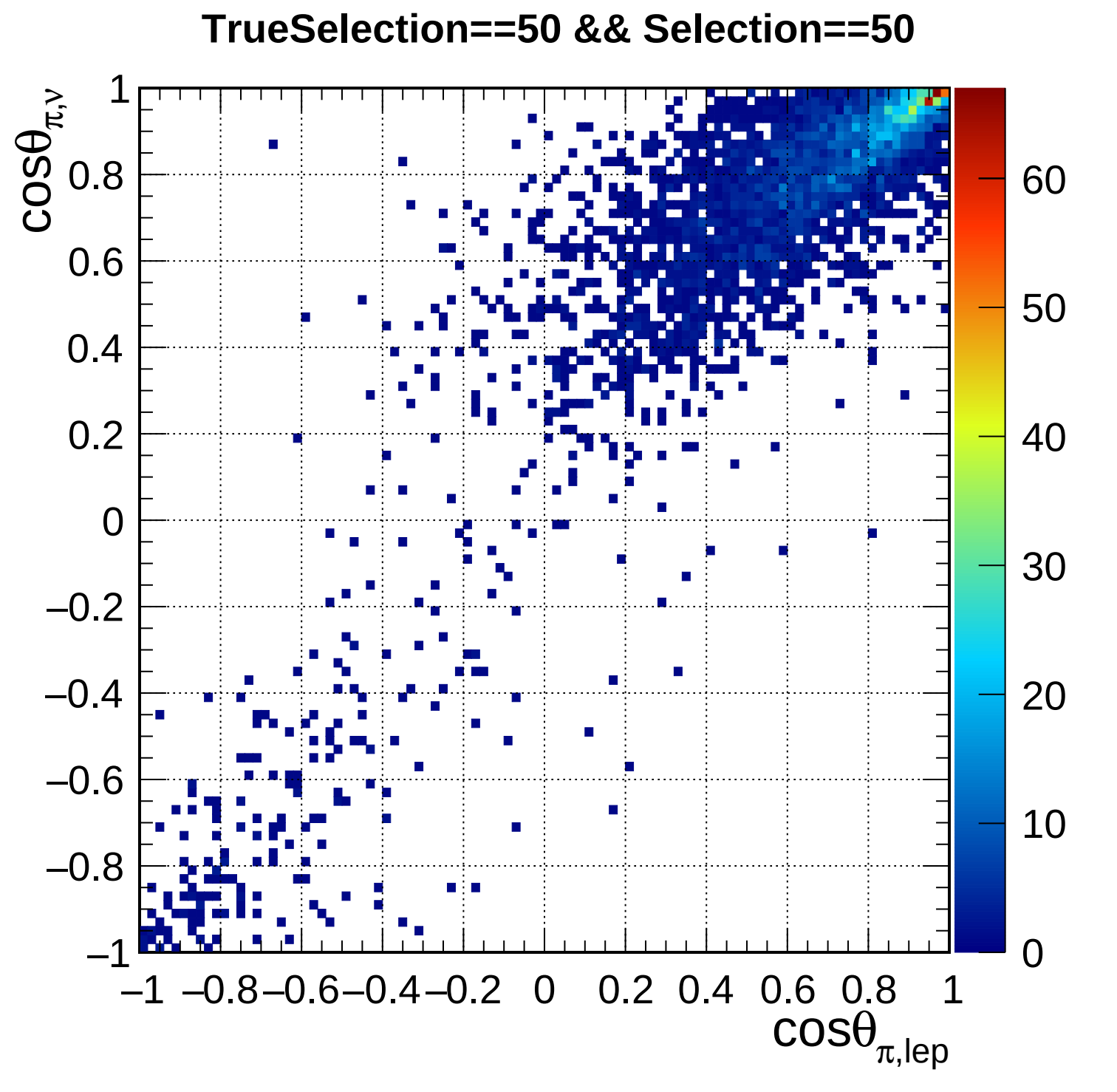

(TrueSelection==50 && Selection==44)/(TrueSelection==50)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

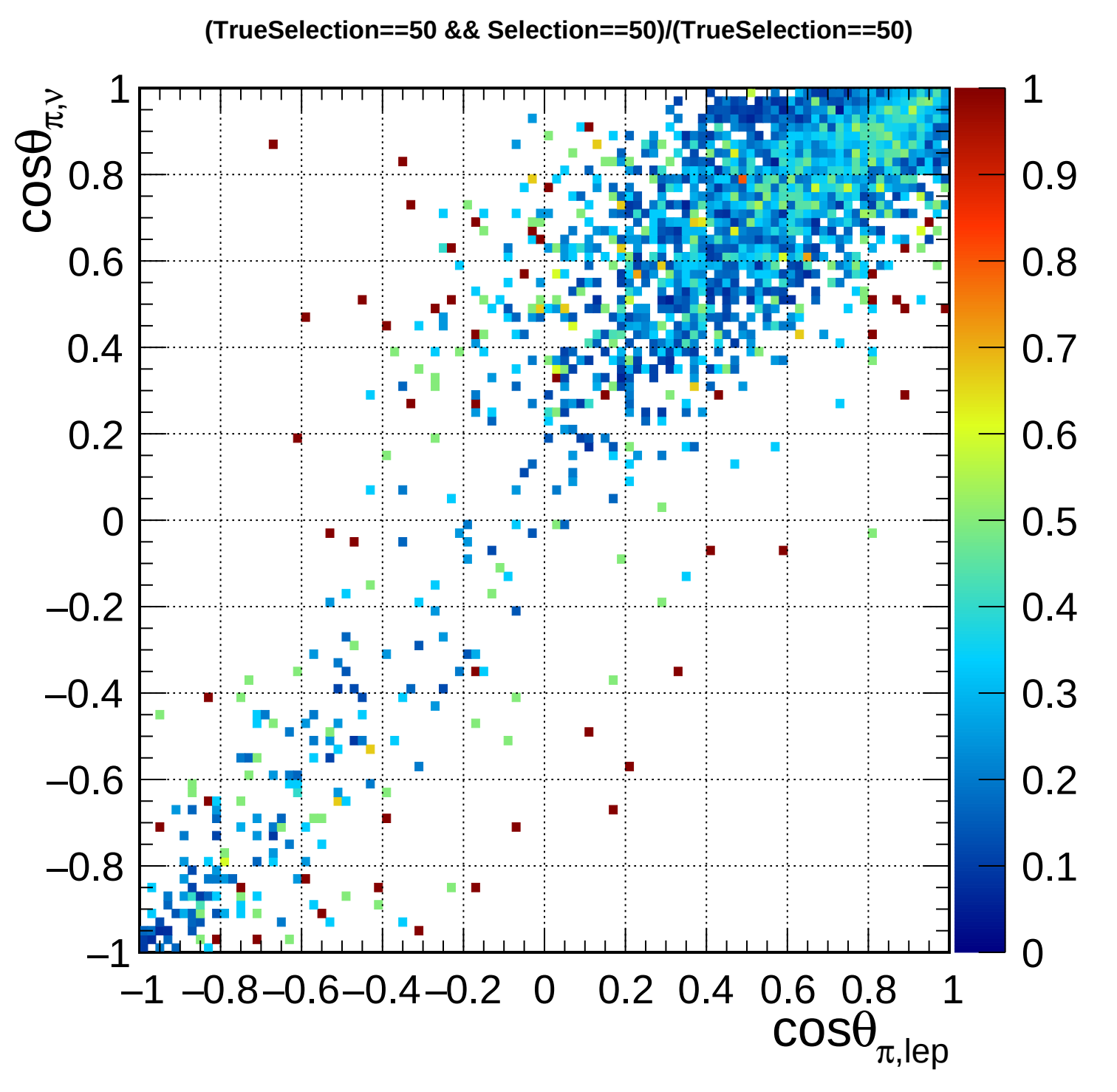

TrueSelection==50 && Selection==45
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

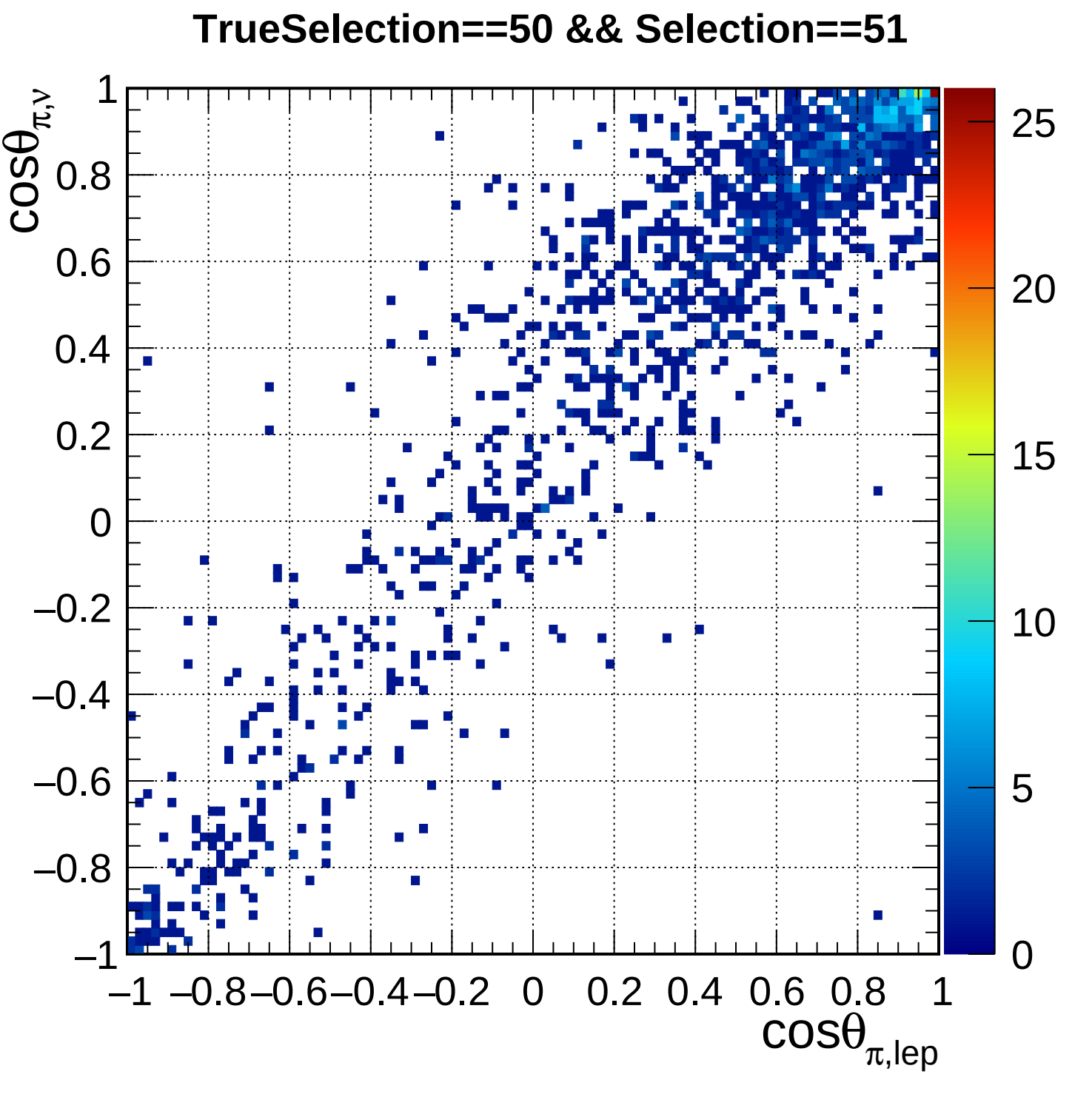

(TrueSelection==50 && Selection==45)/(TrueSelection==50)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

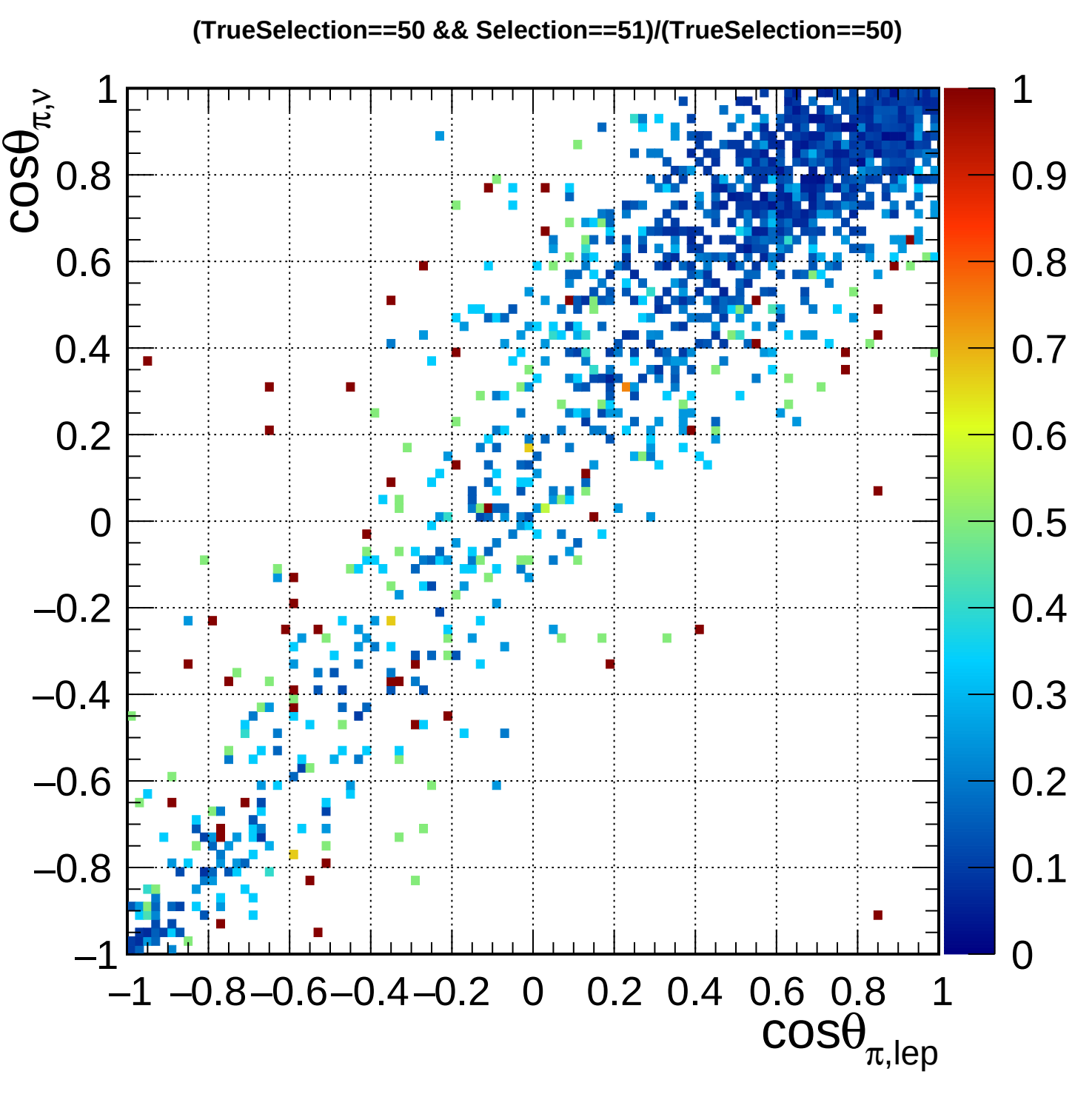

TrueSelection==50 && Selection==49
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
30
25
20
15
10
5
0

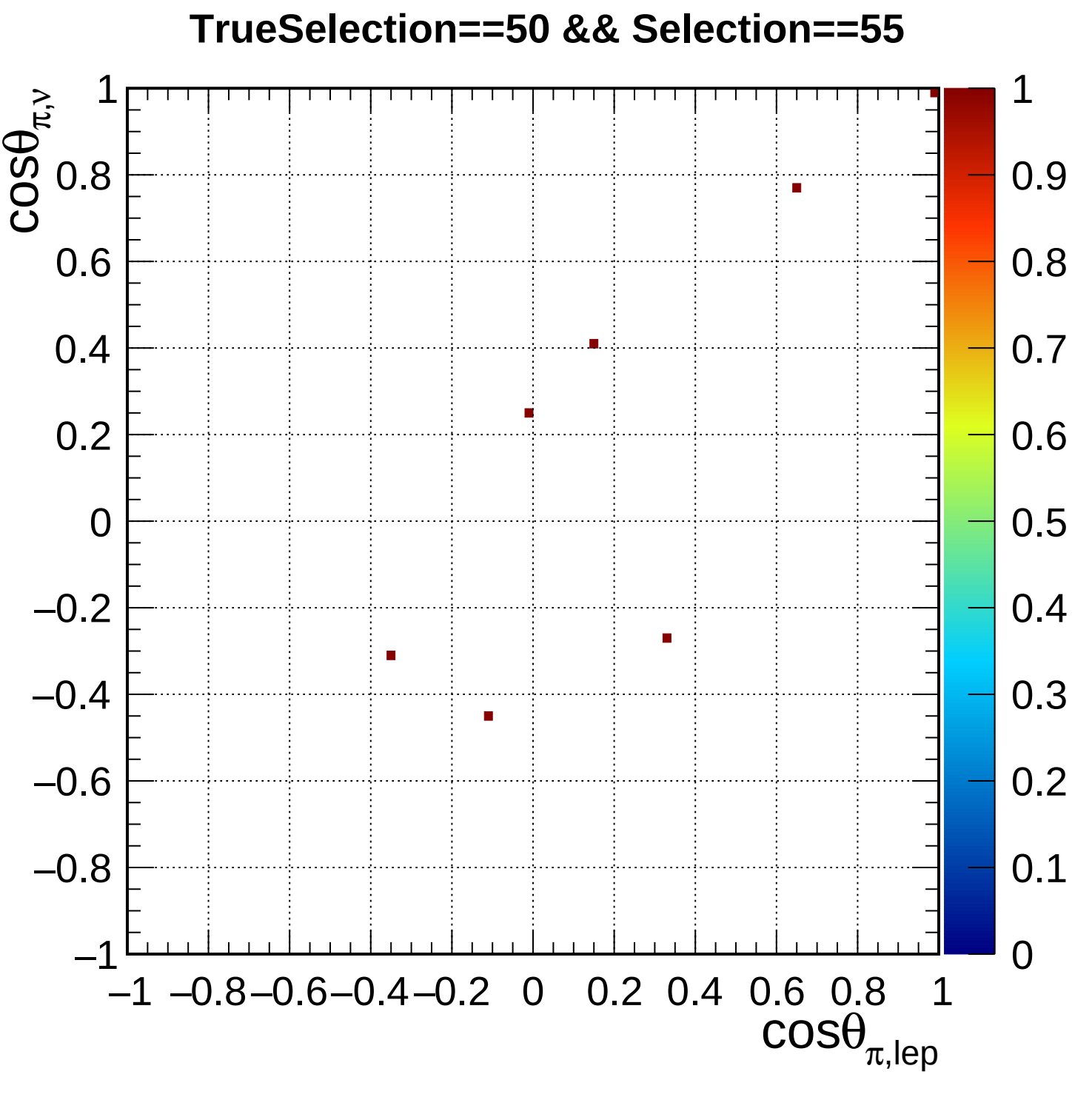

(TrueSelection==50 && Selection==49)/(TrueSelection==50)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

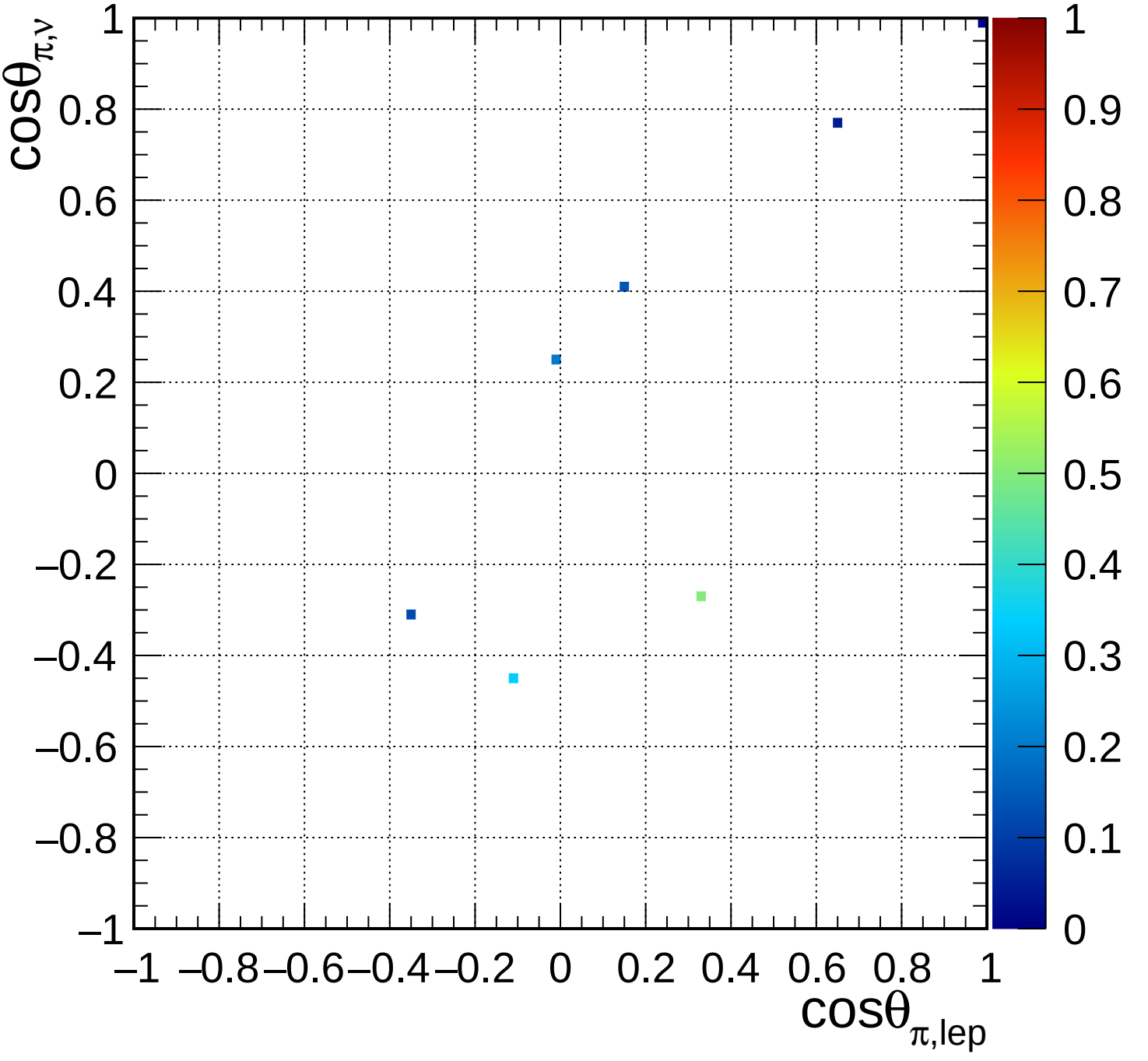

TrueSelection==50 && Selection==50
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
60
50
40
30
20
10
0

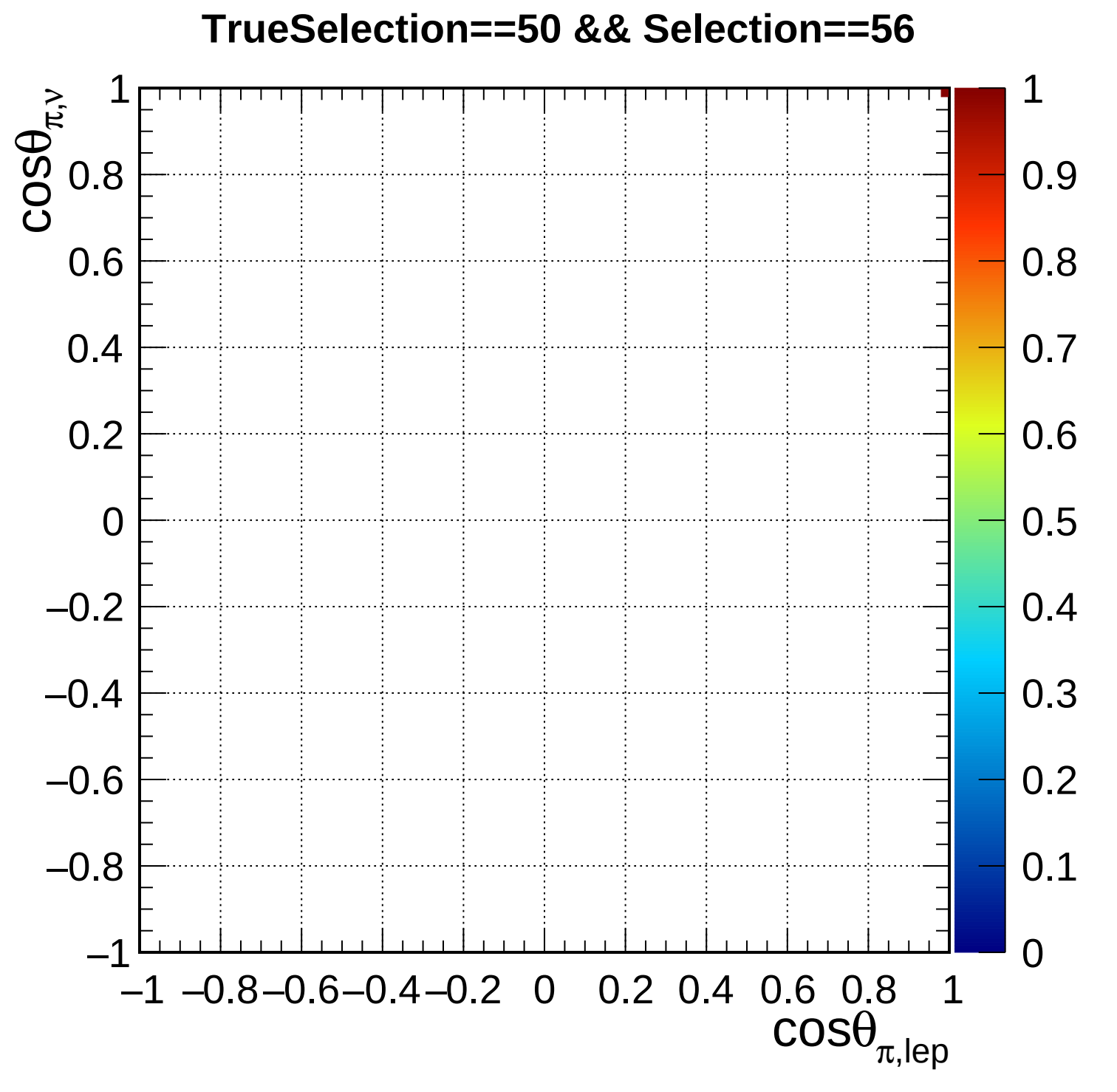

(TrueSelection==50 && Selection==50)/(TrueSelection==50)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

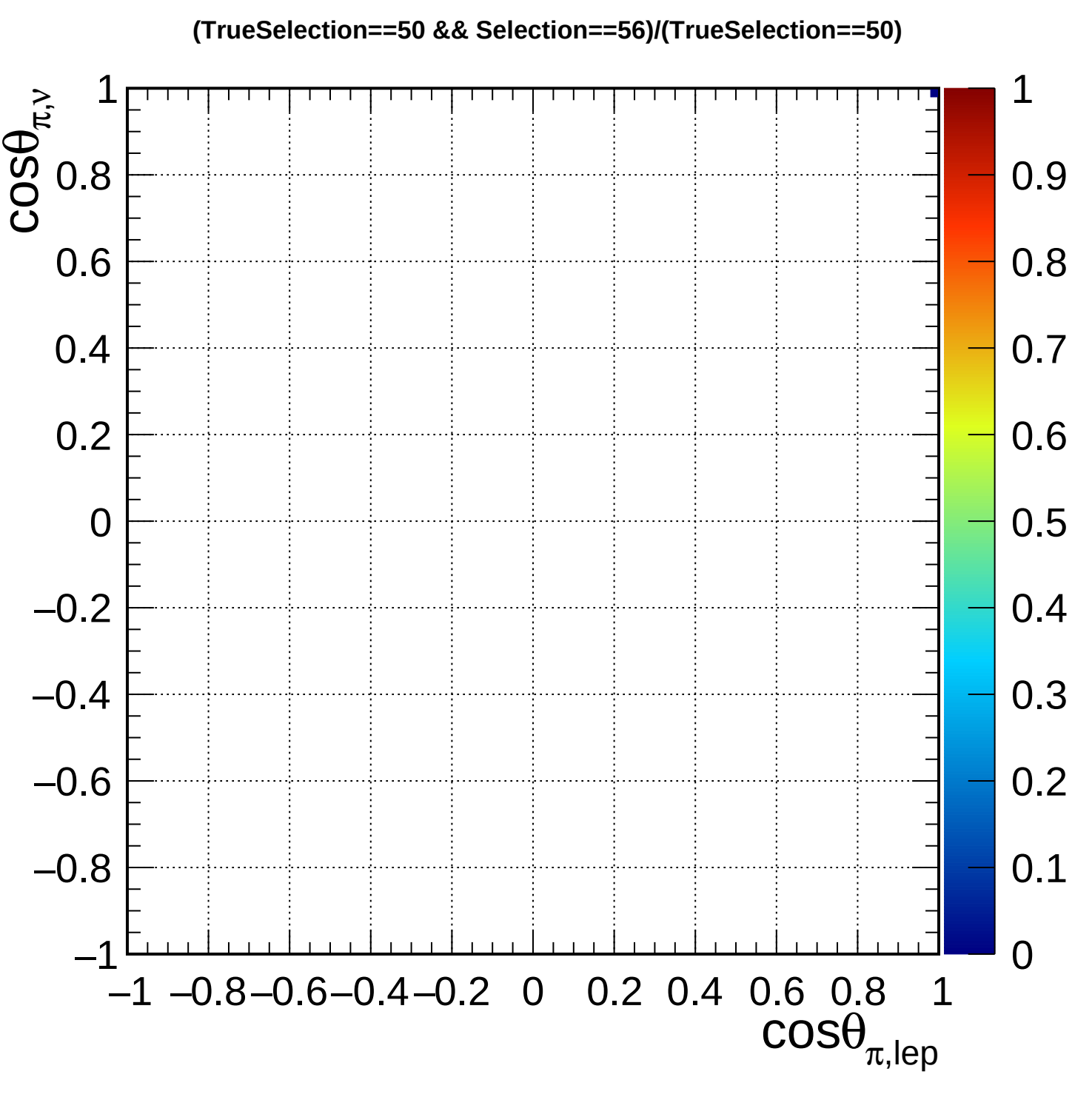

TrueSelection==50 && Selection==51
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
–1 –0.8 –0.6 –0.4 –0.2 0 0.2 0.4 0.6 0.8 1
25
20
15
10
5
0

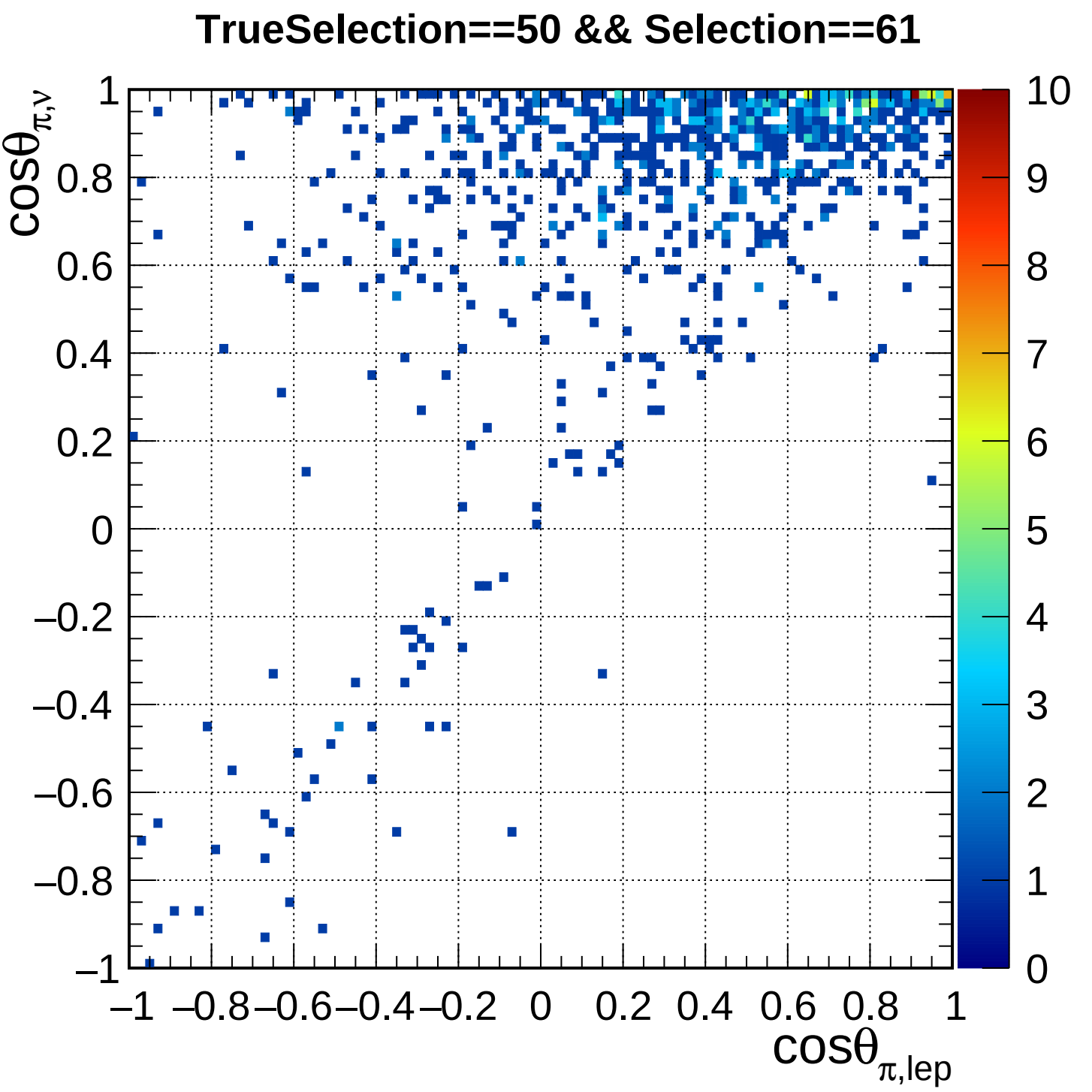

(TrueSelection==50 && Selection==51)/(TrueSelection==50)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

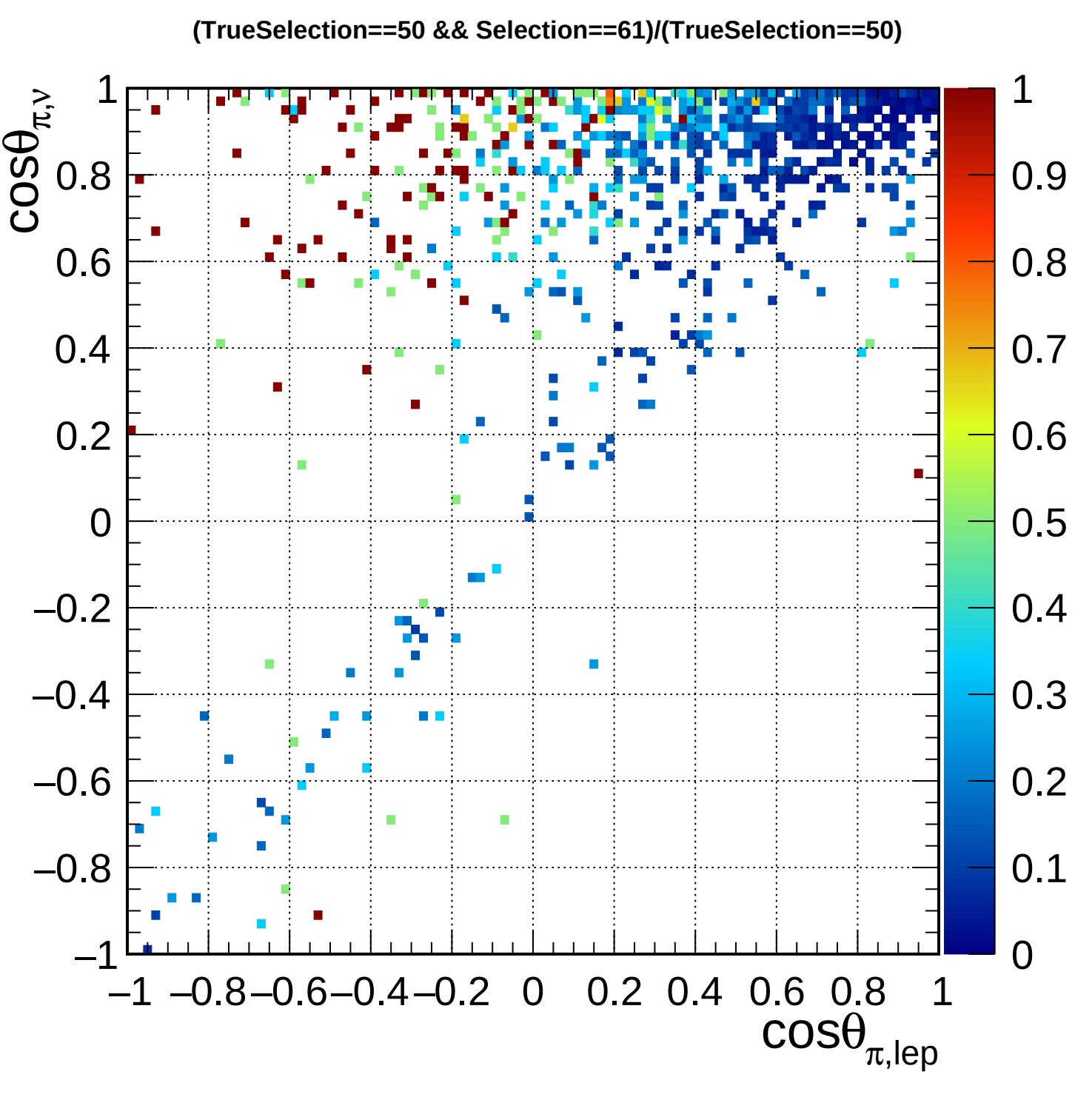

TrueSelection==50 && Selection==55
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

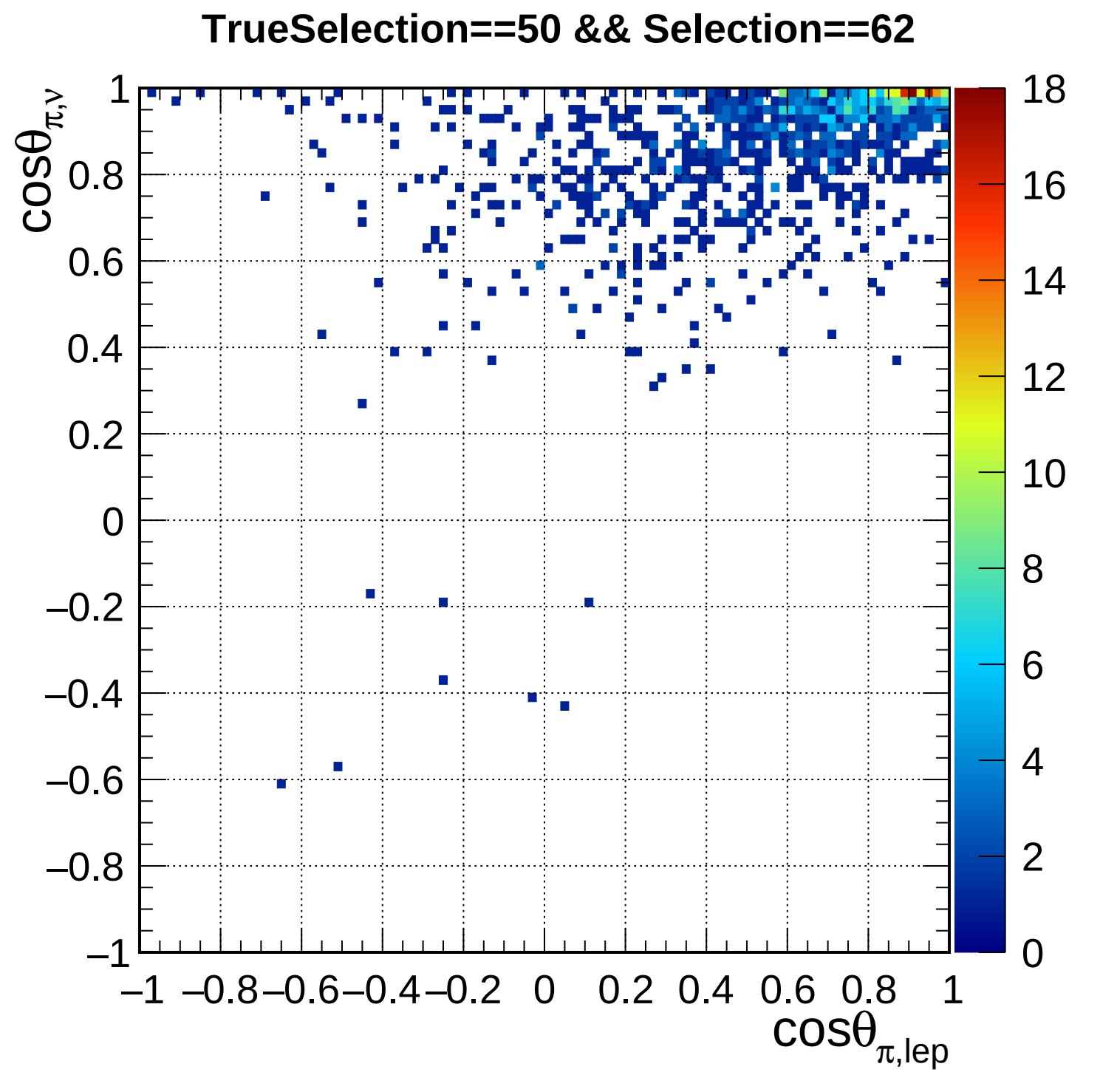

(TrueSelection==50 && Selection==55)/(TrueSelection==50)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

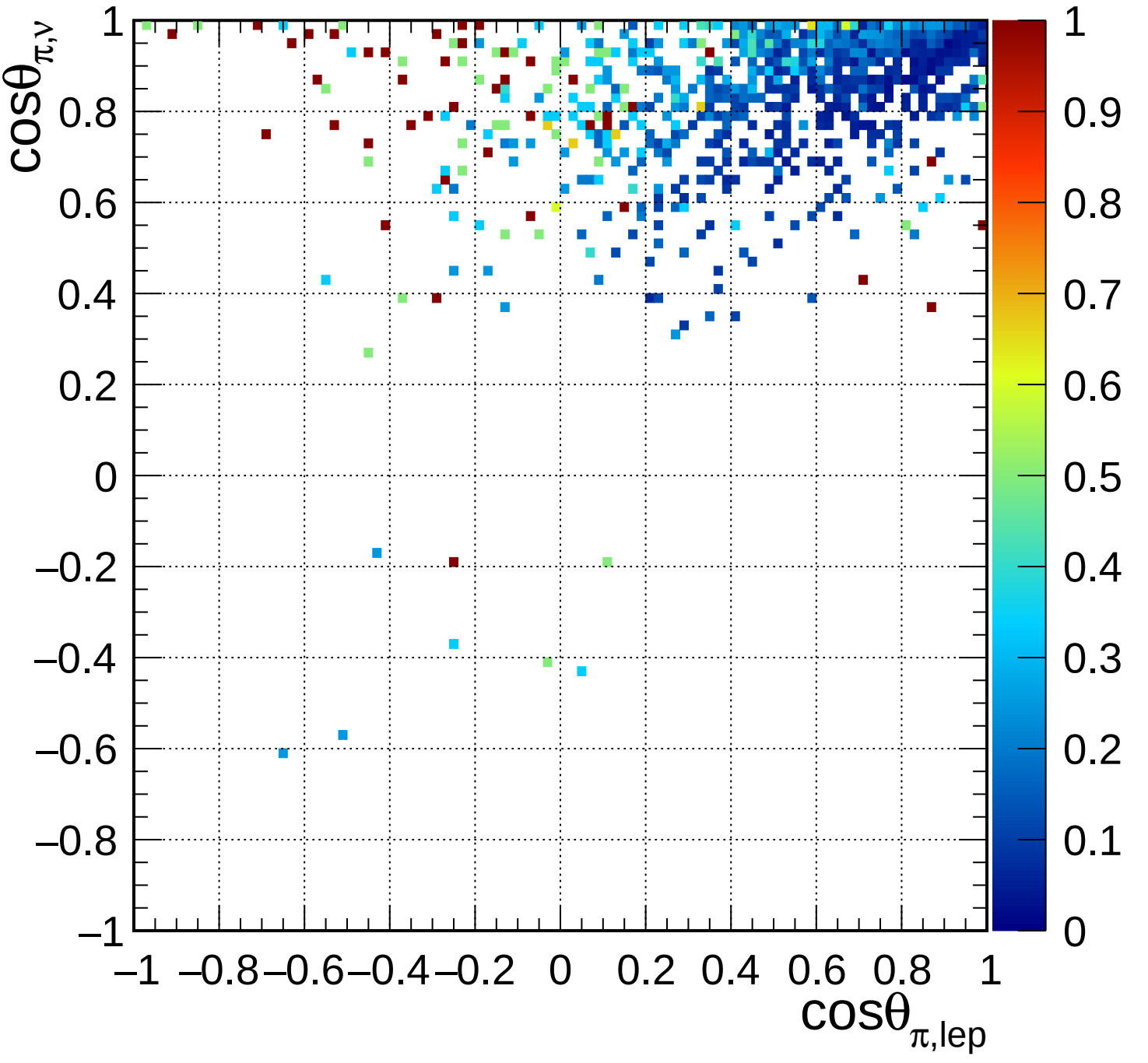

TrueSelection==50 && Selection==56
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

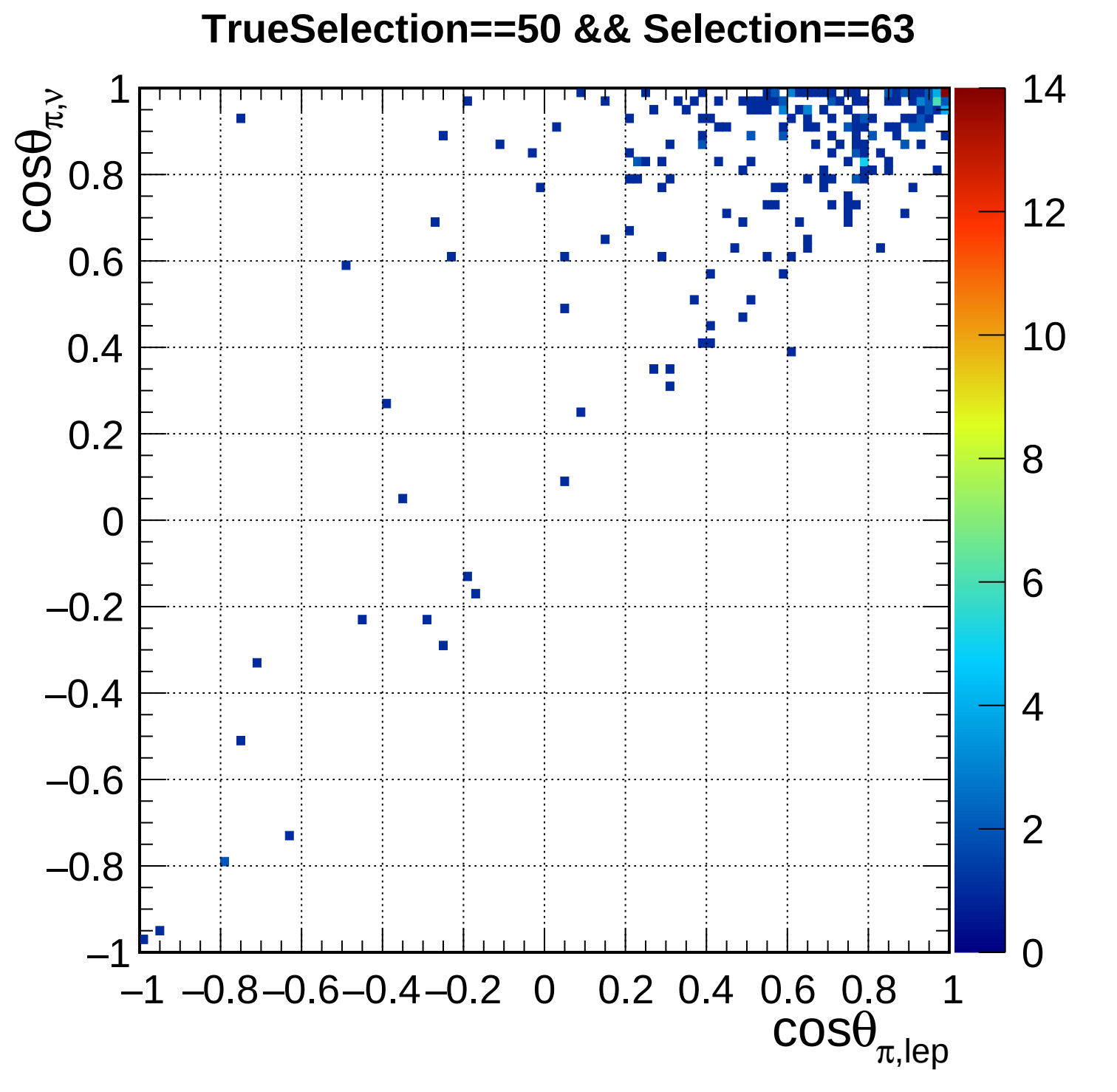

(TrueSelection==50 && Selection==56)/(TrueSelection==50)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

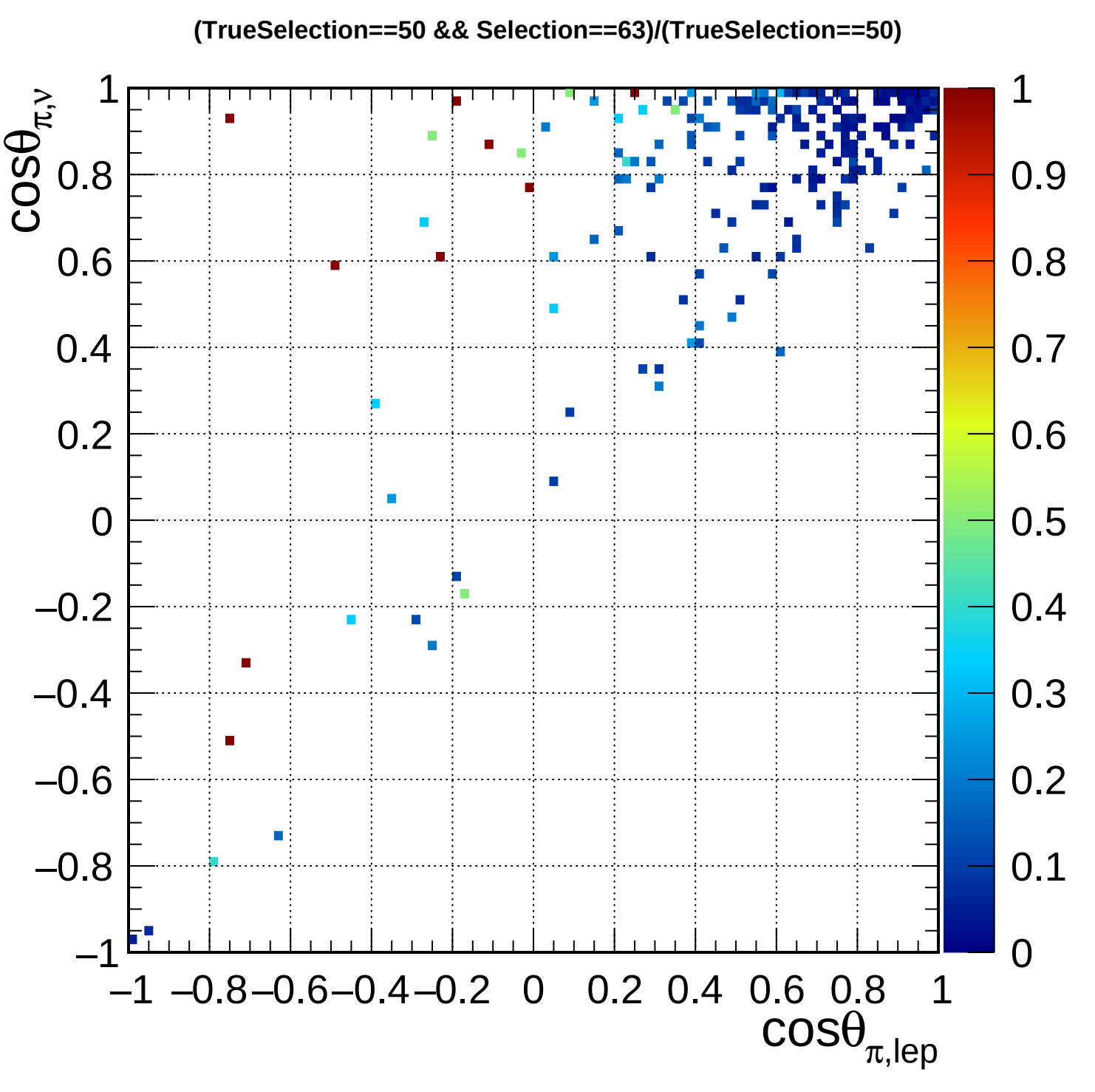

TrueSelection==50 && Selection==61
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
10
9
8
7
6
5
4
3
2
1
0

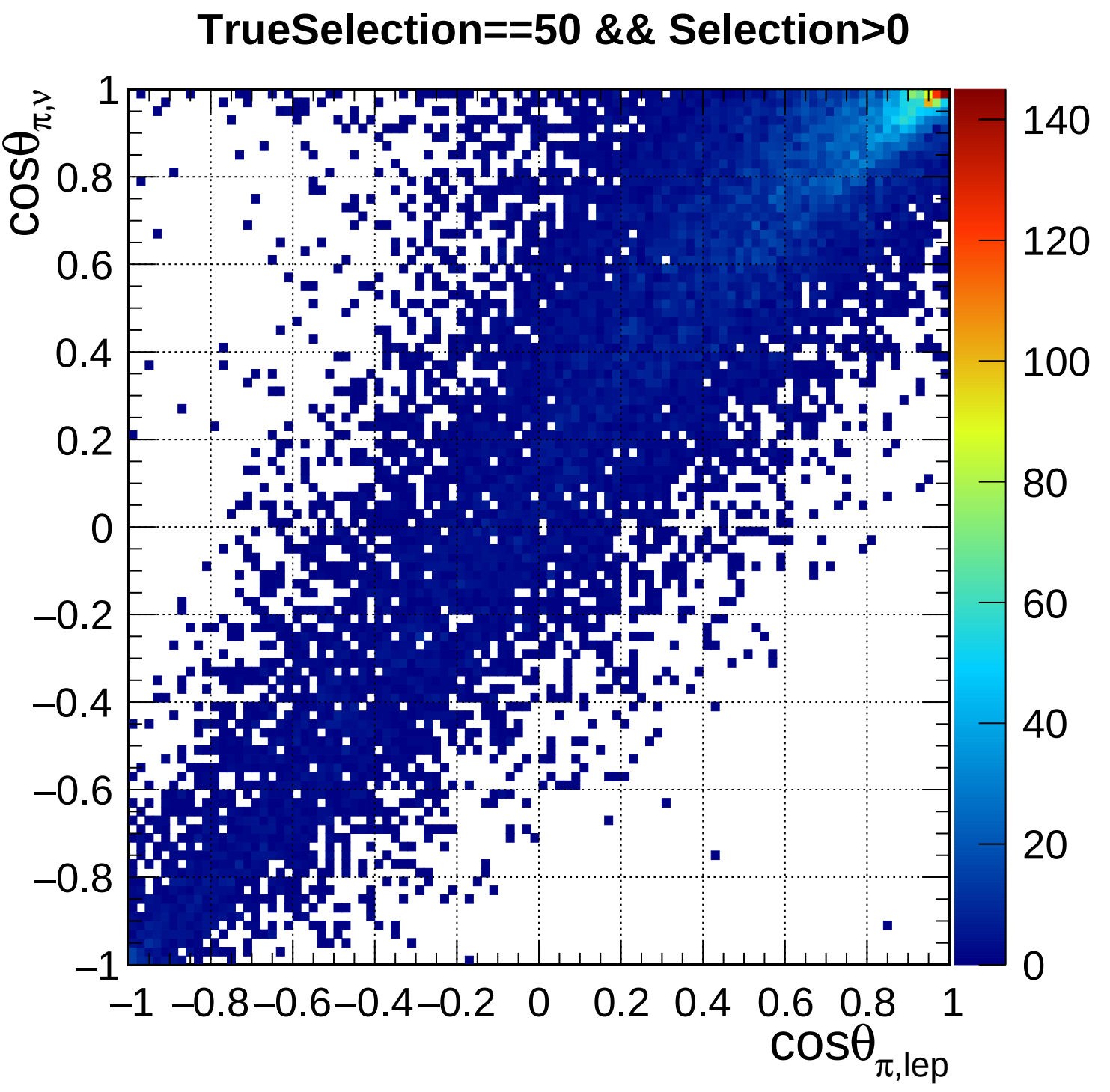

(TrueSelection==50 && Selection==61)/(TrueSelection==50)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

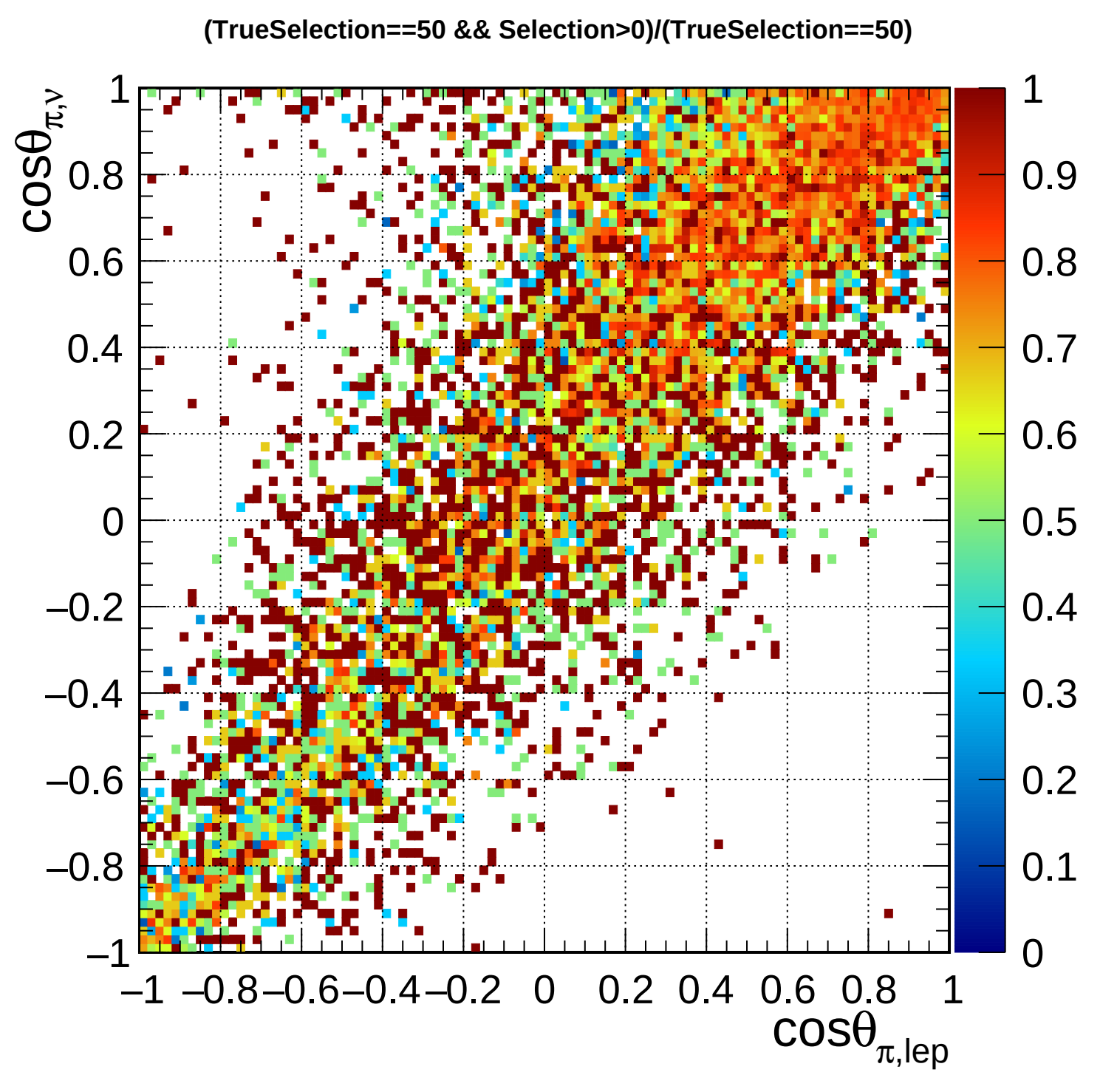

TrueSelection==50 && Selection==62
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
–1 –0.8 –0.6 –0.4 –0.2 0 0.2 0.4 0.6 0.8 1
18
16
14
12
10
8
6
4
2
0

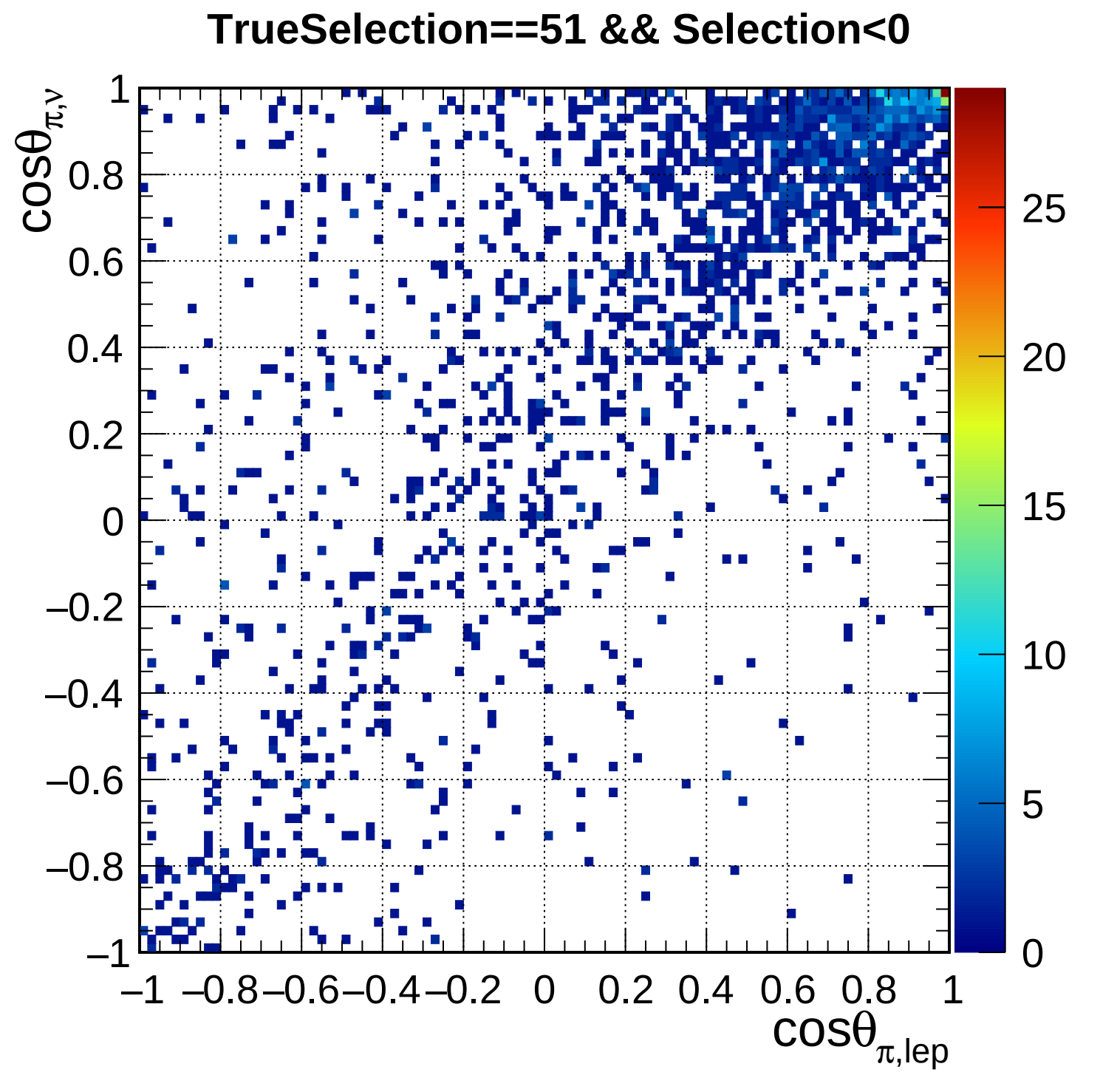

(TrueSelection==50 && Selection==62)/(TrueSelection==50)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

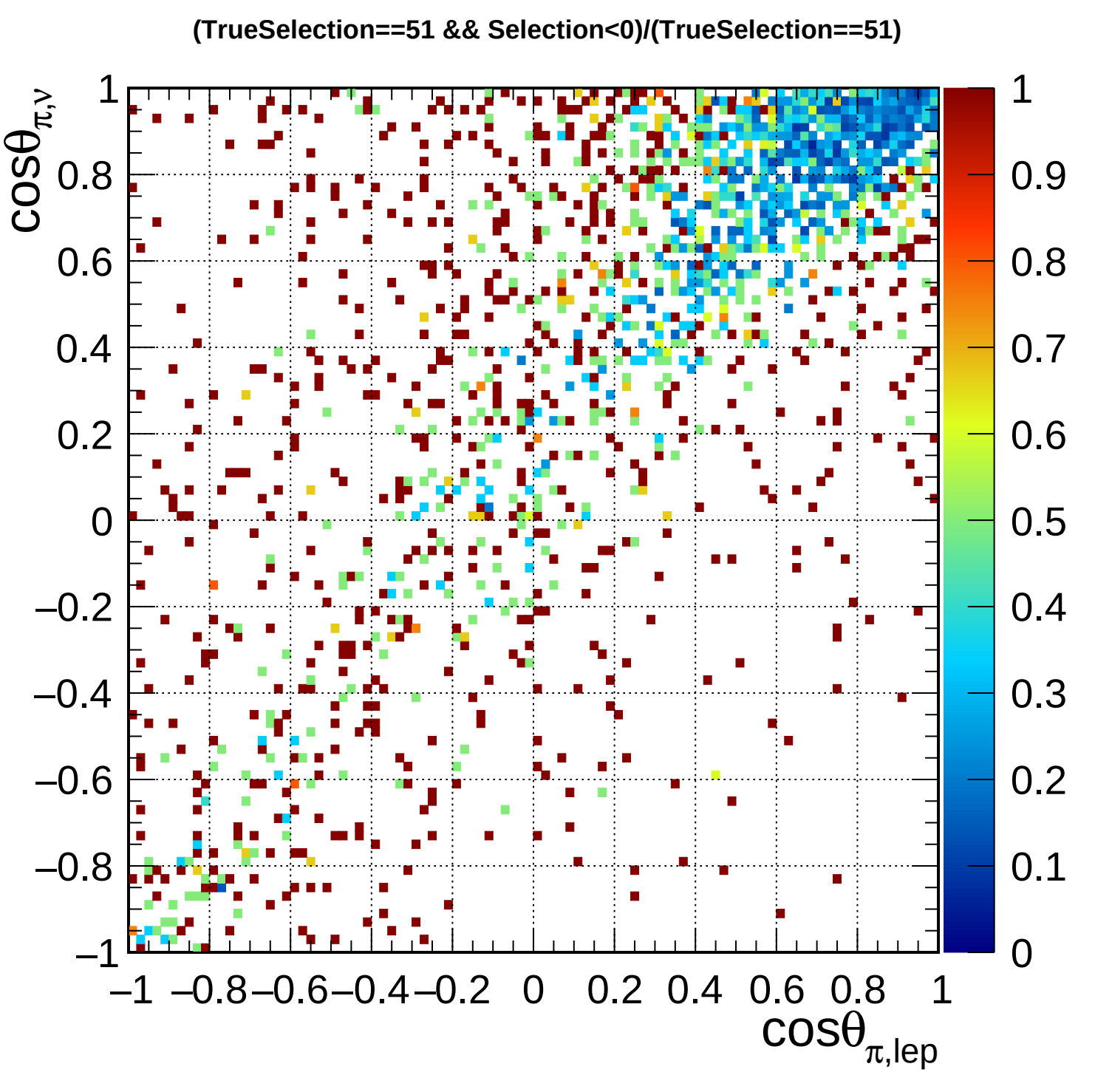

TrueSelection==50 && Selection==63
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
14
12
10
8
6
4
2
0

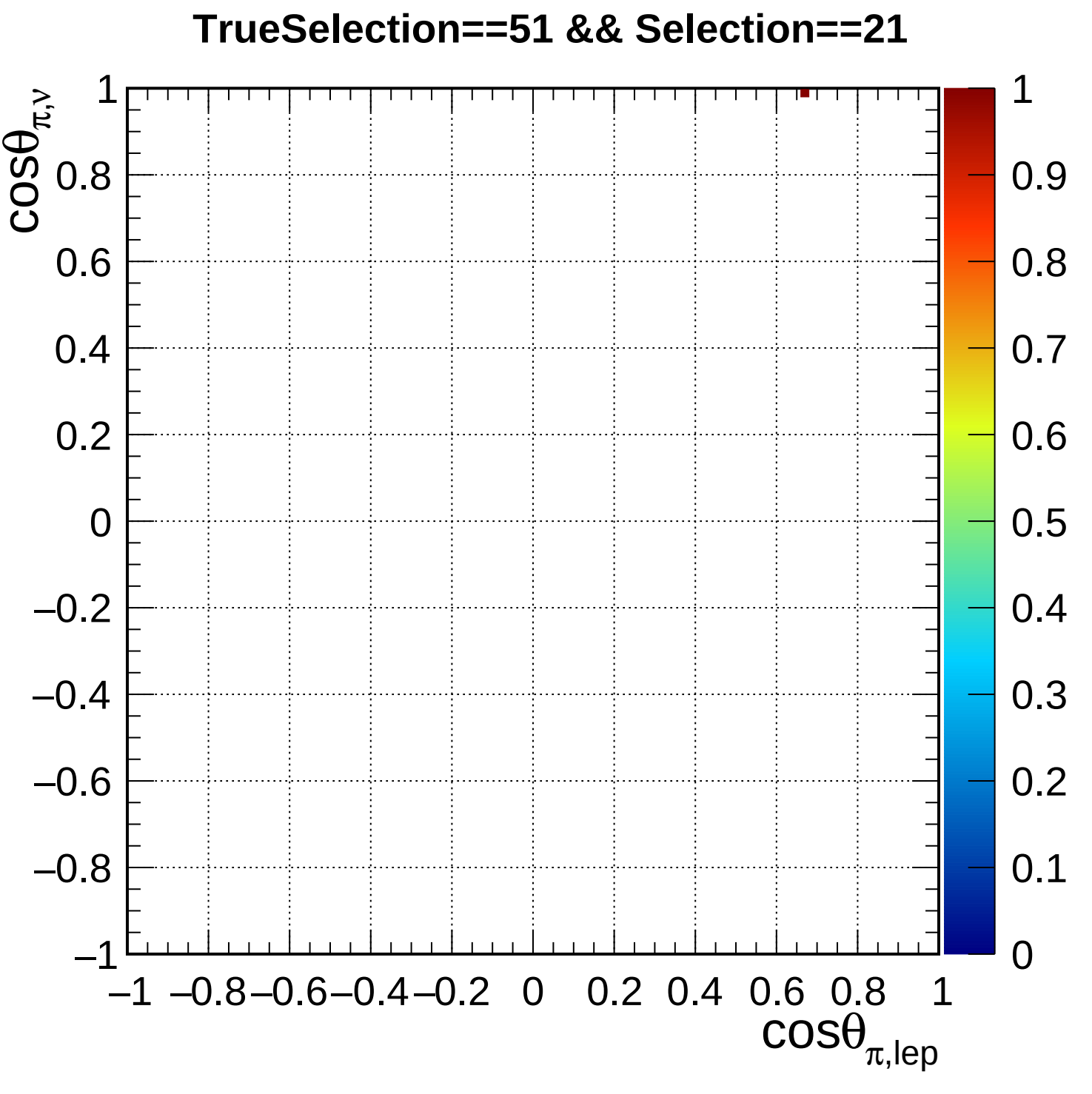

(TrueSelection==50 && Selection==63)/(TrueSelection==50)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

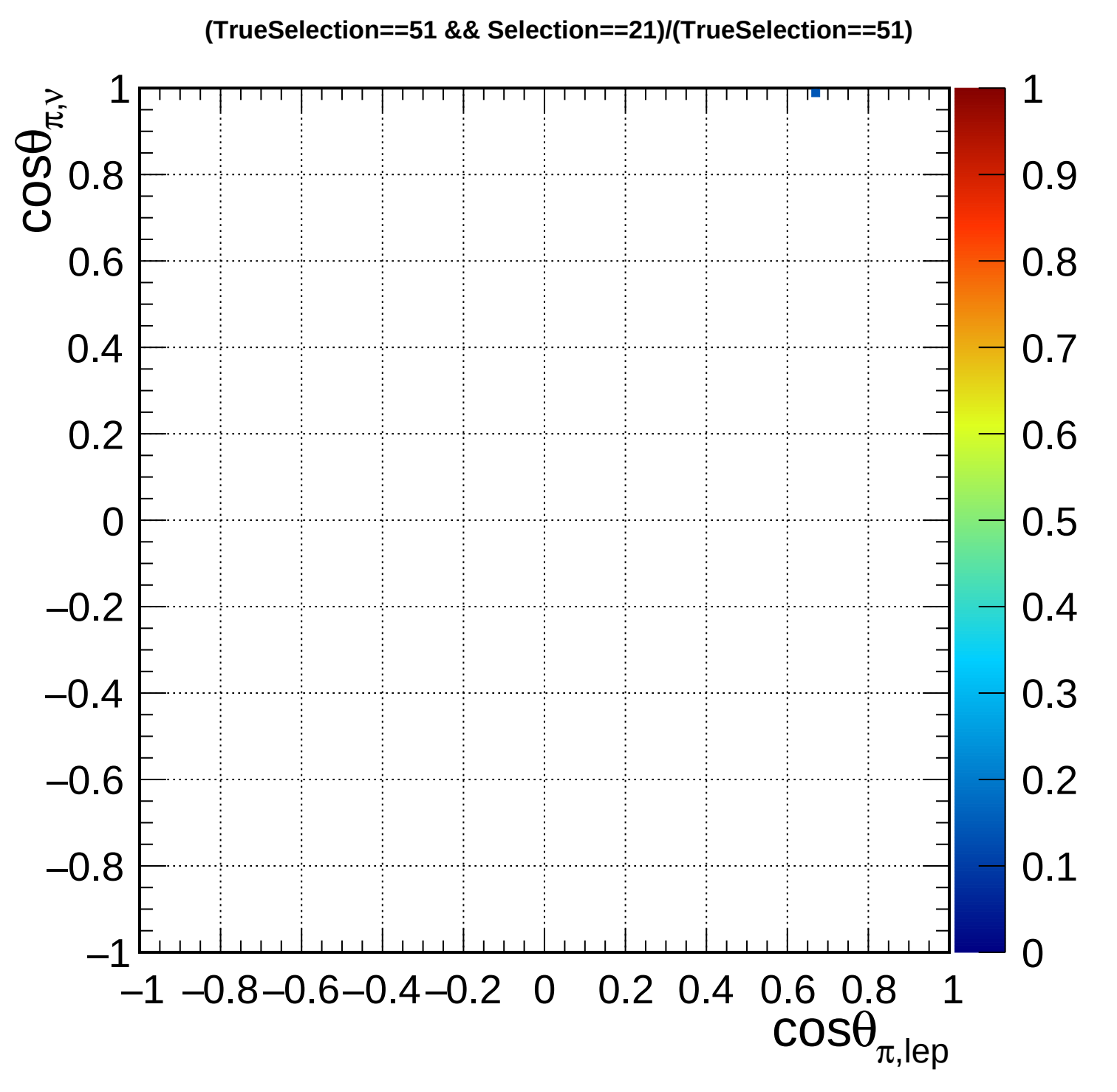

TrueSelection==50 && Selection>0
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
140
120
100
80
60
40
20
0

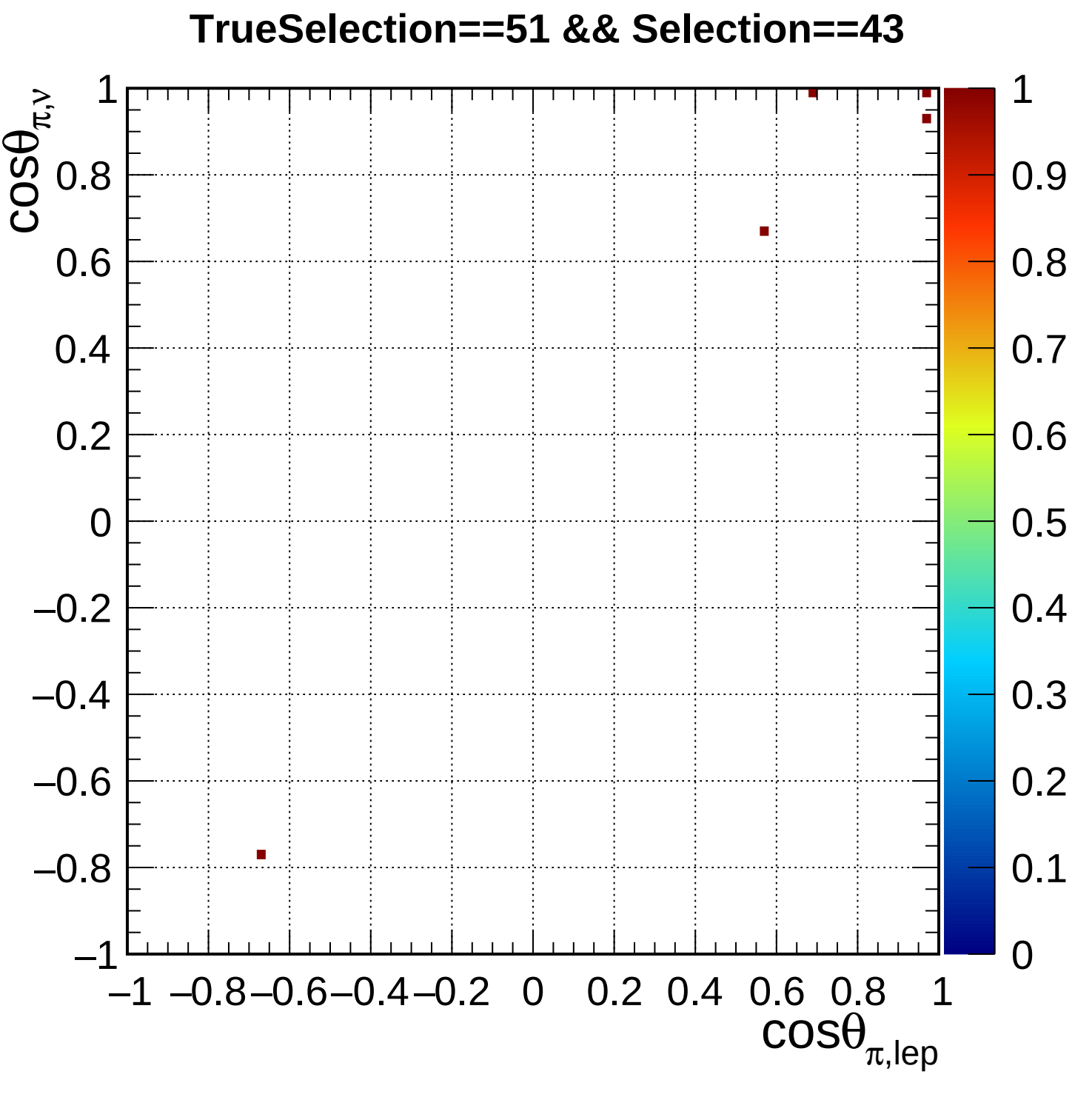

(TrueSelection==50 && Selection>0)/(TrueSelection==50)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

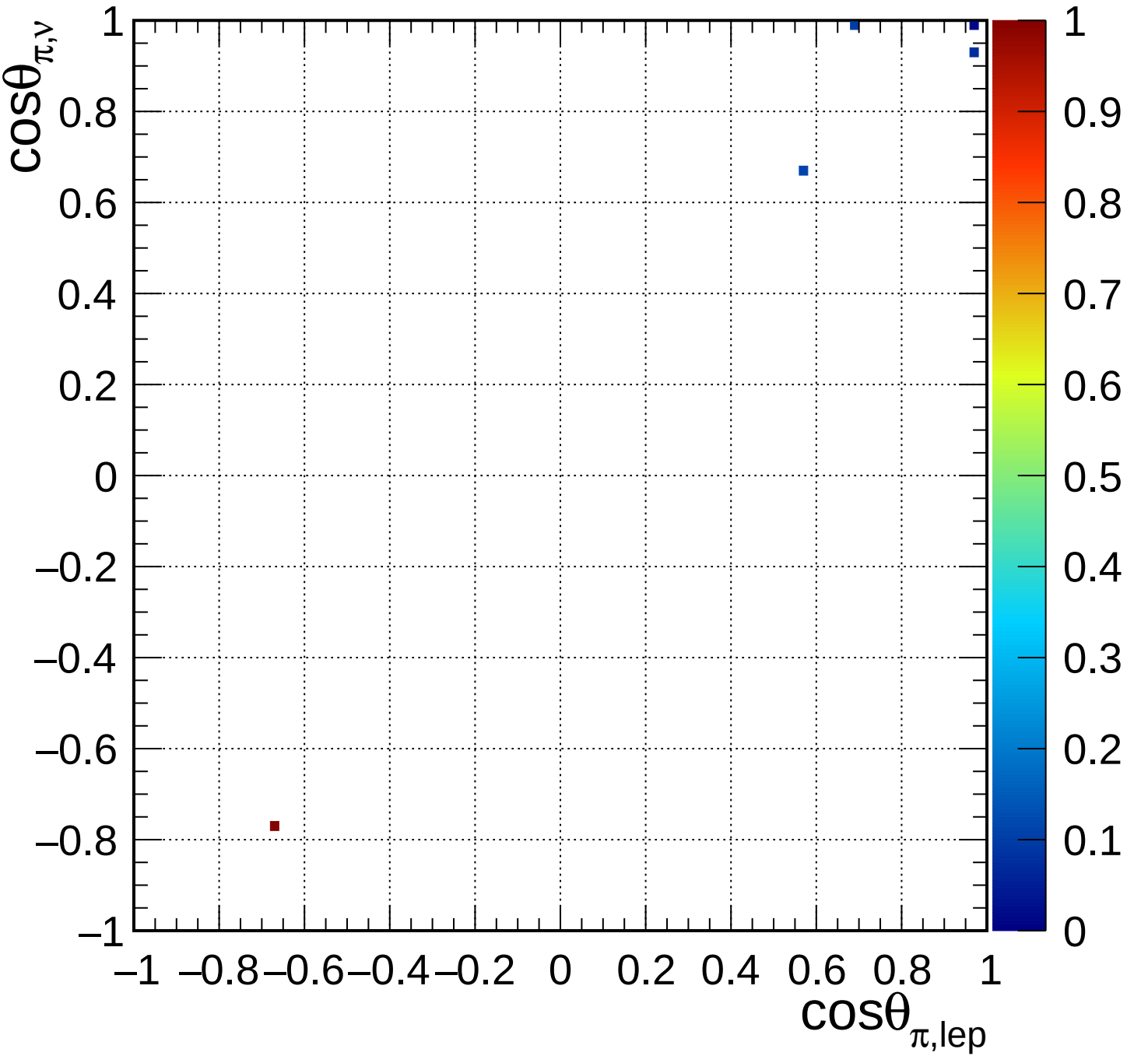

TrueSelection==51 && Selection<0
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
25
20
15
10
5
0

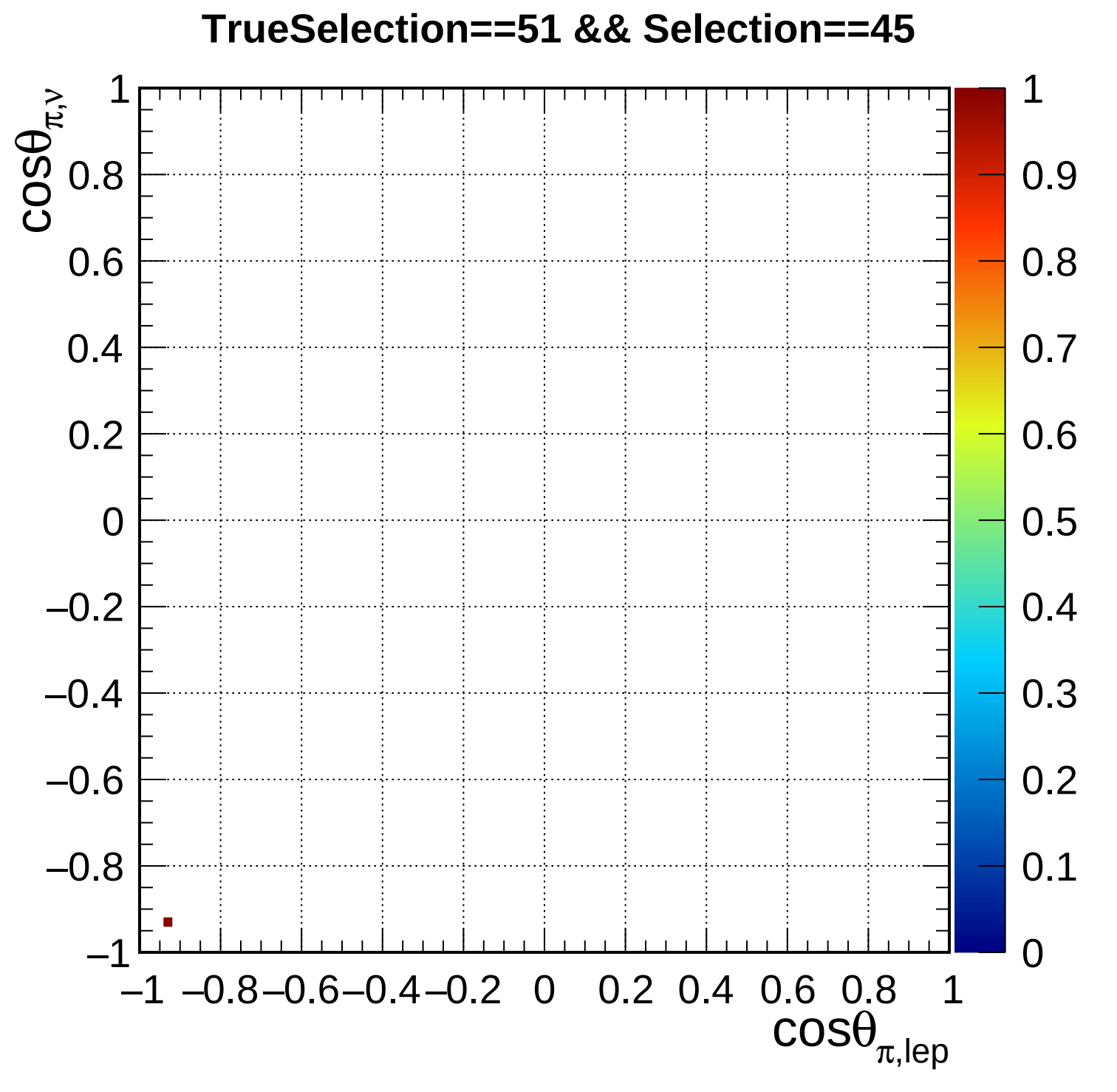

(TrueSelection==51 && Selection<0)/(TrueSelection==51)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

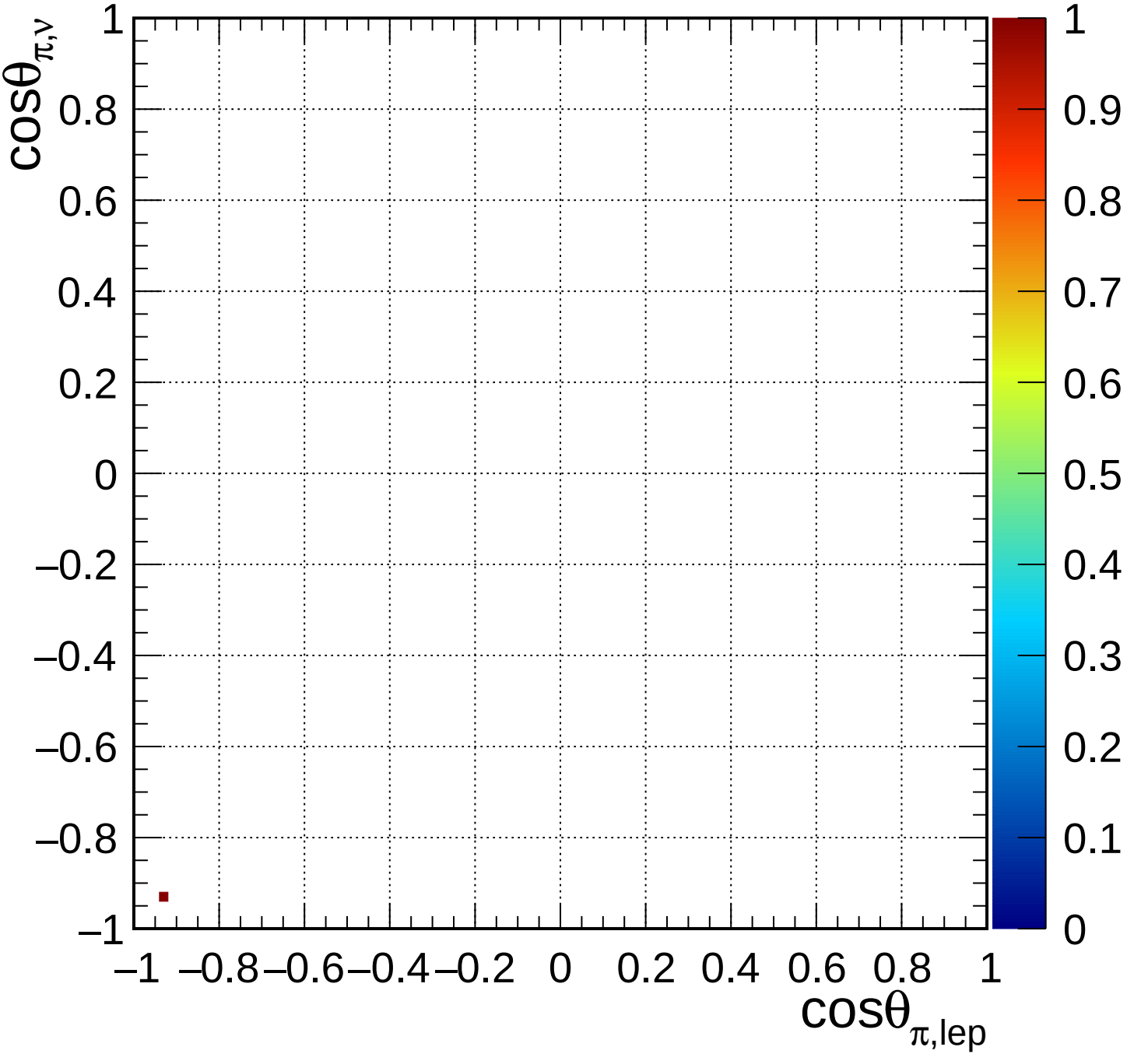

TrueSelection==51 && Selection==21
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

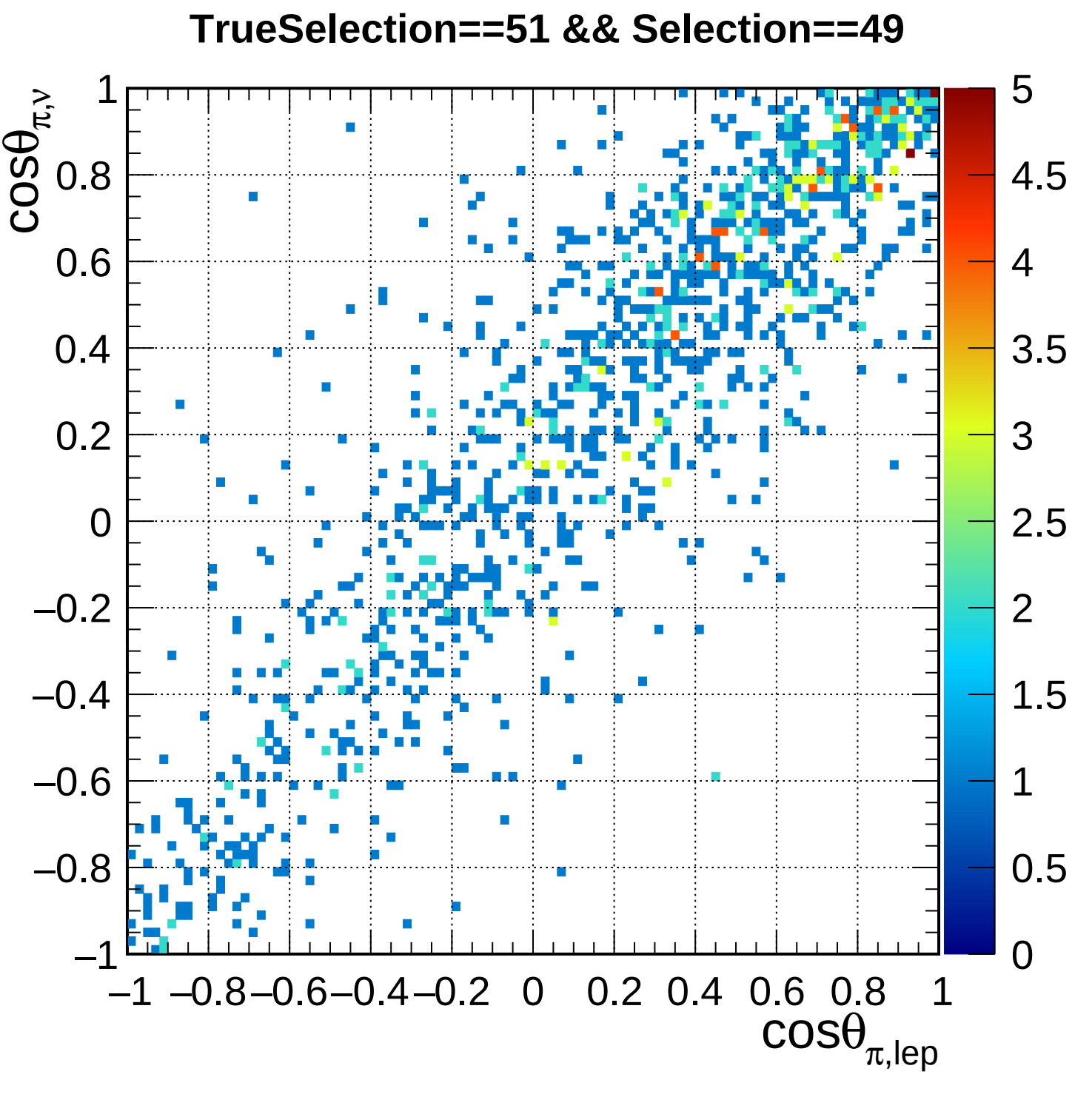

(TrueSelection==51 && Selection==21)/(TrueSelection==51)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

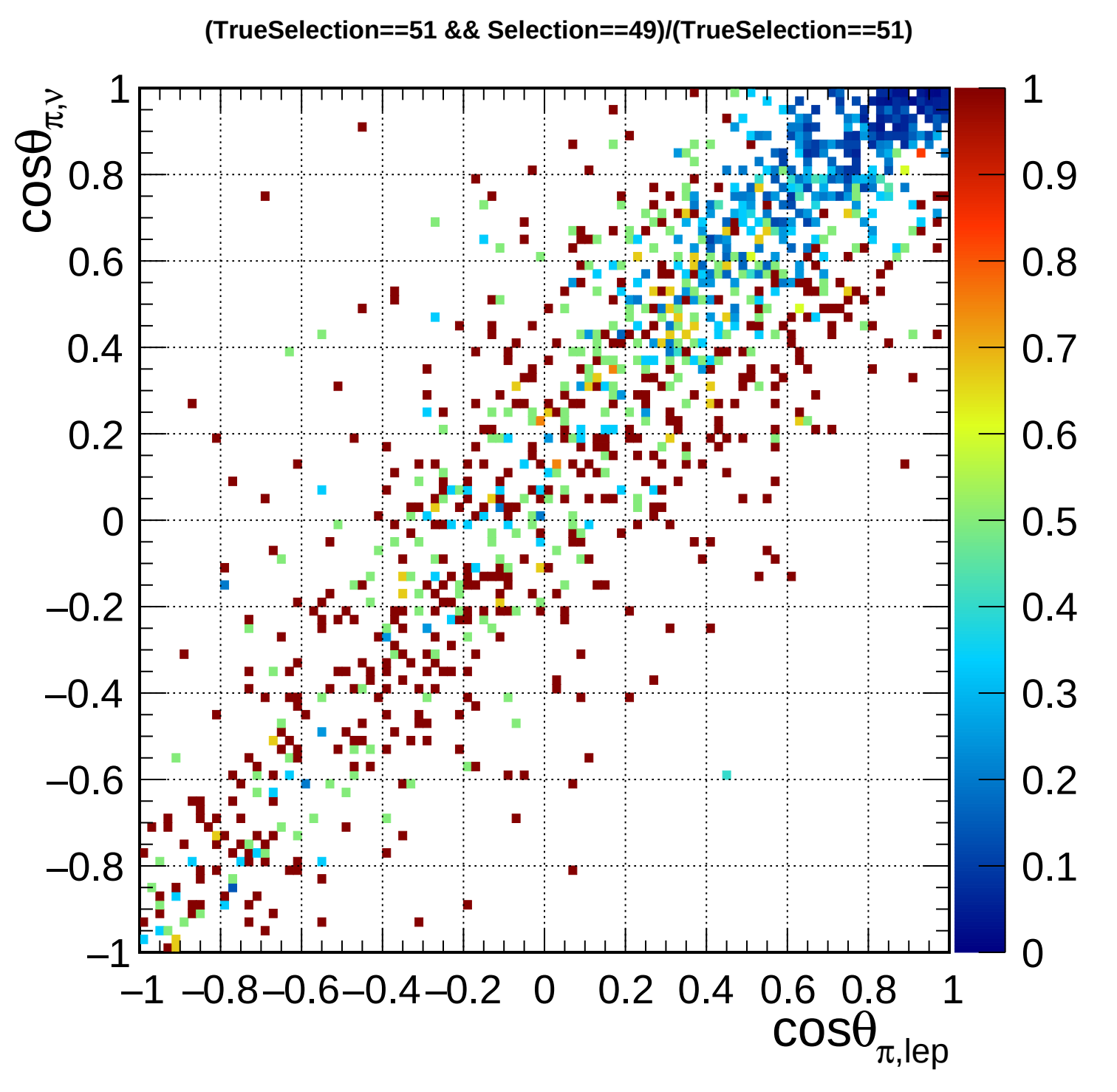

TrueSelection==51 && Selection==43
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

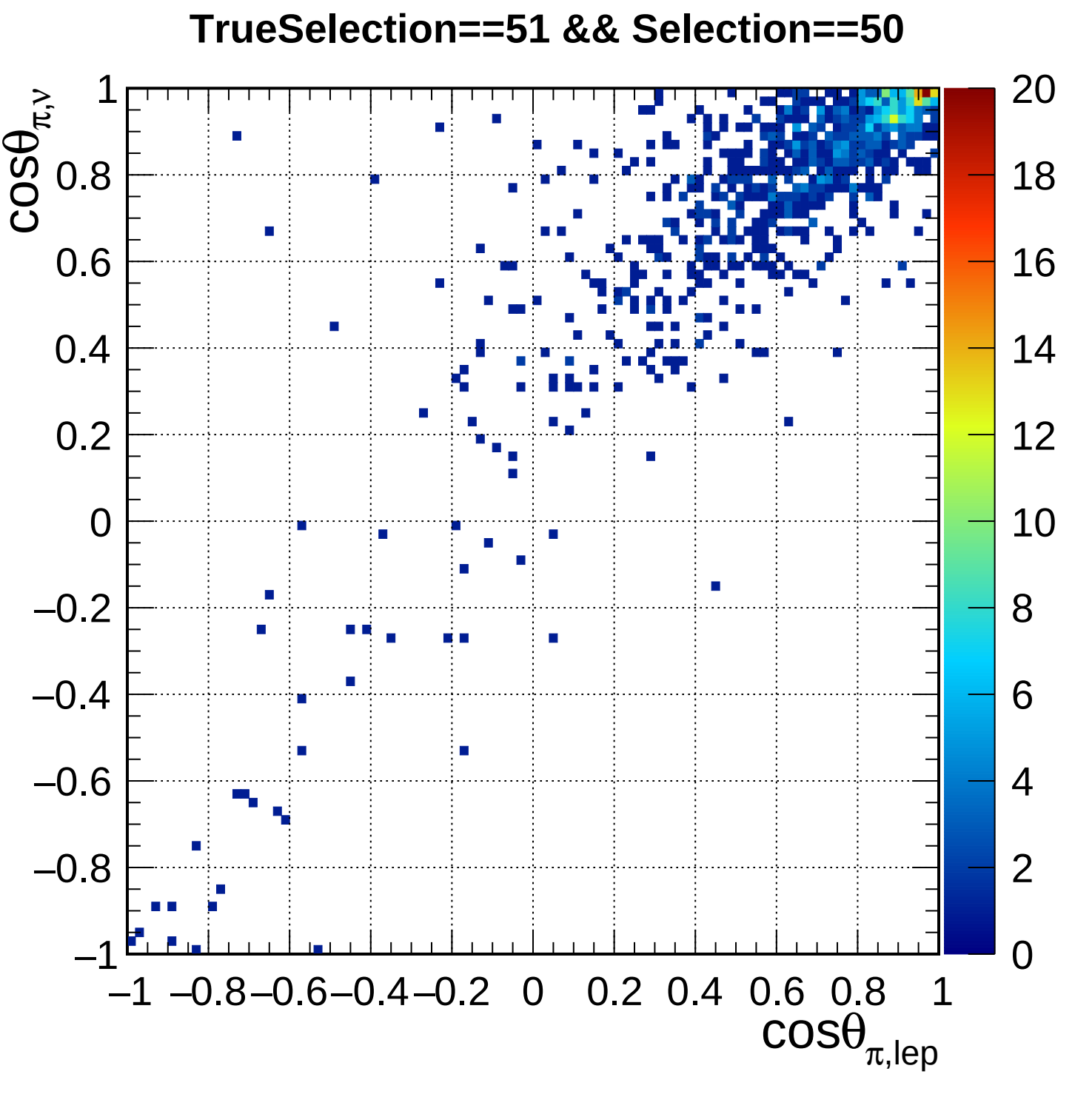

(TrueSelection==51 && Selection==43)/(TrueSelection==51)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

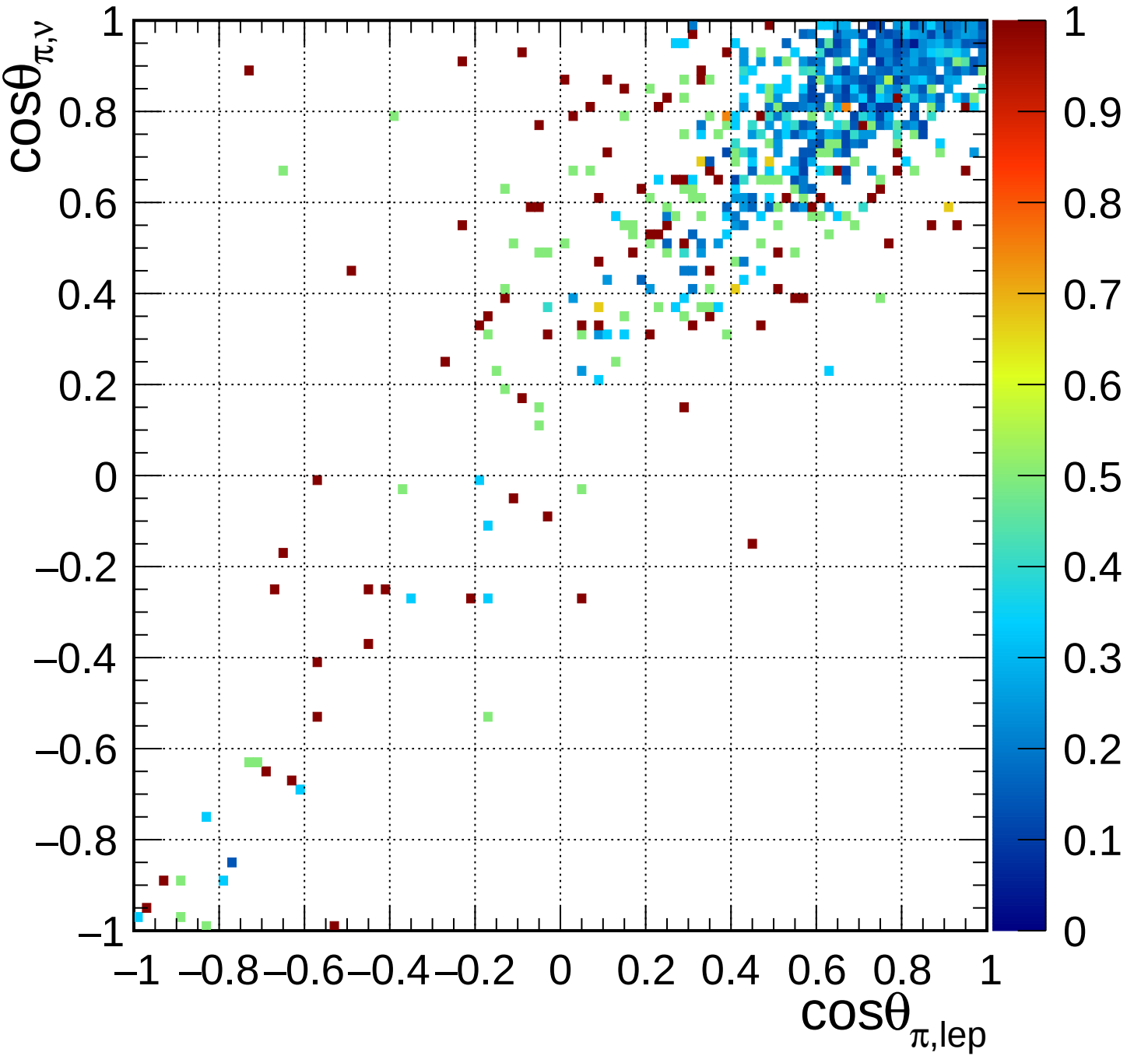

TrueSelection==51 && Selection==45
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

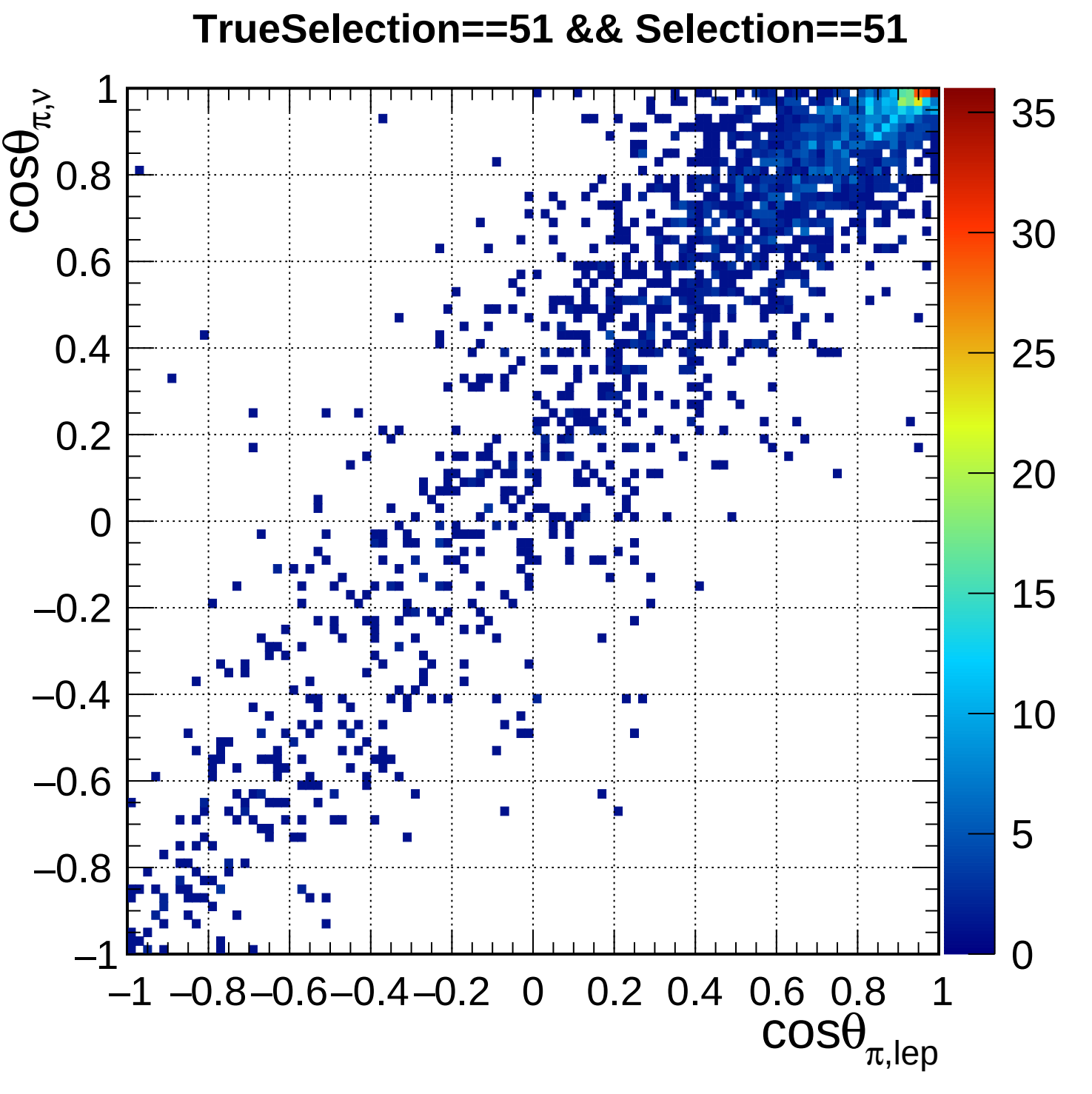

(TrueSelection==51 && Selection==45)/(TrueSelection==51)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

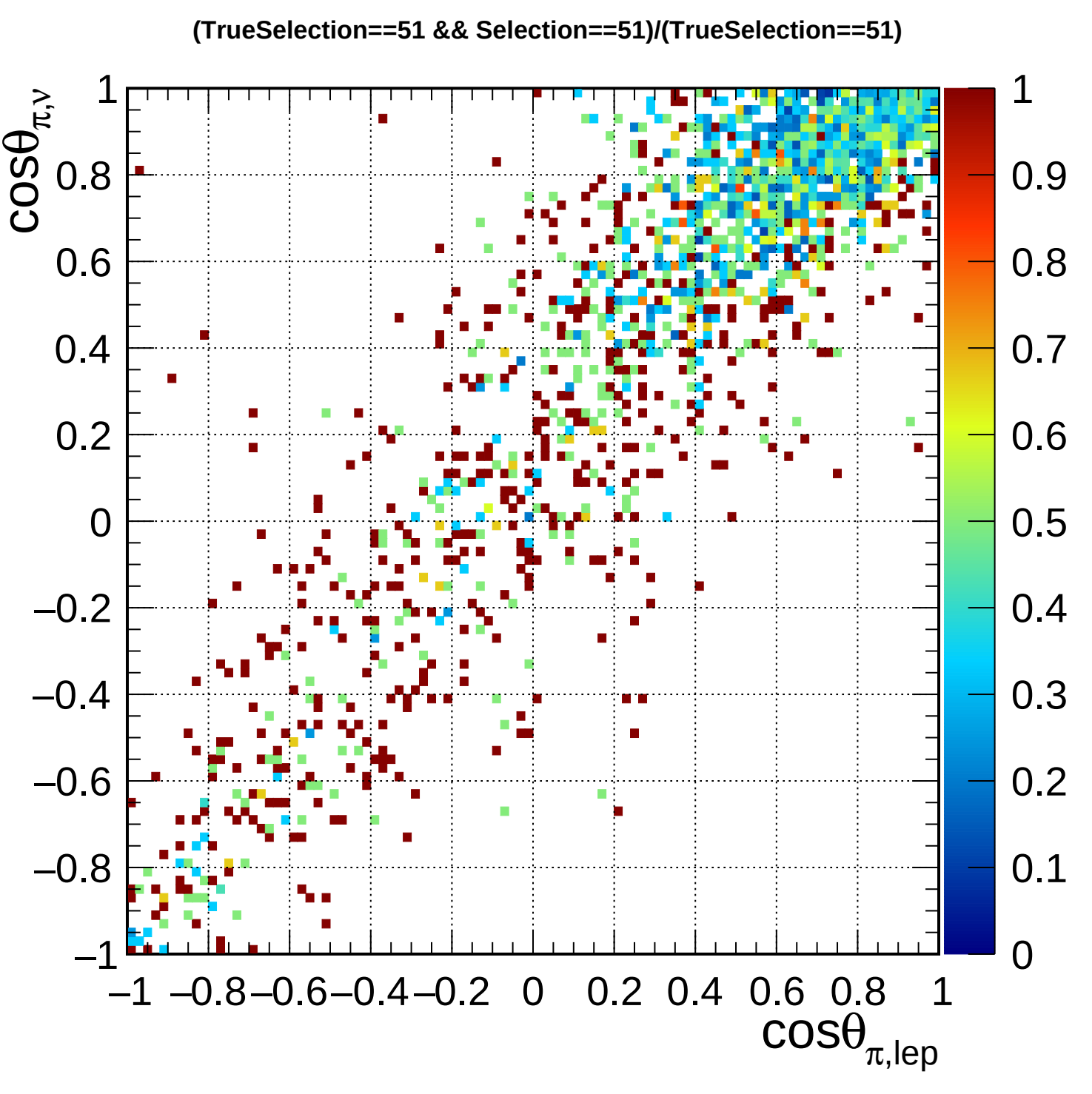

TrueSelection==51 && Selection==49
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
–1 –0.8 –0.6 –0.4 –0.2 0 0.2 0.4 0.6 0.8 1
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0

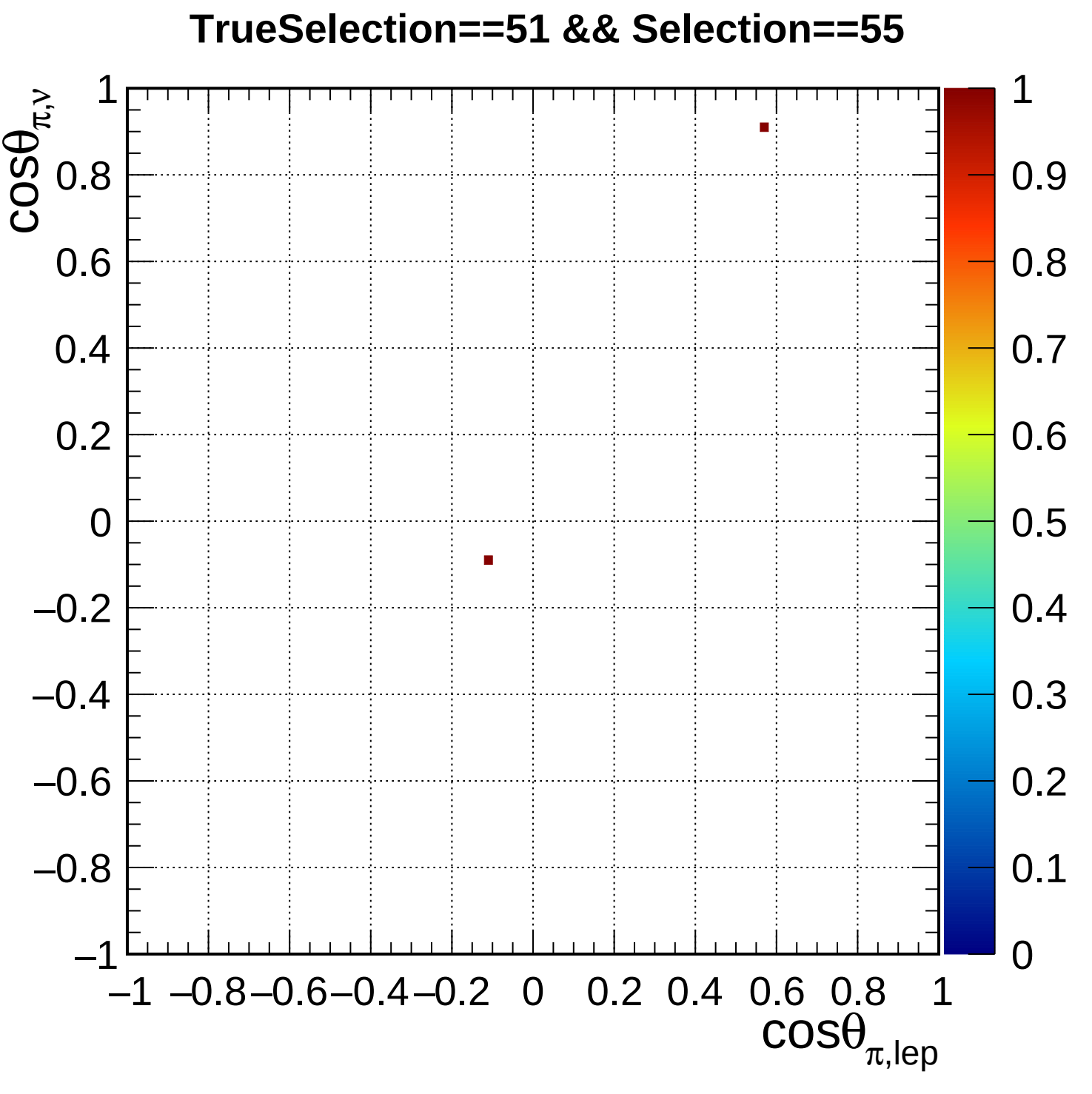

(TrueSelection==51 && Selection==49)/(TrueSelection==51)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

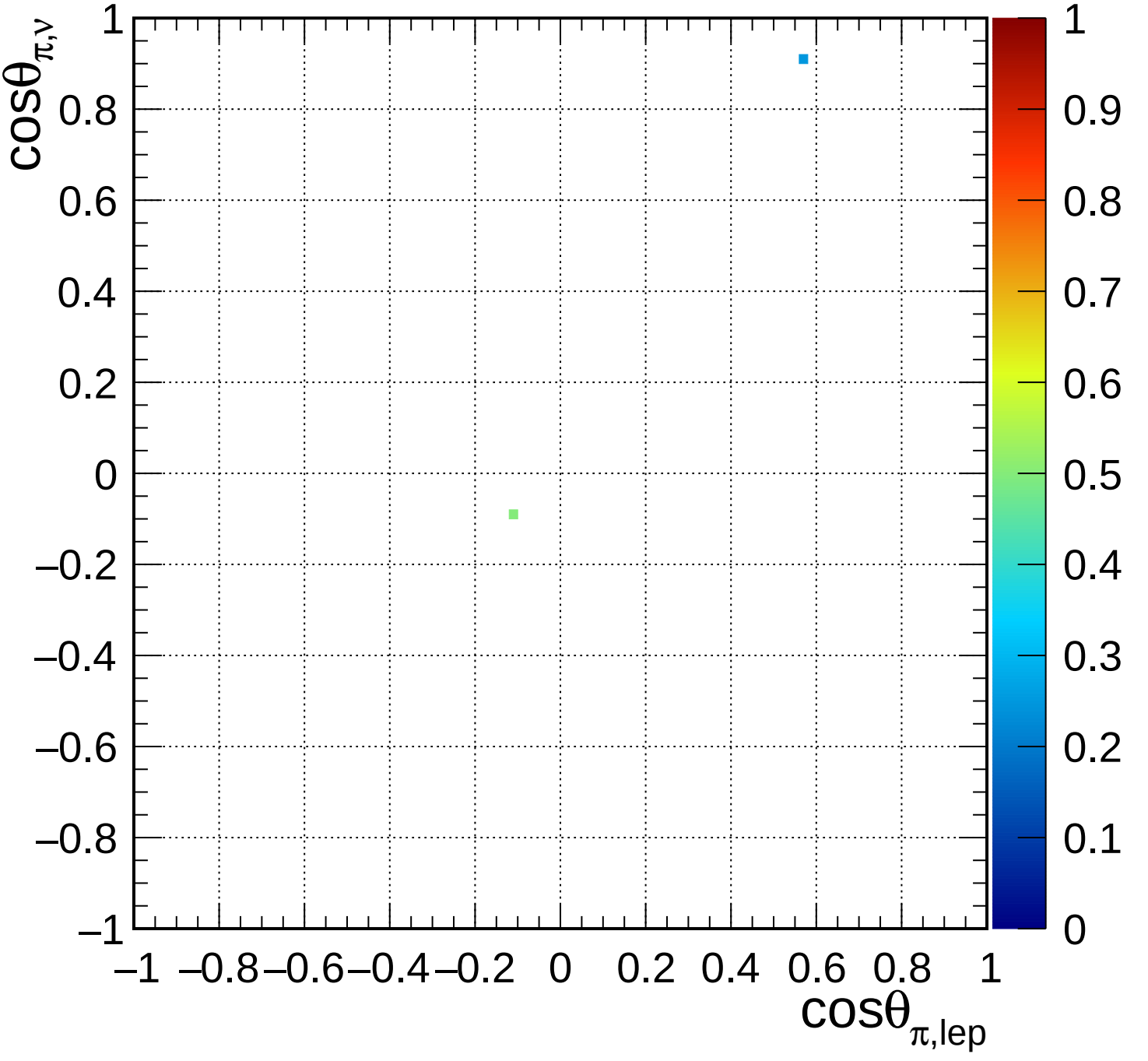

TrueSelection==51 && Selection==50
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
20
18
16
14
12
10
8
6
4
2
0

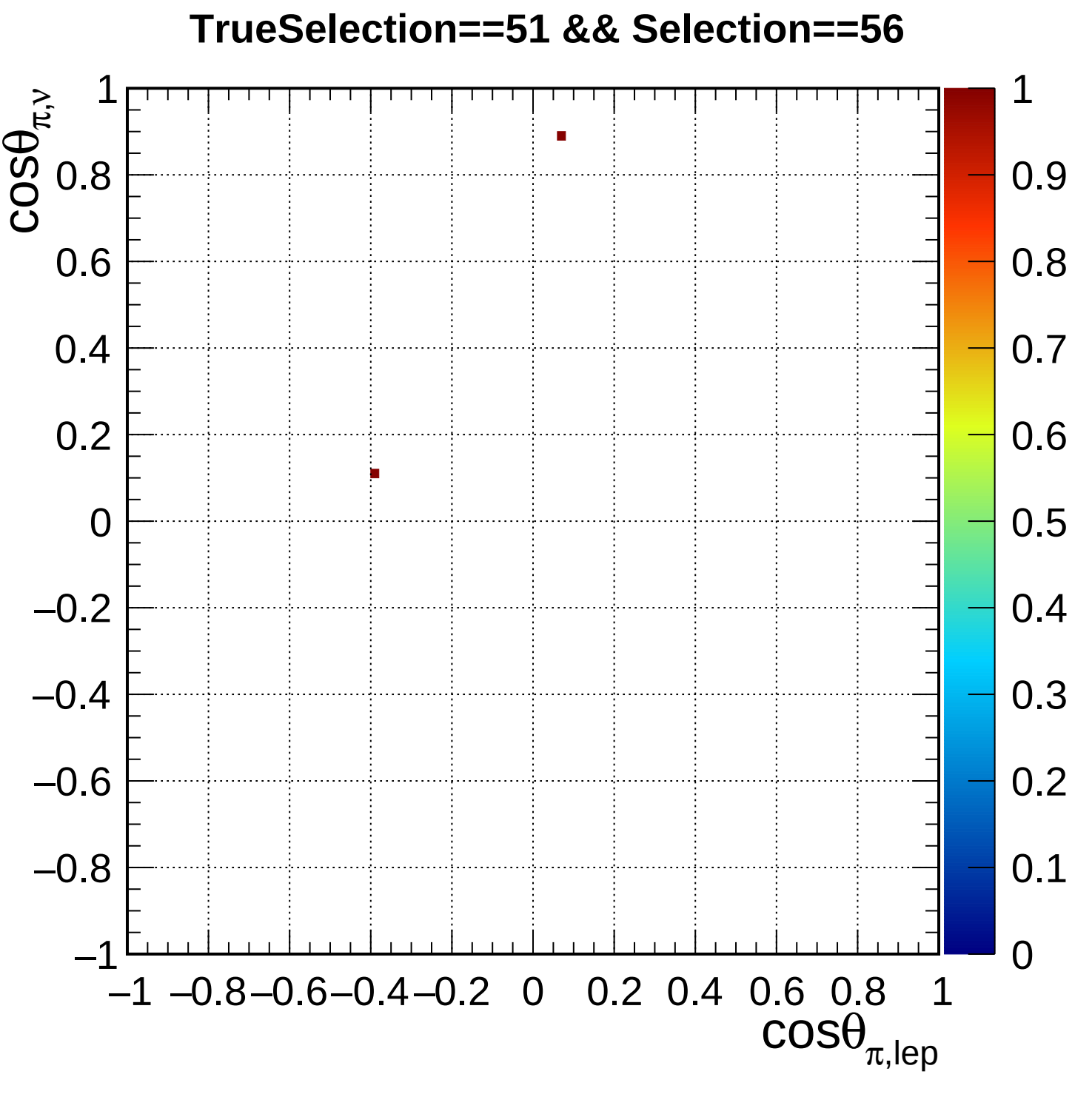

(TrueSelection==51 && Selection==50)/(TrueSelection==51)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

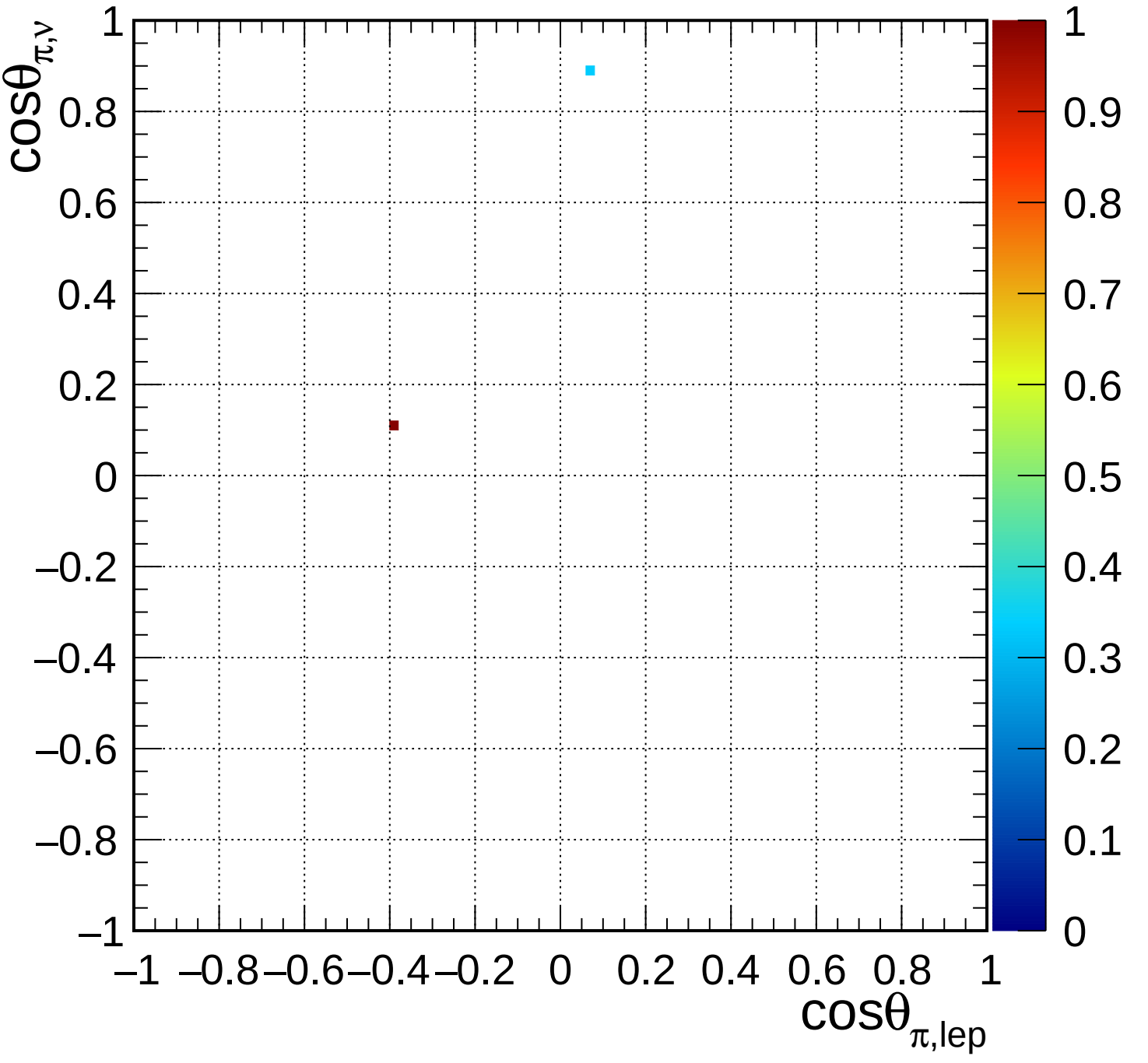

TrueSelection==51 && Selection==51
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
35
30
25
20
15
10
5
0

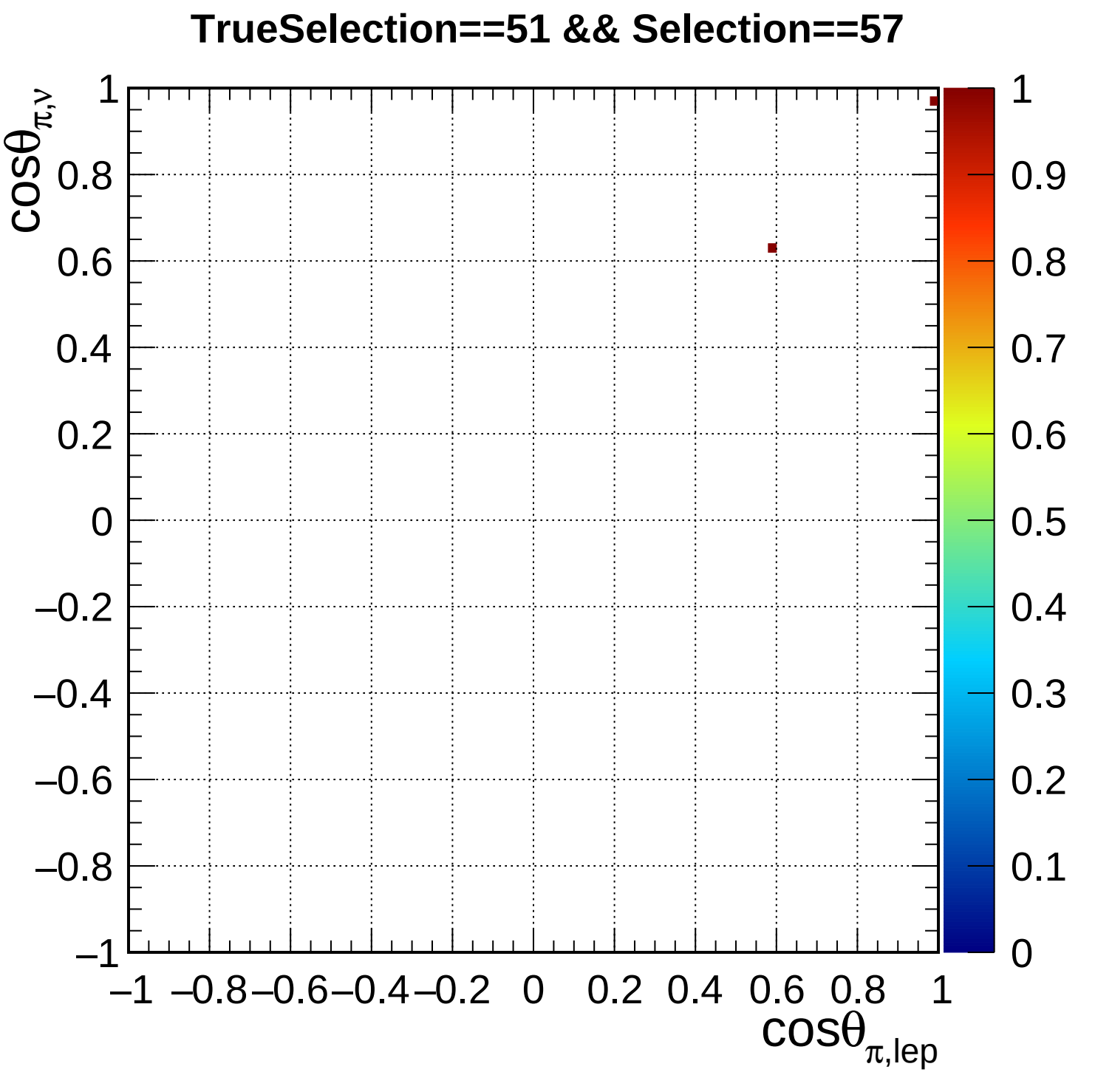

(TrueSelection==51 && Selection==51)/(TrueSelection==51)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

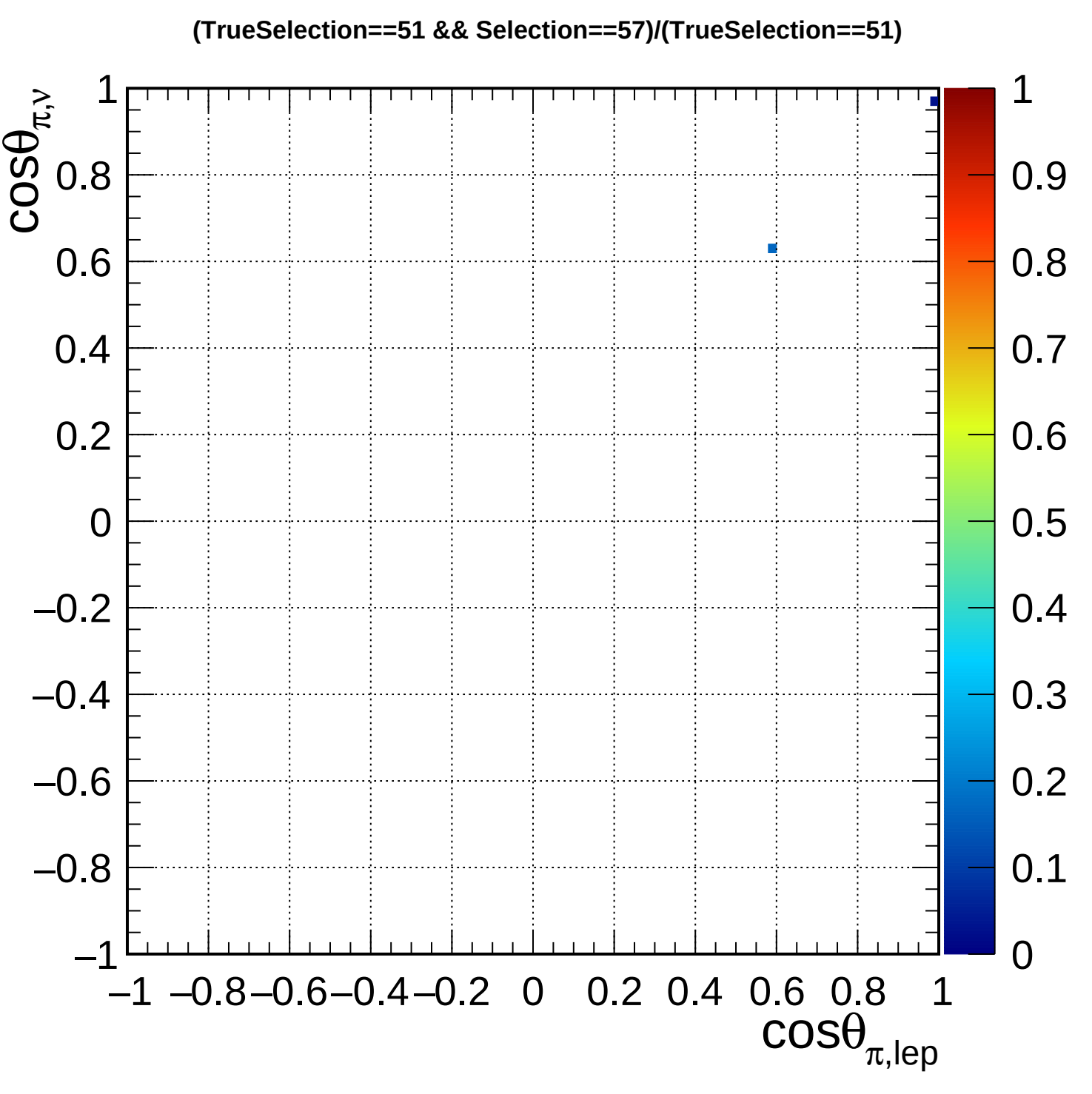

TrueSelection==51 && Selection==55
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

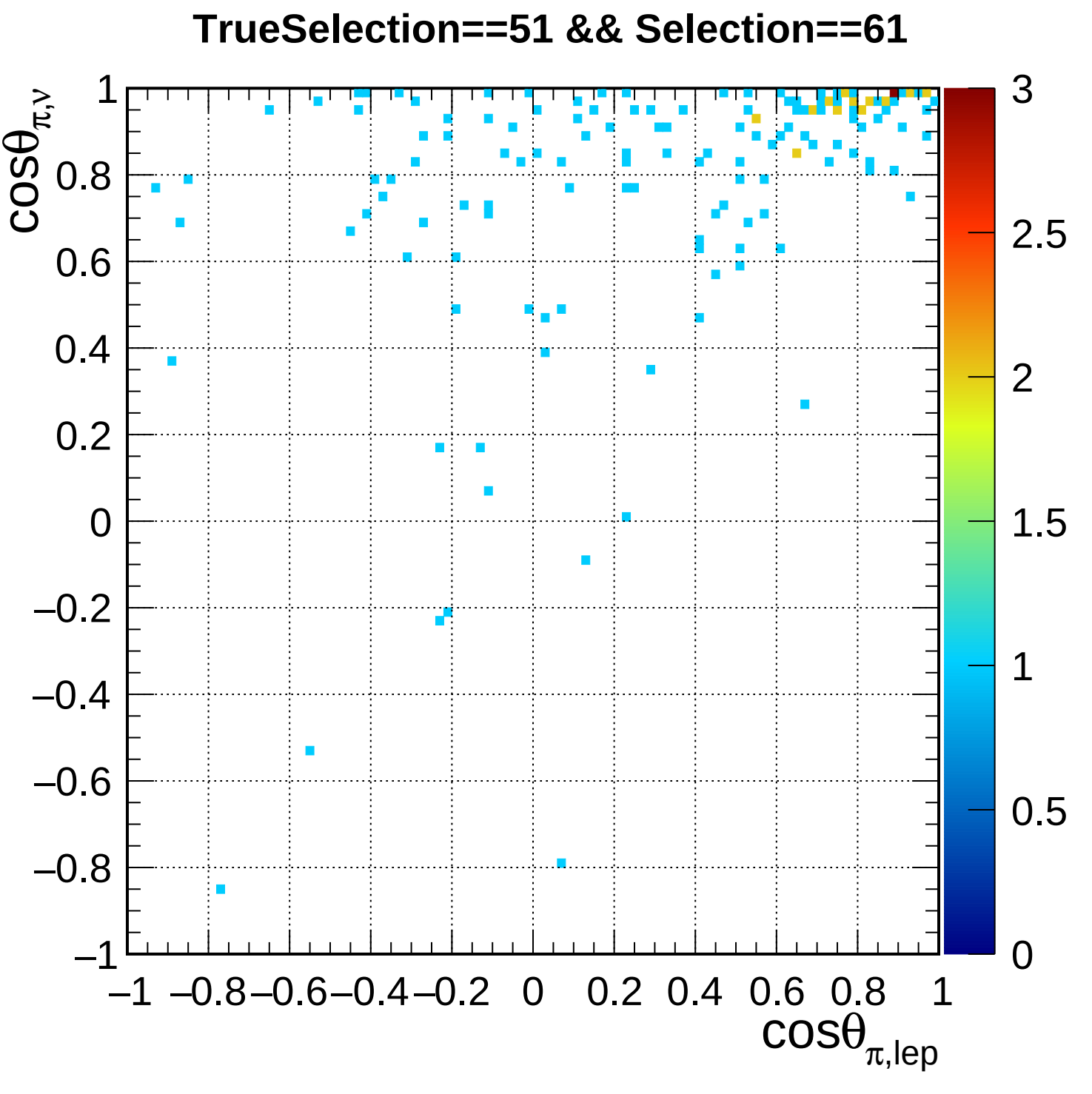

(TrueSelection==51 && Selection==55)/(TrueSelection==51)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

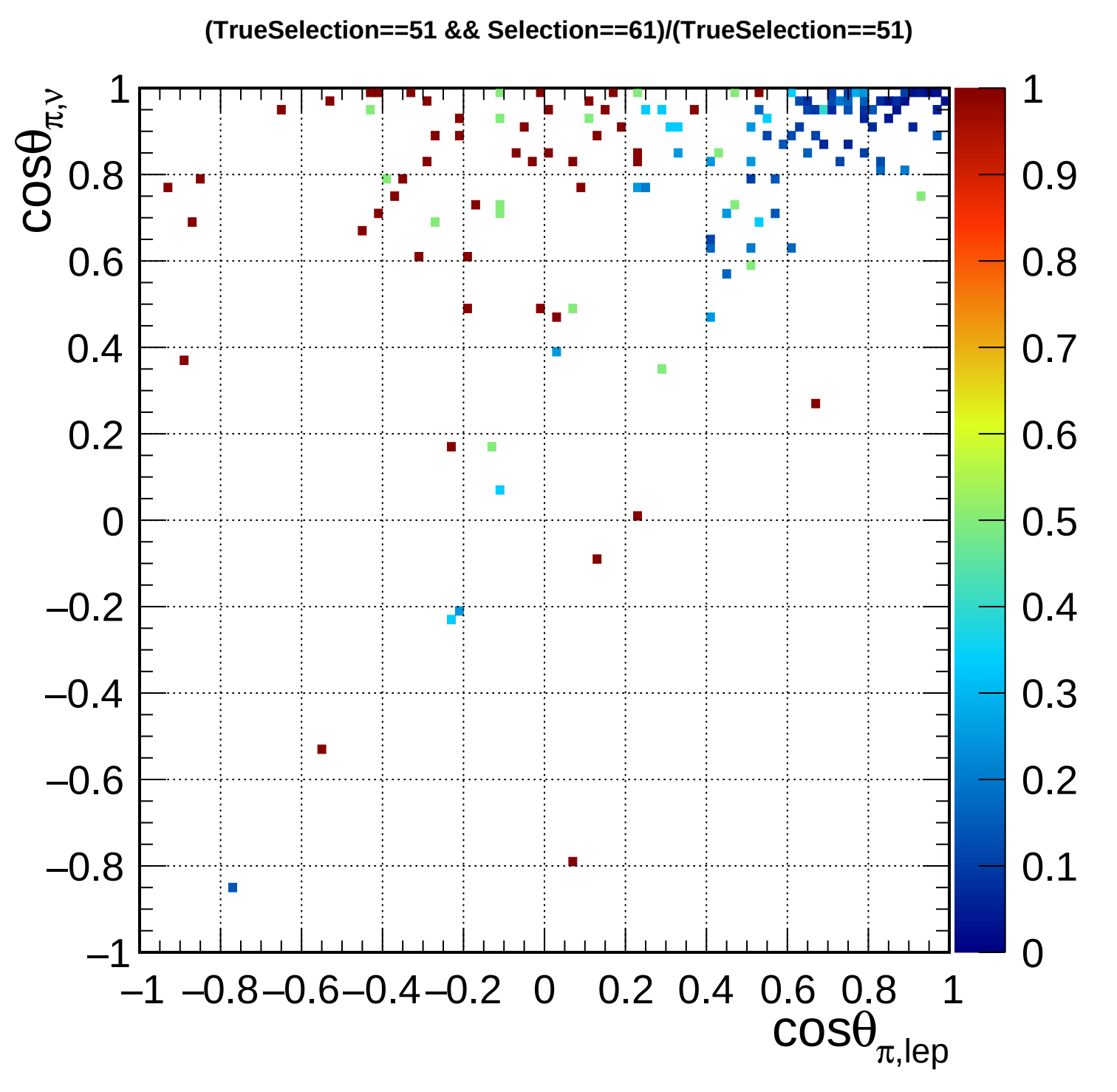

TrueSelection==51 && Selection==56
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

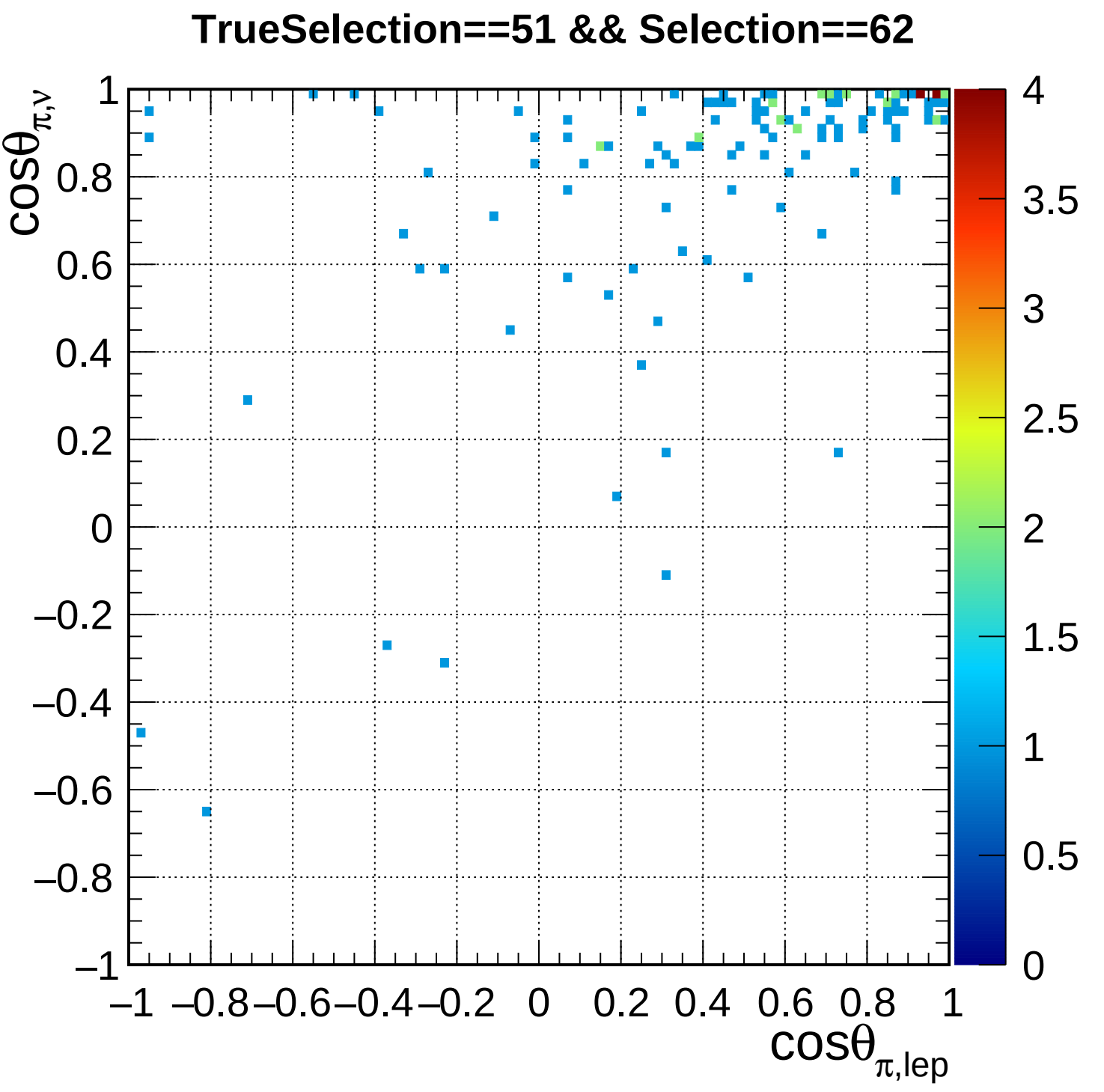

(TrueSelection==51 && Selection==56)/(TrueSelection==51)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

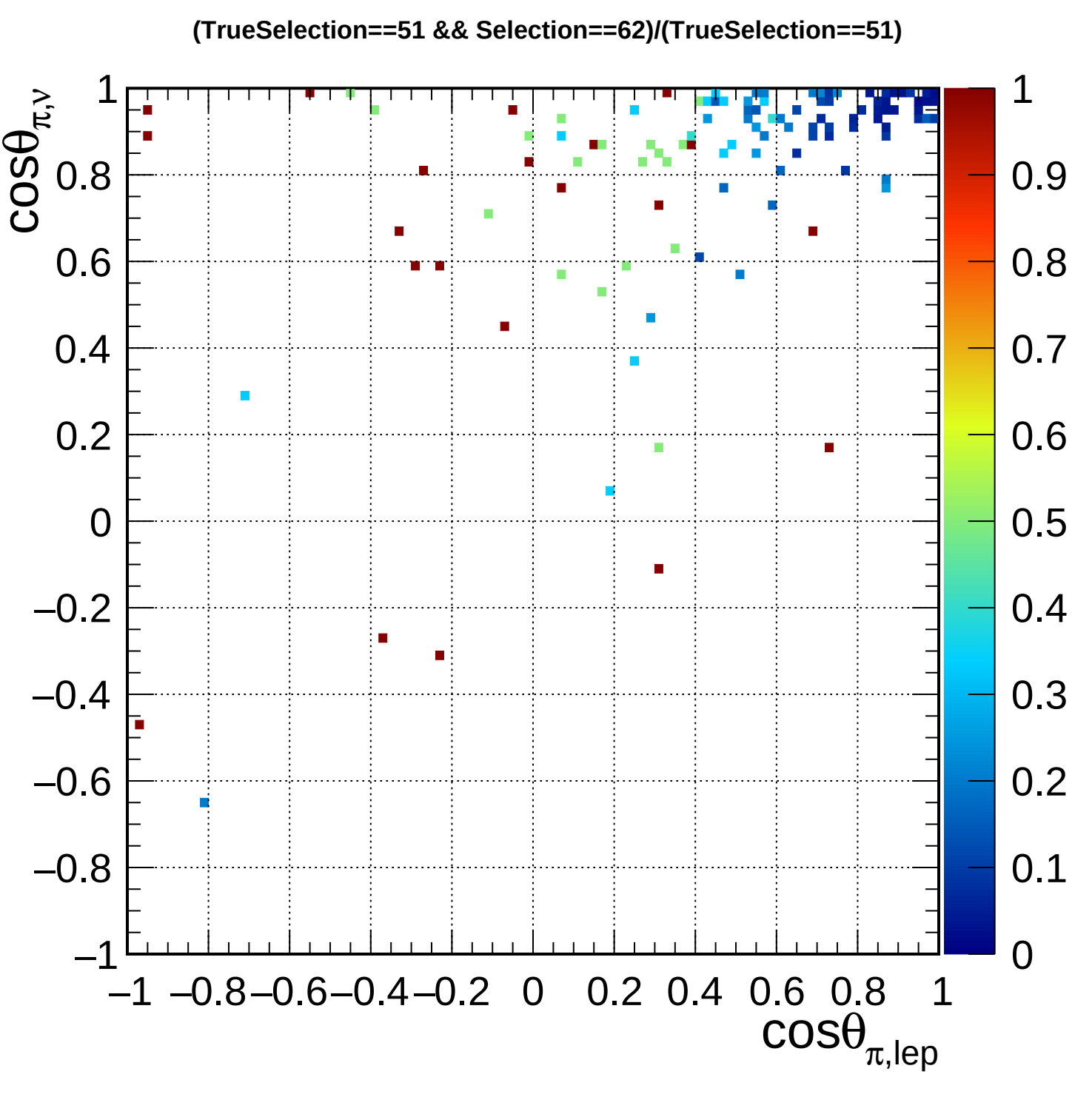

TrueSelection==51 && Selection==57
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

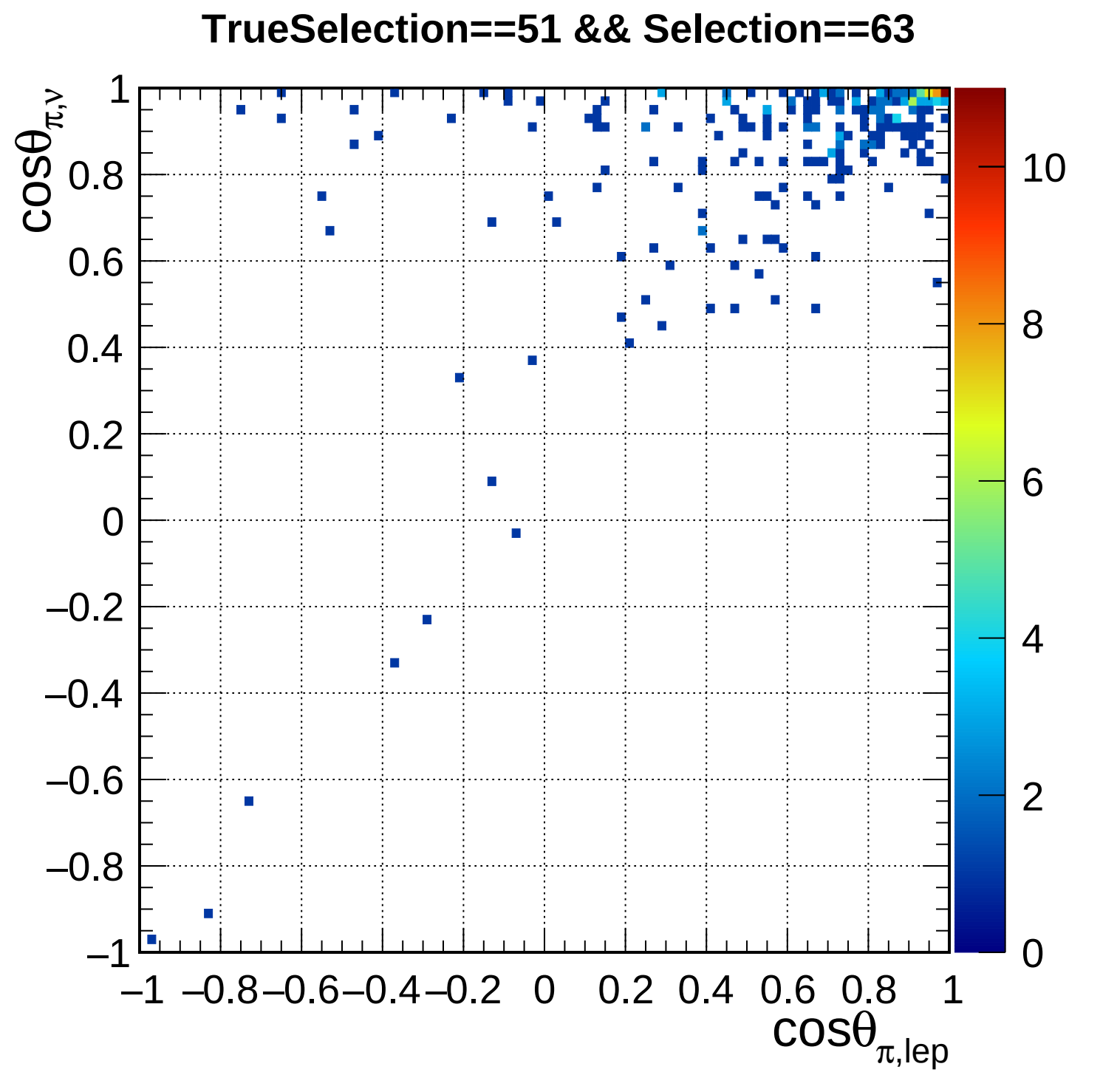

(TrueSelection==51 && Selection==57)/(TrueSelection==51)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

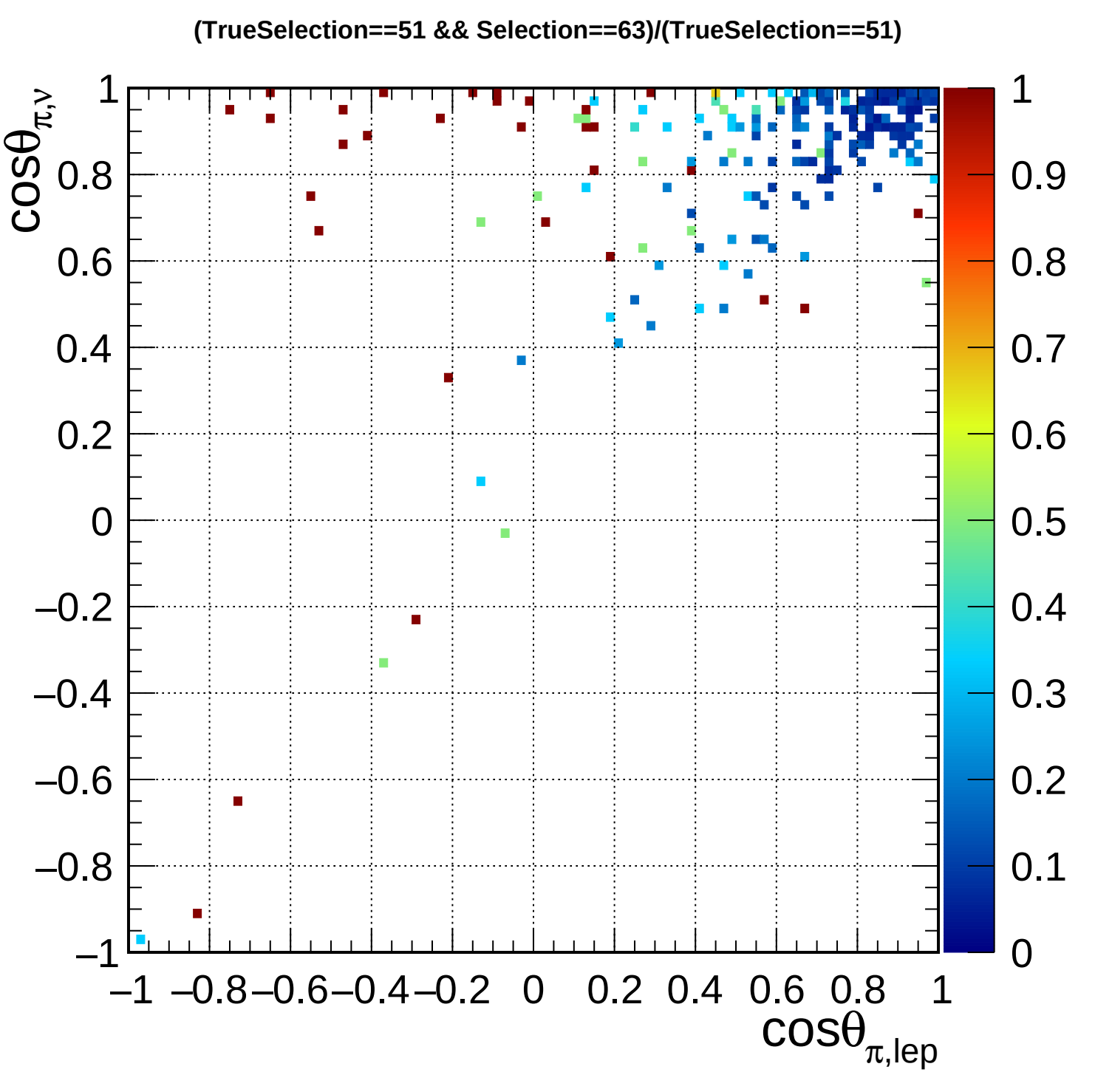

TrueSelection==51 && Selection==61
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
3
2.5
2
1.5
1
0.5
0

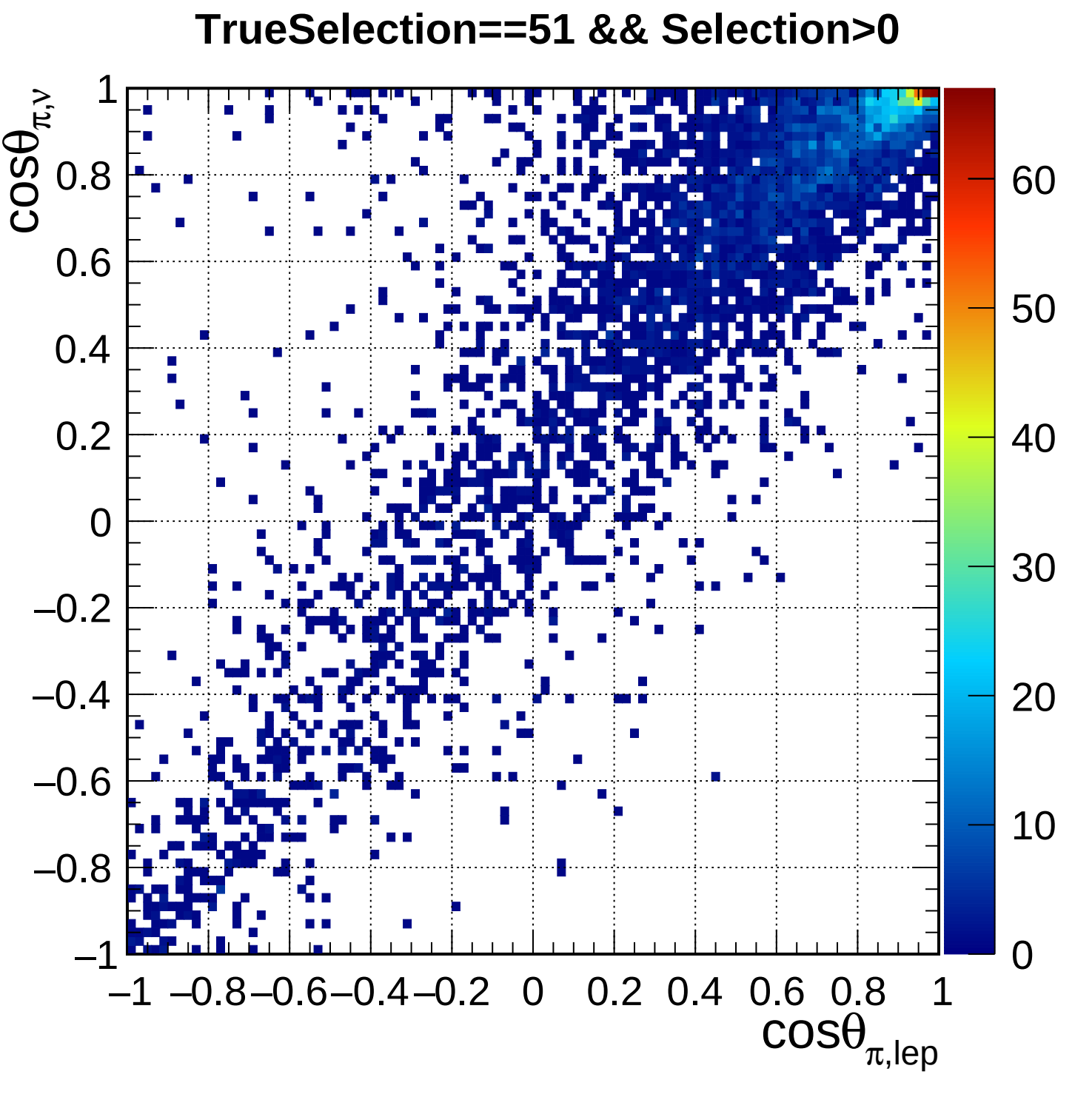

(TrueSelection==51 && Selection==61)/(TrueSelection==51)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

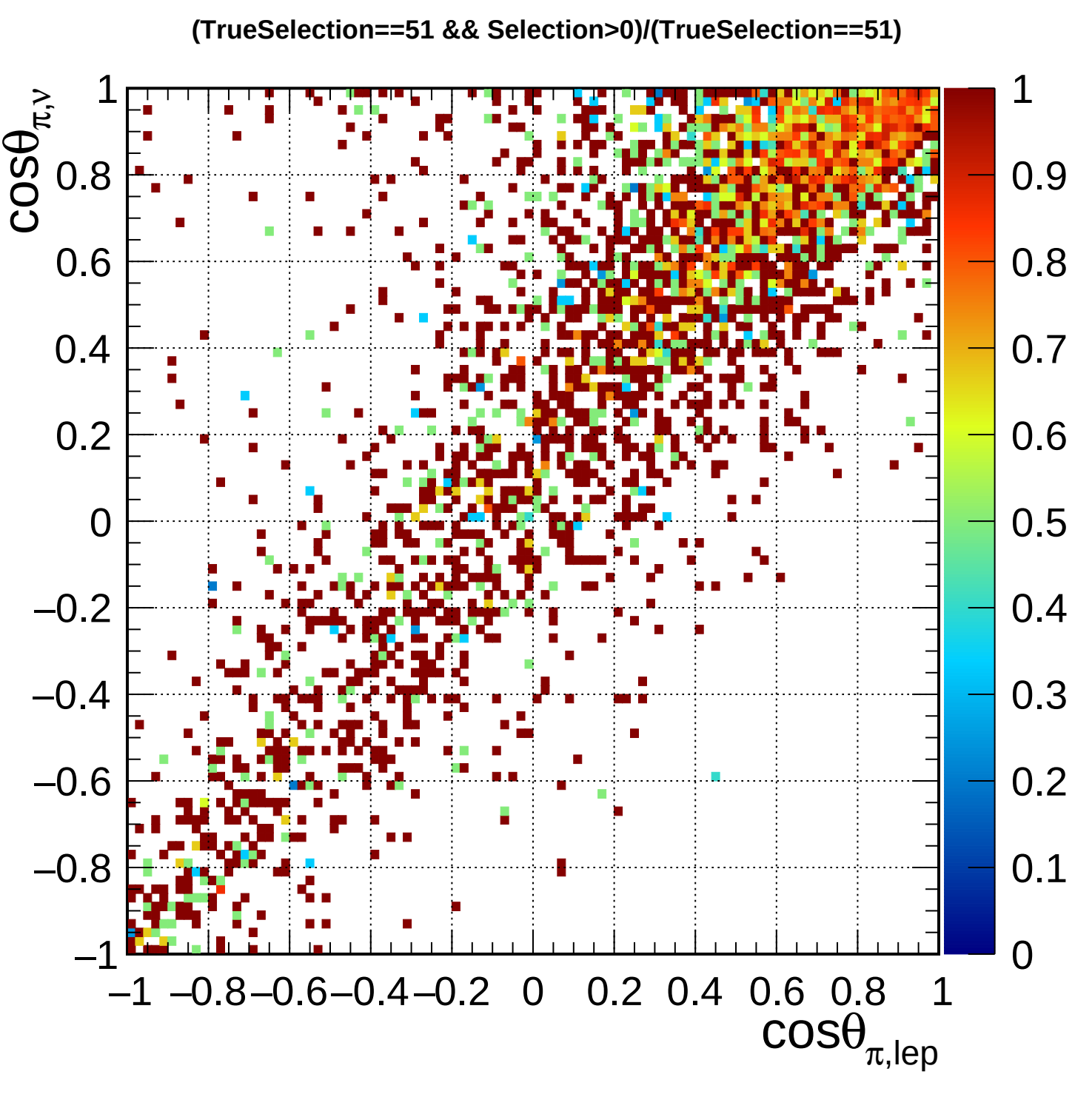

TrueSelection==51 && Selection==62
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
–1 –0.8 –0.6 –0.4 –0.2 0 0.2 0.4 0.6 0.8 1
4
3.5
3
2.5
2
1.5
1
0.5
0

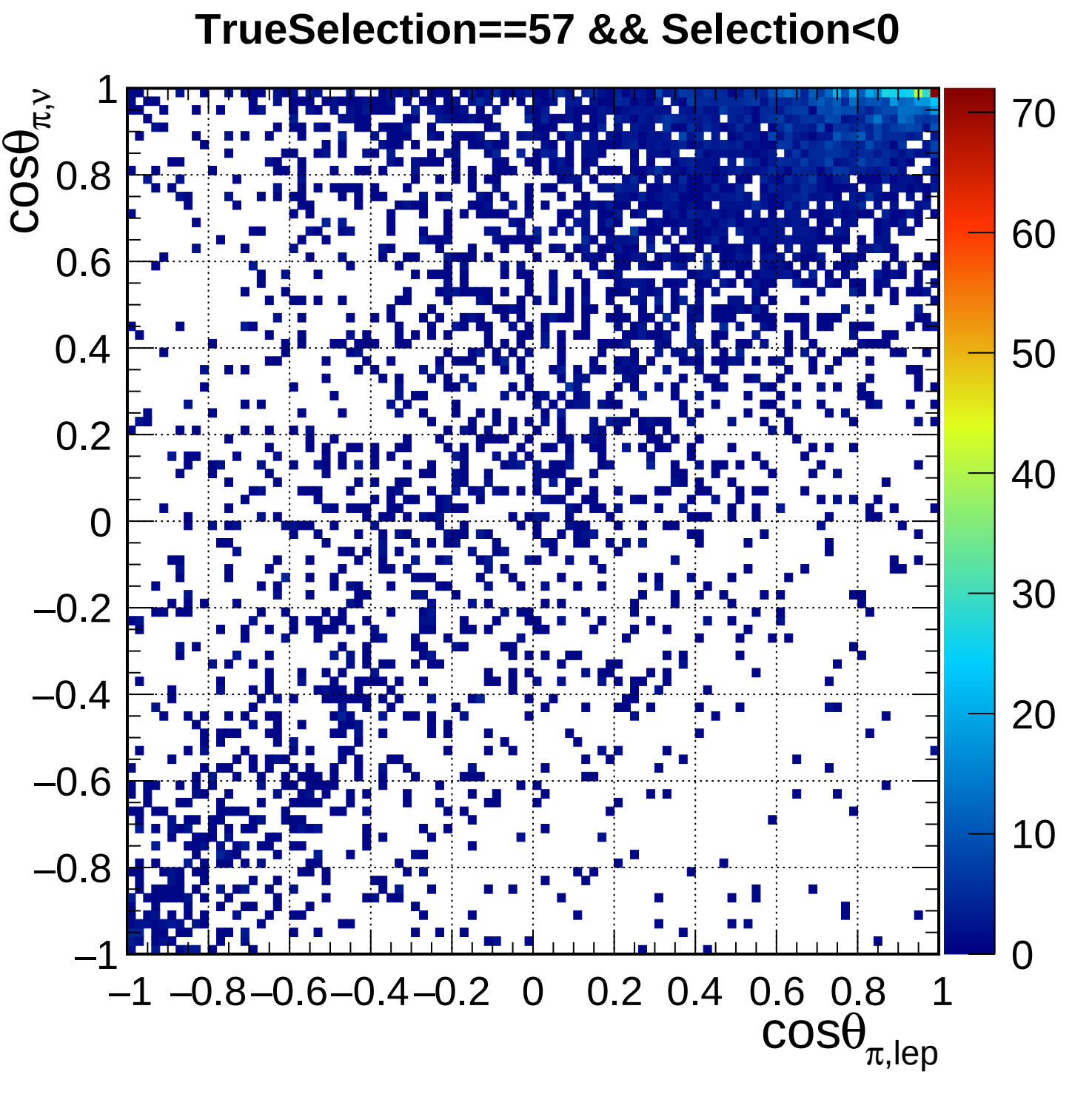

(TrueSelection==51 && Selection==62)/(TrueSelection==51)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

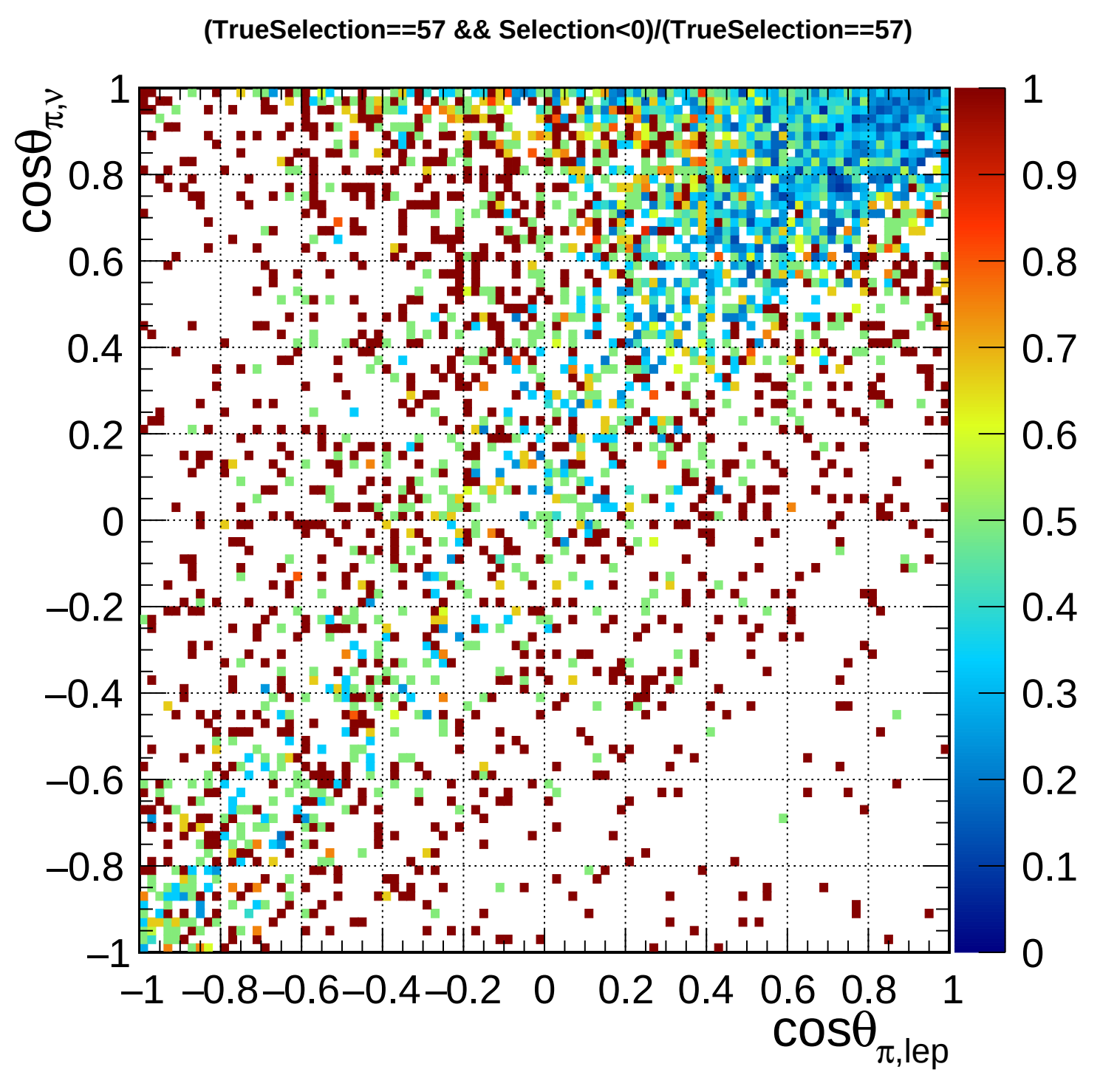

TrueSelection==51 && Selection==63
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
10
8
6
4
2
0

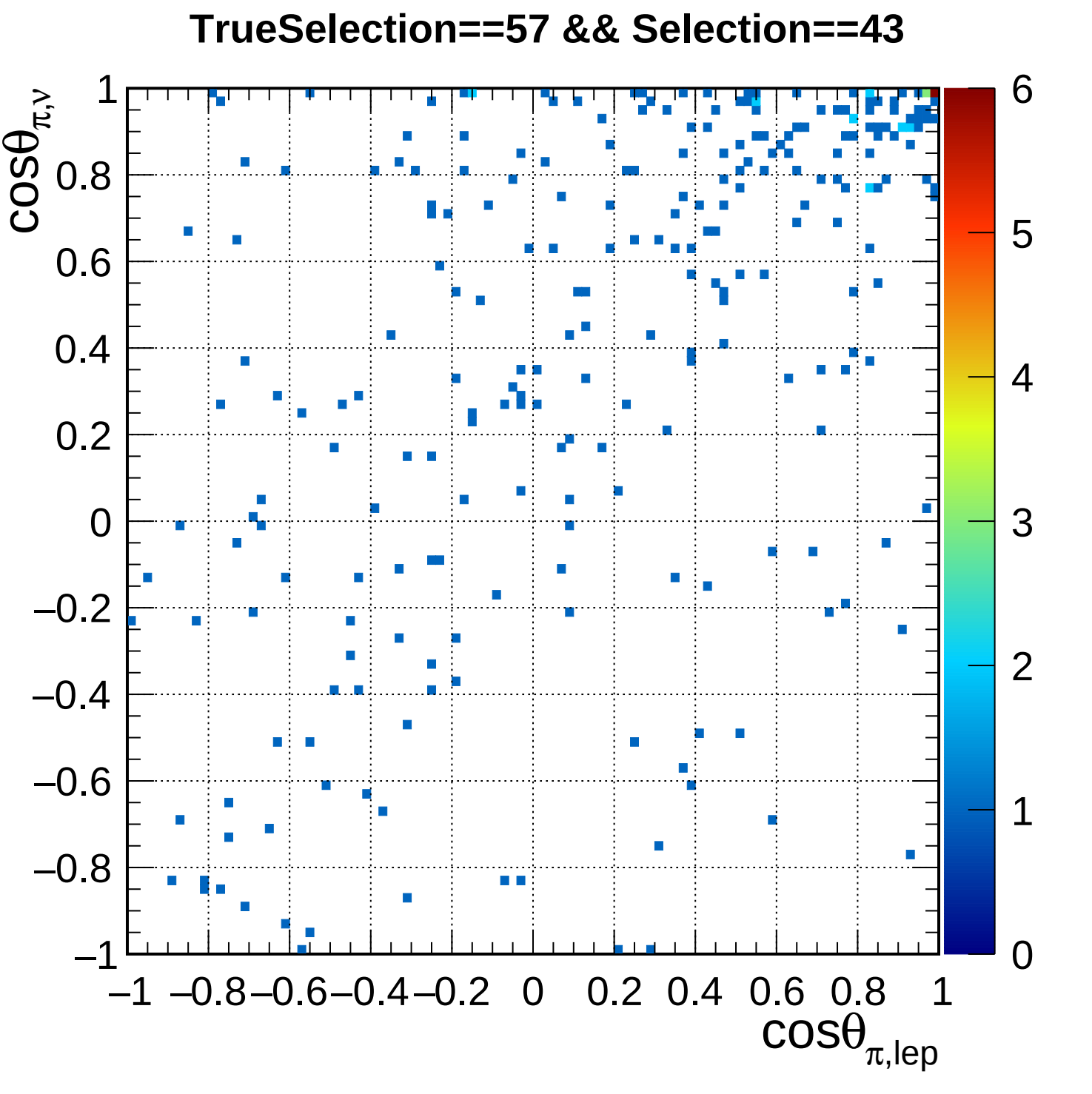

(TrueSelection==51 && Selection==63)/(TrueSelection==51)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

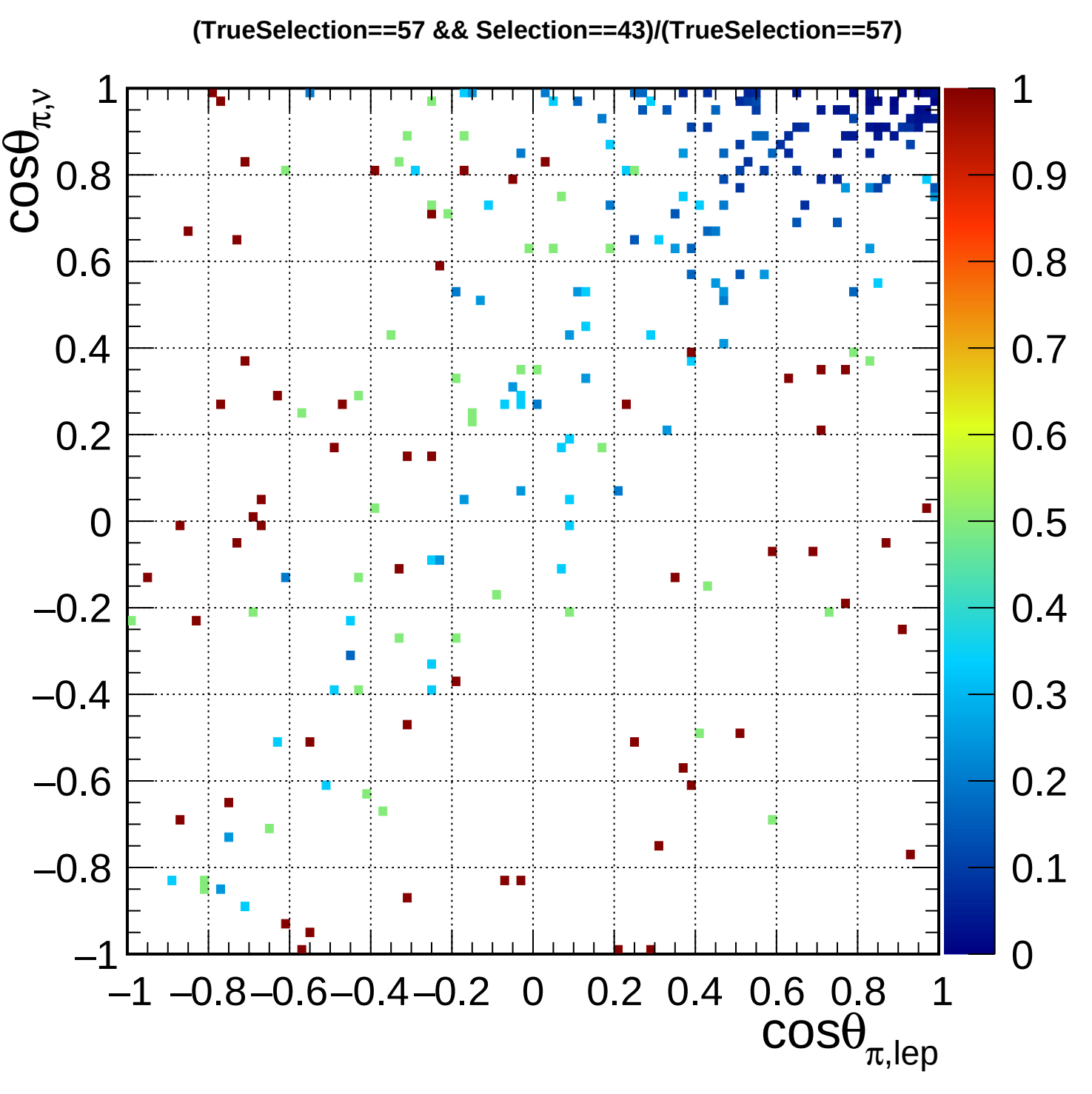

TrueSelection==51 && Selection>0
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
60
50
40
30
20
10
0

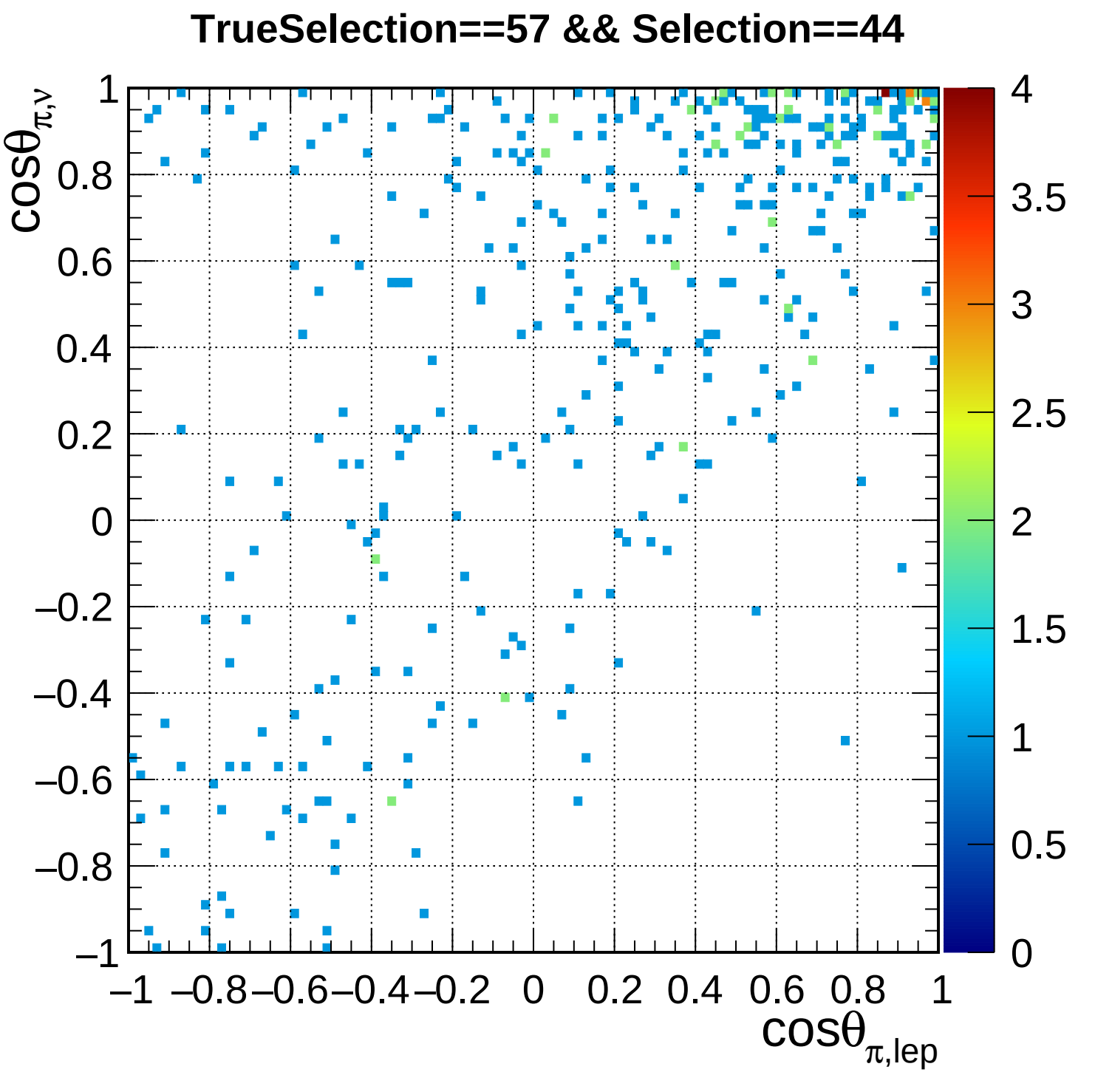

(TrueSelection==51 && Selection>0)/(TrueSelection==51)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

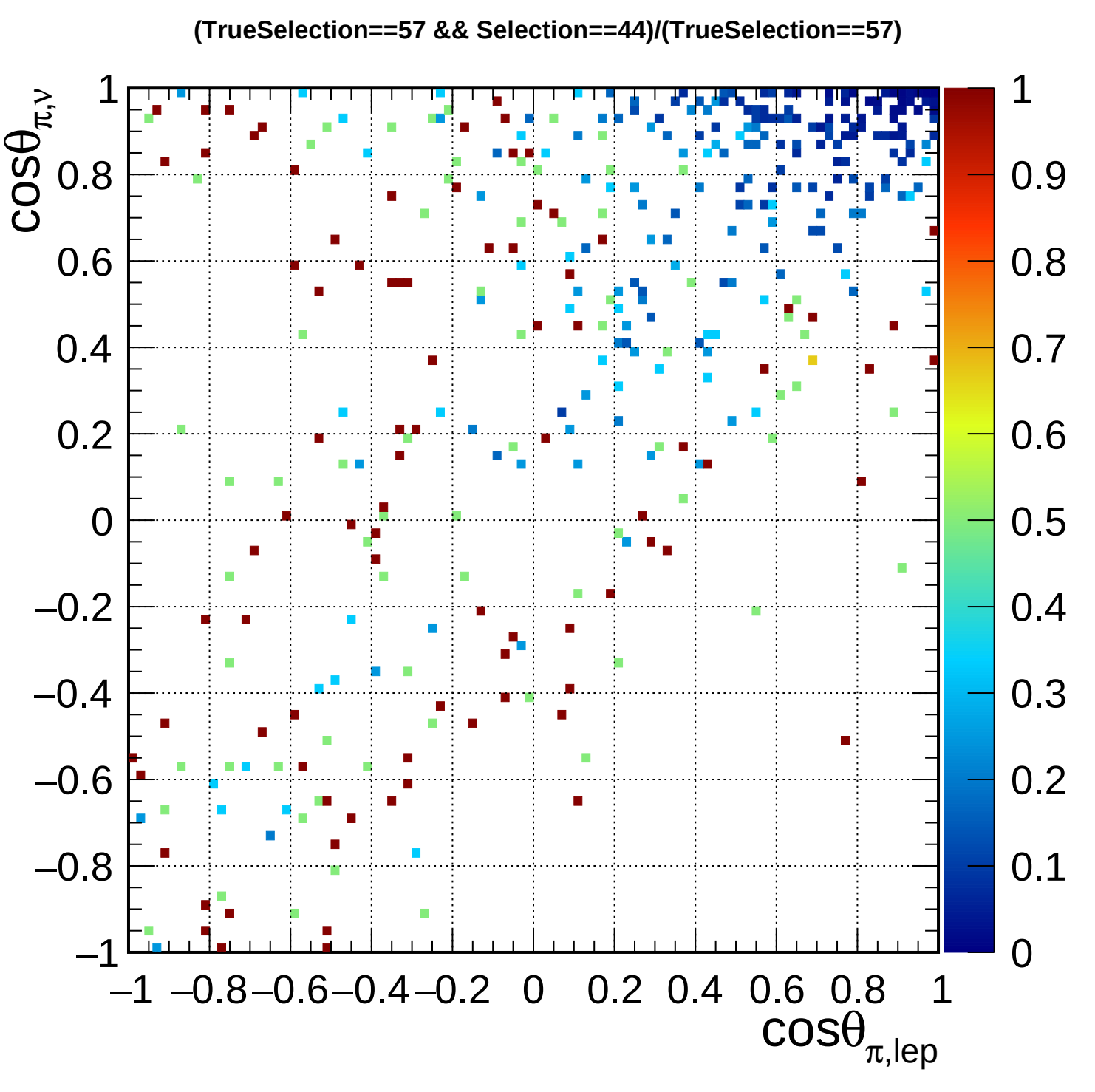

TrueSelection==57 && Selection<0
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
70
60
50
40
30
20
10
0

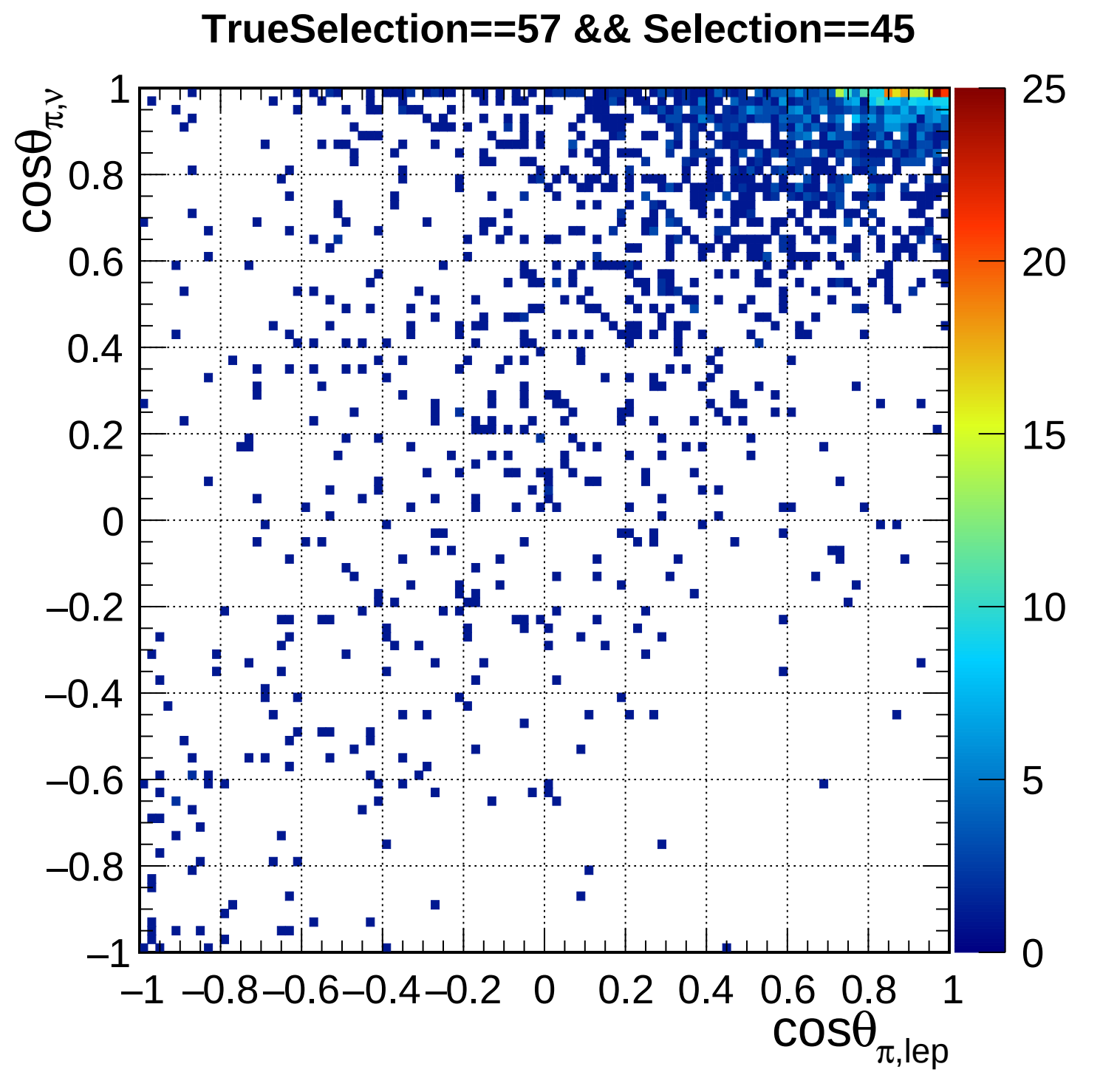

(TrueSelection==57 && Selection<0)/(TrueSelection==57)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

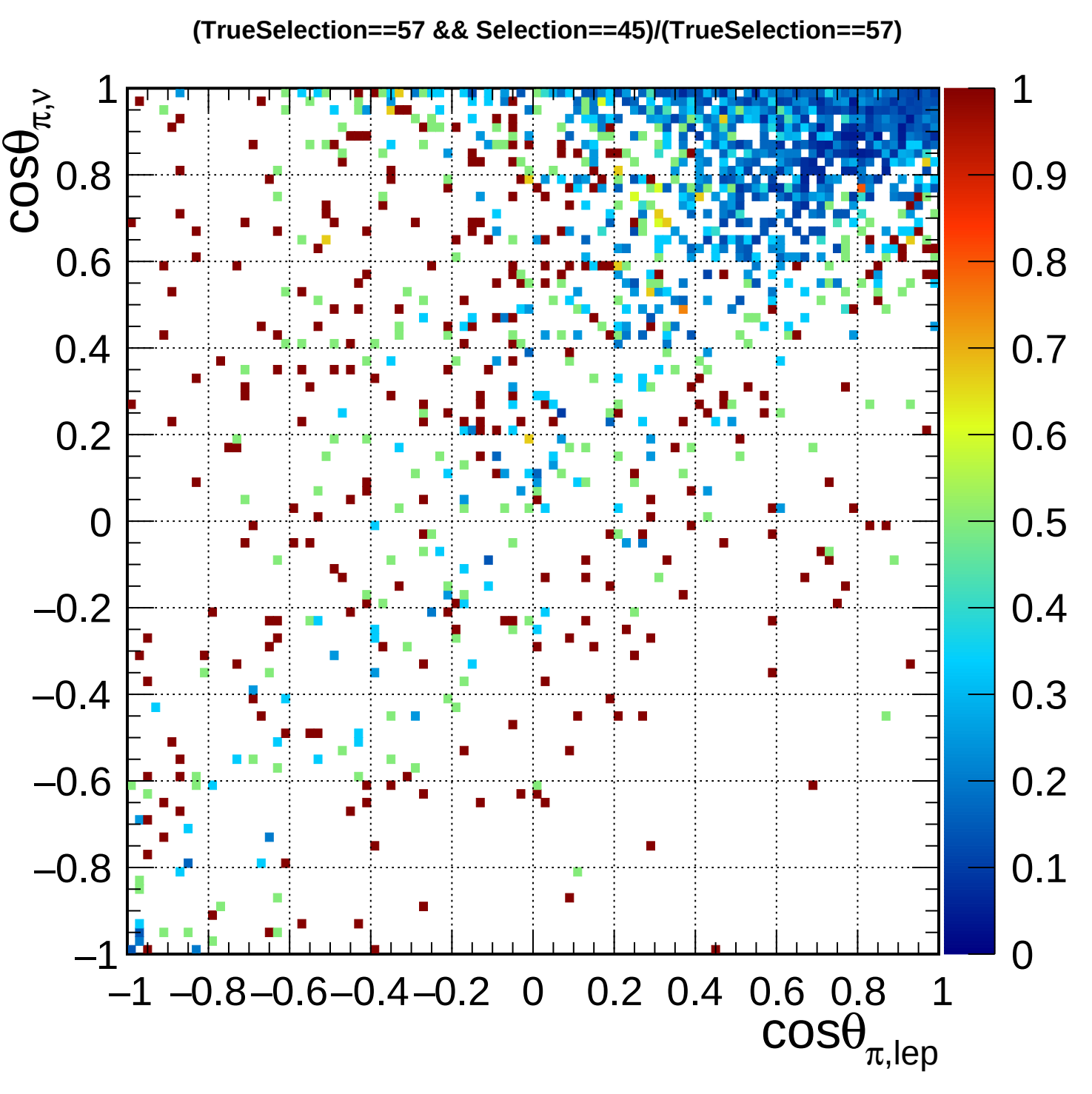

TrueSelection==57 && Selection==43
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
6
5
4
3
2
1
0

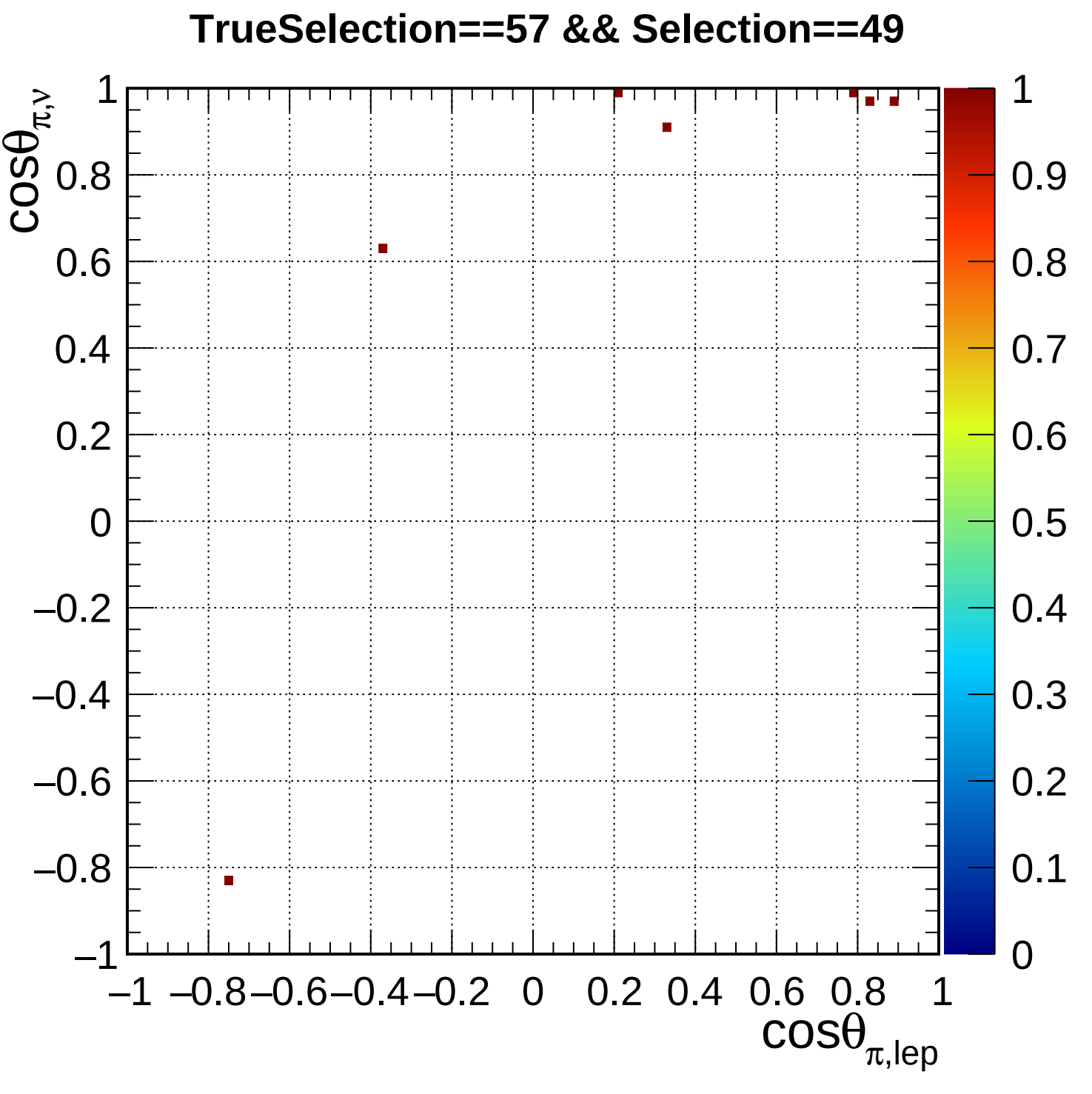

(TrueSelection==57 && Selection==43)/(TrueSelection==57)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

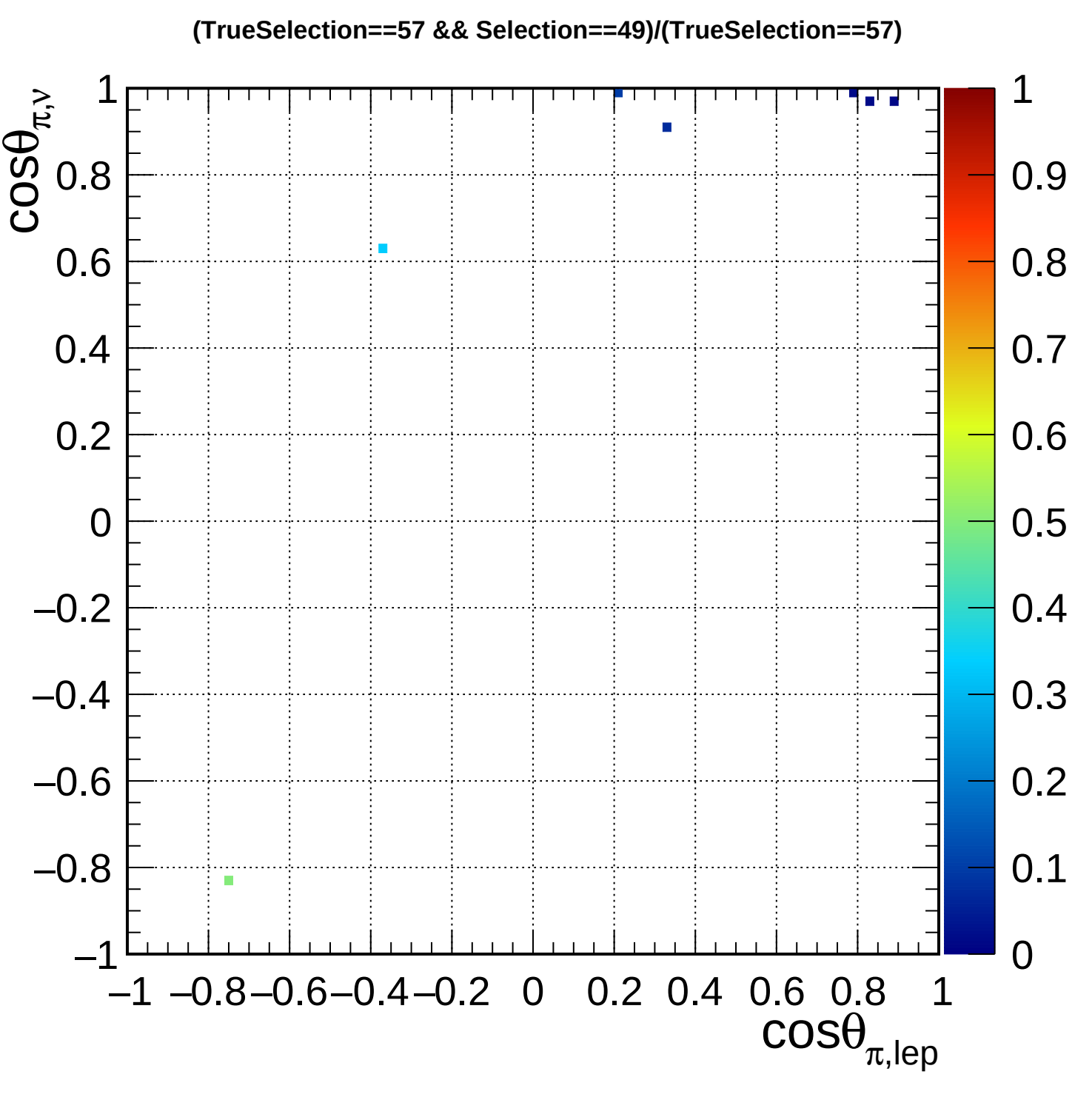

TrueSelection==57 && Selection==44
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
4
3.5
3
2.5
2
1.5
1
0.5
0

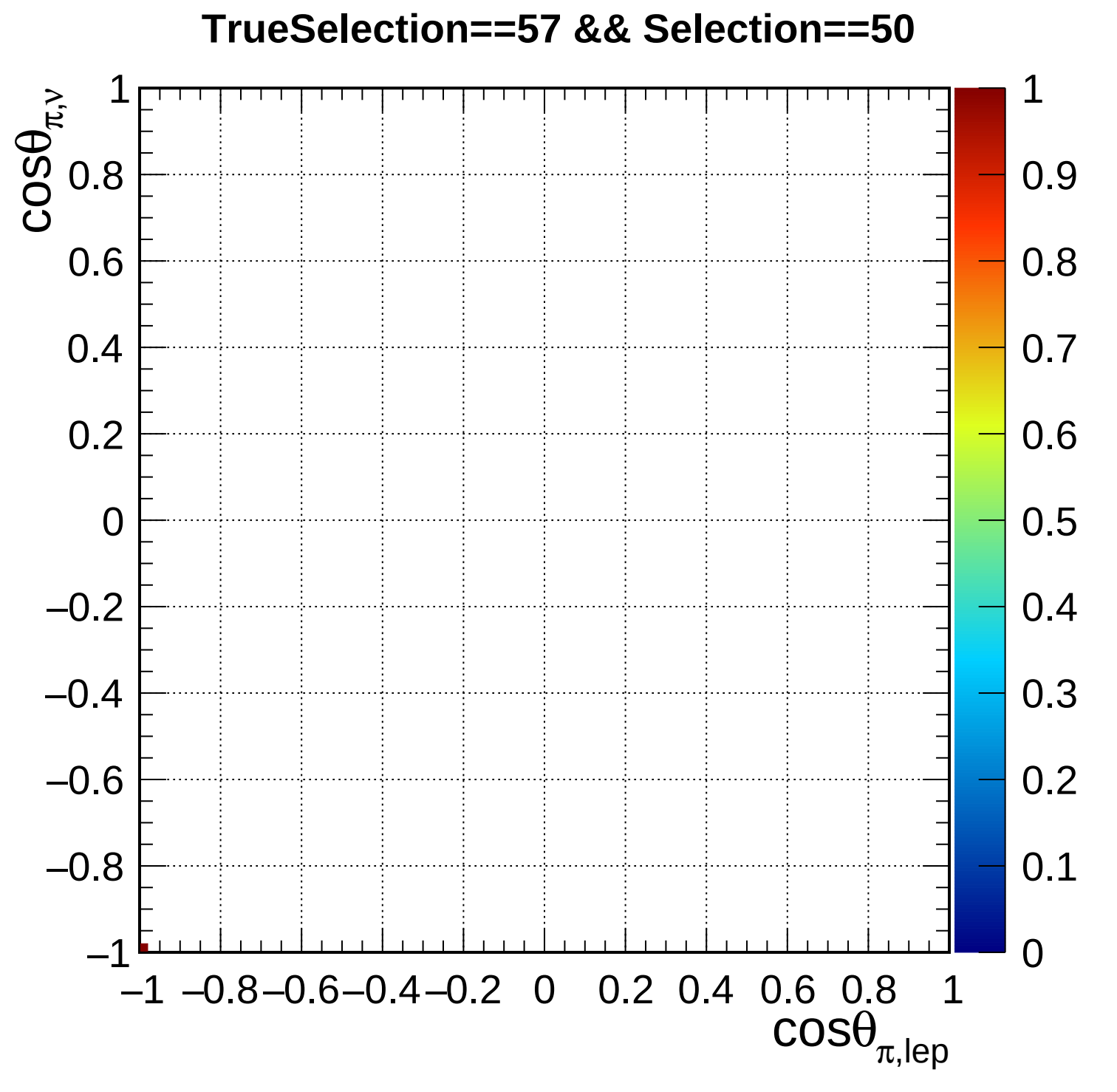

(TrueSelection==57 && Selection==44)/(TrueSelection==57)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

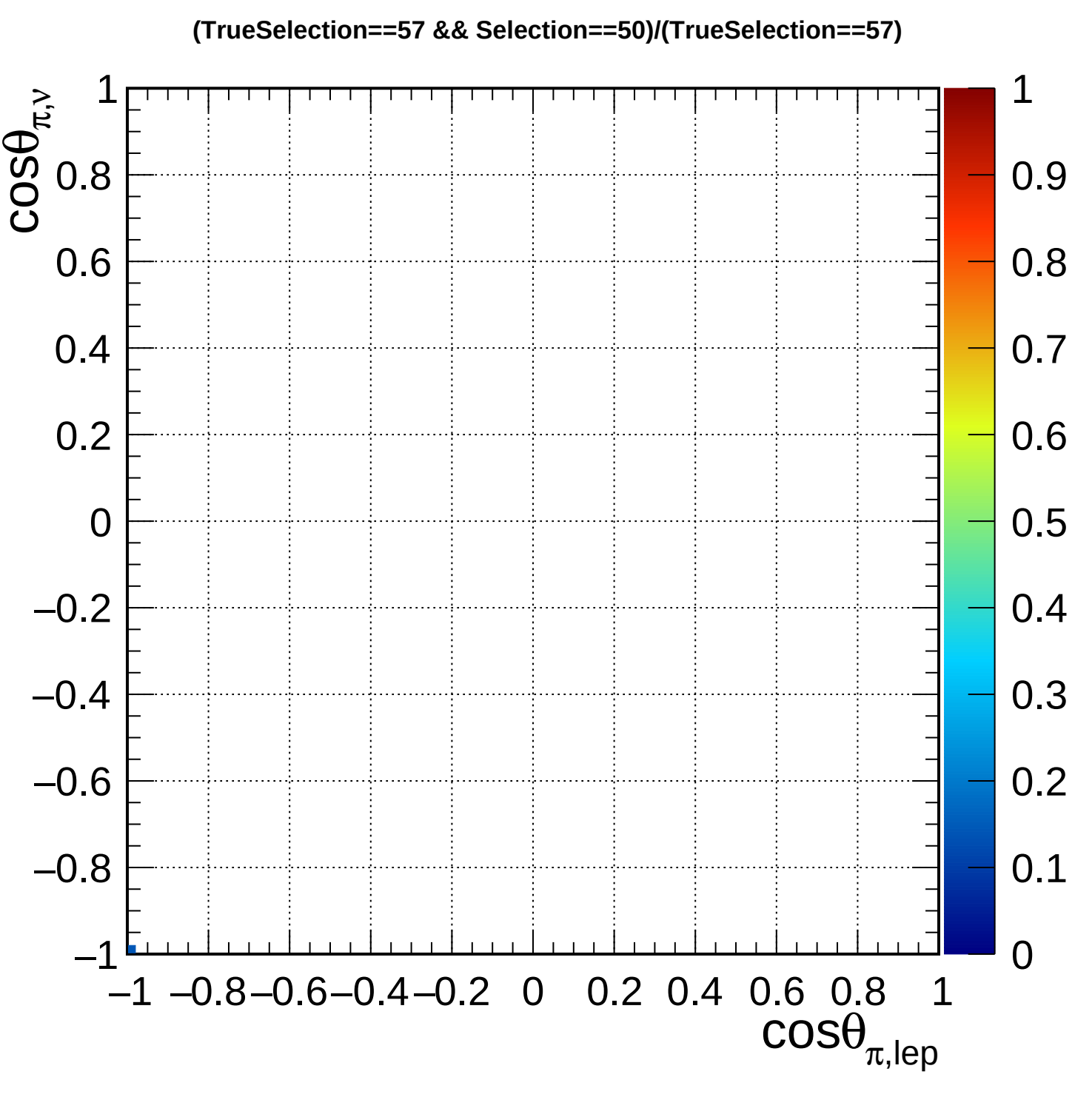

TrueSelection==57 && Selection==45
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
25
20
15
10
5
0

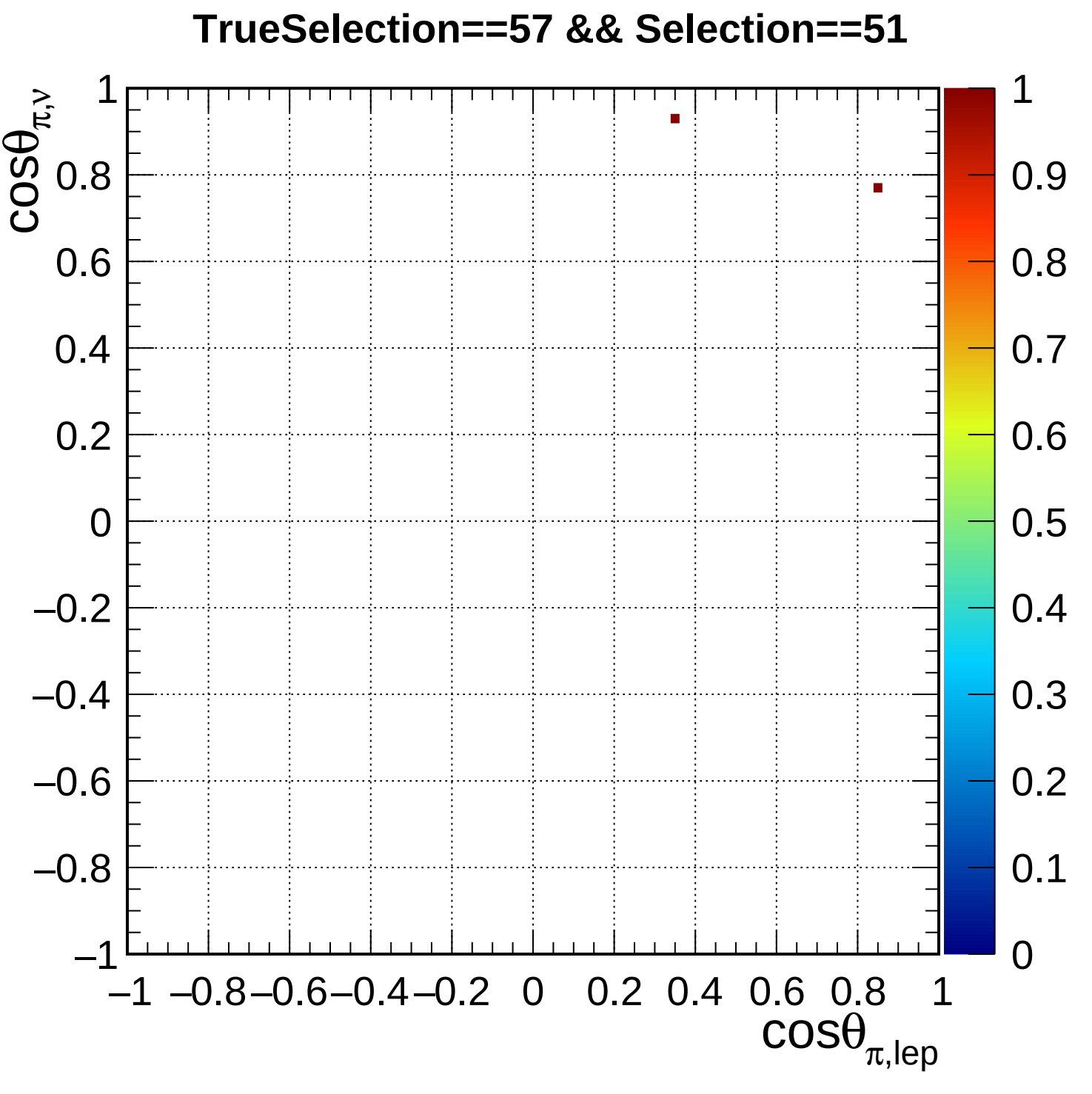

(TrueSelection==57 && Selection==45)/(TrueSelection==57)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

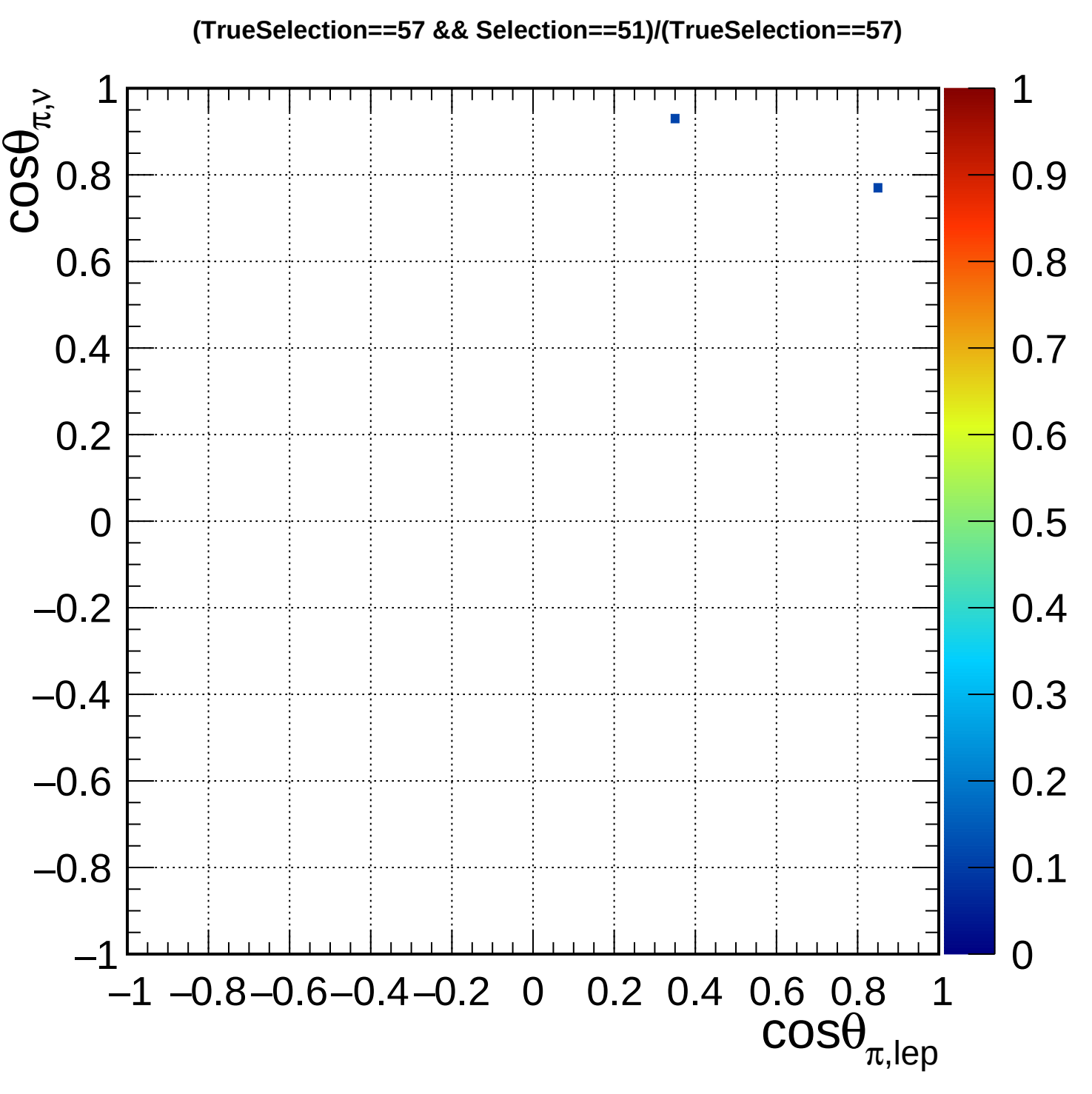

TrueSelection==57 && Selection==49
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

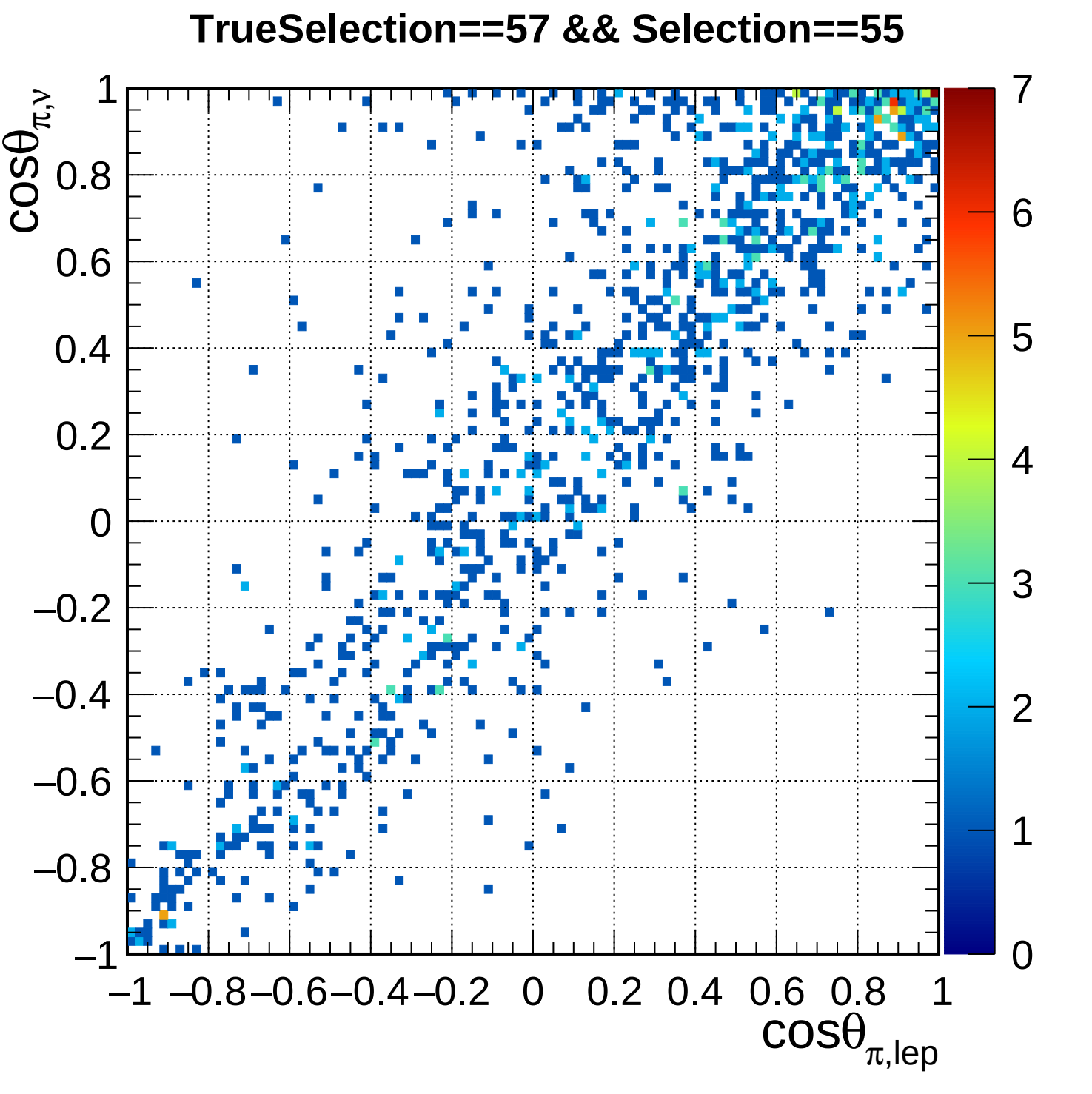

(TrueSelection==57 && Selection==49)/(TrueSelection==57)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

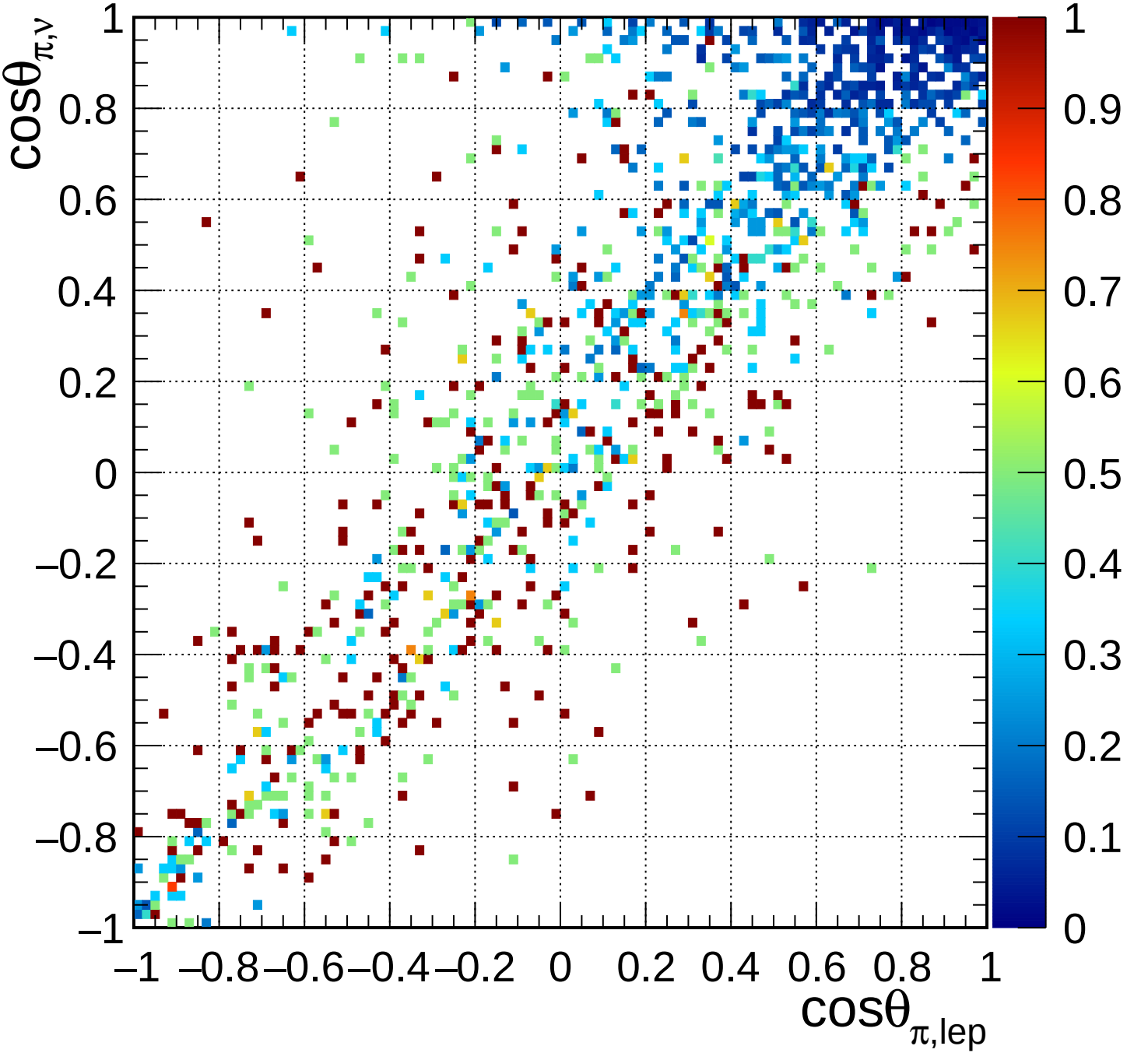

TrueSelection==57 && Selection==50
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

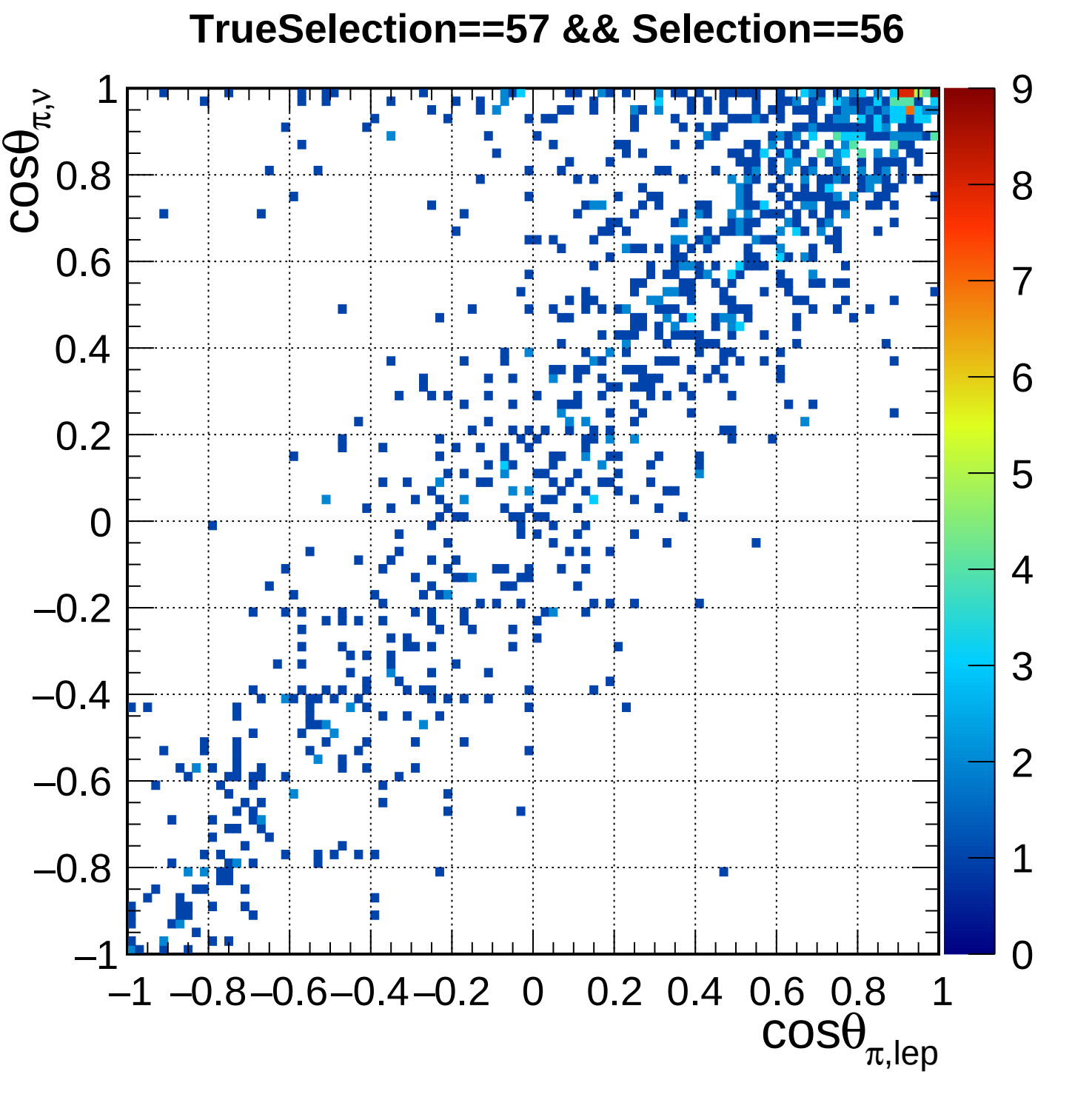

(TrueSelection==57 && Selection==50)/(TrueSelection==57)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
–1 –0.8 –0.6 –0.4 –0.2 0 0.2 0.4 0.6 0.8 1
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0

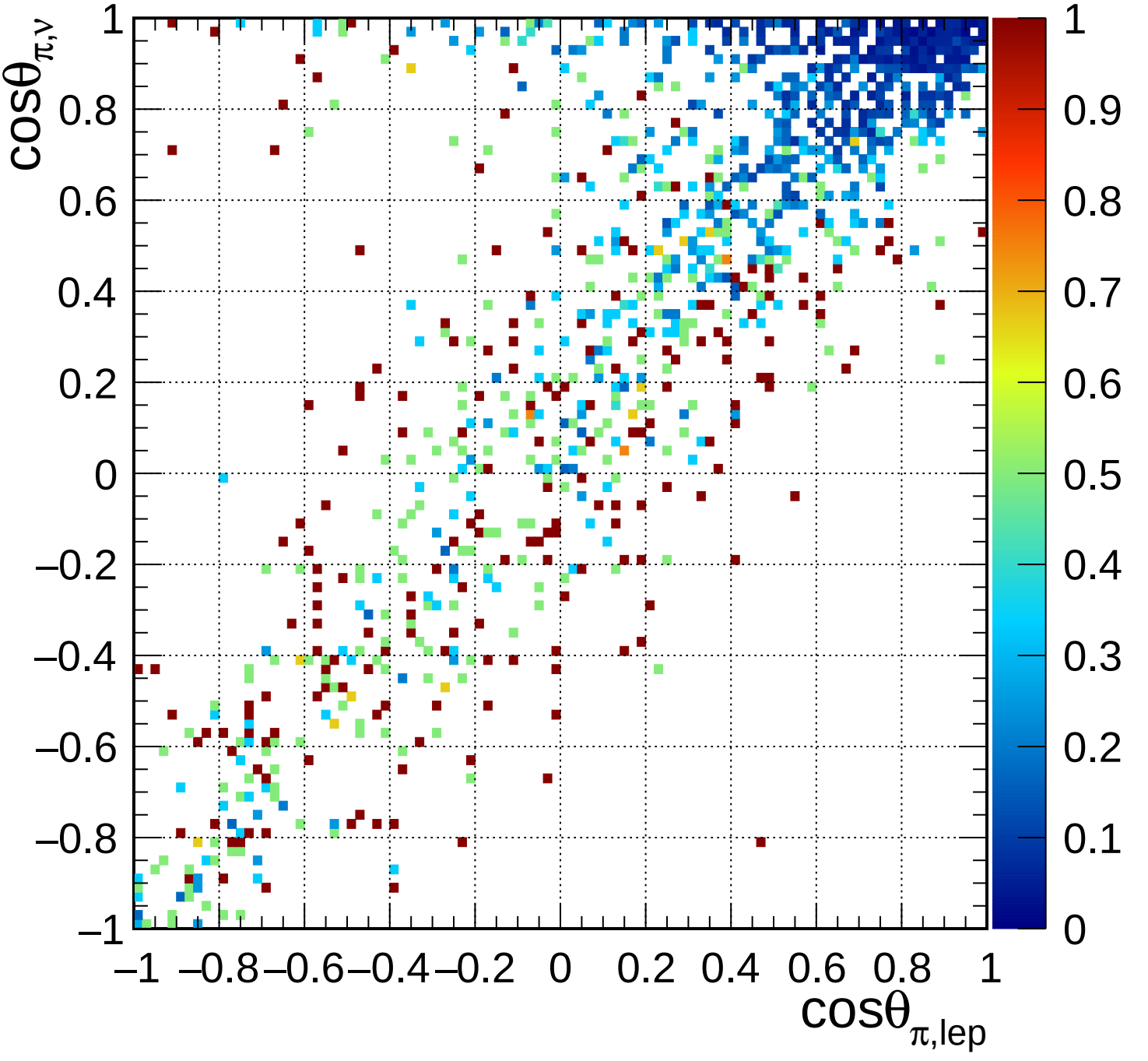

TrueSelection==57 && Selection==51
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

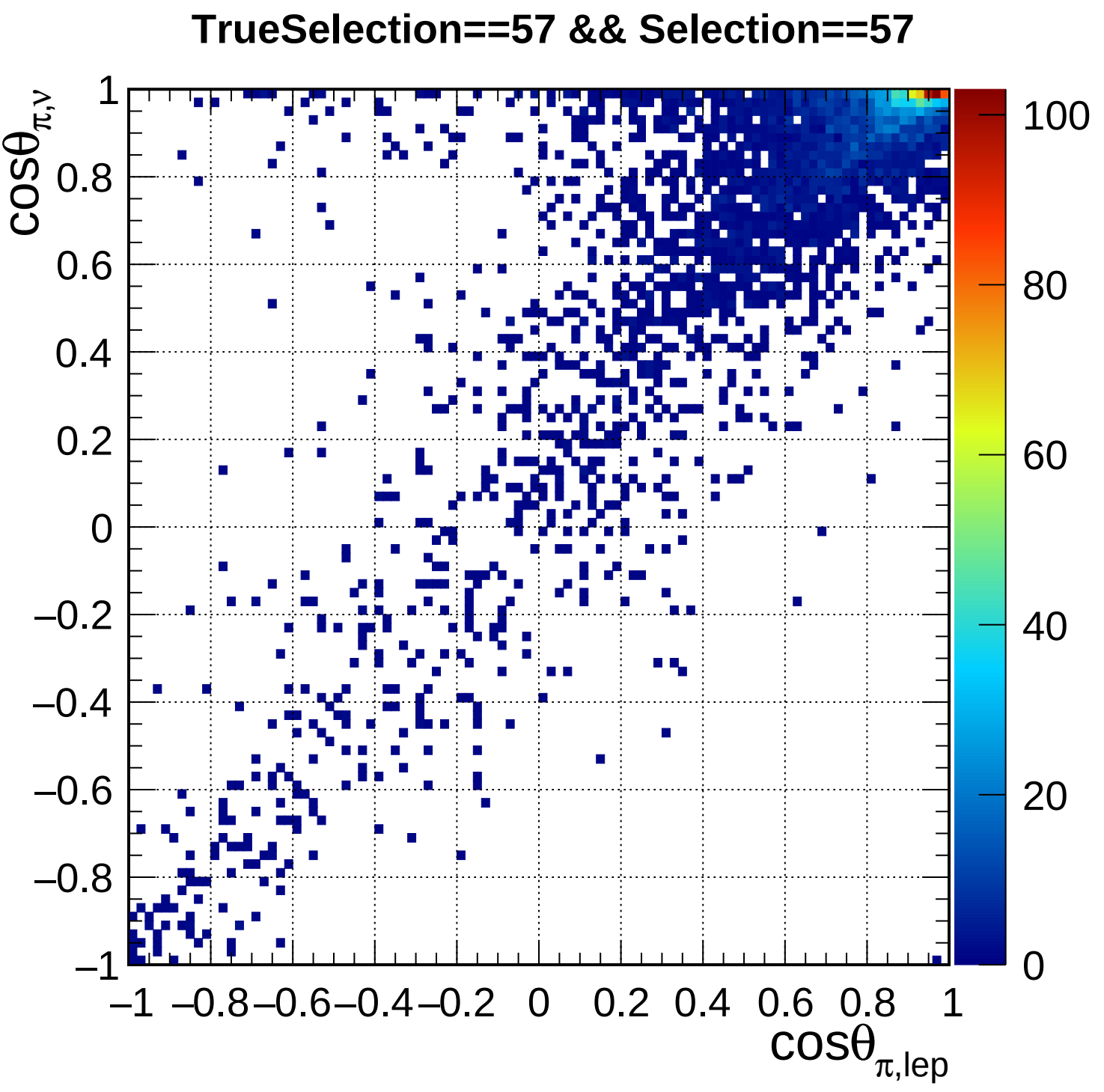

(TrueSelection==57 && Selection==51)/(TrueSelection==57)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

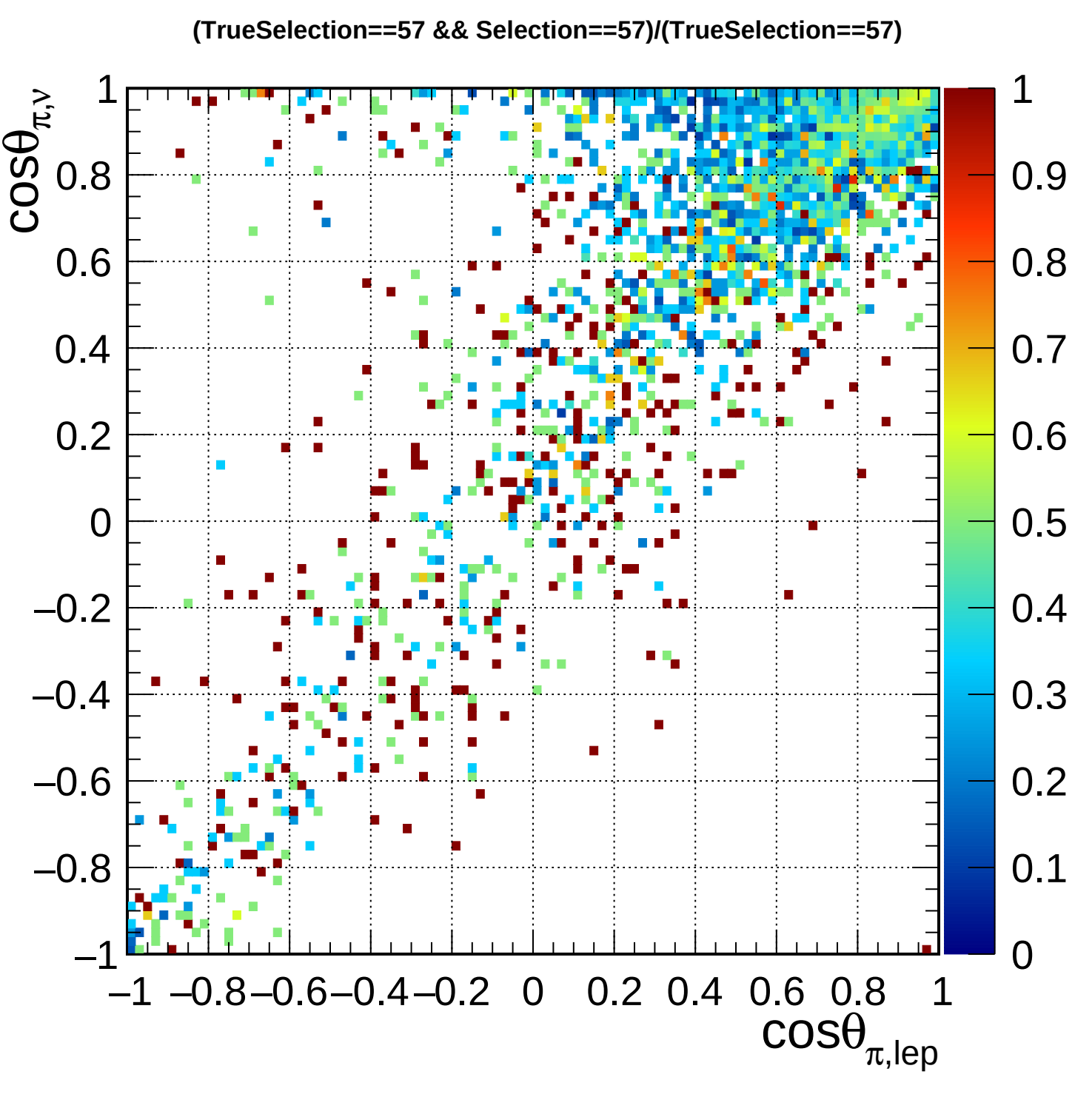

TrueSelection==57 && Selection==55
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
–1 –0.8 –0.6 –0.4 –0.2 0 0.2 0.4 0.6 0.8 1
7
6
5
4
3
2
1
0

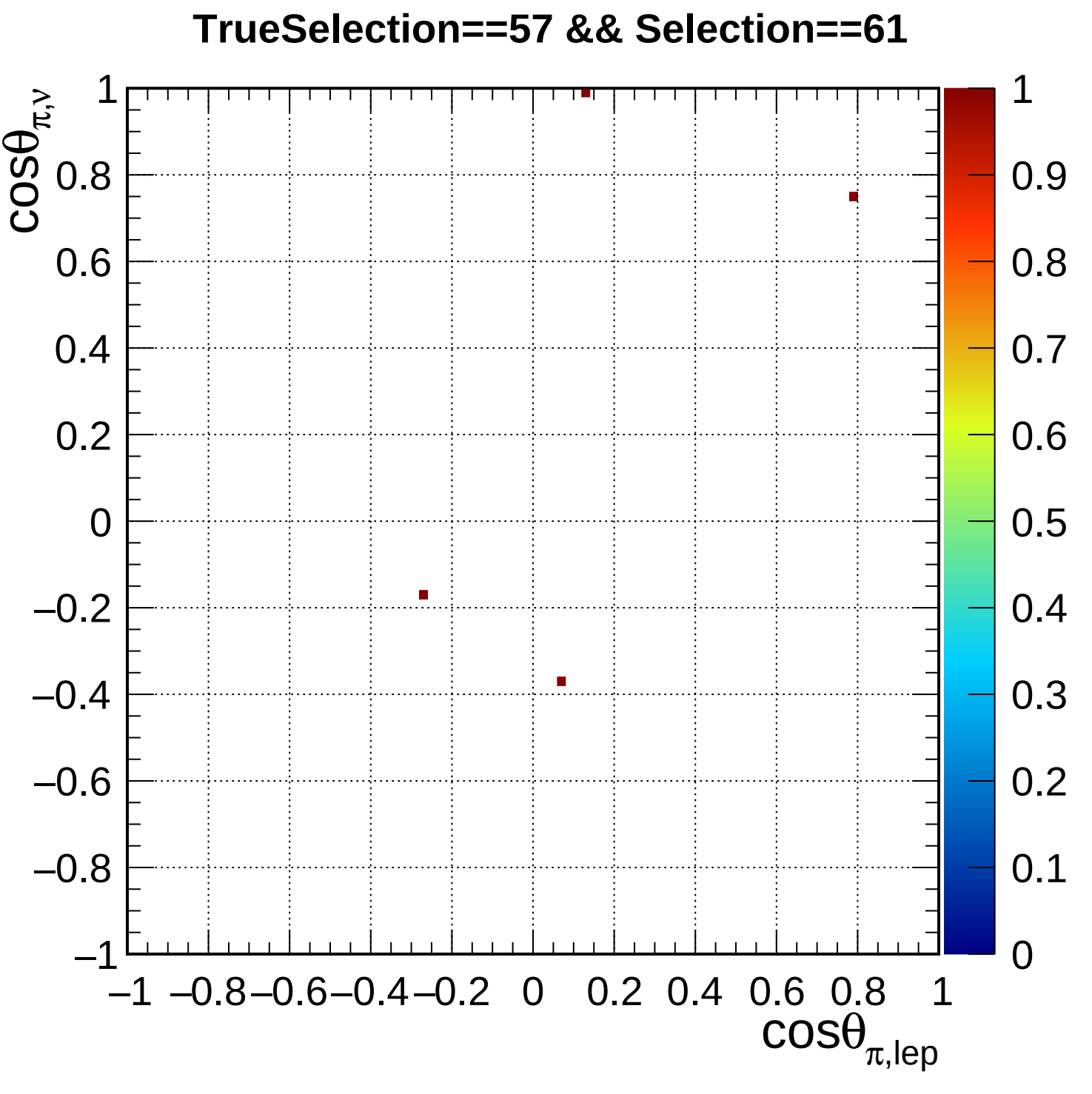

(TrueSelection==57 && Selection==55)/(TrueSelection==57)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

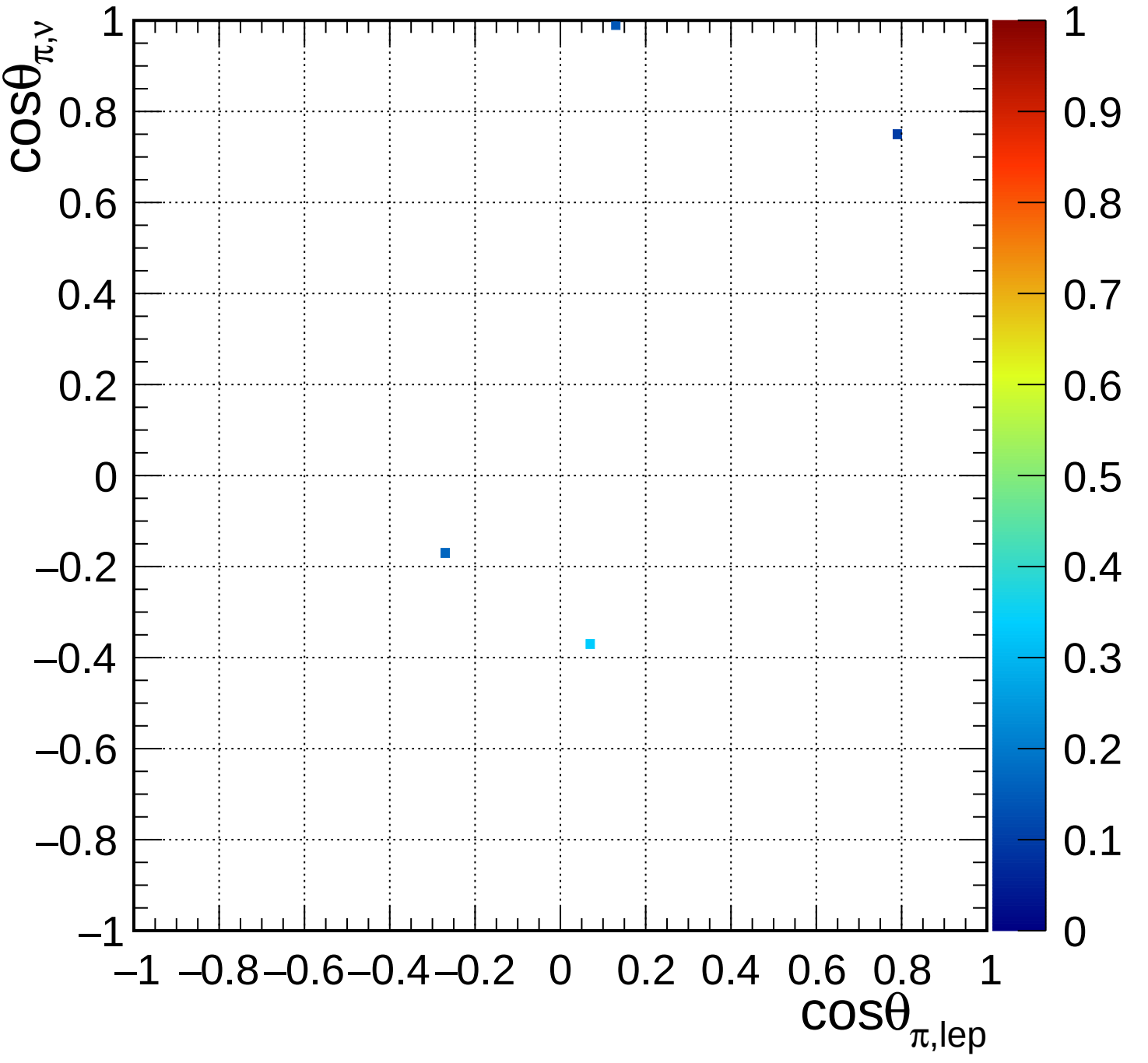

TrueSelection==57 && Selection==56
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
–1 –0.8 –0.6 –0.4 –0.2 0 0.2 0.4 0.6 0.8 1
9
8
7
6
5
4
3
2
1
0

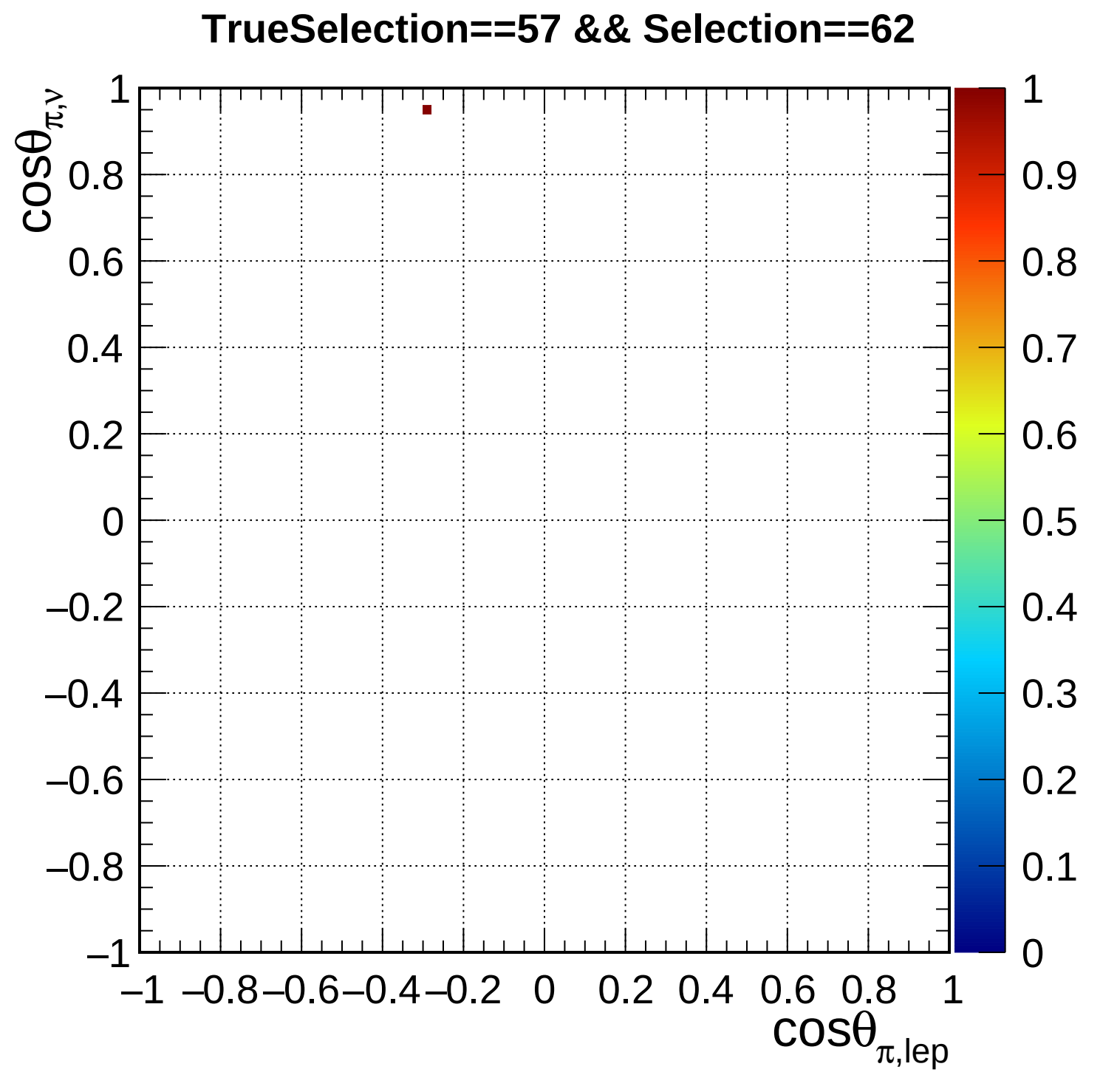

(TrueSelection==57 && Selection==56)/(TrueSelection==57)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

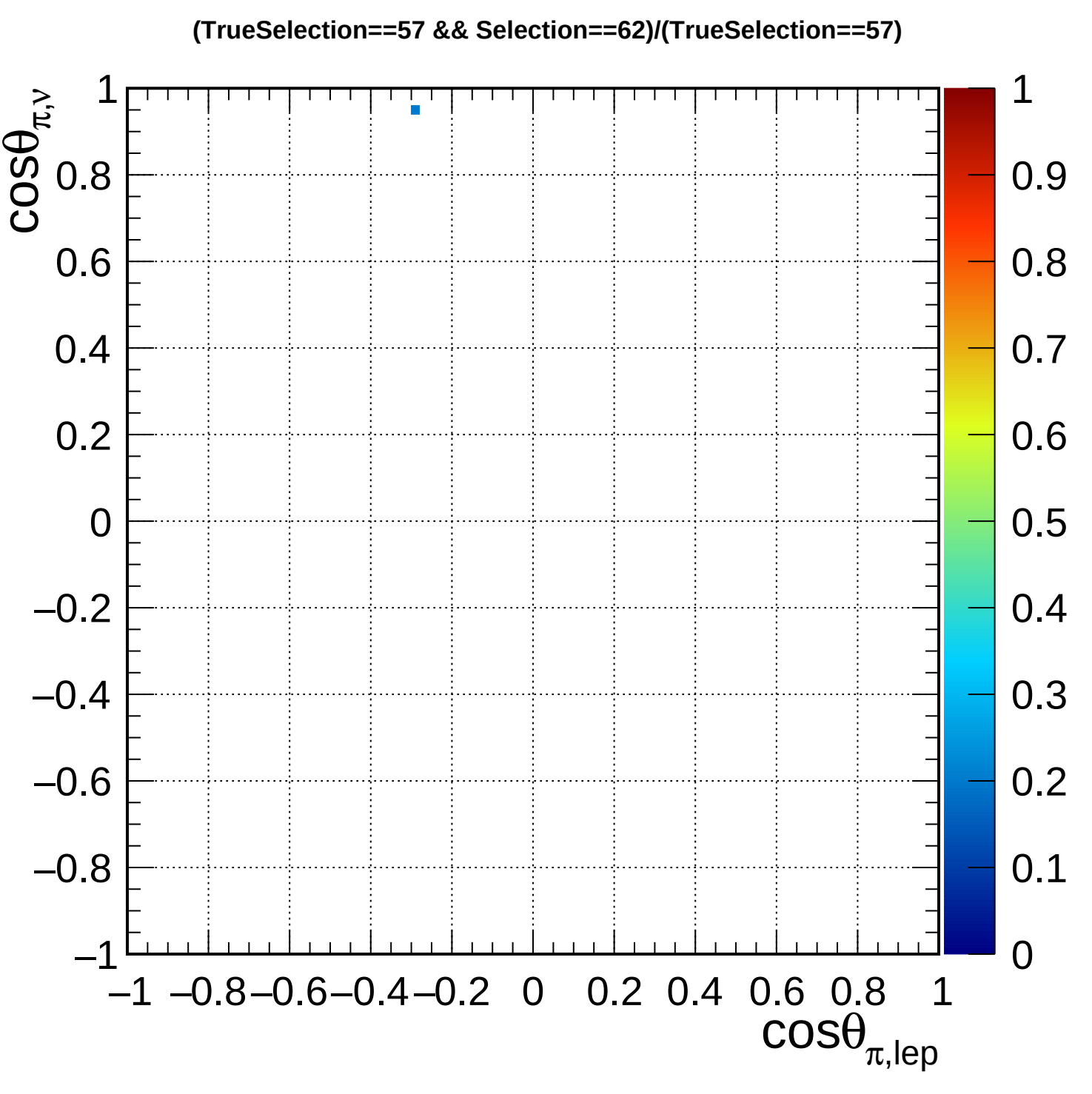

TrueSelection==57 && Selection==57
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
100
80
60
40
20
0

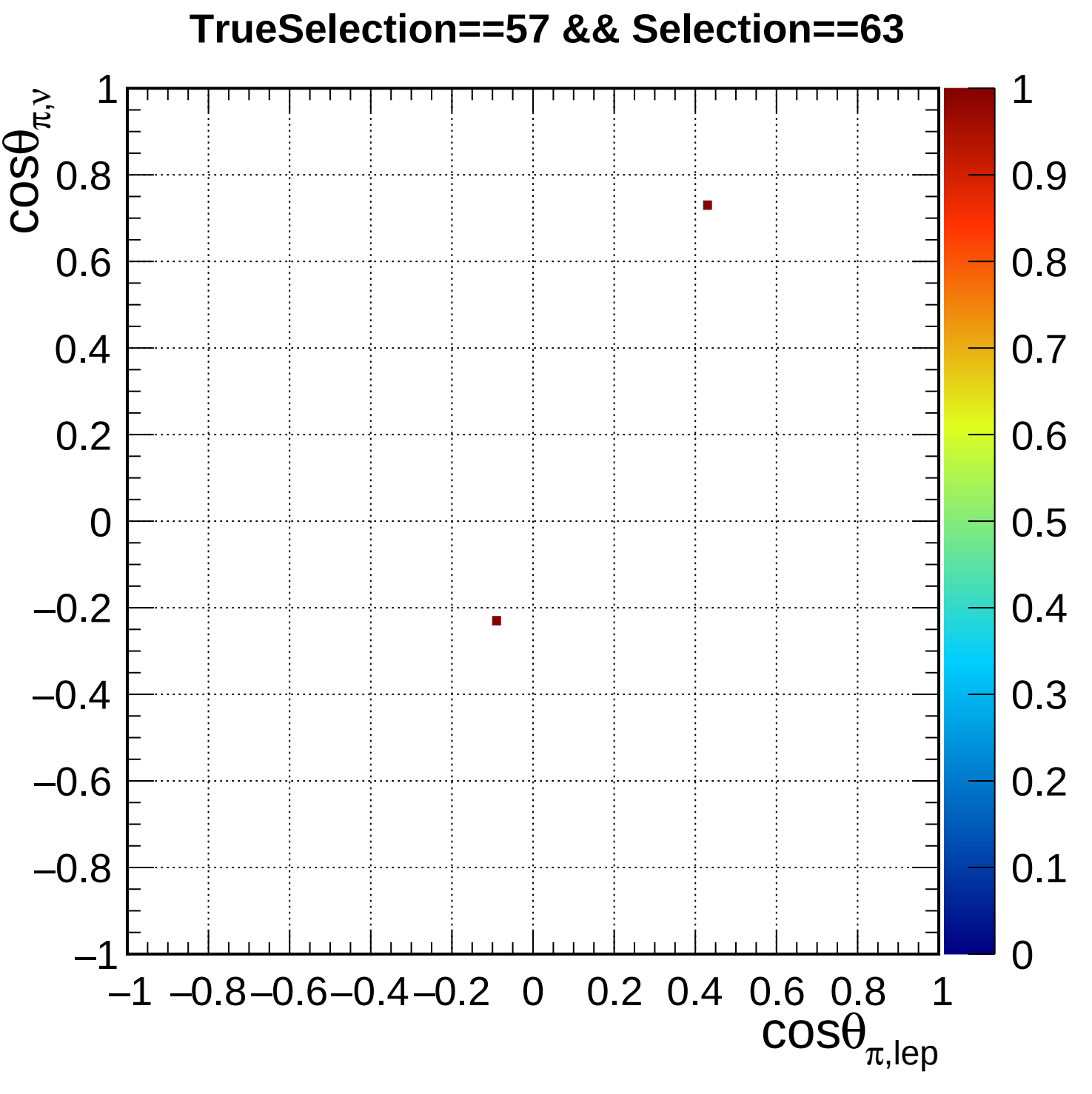

(TrueSelection==57 && Selection==57)/(TrueSelection==57)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

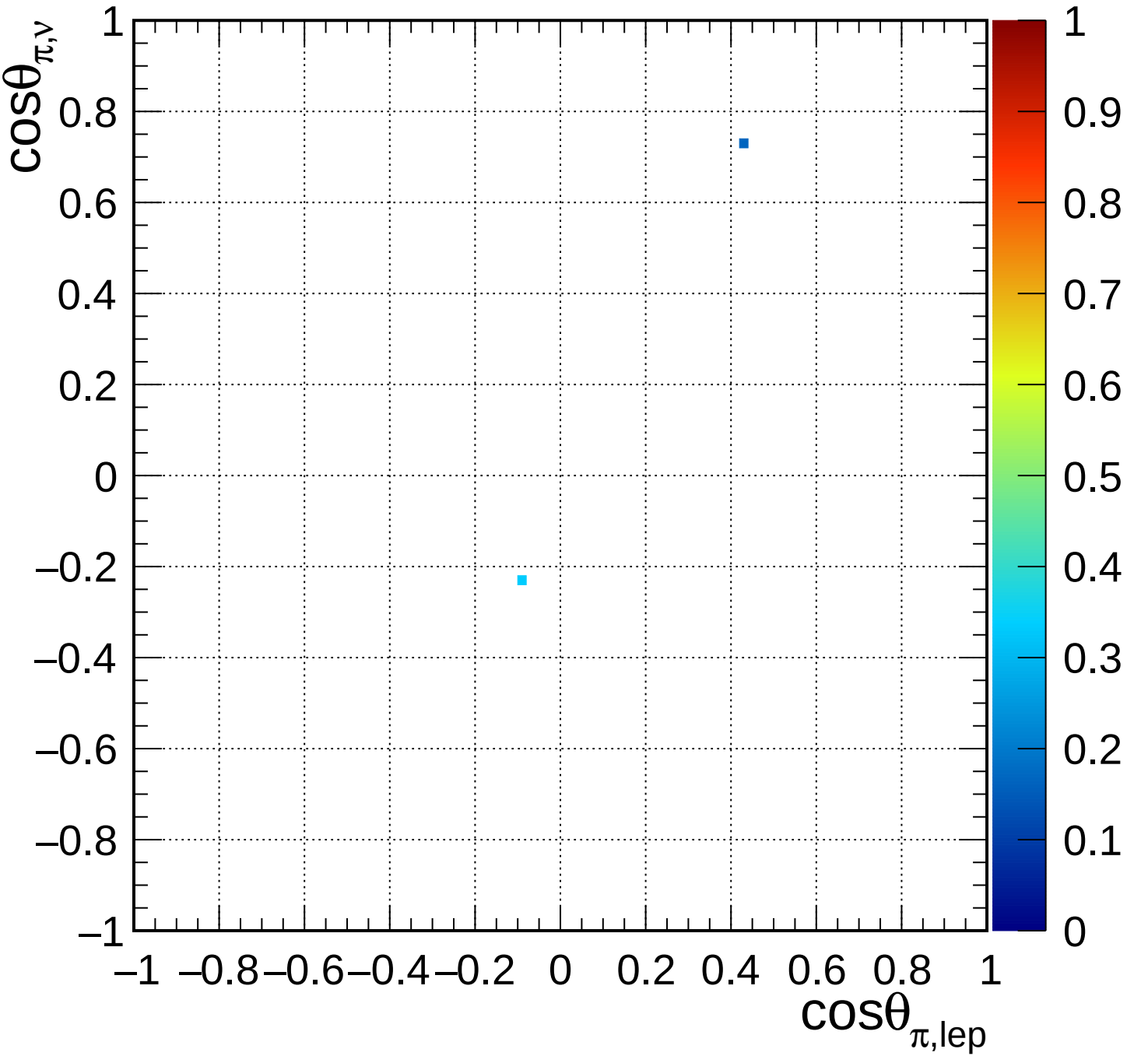

TrueSelection==57 && Selection==61
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

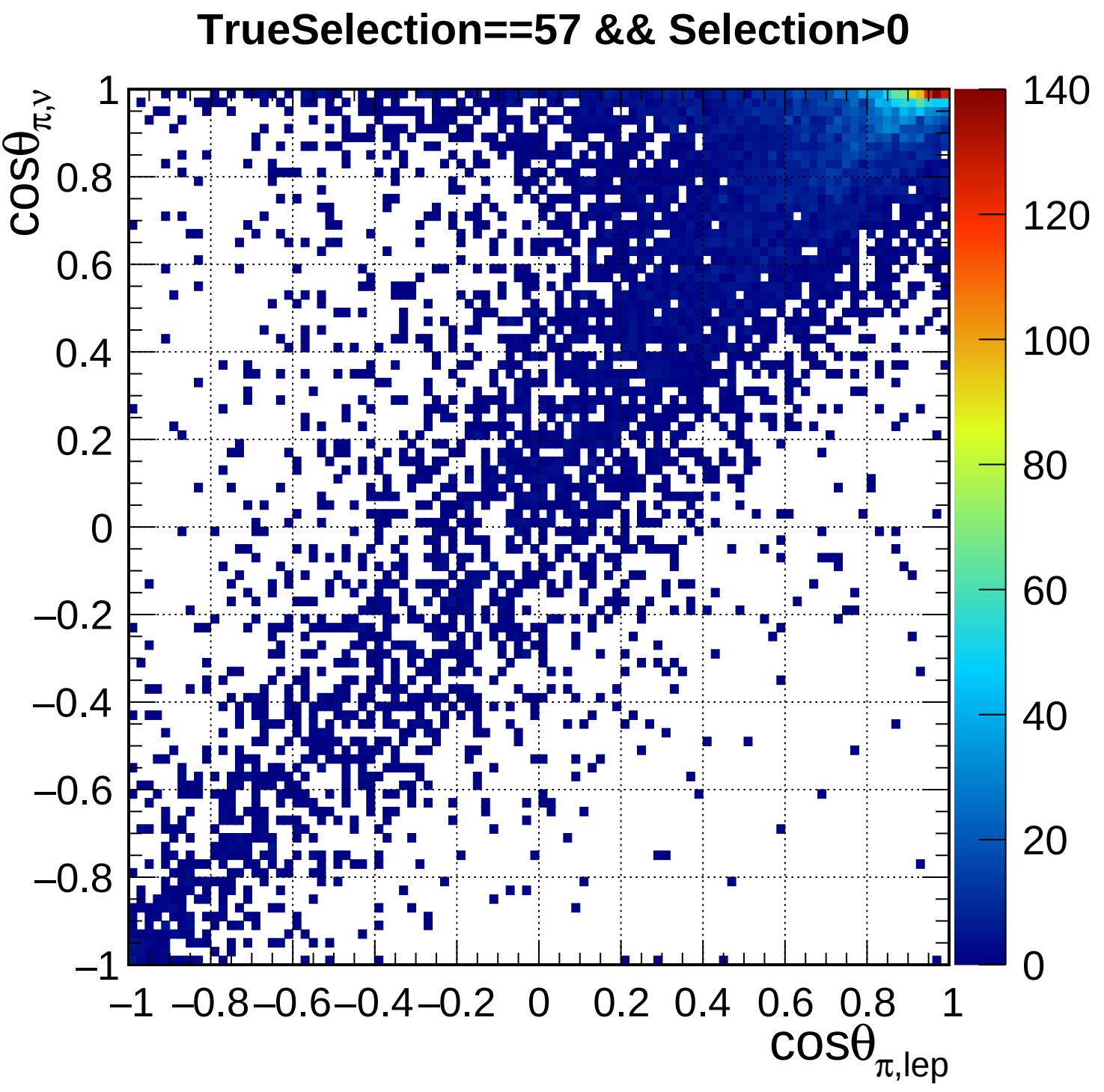

(TrueSelection==57 && Selection==61)/(TrueSelection==57)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

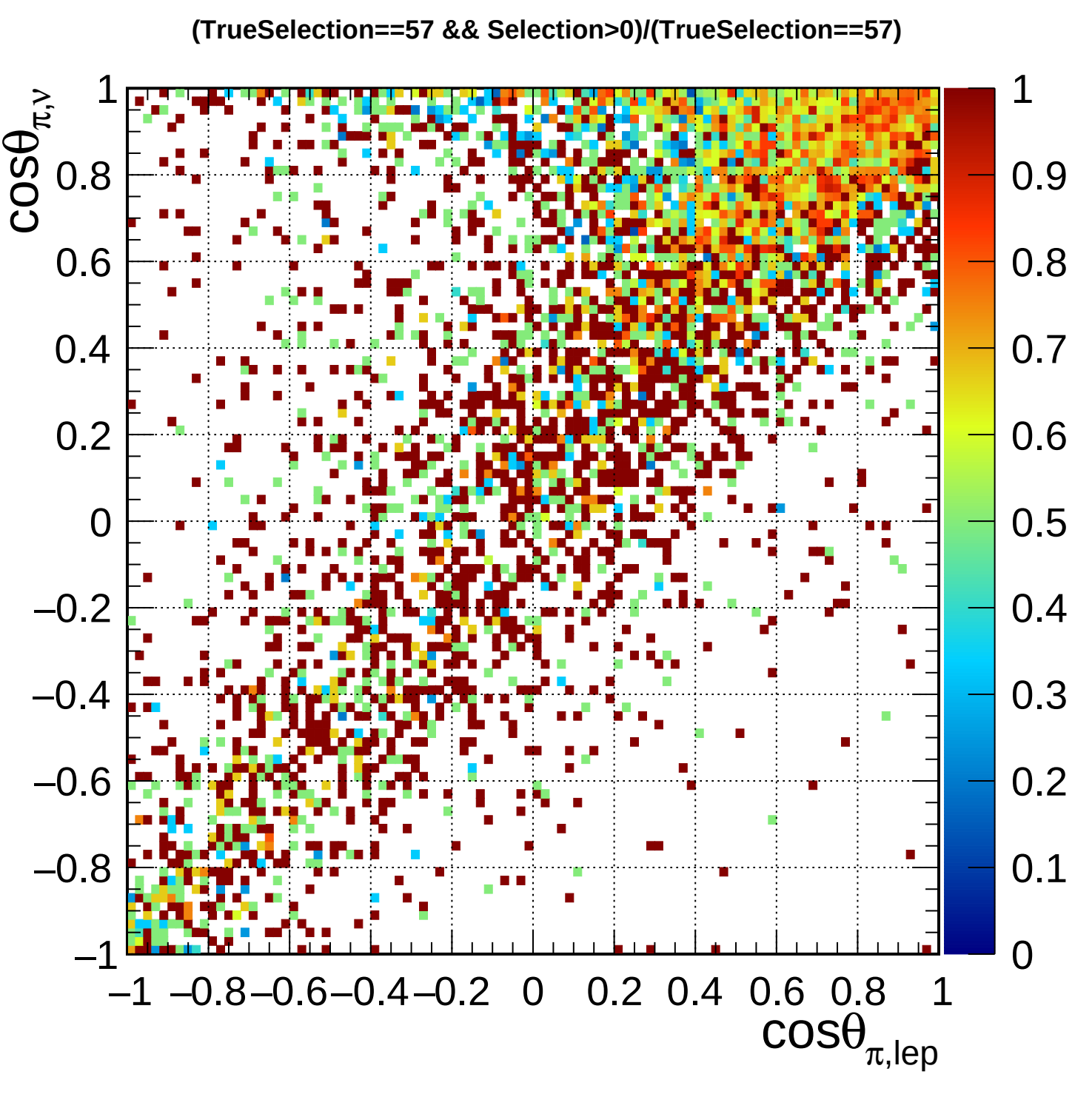

TrueSelection==57 && Selection==62
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

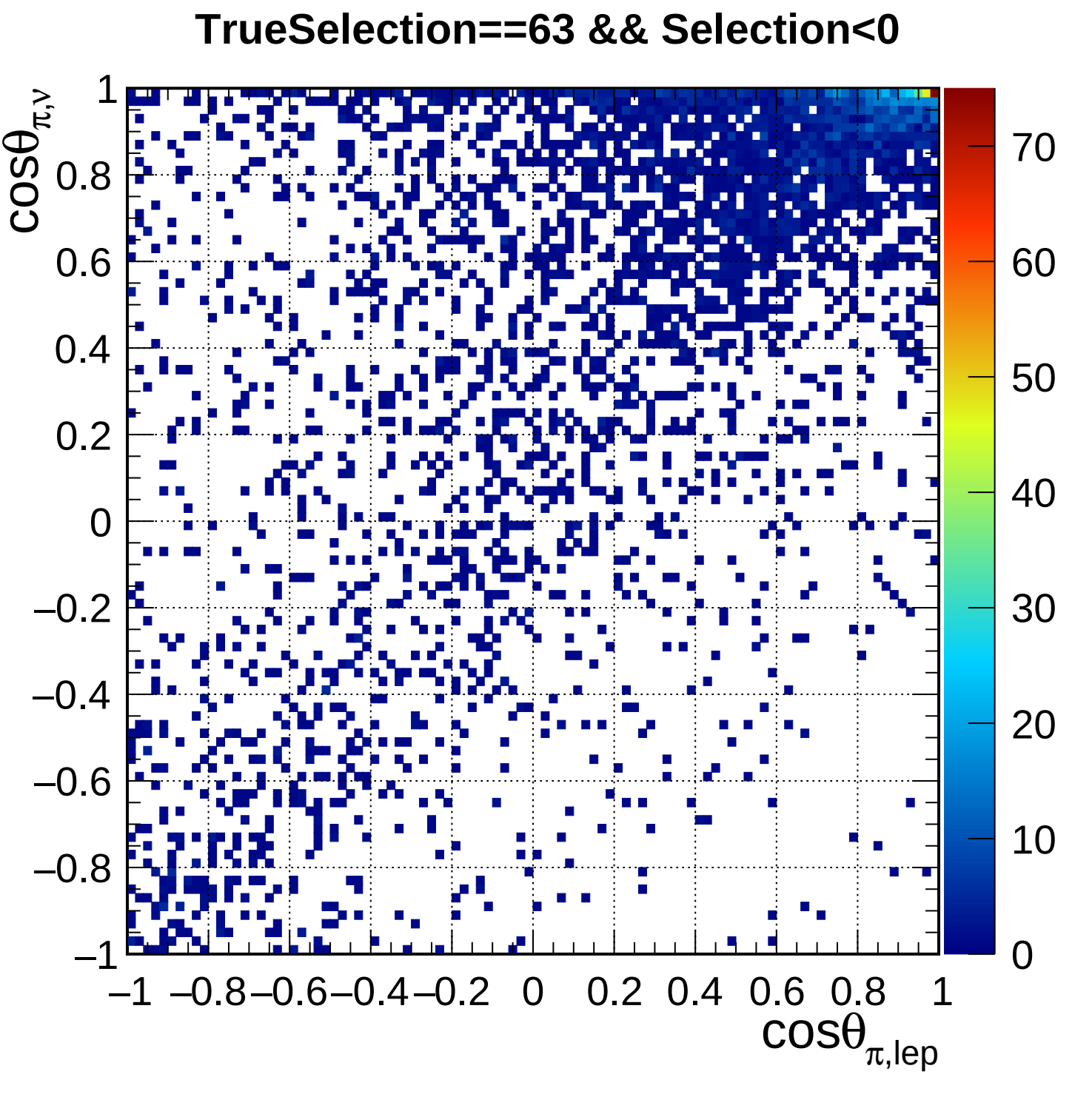

(TrueSelection==57 && Selection==62)/(TrueSelection==57)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

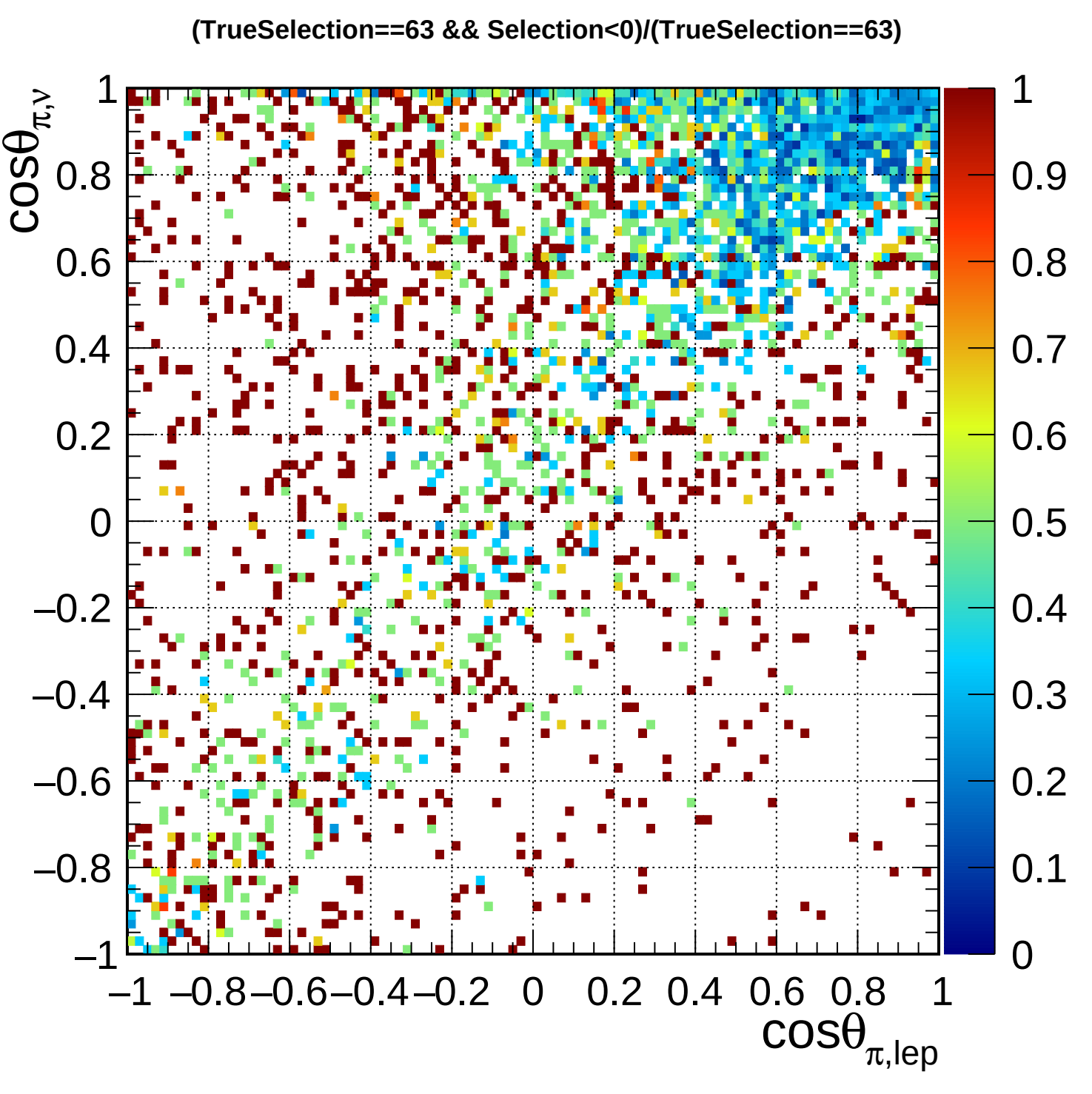

TrueSelection==57 && Selection==63
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
–1 –0.8 –0.6 –0.4 –0.2 0 0.2 0.4 0.6 0.8 1
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0

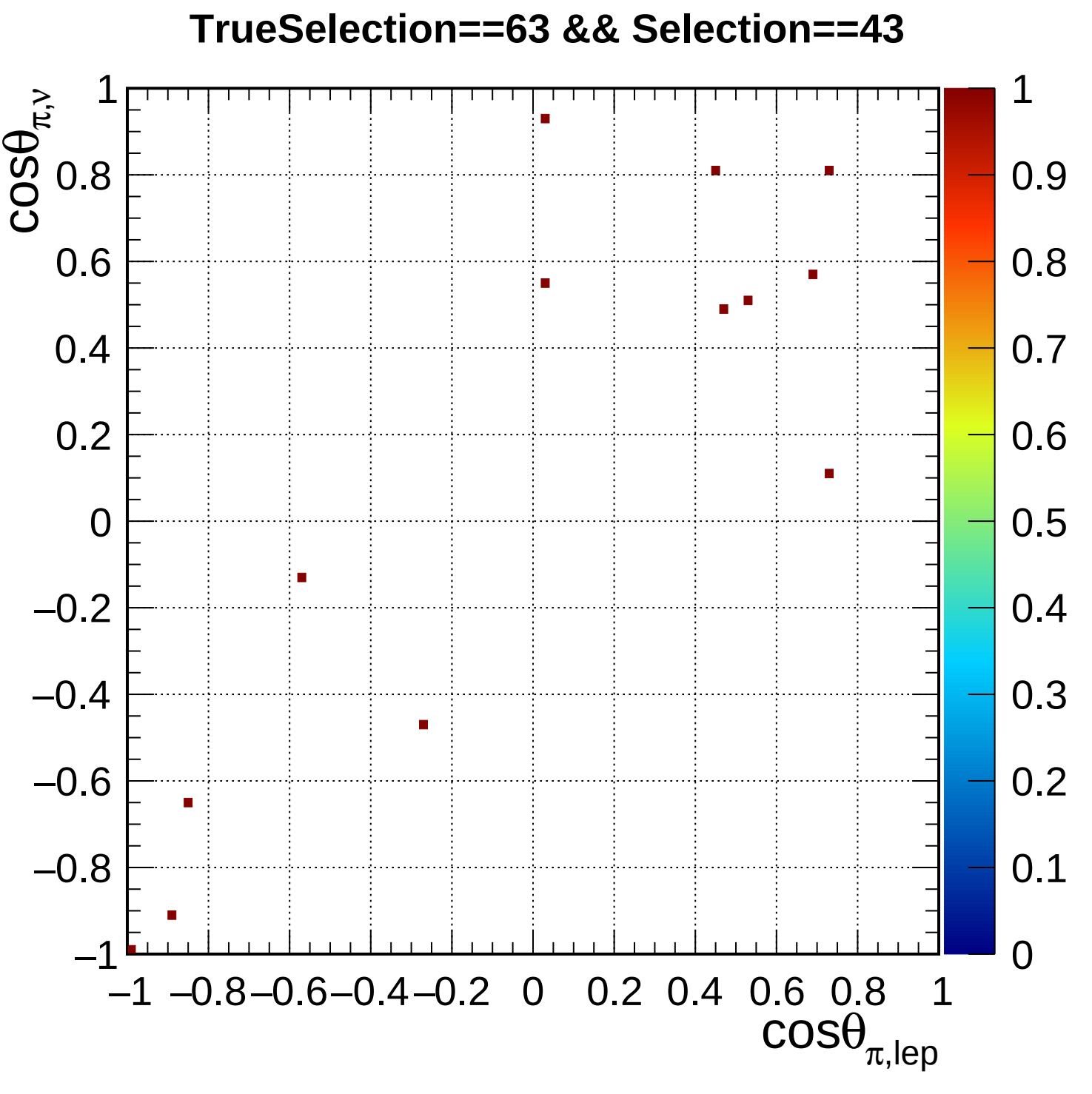

(TrueSelection==57 && Selection==63)/(TrueSelection==57)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

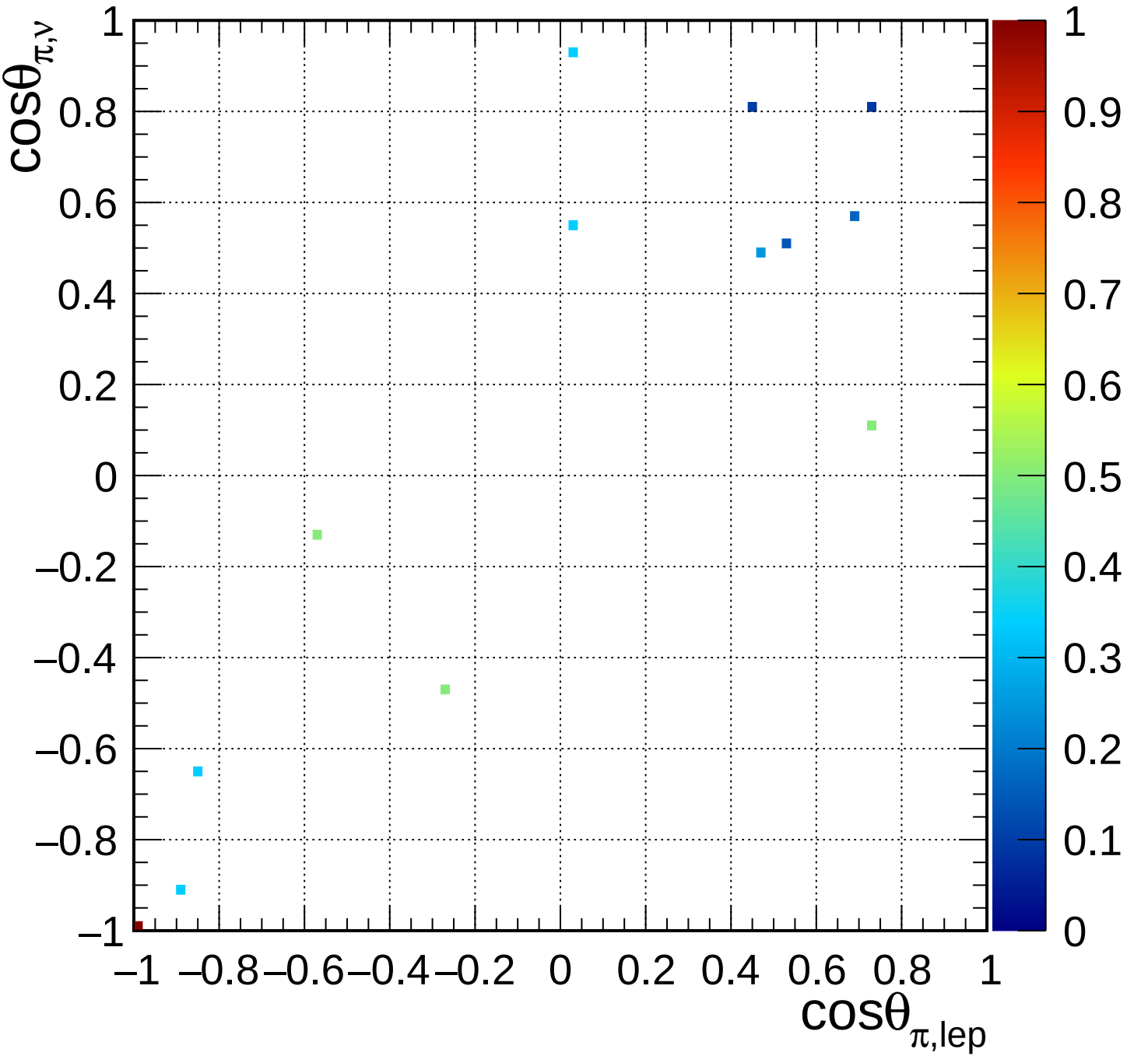

TrueSelection==57 && Selection>0
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
140
120
100
80
60
40
20
0

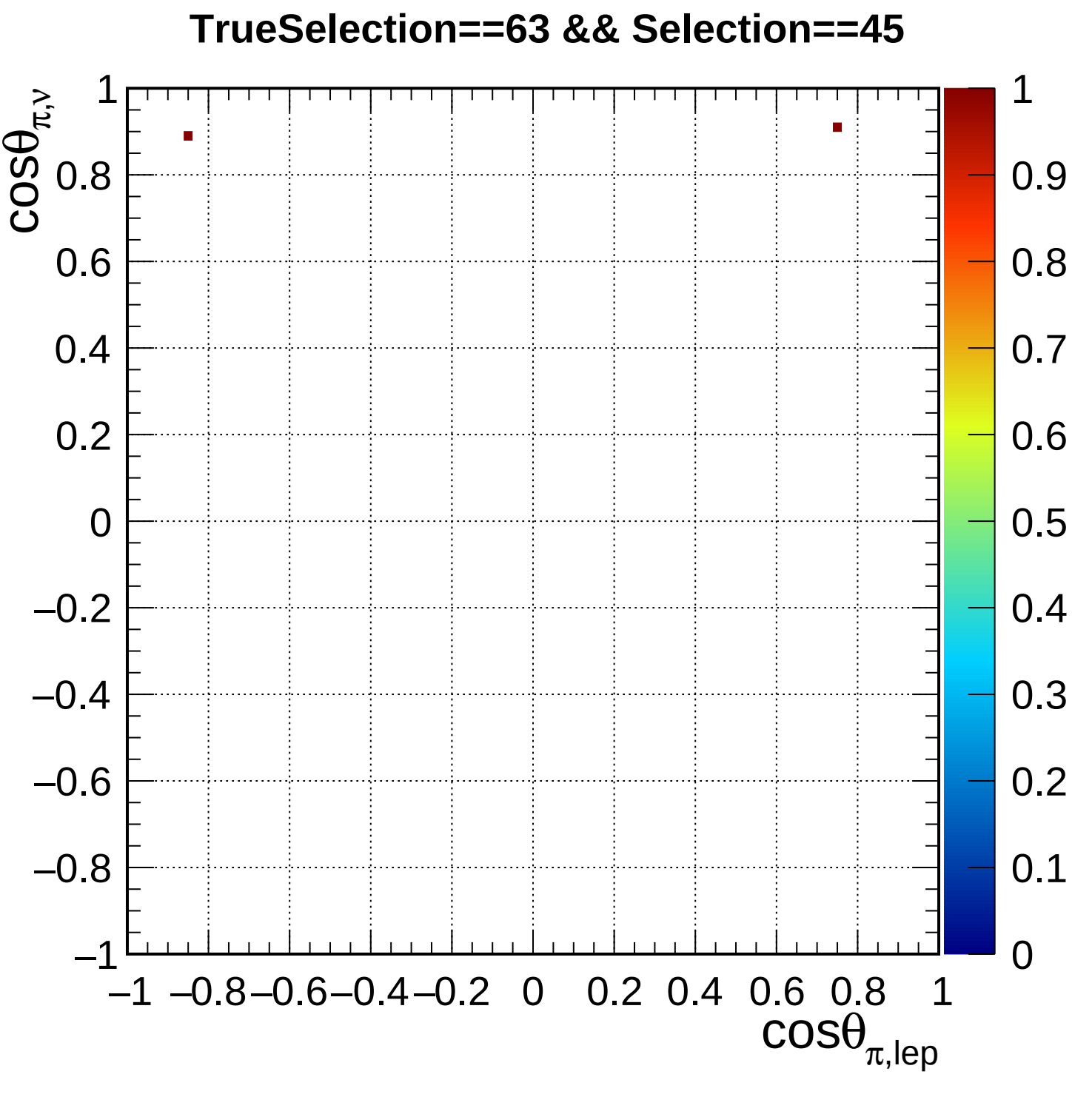

(TrueSelection==57 && Selection>0)/(TrueSelection==57)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

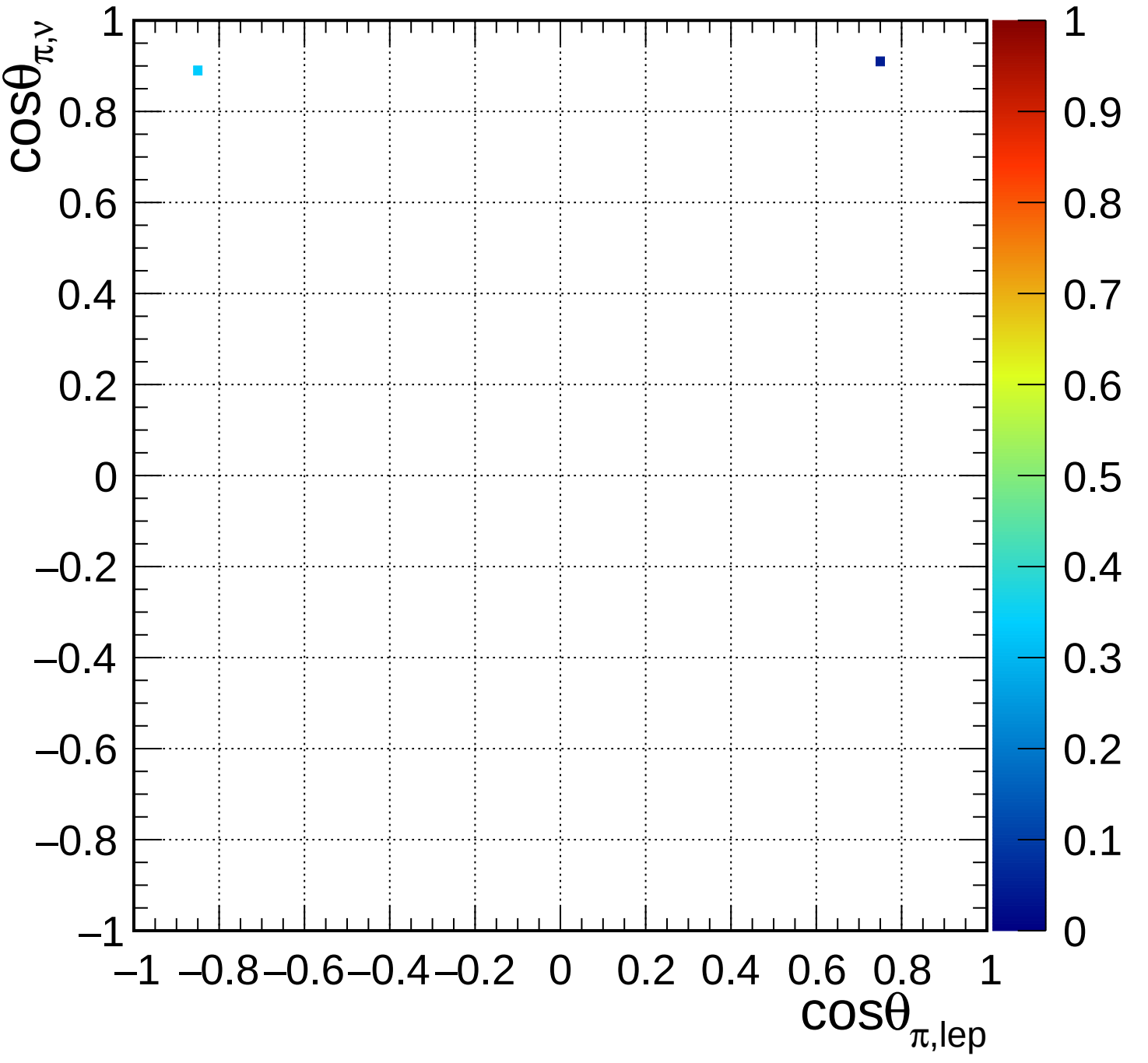

TrueSelection==63 && Selection<0
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
70
60
50
40
30
20
10
0

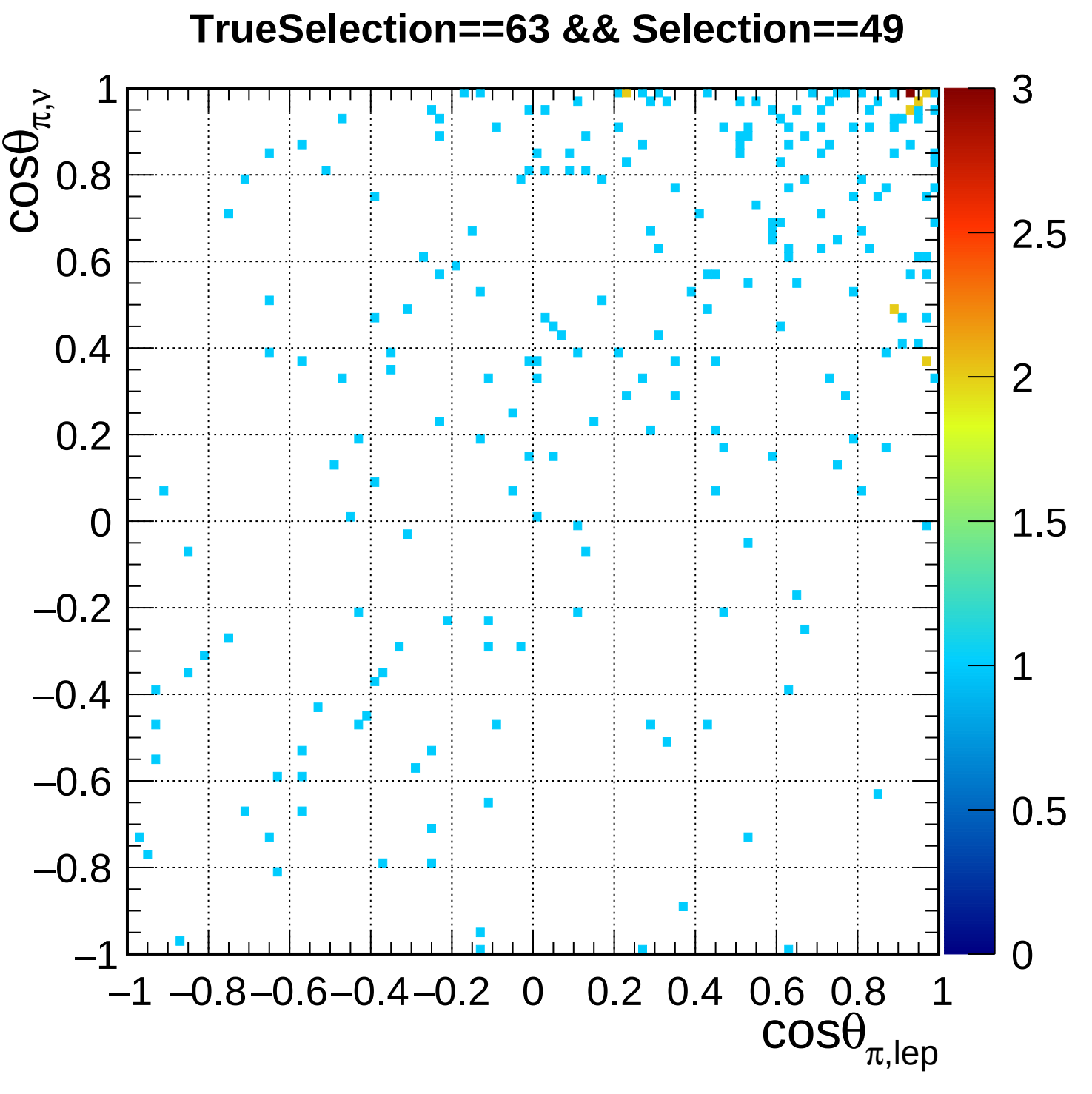

(TrueSelection==63 && Selection<0)/(TrueSelection==63)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

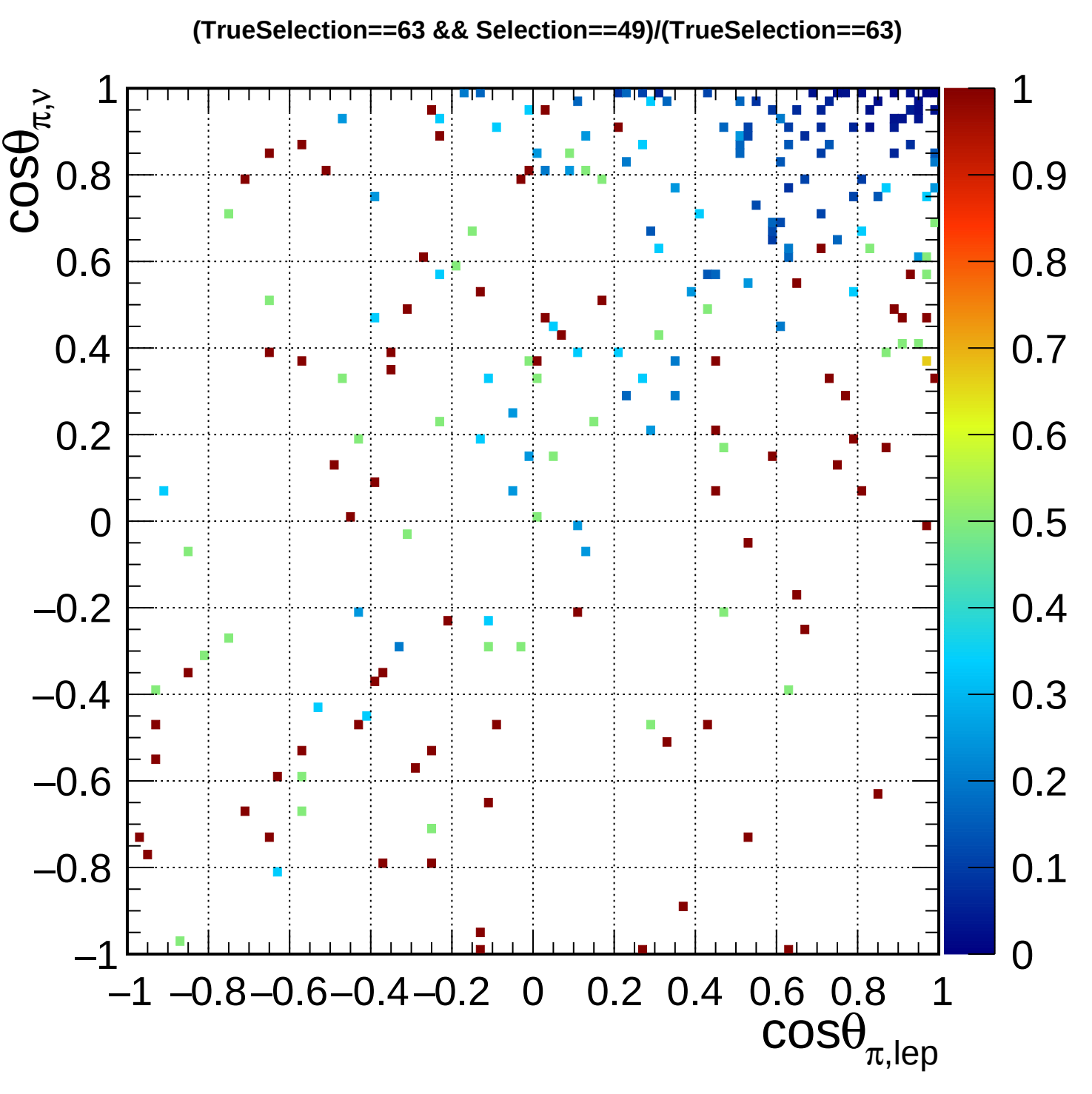

TrueSelection==63 && Selection==43
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

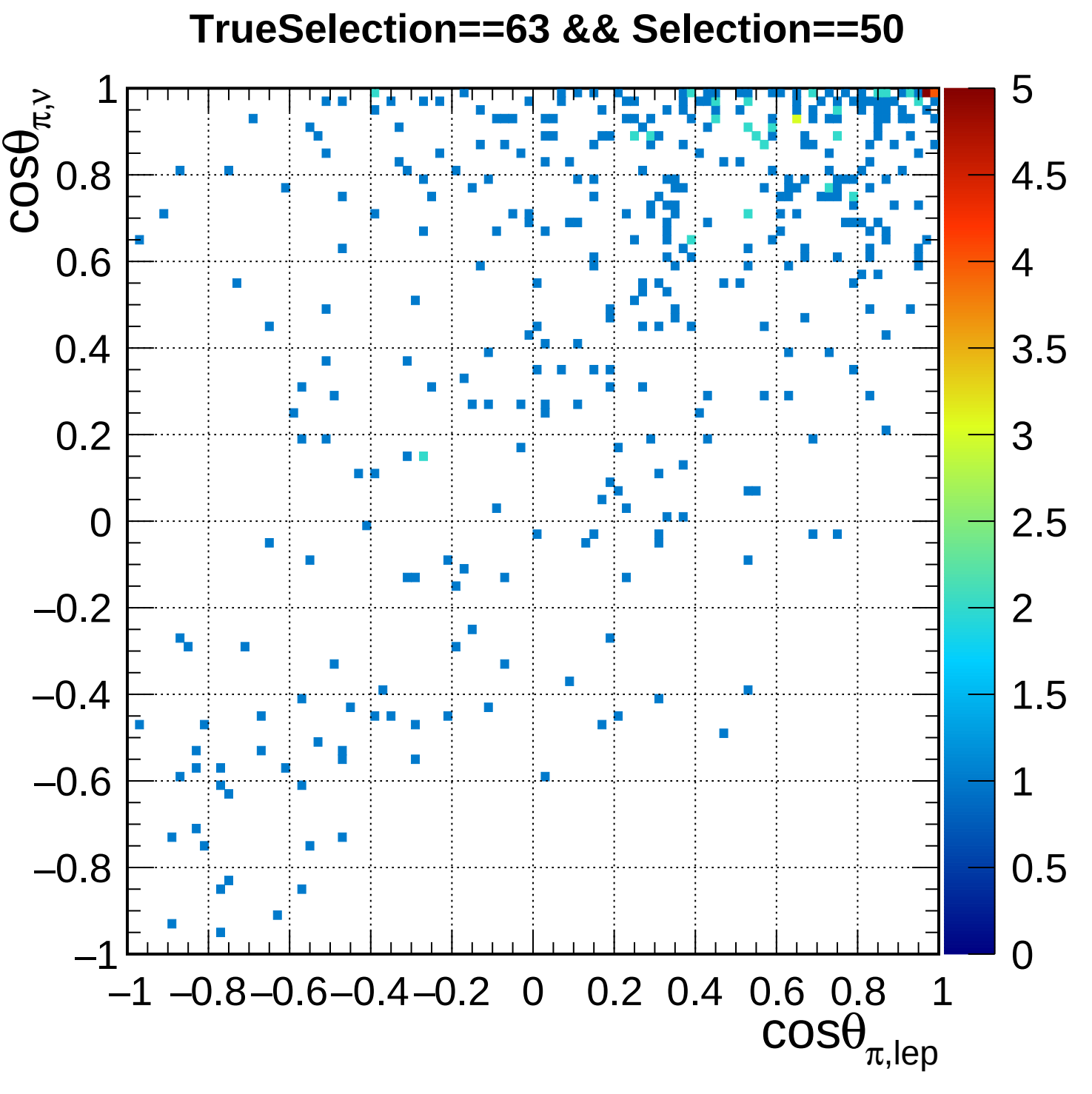

(TrueSelection==63 && Selection==43)/(TrueSelection==63)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

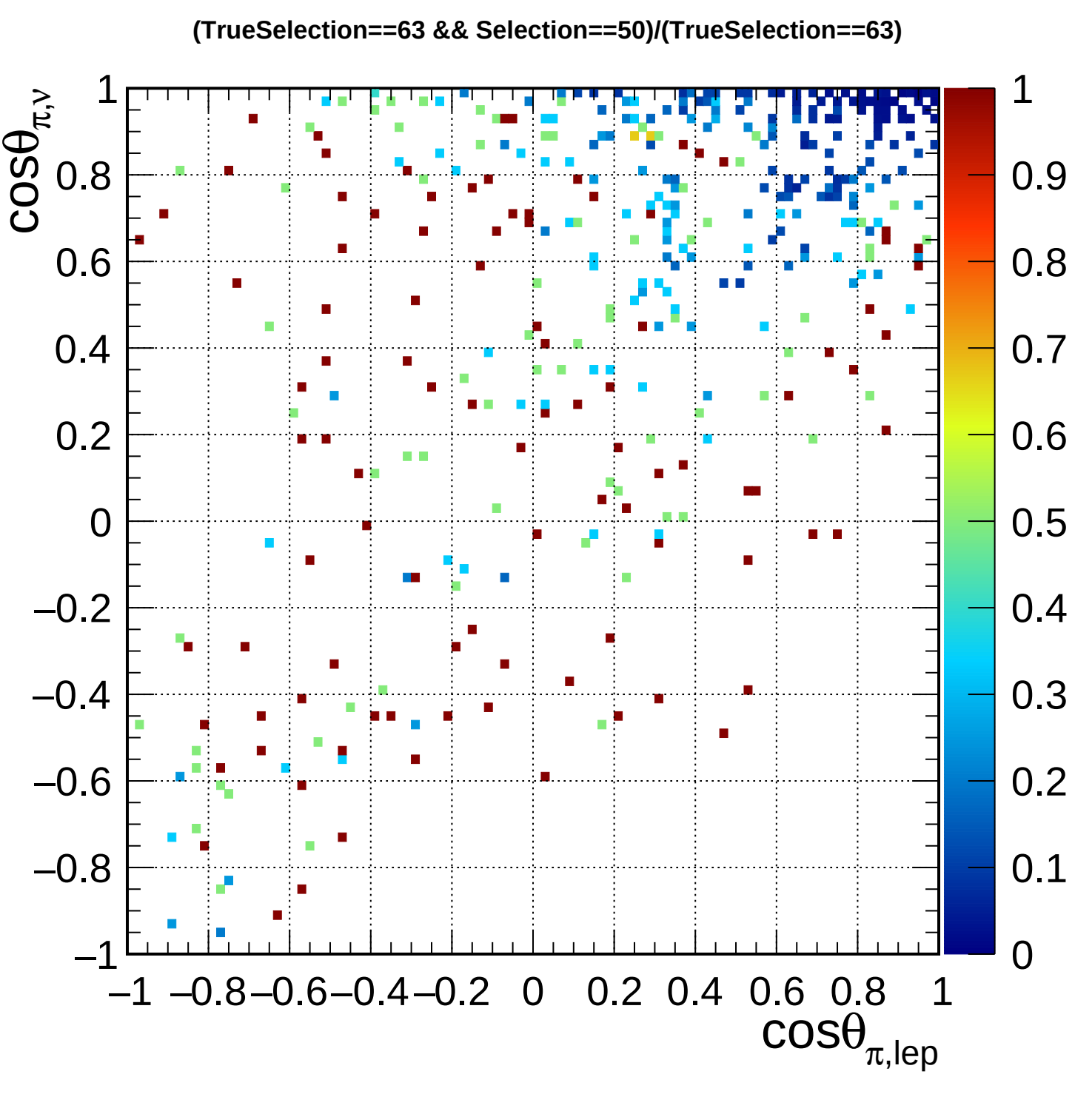

TrueSelection==63 && Selection==45
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

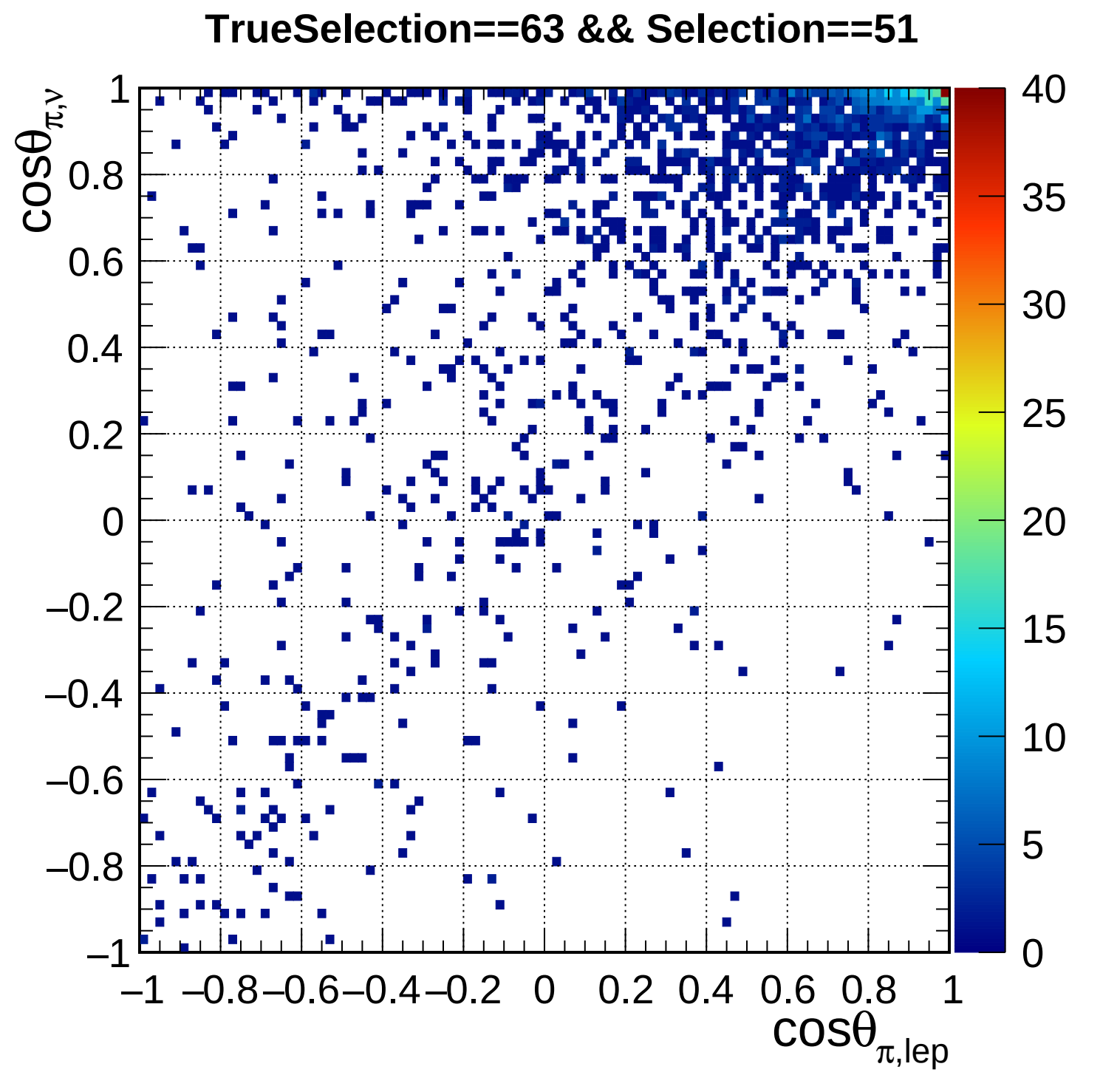

(TrueSelection==63 && Selection==45)/(TrueSelection==63)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

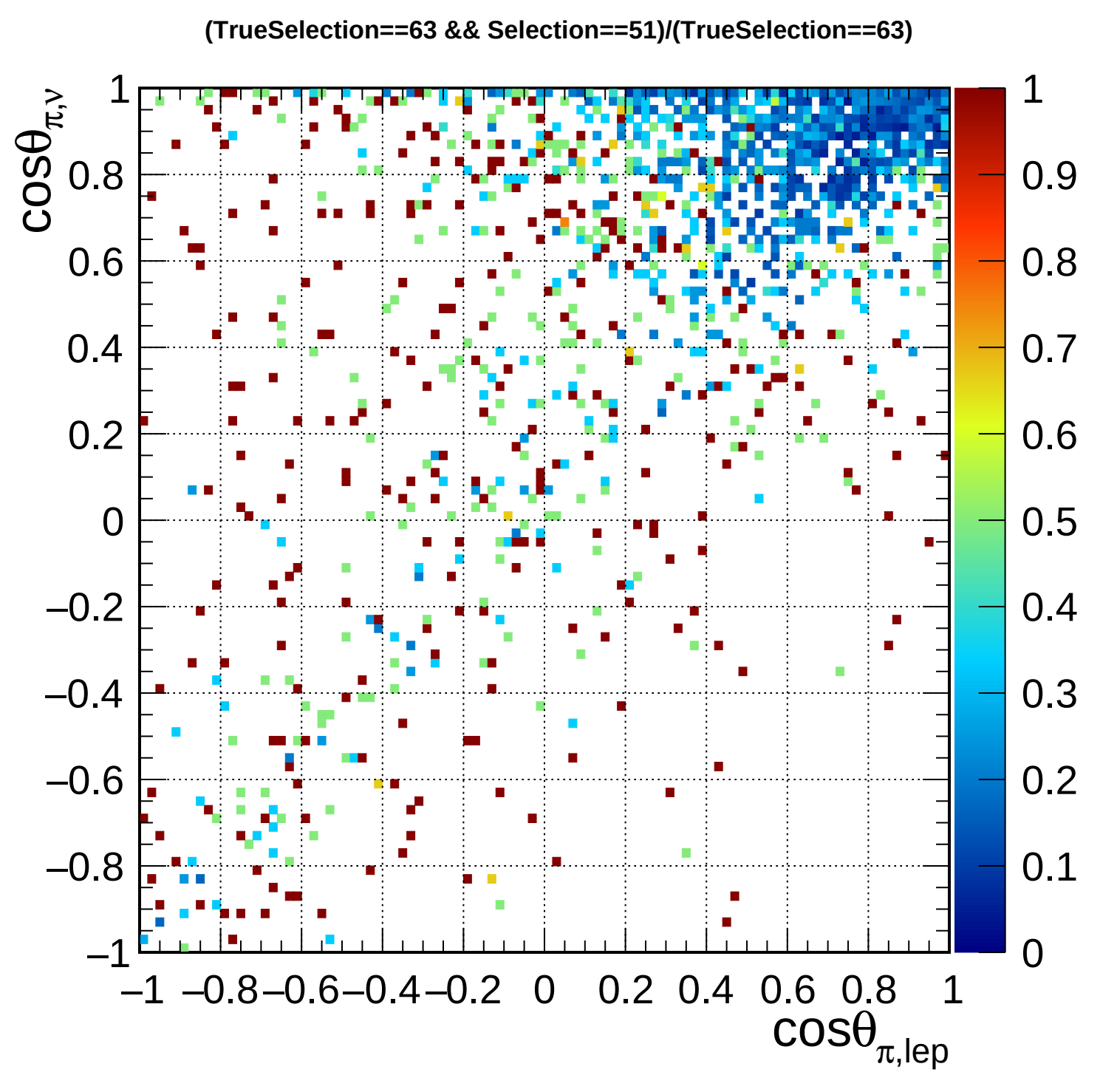

TrueSelection==63 && Selection==49
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
3
2.5
2
1.5
1
0.5
0

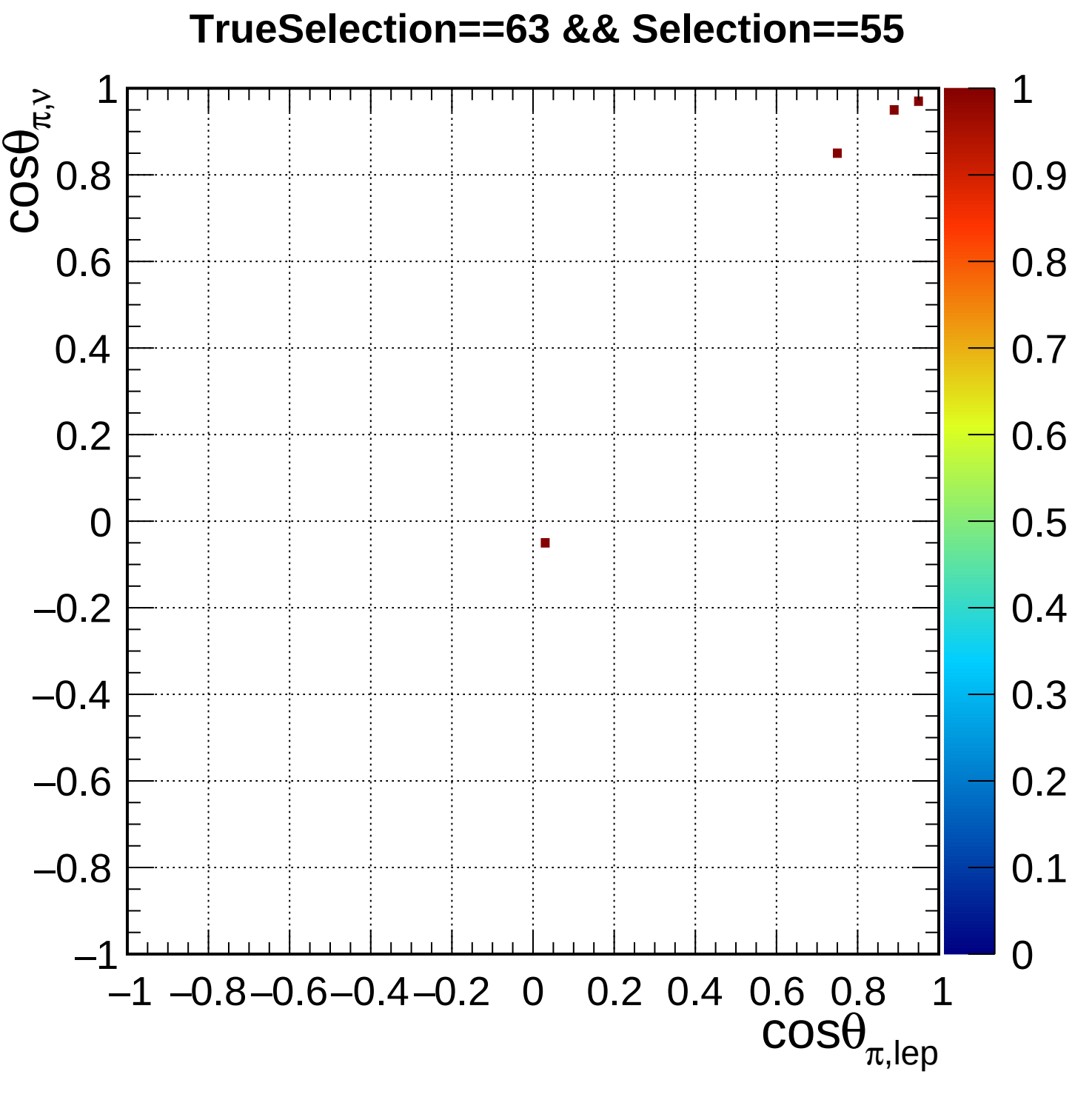

(TrueSelection==63 && Selection==49)/(TrueSelection==63)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

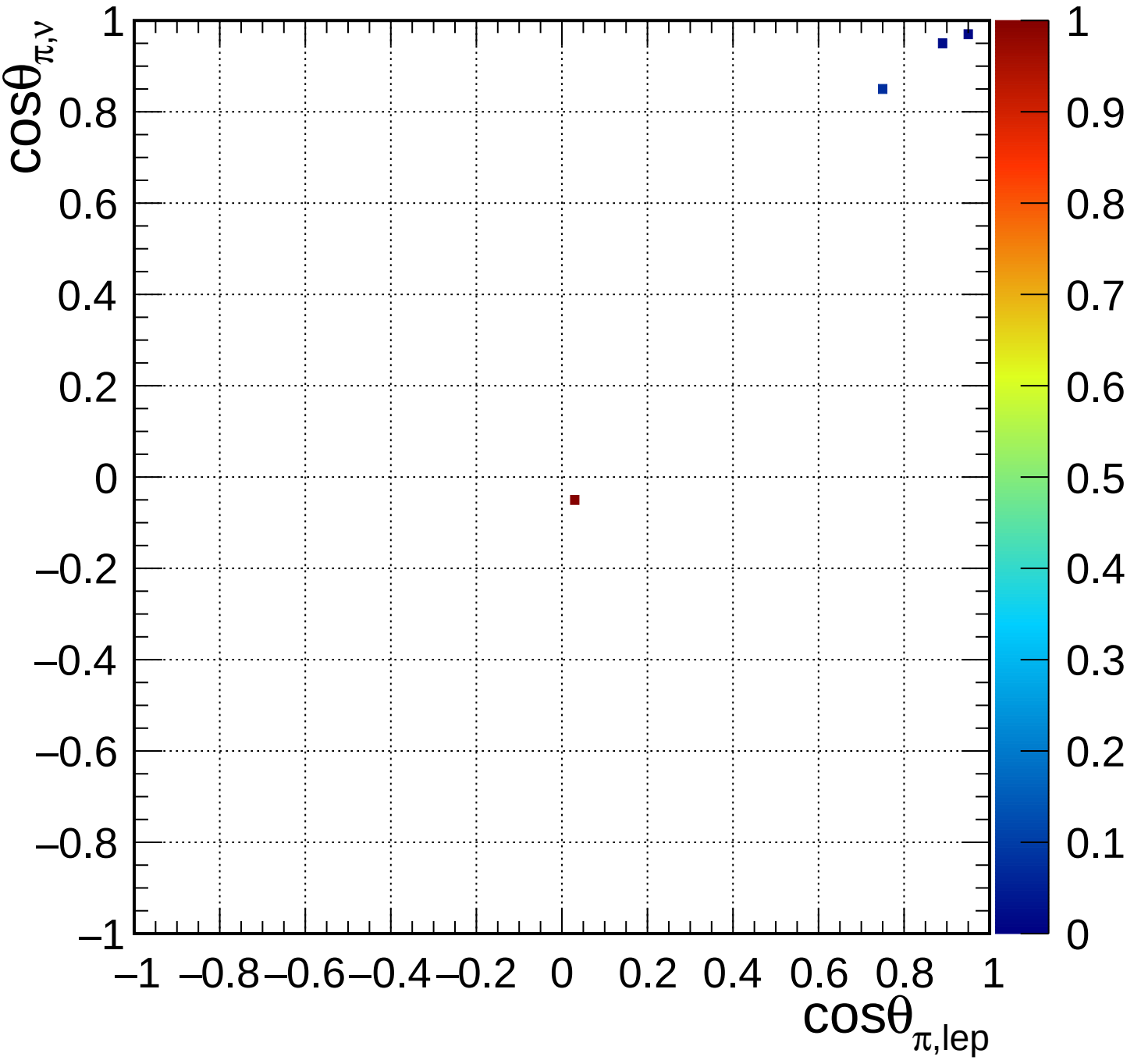

TrueSelection==63 && Selection==50
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0

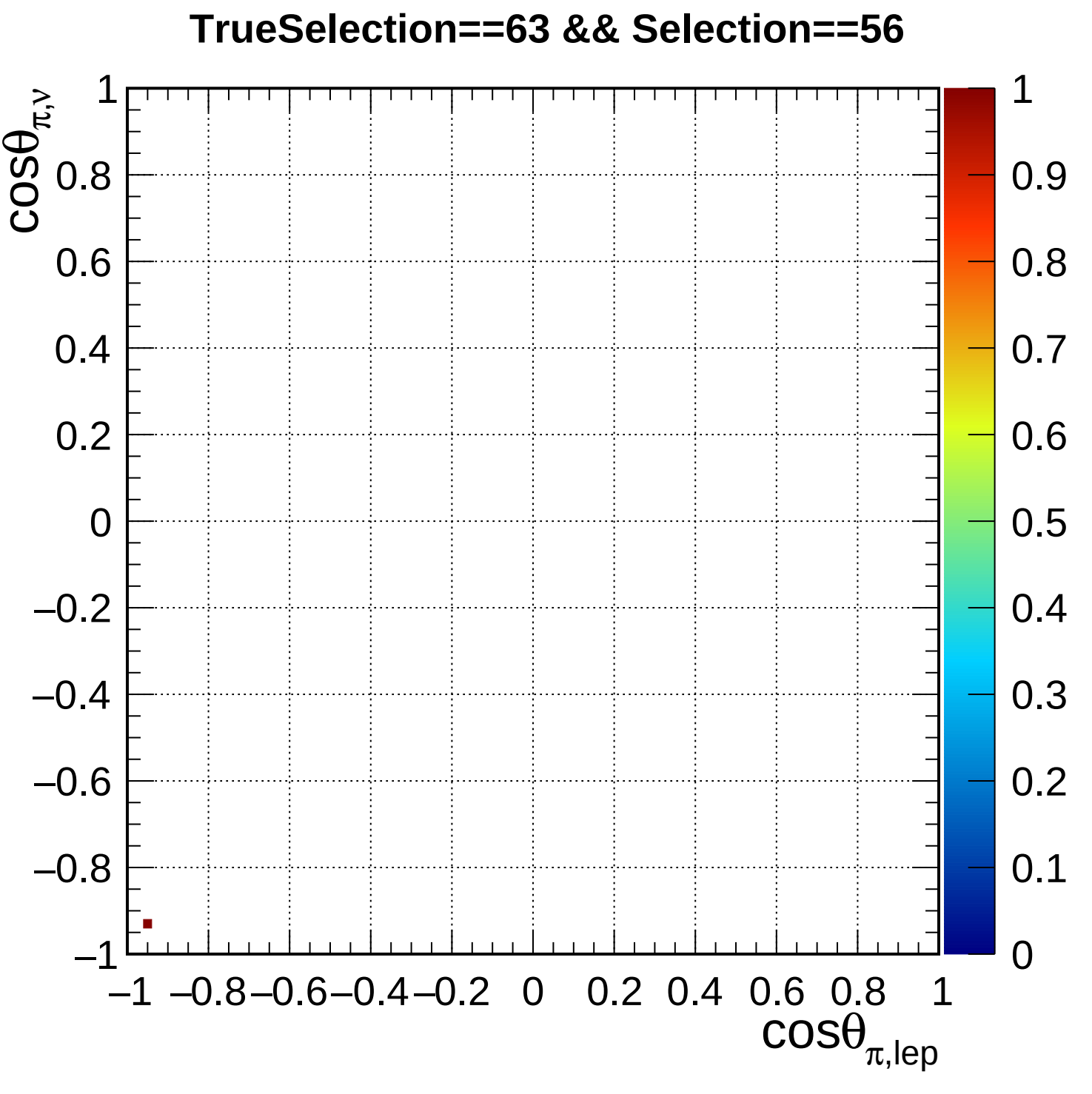

(TrueSelection==63 && Selection==50)/(TrueSelection==63)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

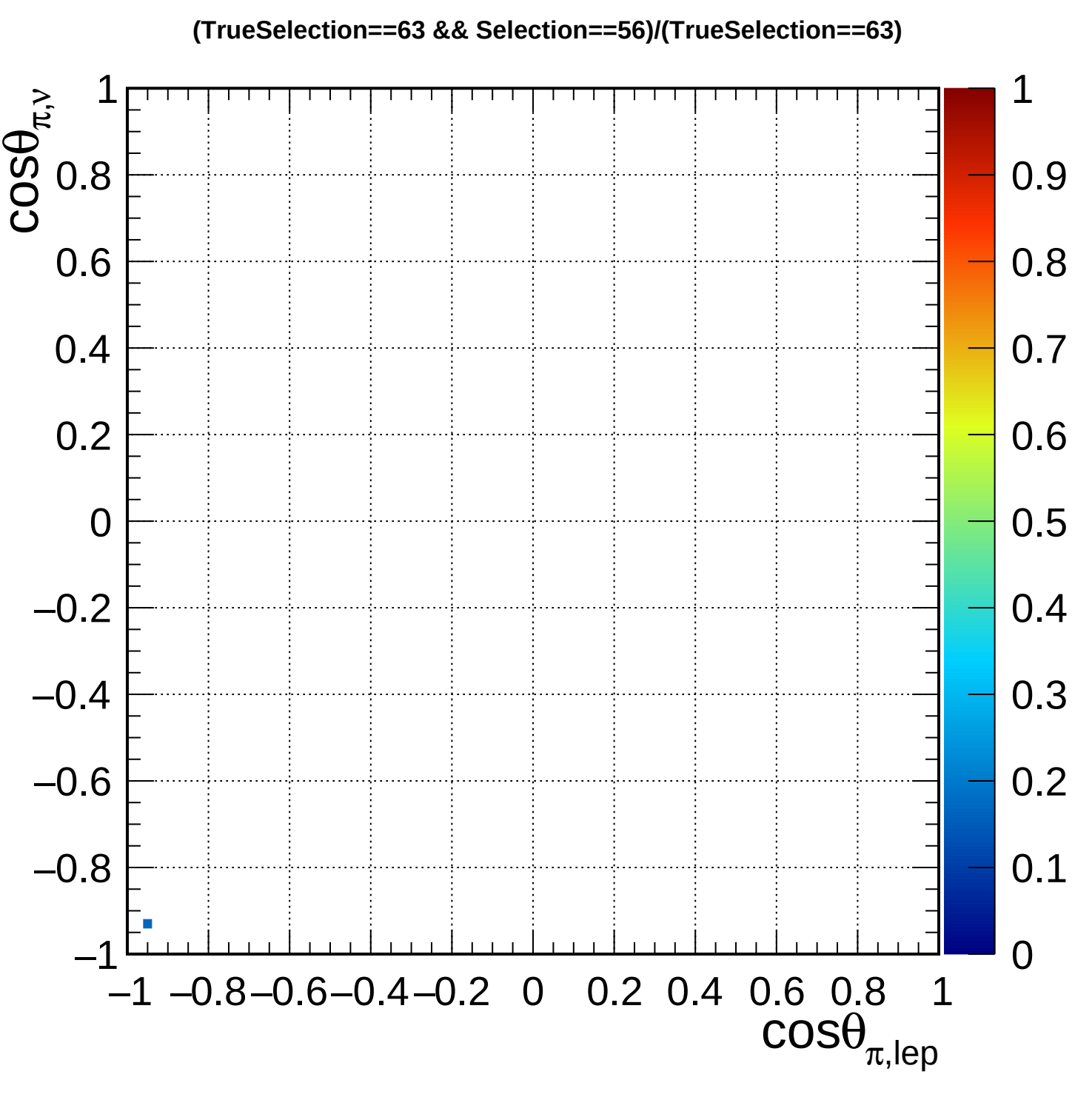

TrueSelection==63 && Selection==51
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
–1 –0.8 –0.6 –0.4 –0.2 0 0.2 0.4 0.6 0.8 1
40
35
30
25
20
15
10
5
0

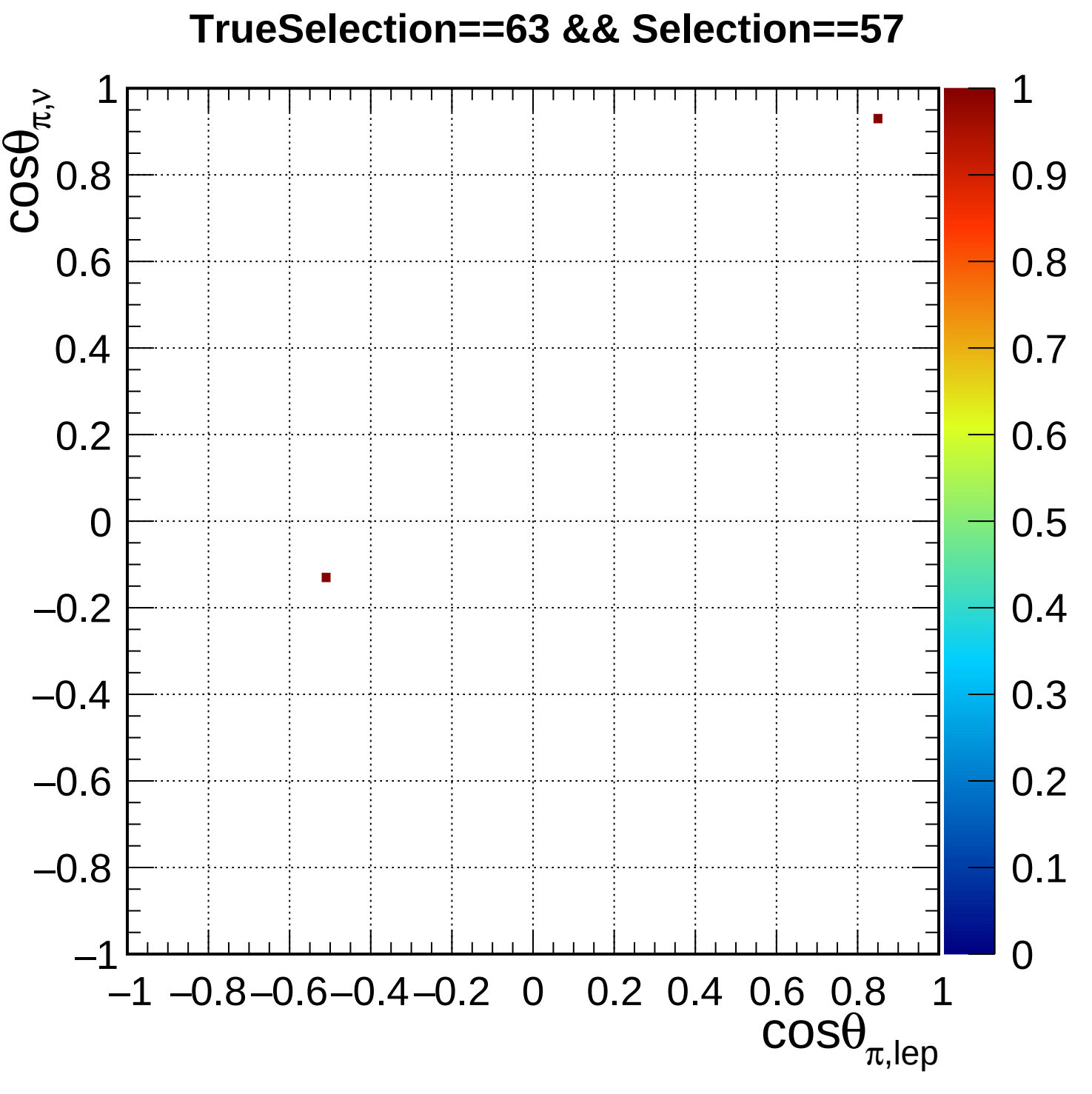

(TrueSelection==63 && Selection==51)/(TrueSelection==63)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

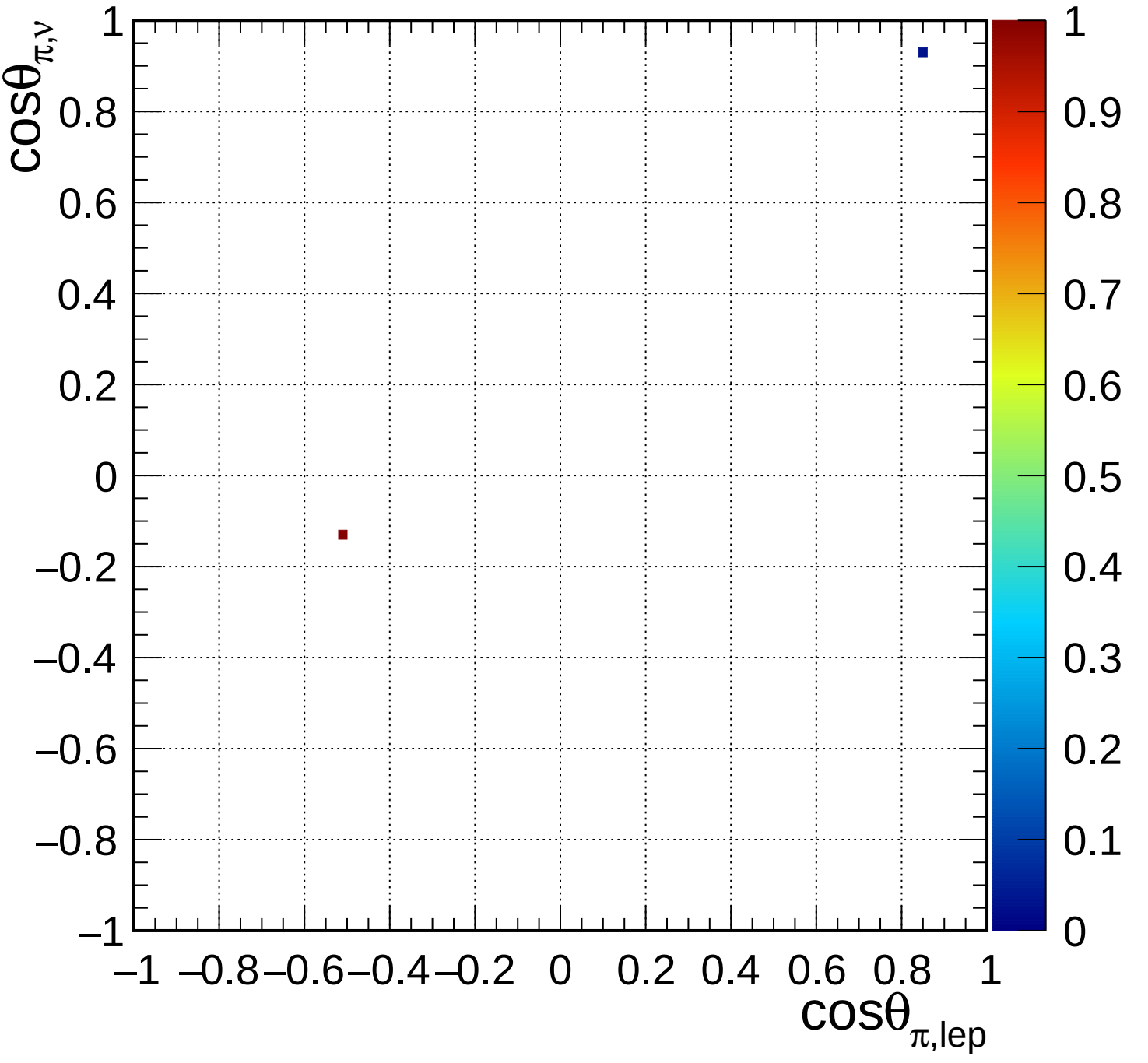

TrueSelection==63 && Selection==55
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

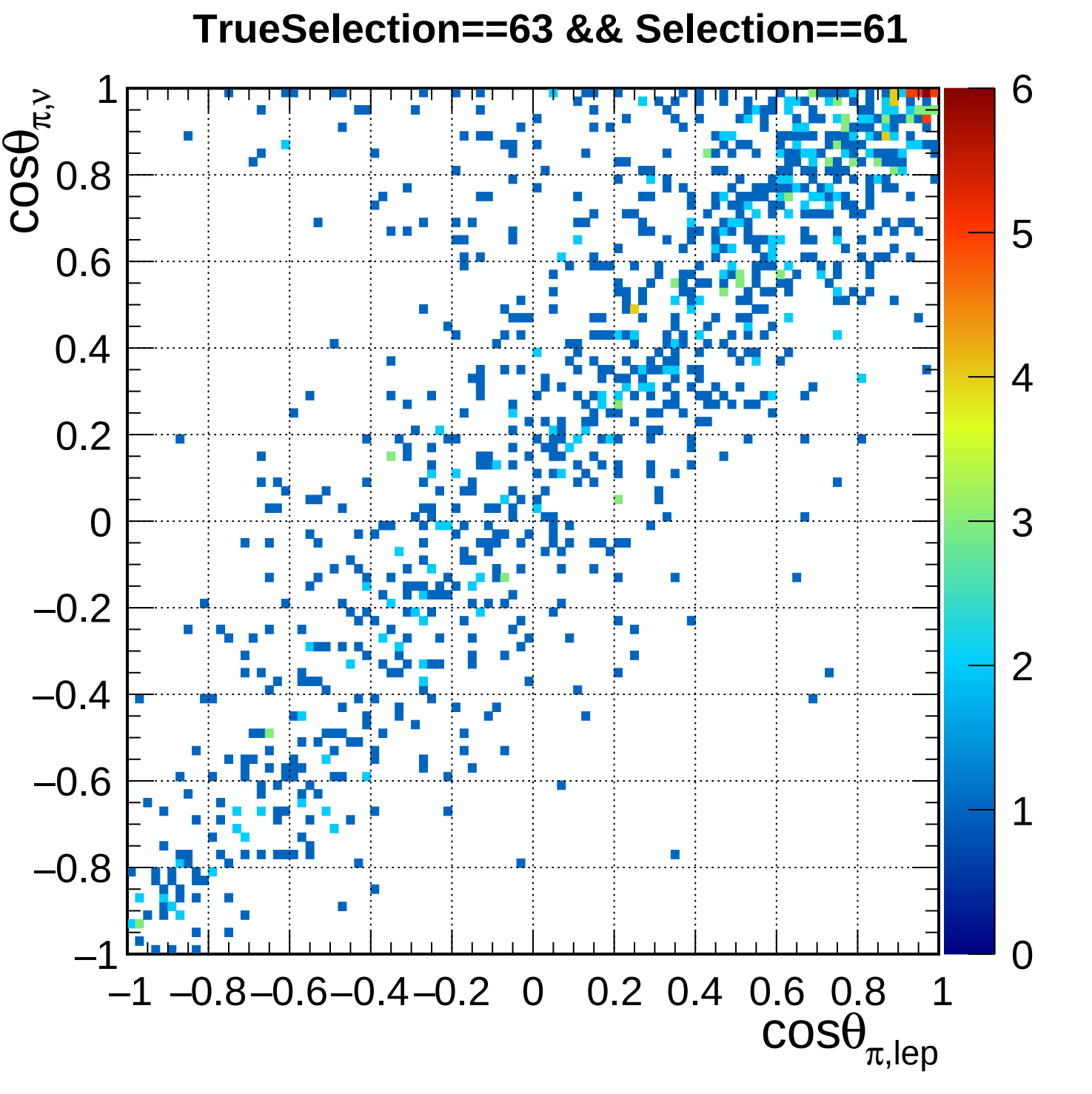

(TrueSelection==63 && Selection==55)/(TrueSelection==63)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

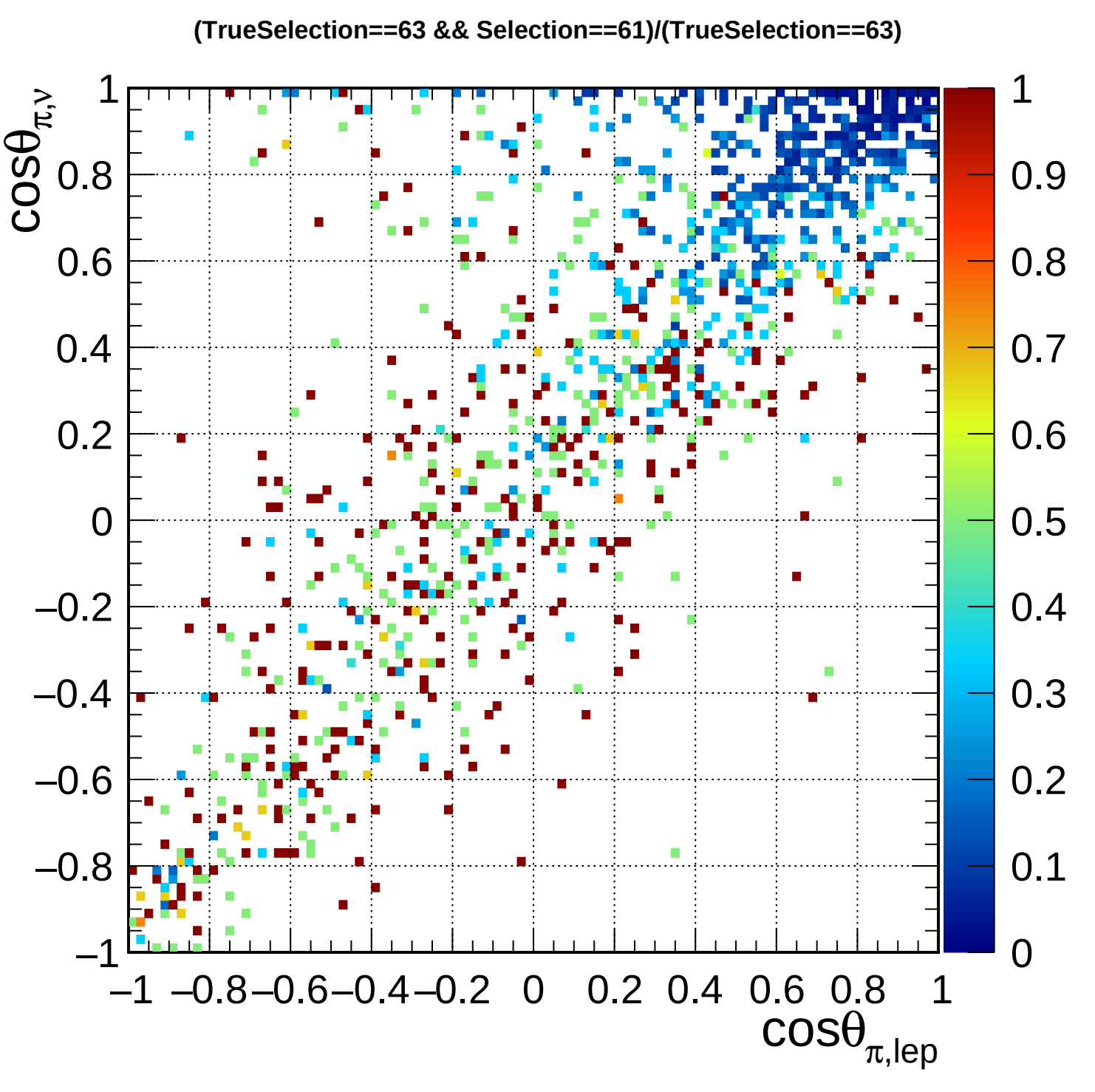

TrueSelection==63 && Selection==56
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

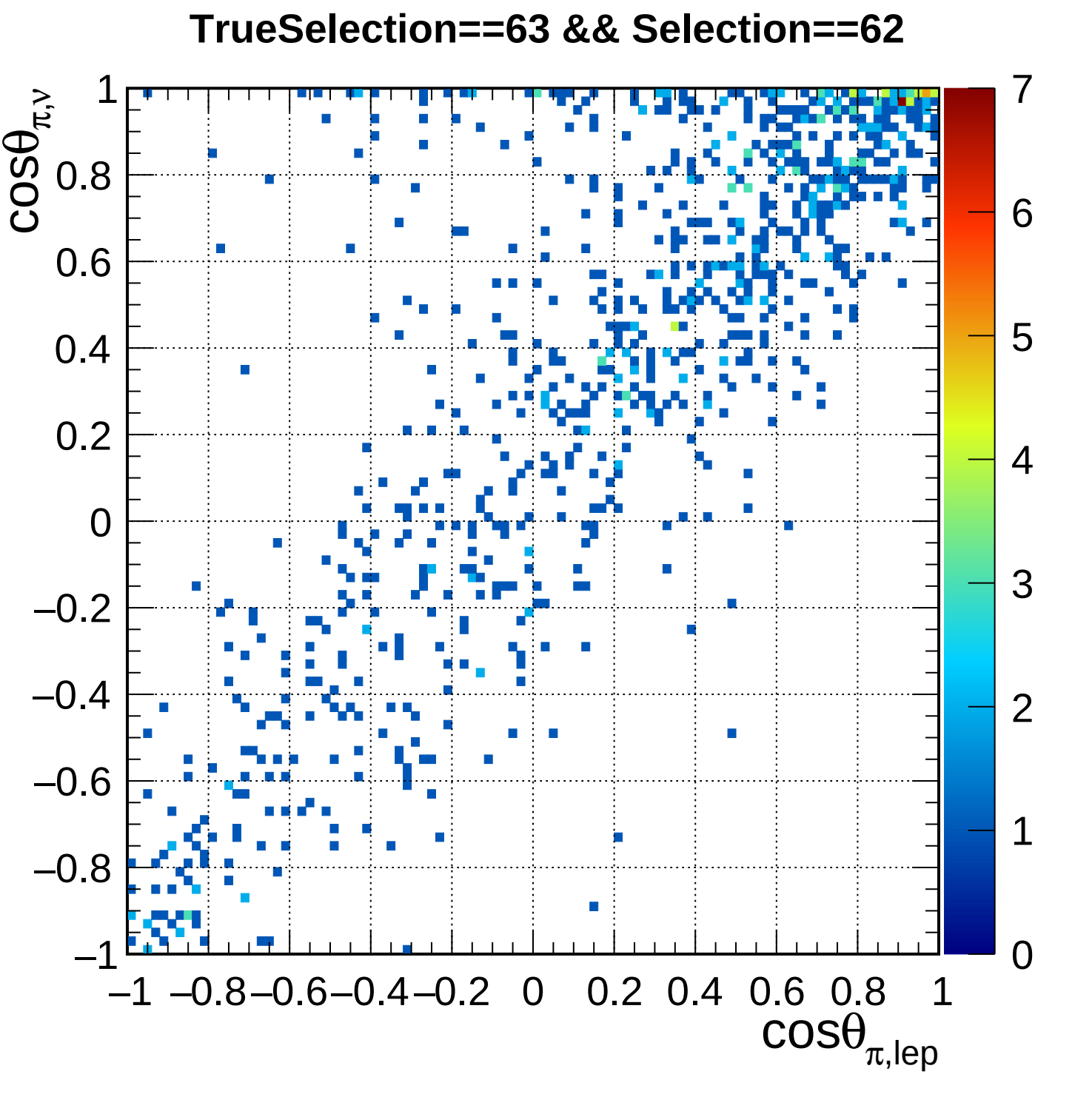

(TrueSelection==63 && Selection==56)/(TrueSelection==63)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

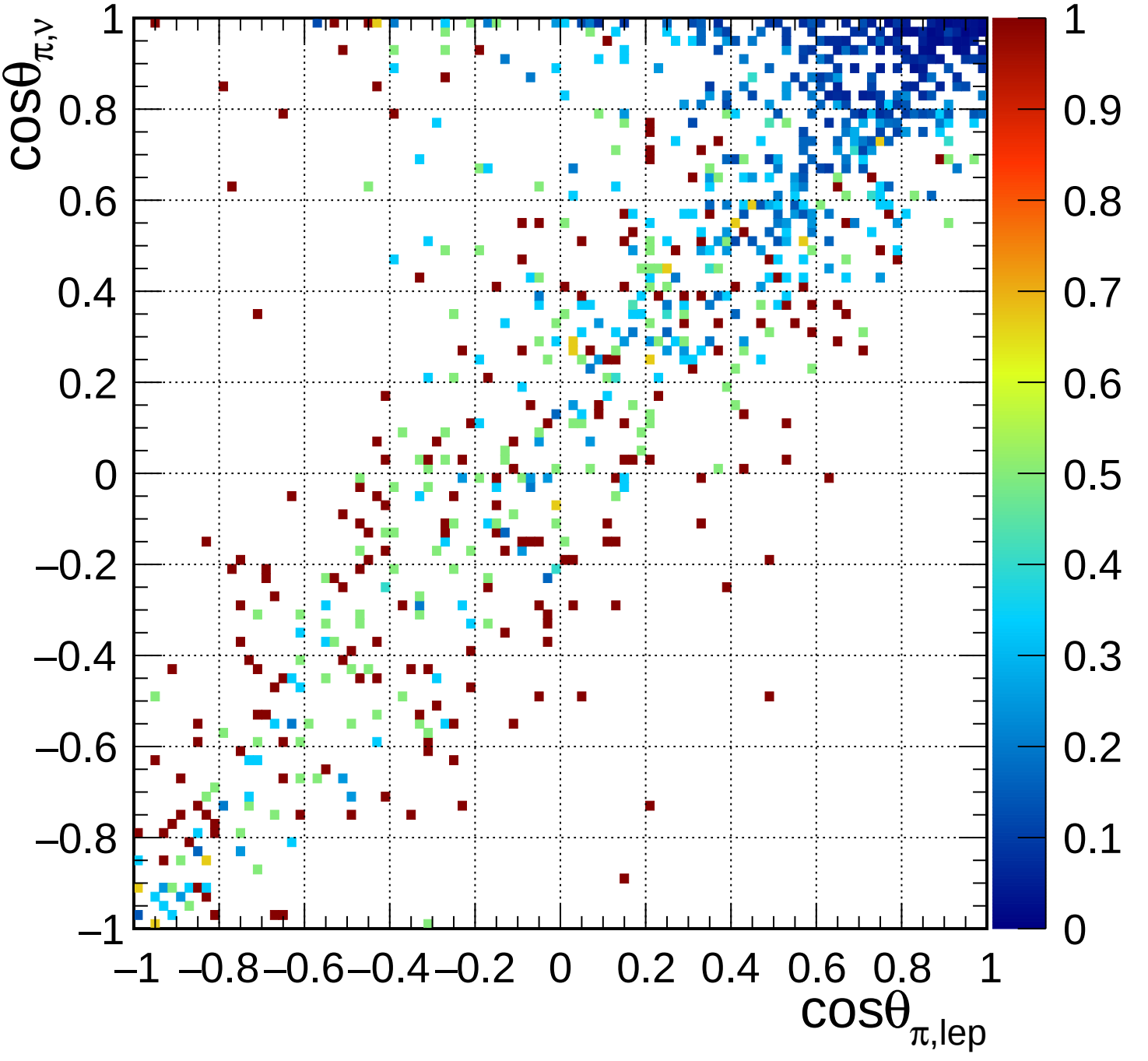

TrueSelection==63 && Selection==57
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

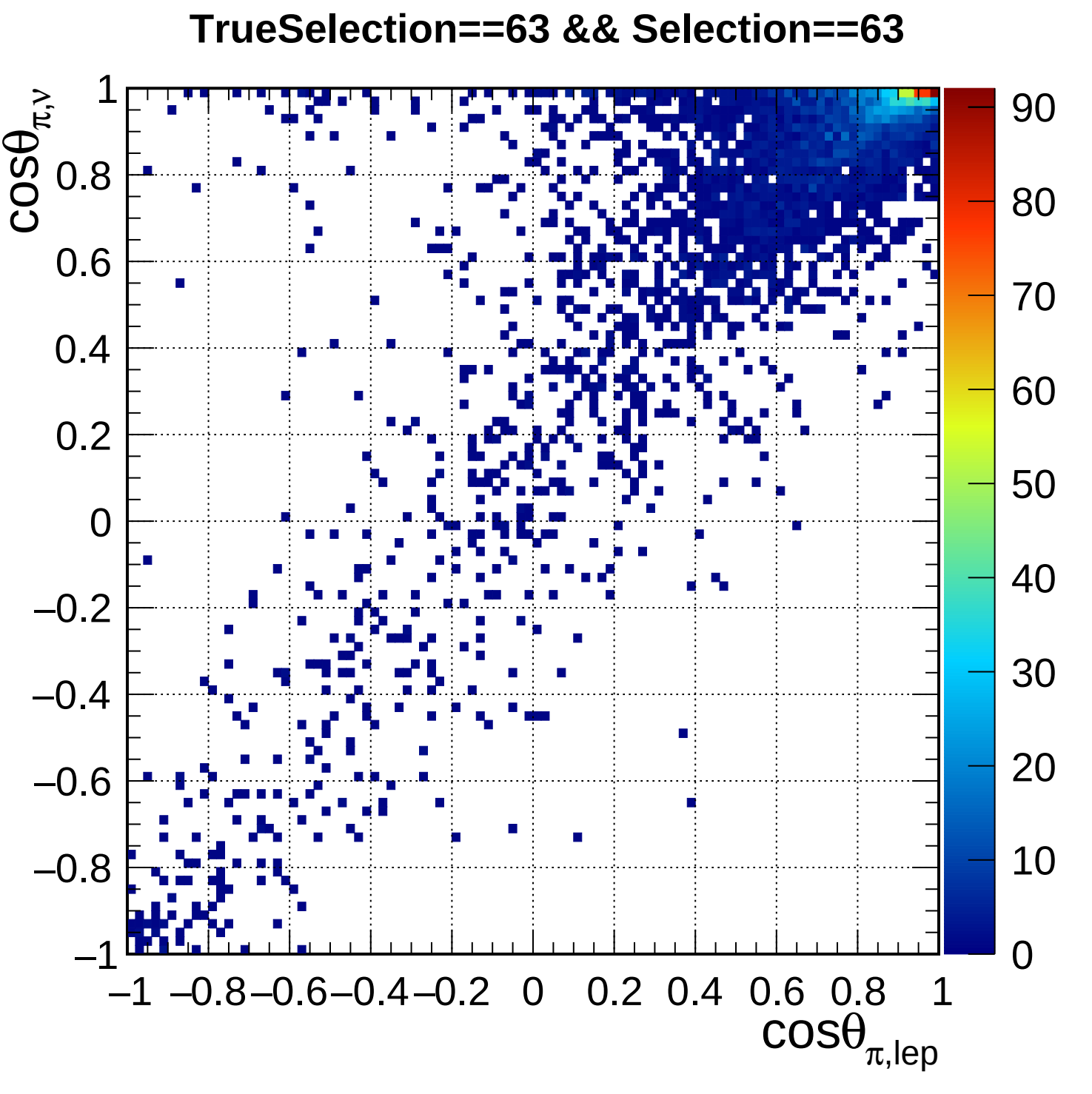

(TrueSelection==63 && Selection==57)/(TrueSelection==63)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

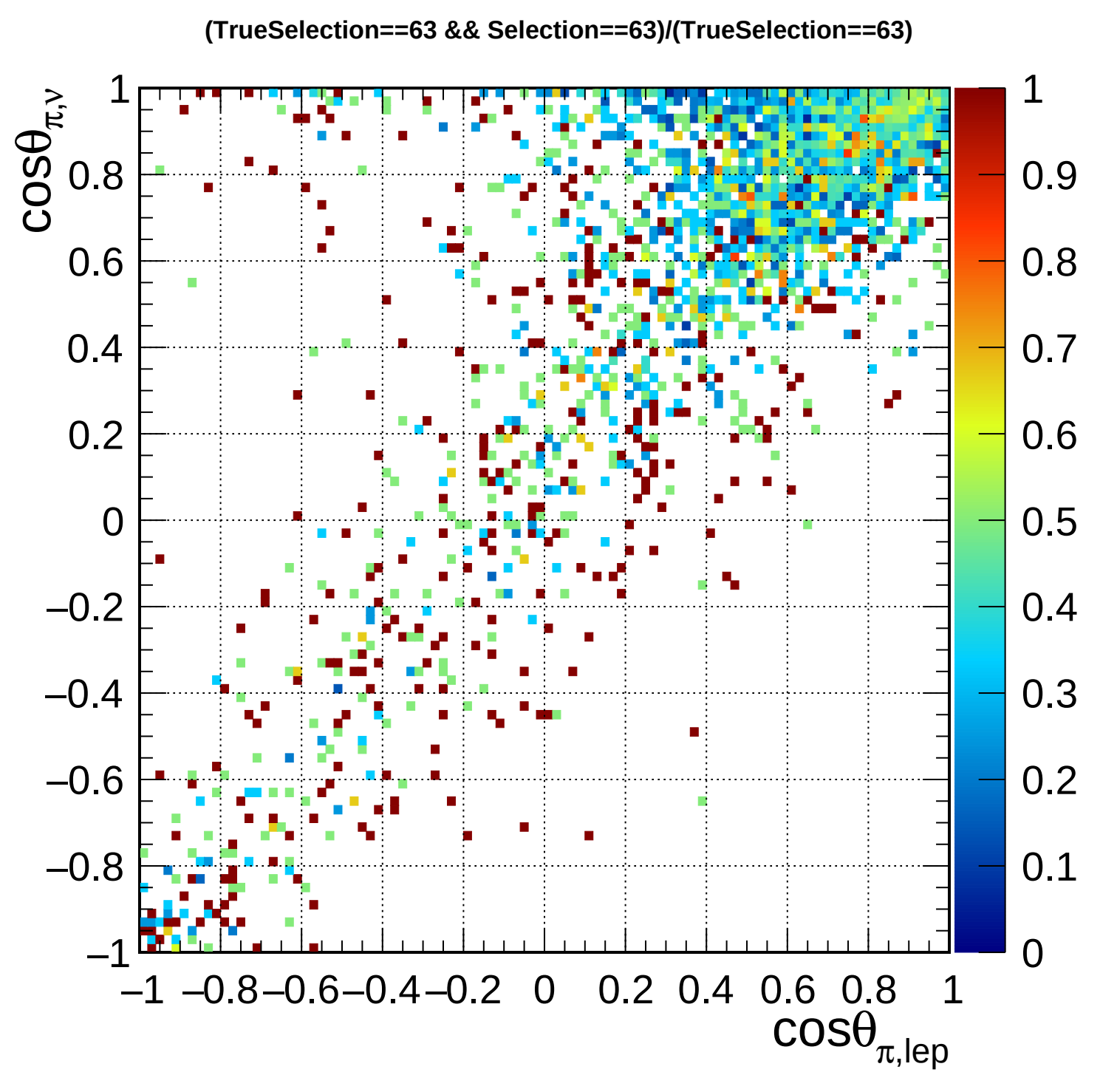

TrueSelection==63 && Selection==61
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
6
5
4
3
2
1
0

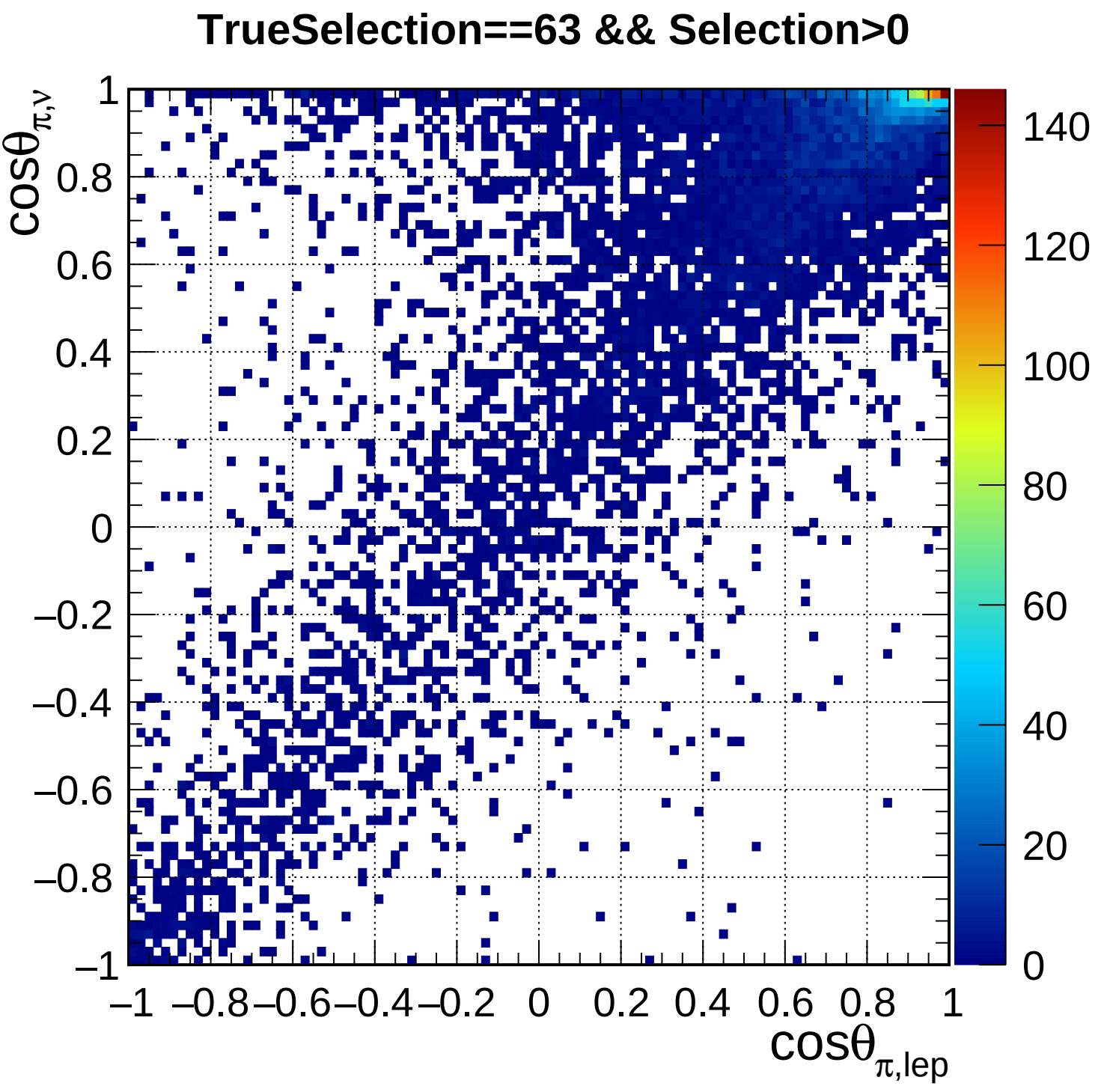

(TrueSelection==63 && Selection==61)/(TrueSelection==63)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

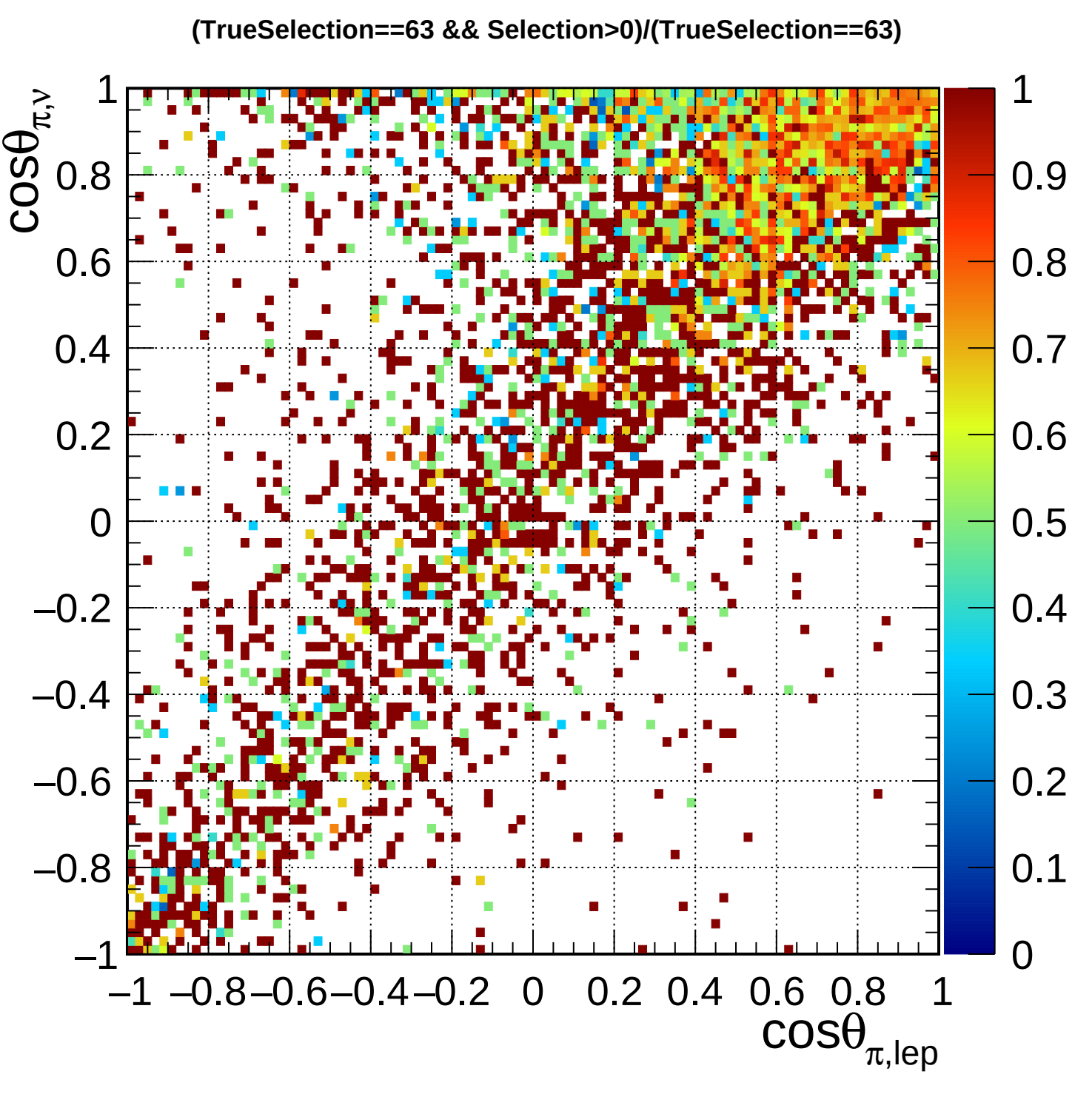

TrueSelection==63 && Selection==62
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
7
6
5
4
3
2
1
0

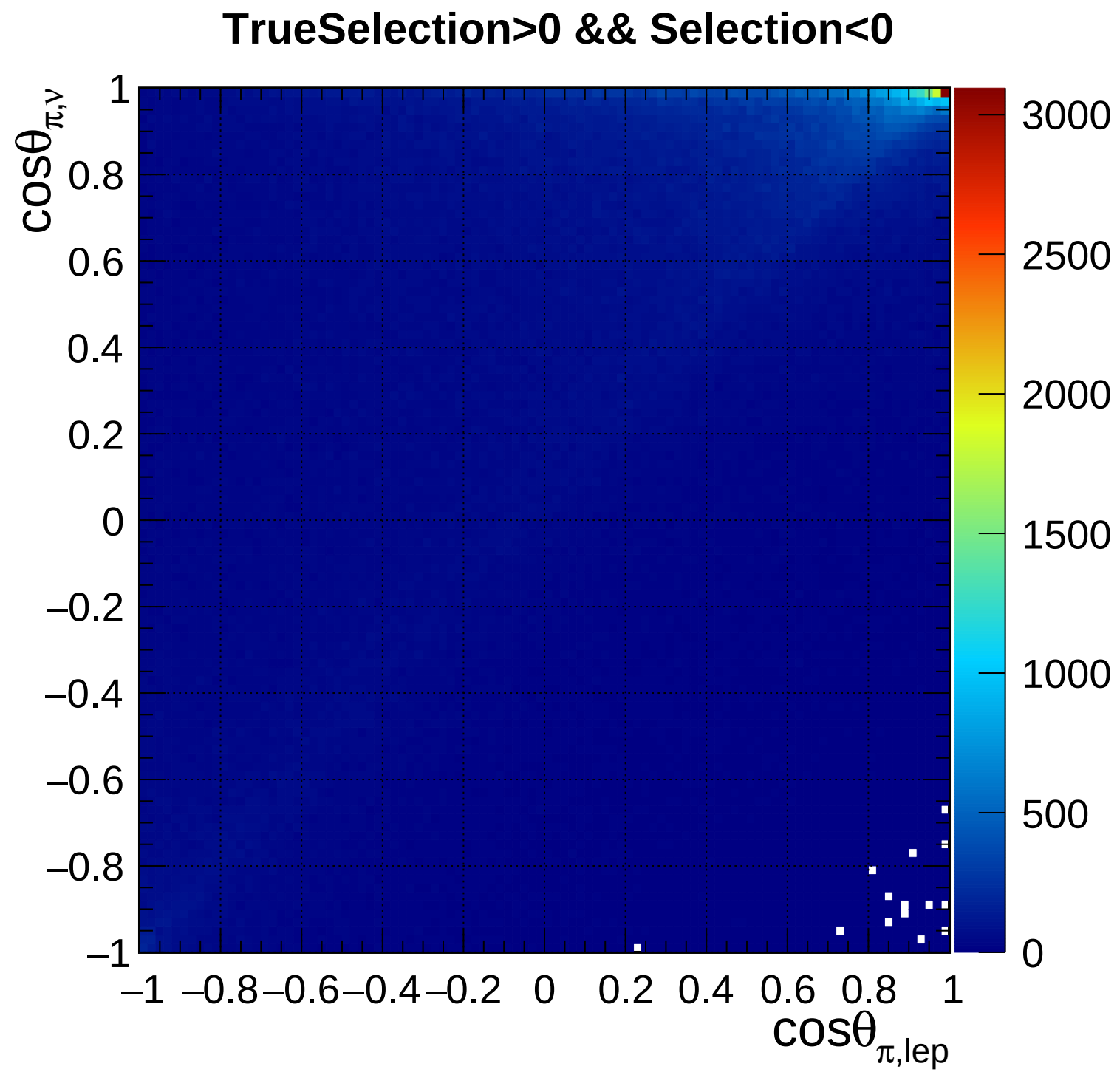

(TrueSelection==63 && Selection==62)/(TrueSelection==63)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

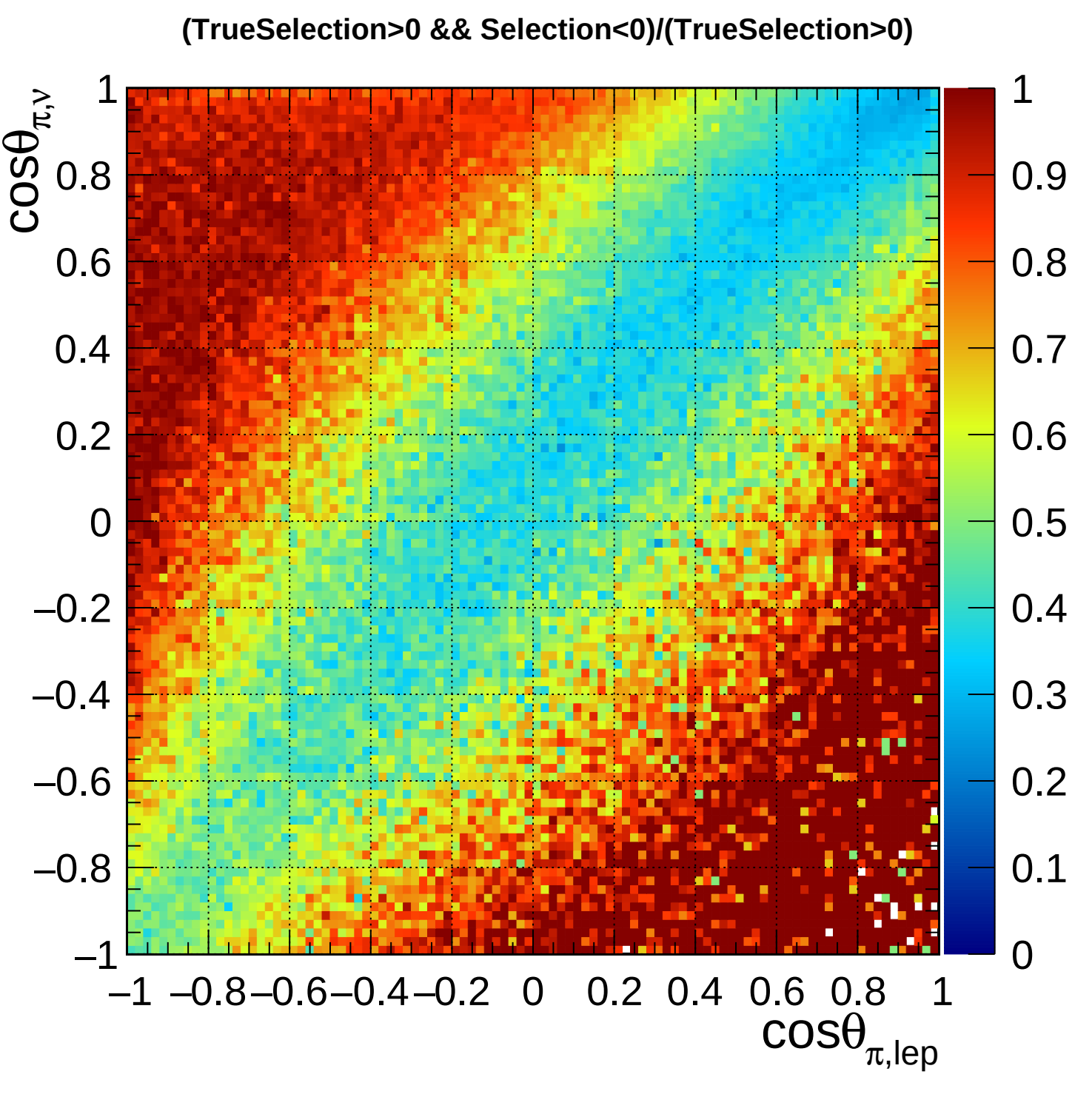

TrueSelection==63 && Selection==63
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
–1 –0.8 –0.6 –0.4 –0.2 0 0.2 0.4 0.6 0.8 1
90
80
70
60
50
40
30
20
10
0

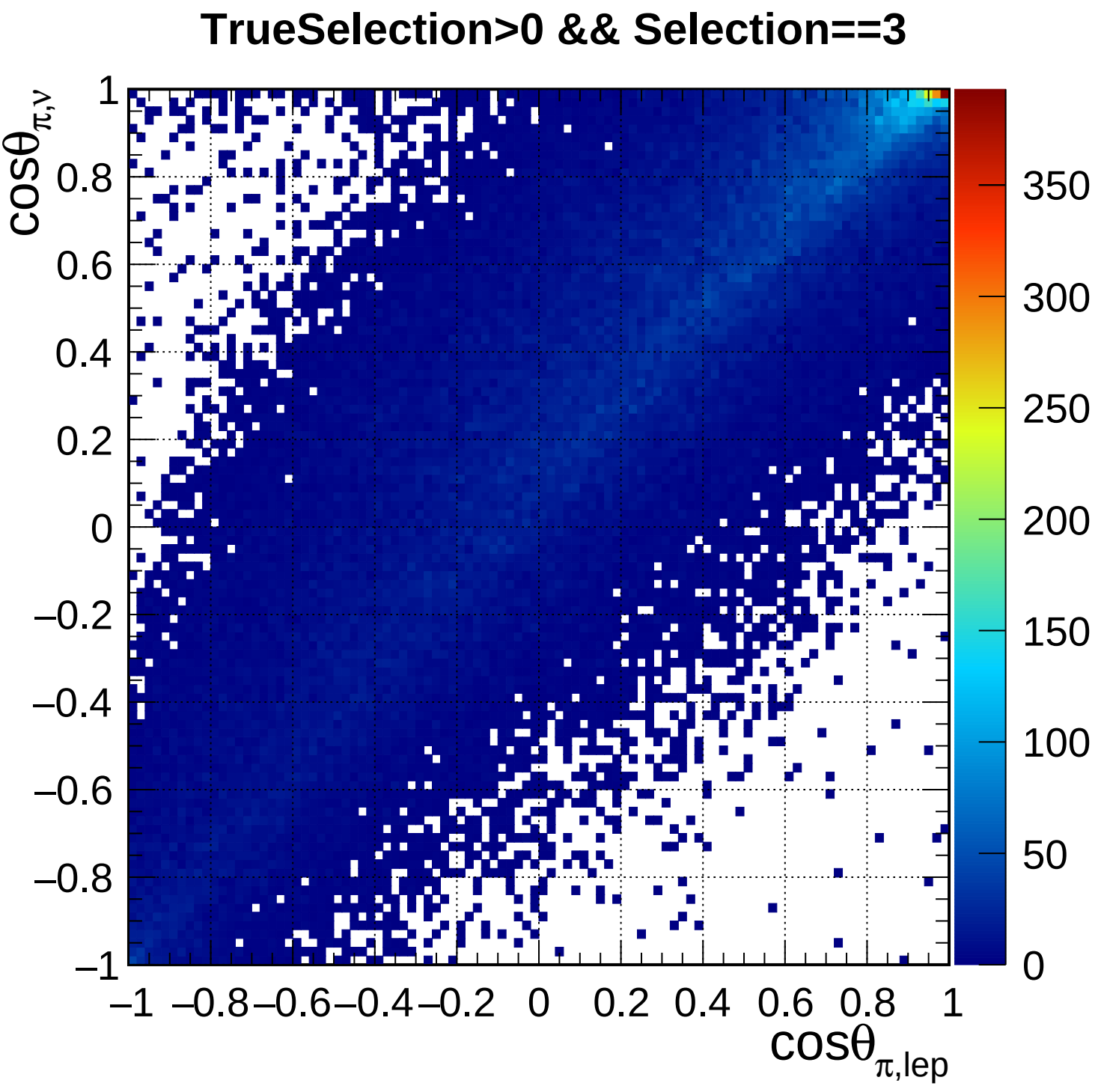

(TrueSelection==63 && Selection==63)/(TrueSelection==63)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

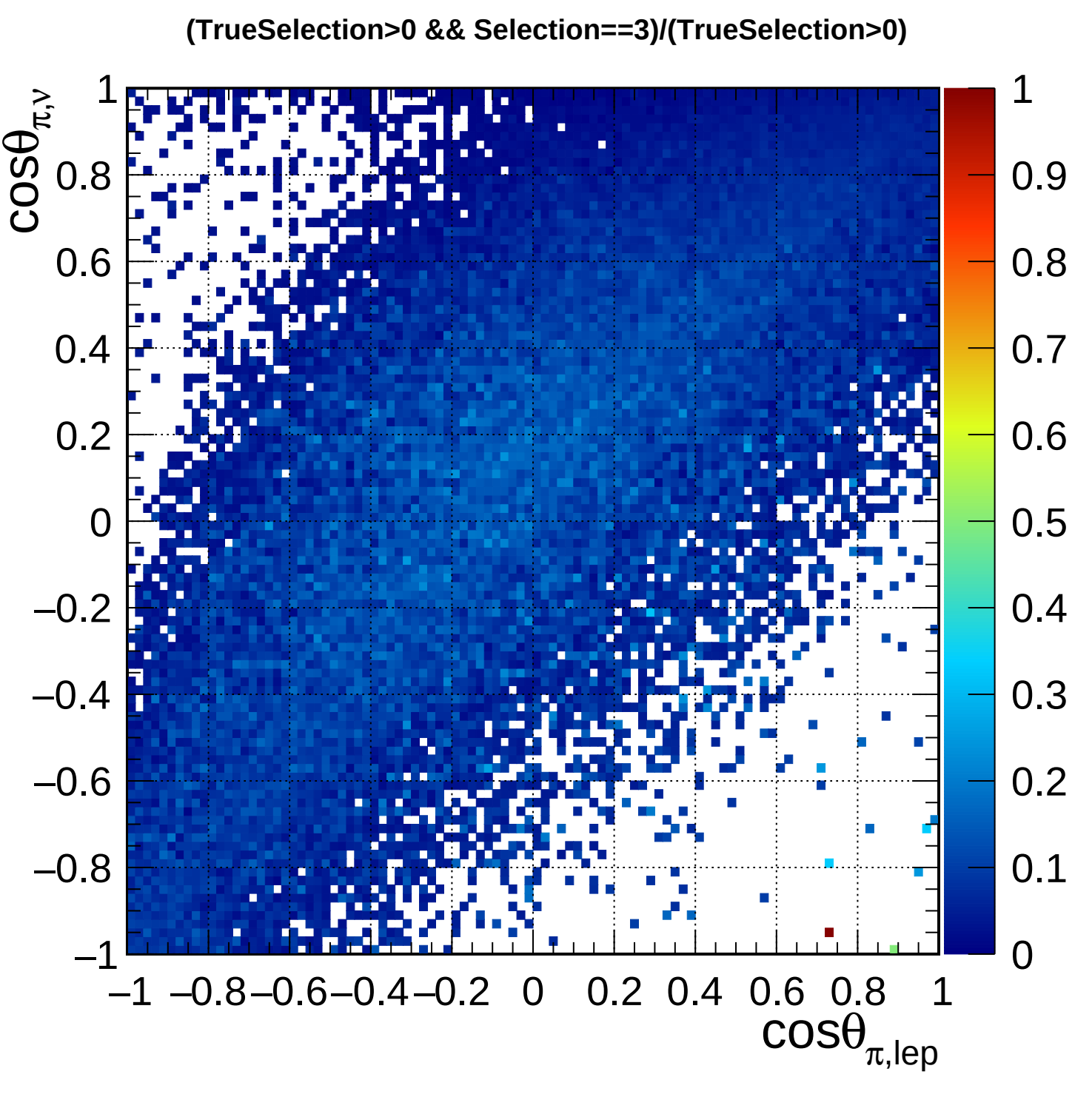

TrueSelection==63 && Selection>0
cosθπ,ν
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
–1 –0.8 –0.6 –0.4 –0.2 0 0.2 0.4 0.6 0.8 1
cosθπ,lep
140
120
100
80
60
40
20
0

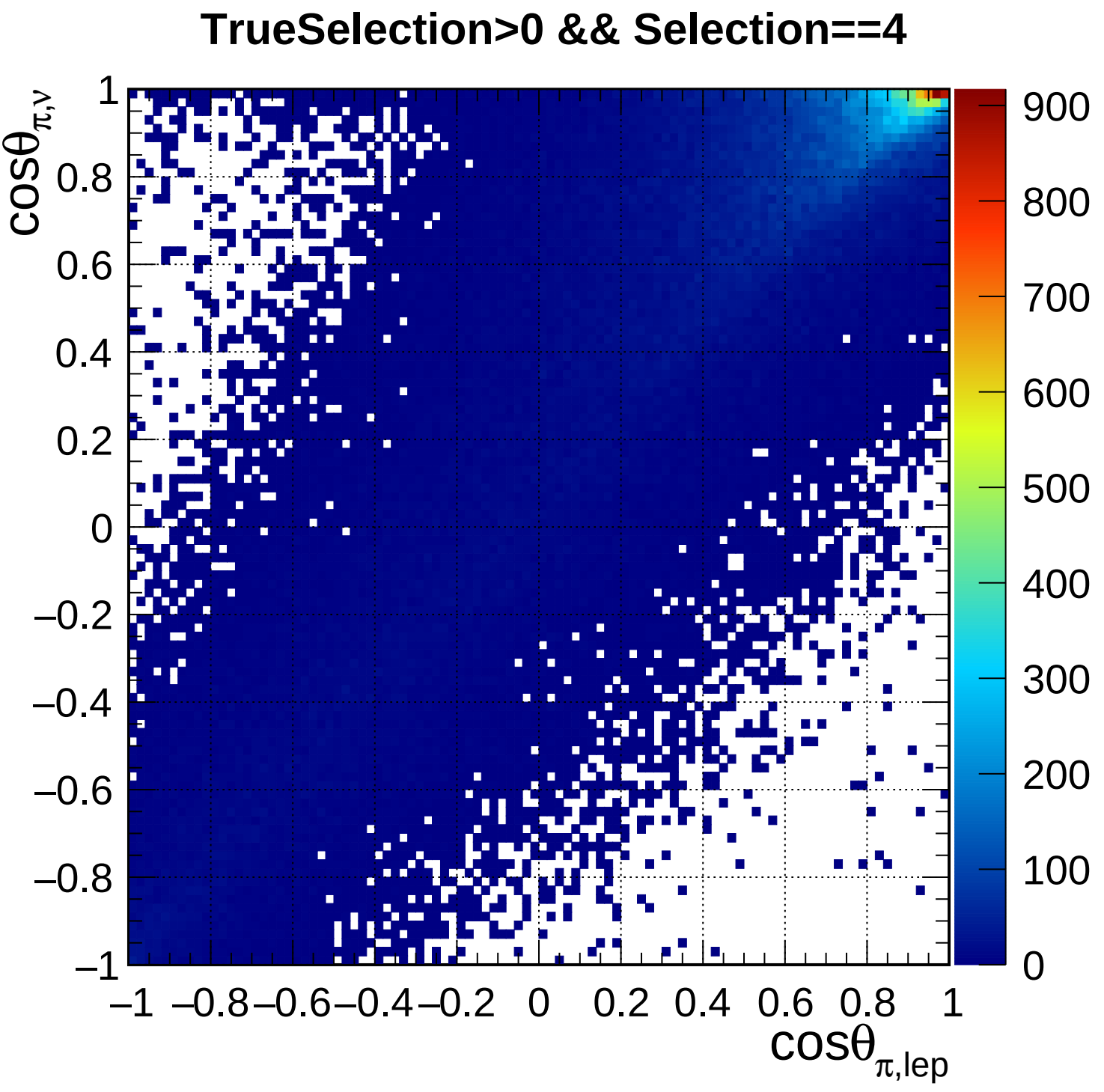

(TrueSelection==63 && Selection>0)/(TrueSelection==63)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

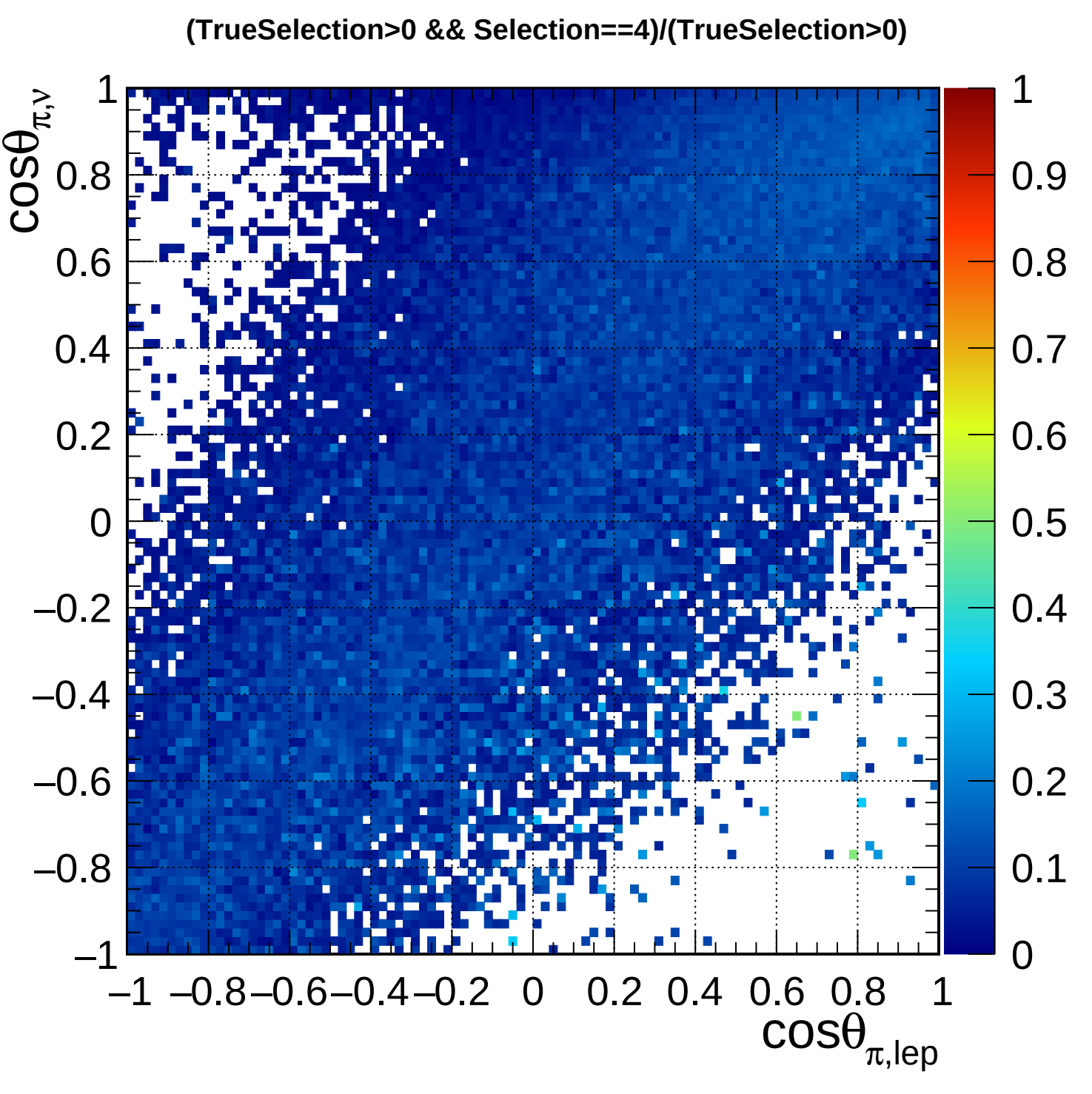

TrueSelection>0 && Selection<0
cosθπ,ν
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
–1 –0.8 –0.6 –0.4 –0.2 0 0.2 0.4 0.6 0.8 1
cosθπ,lep
3000
2500
2000
1500
1000
500
0

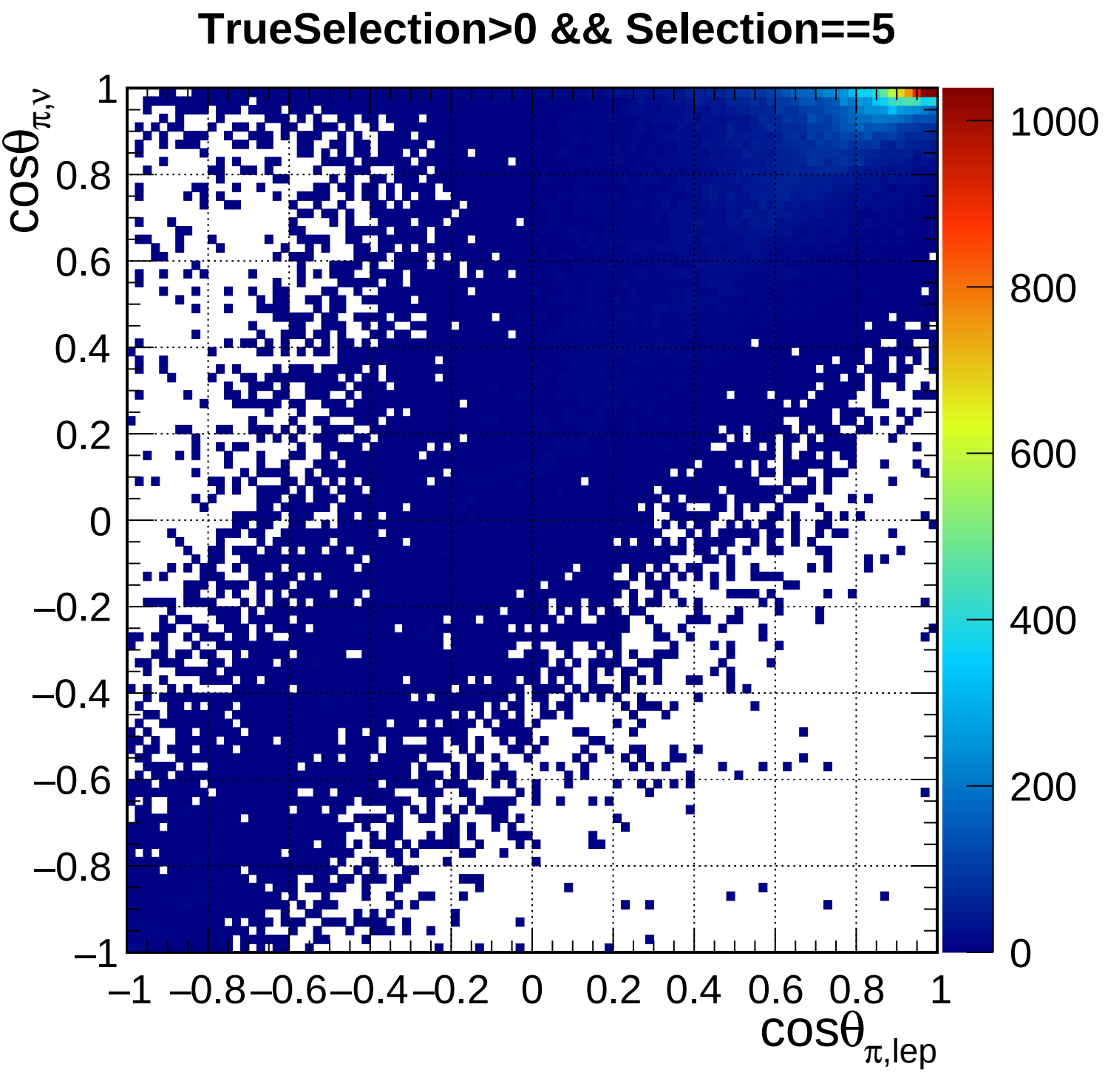

(TrueSelection>0 && Selection<0)/(TrueSelection>0)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

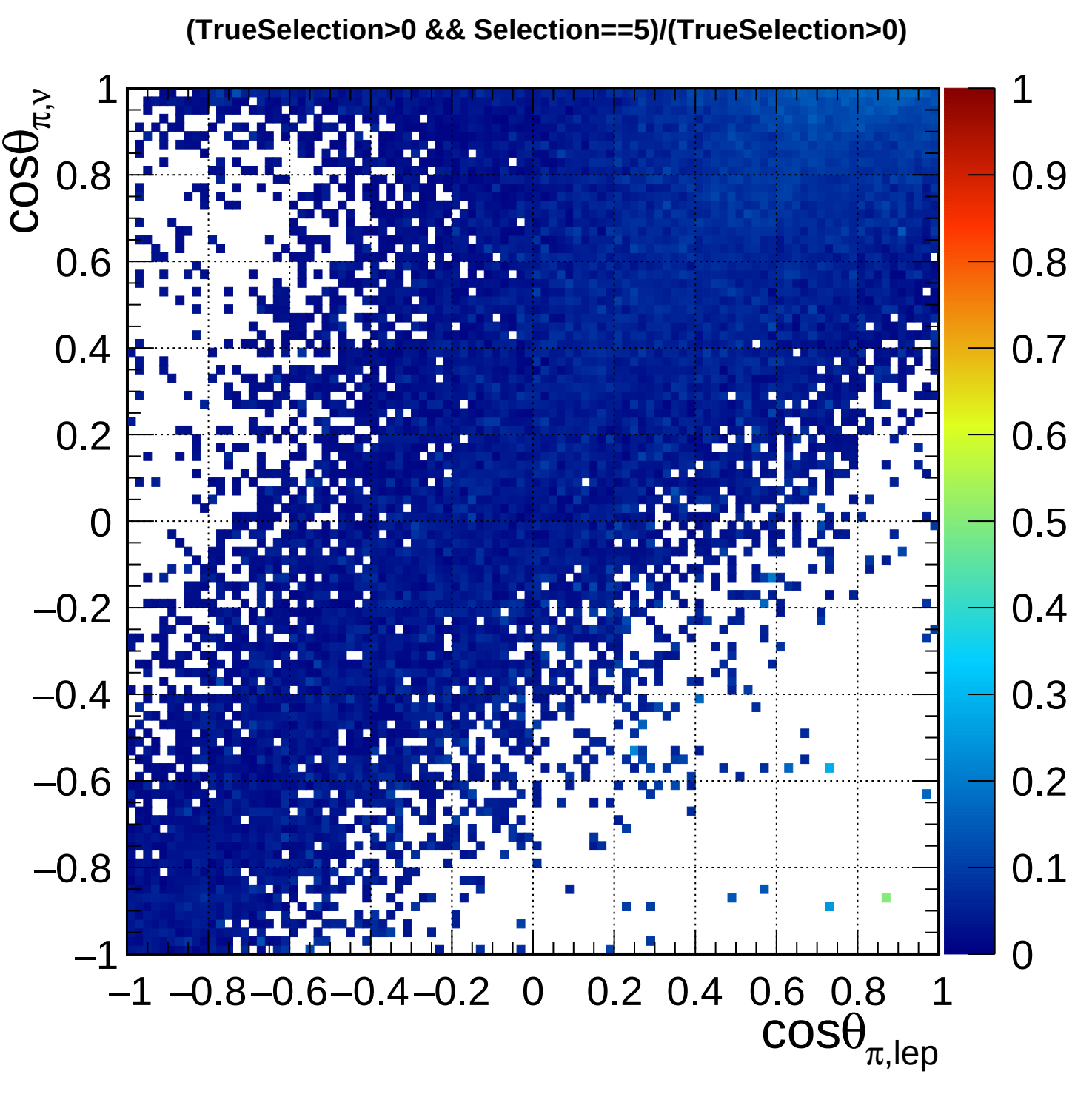

TrueSelection>0 && Selection==3
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
350
300
250
200
150
100
50
0

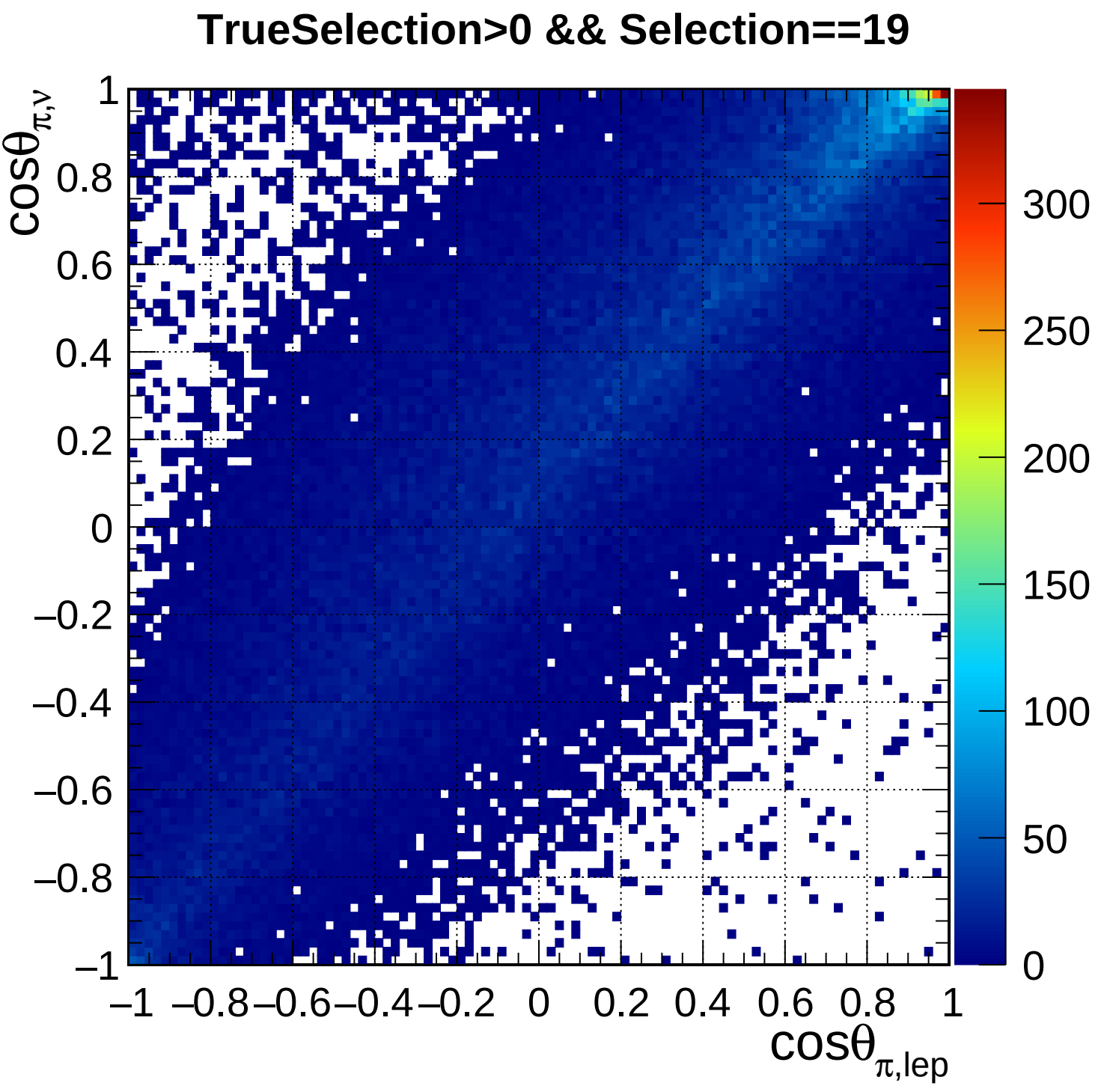

(TrueSelection>0 && Selection==3)/(TrueSelection>0)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

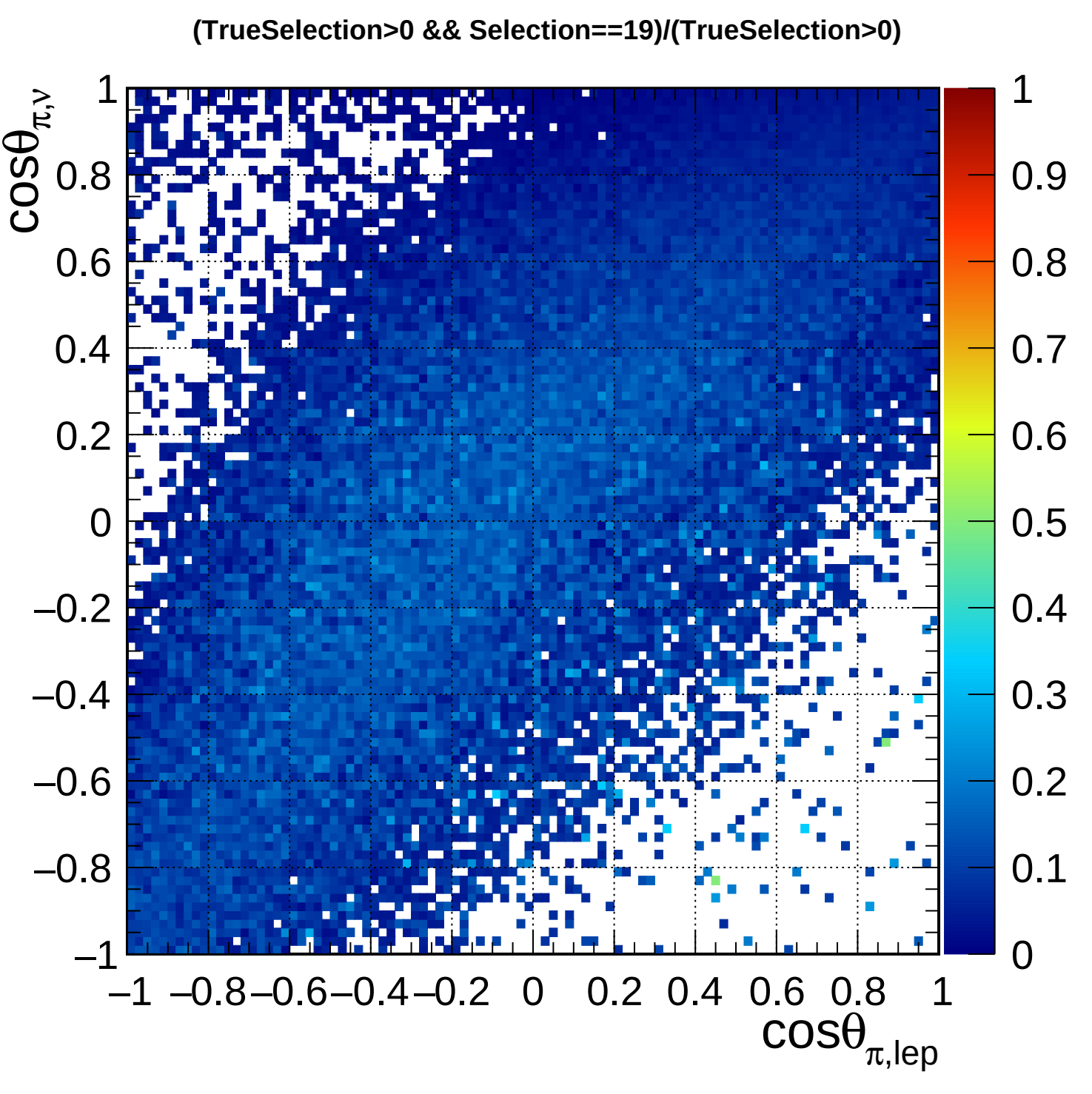

TrueSelection>0 && Selection==4
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
900
800
700
600
500
400
300
200
100
0

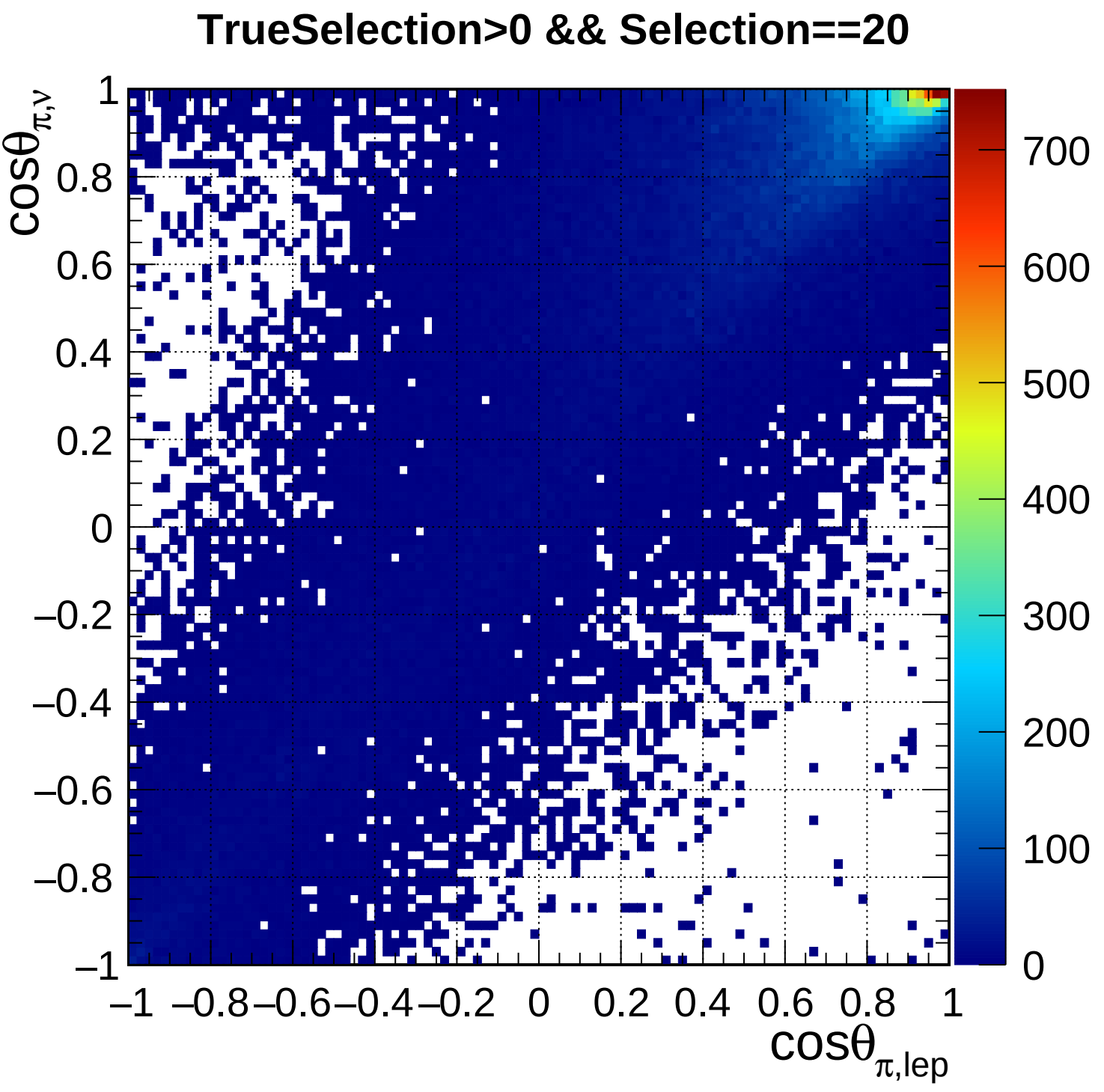

(TrueSelection>0 && Selection==4)/(TrueSelection>0)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

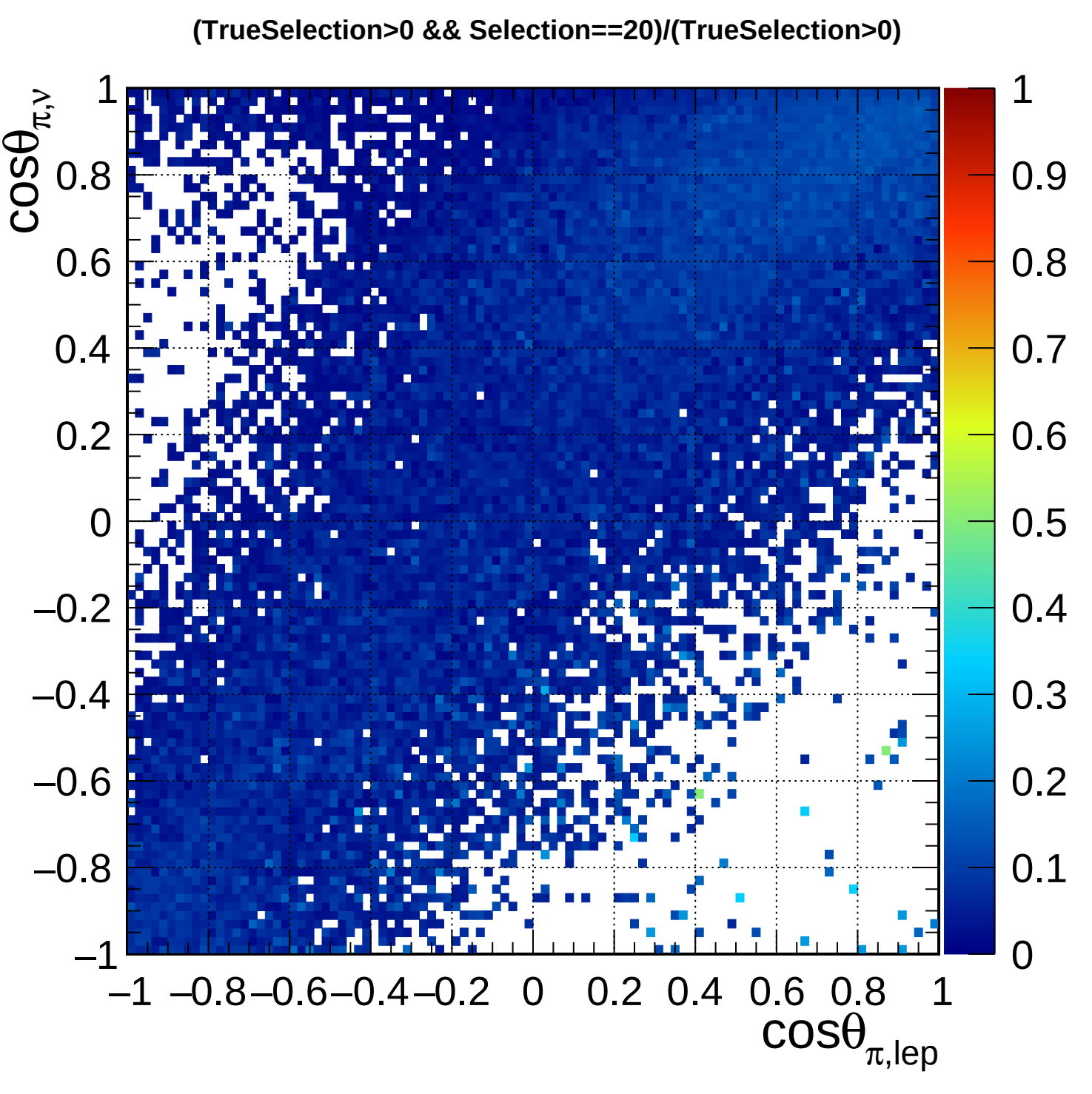

TrueSelection>0 && Selection==5
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
–1 –0.8 –0.6 –0.4 –0.2 0 0.2 0.4 0.6 0.8 1
1000
800
600
400
200
0

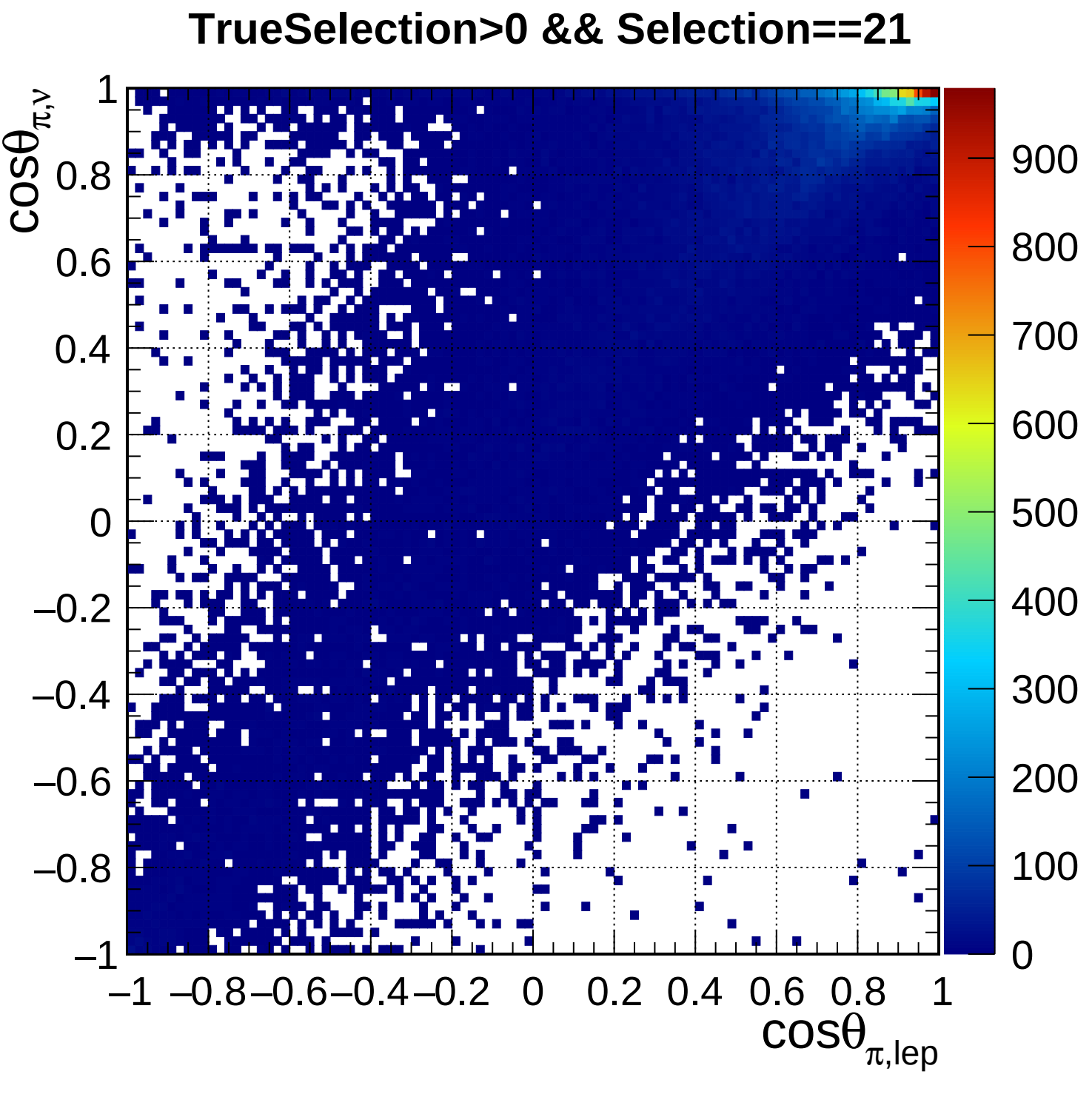

(TrueSelection>0 && Selection==5)/(TrueSelection>0)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

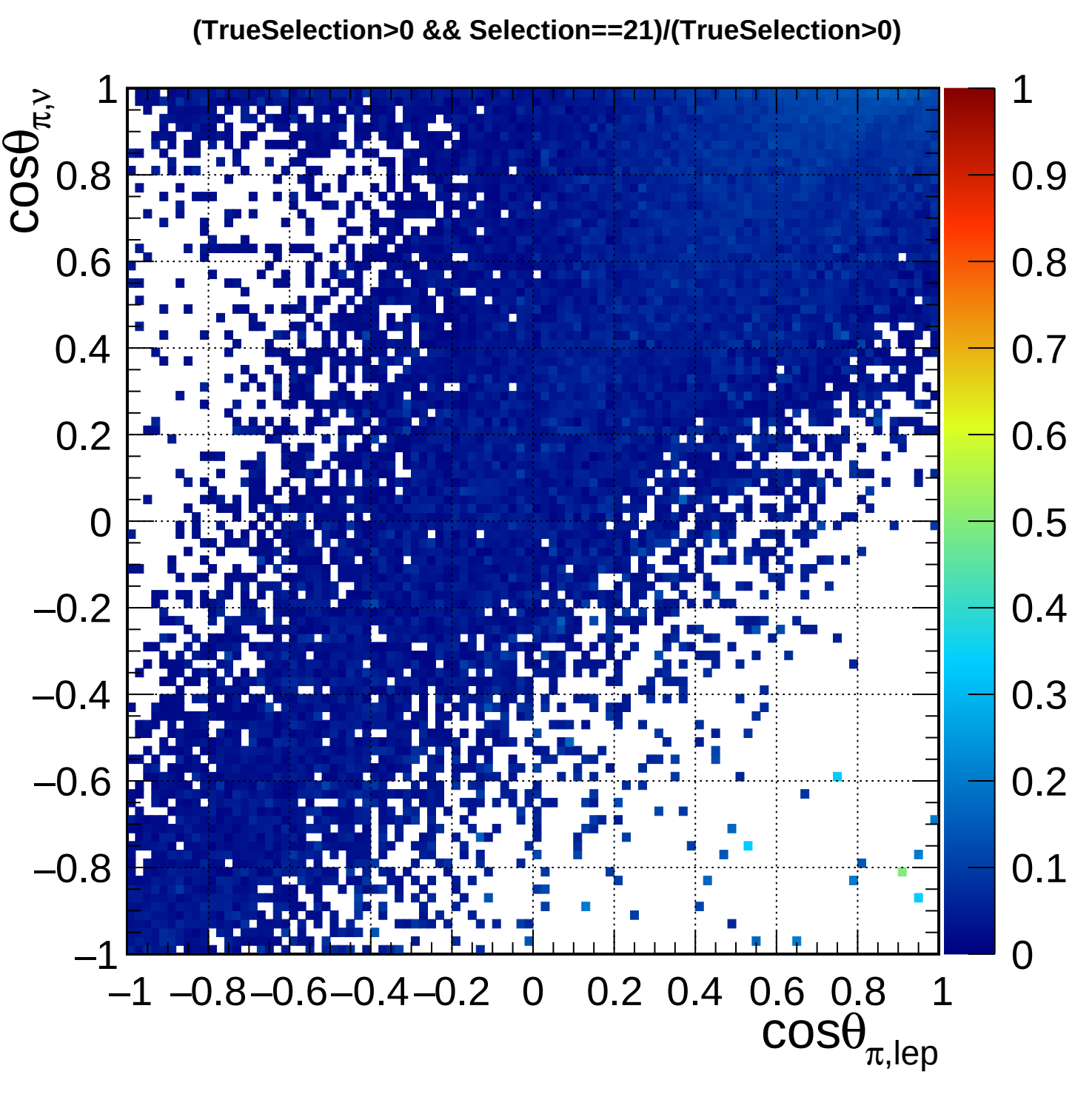

TrueSelection>0 && Selection==19
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
300
250
200
150
100
50
0

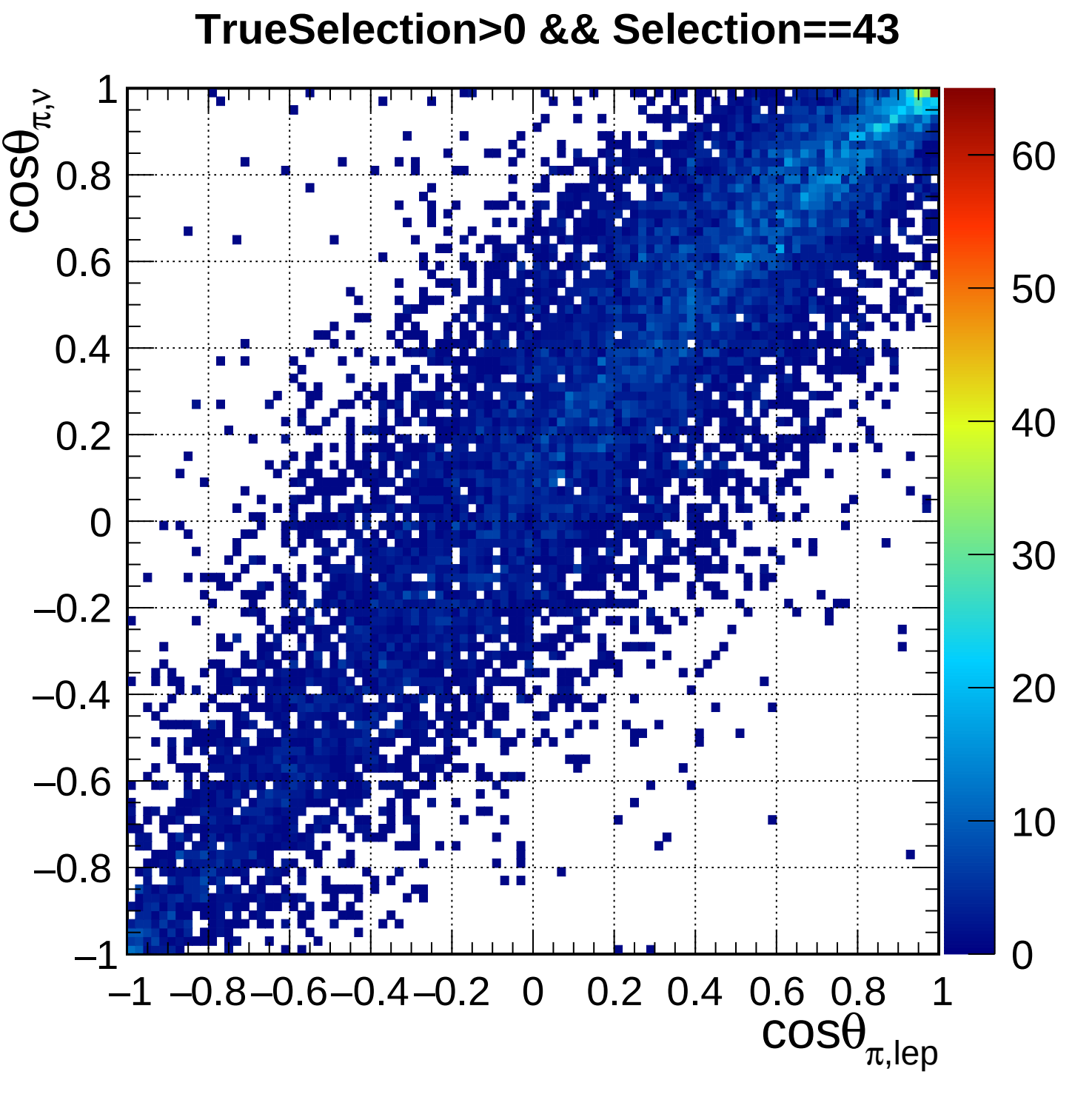

(TrueSelection>0 && Selection==19)/(TrueSelection>0)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

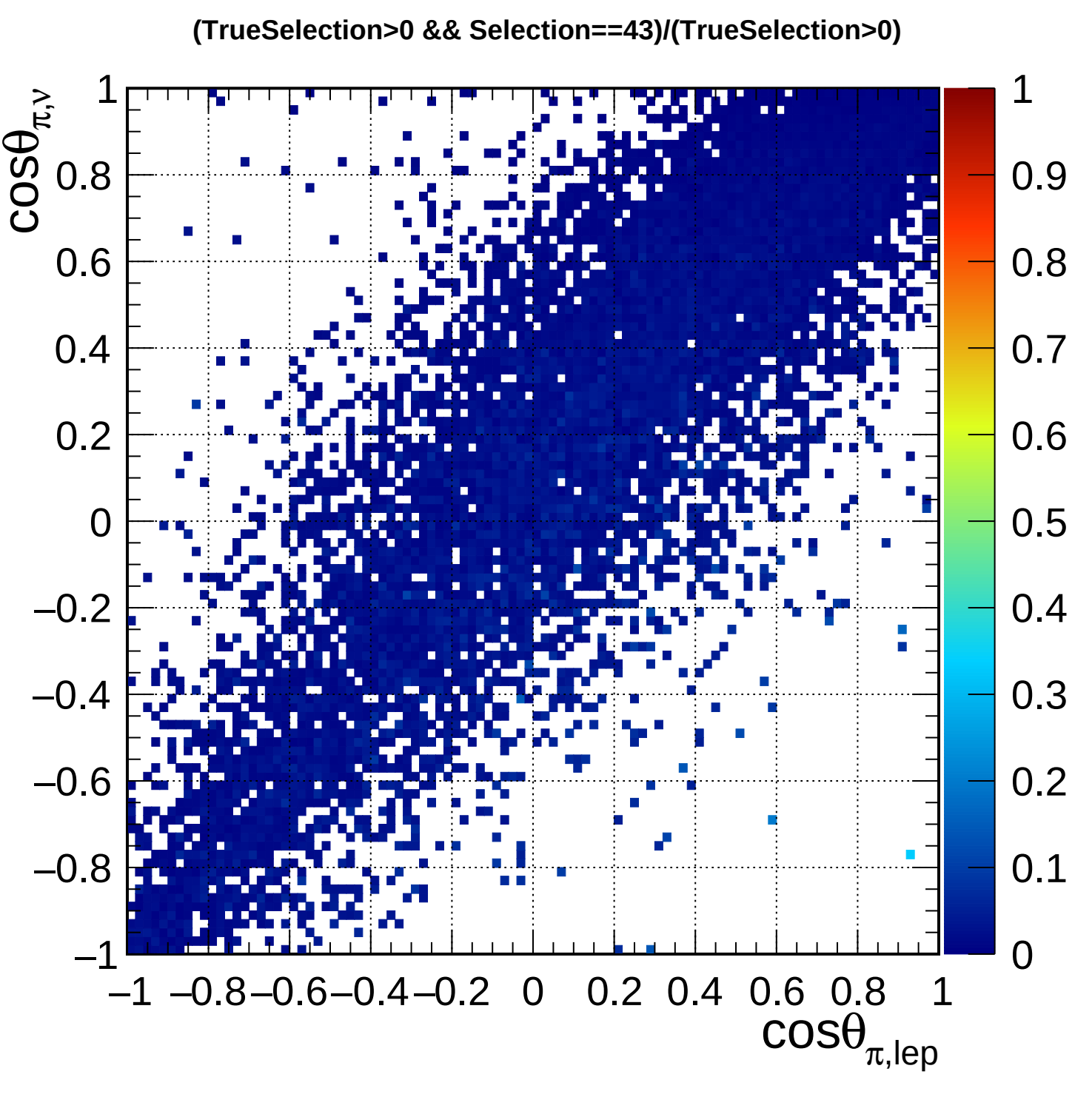

TrueSelection>0 && Selection==20
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
700
600
500
400
300
200
100
0

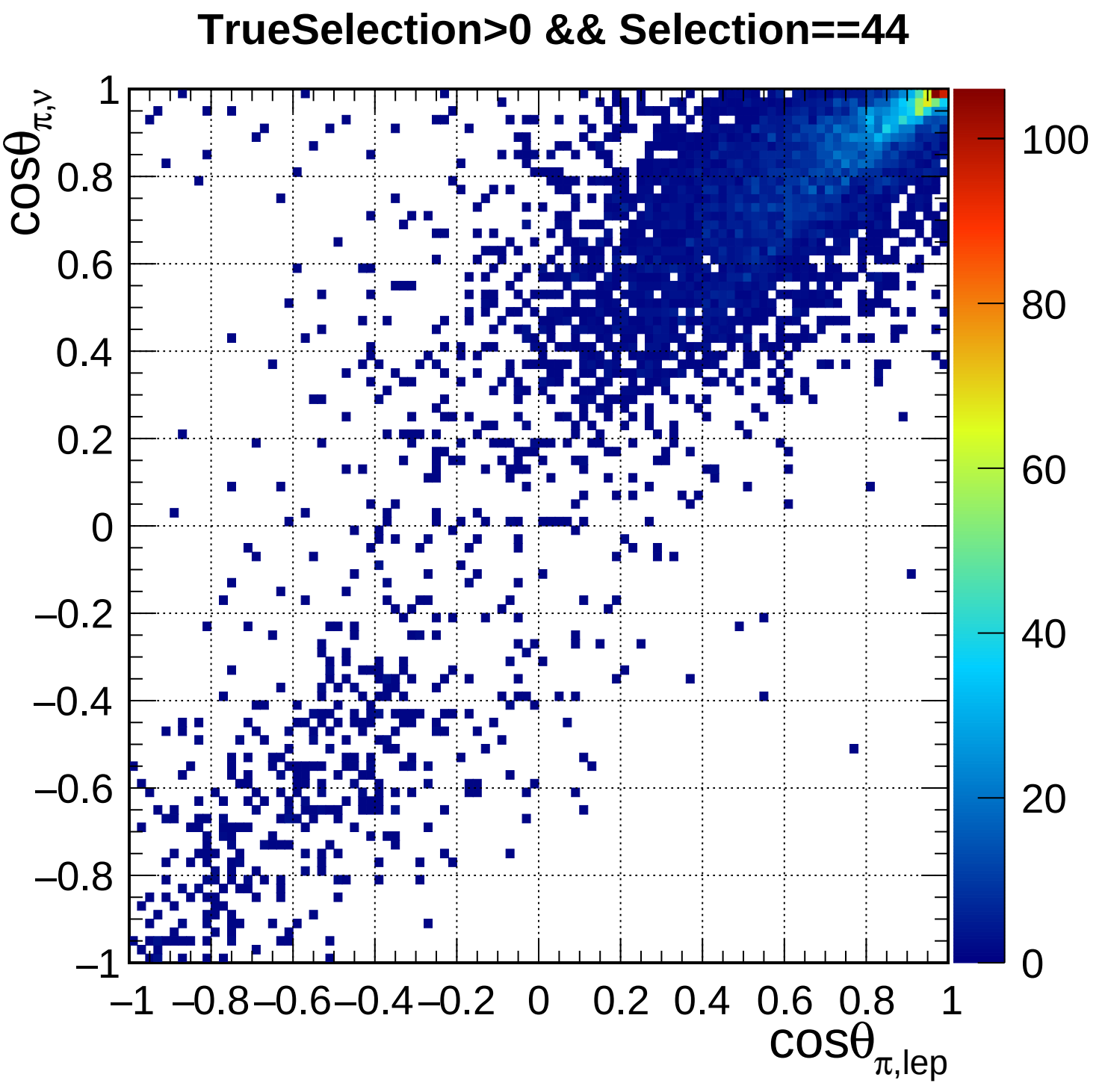

(TrueSelection>0 && Selection==20)/(TrueSelection>0)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

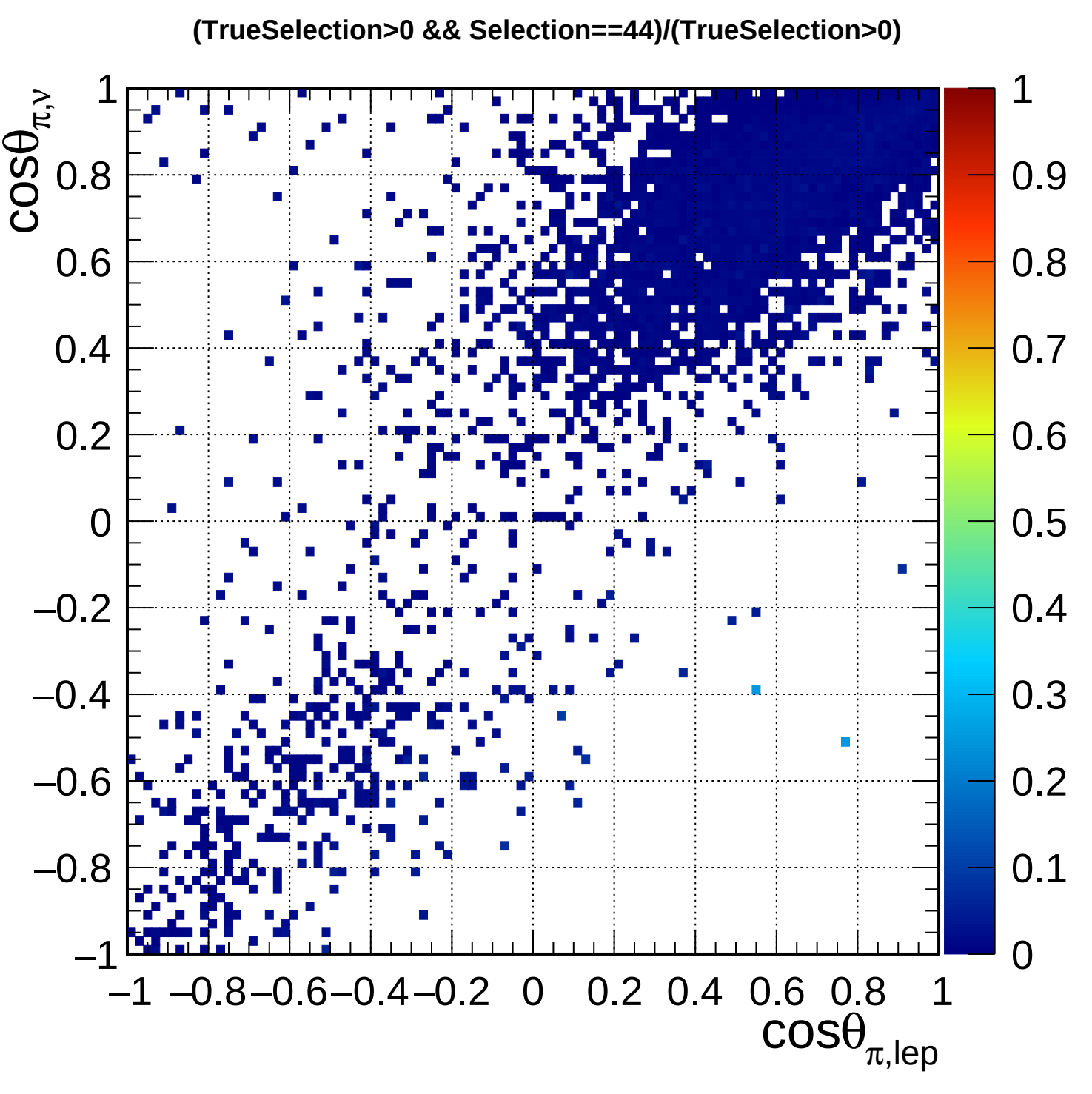

TrueSelection>0 && Selection==21
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
900
800
700
600
500
400
300
200
100
0

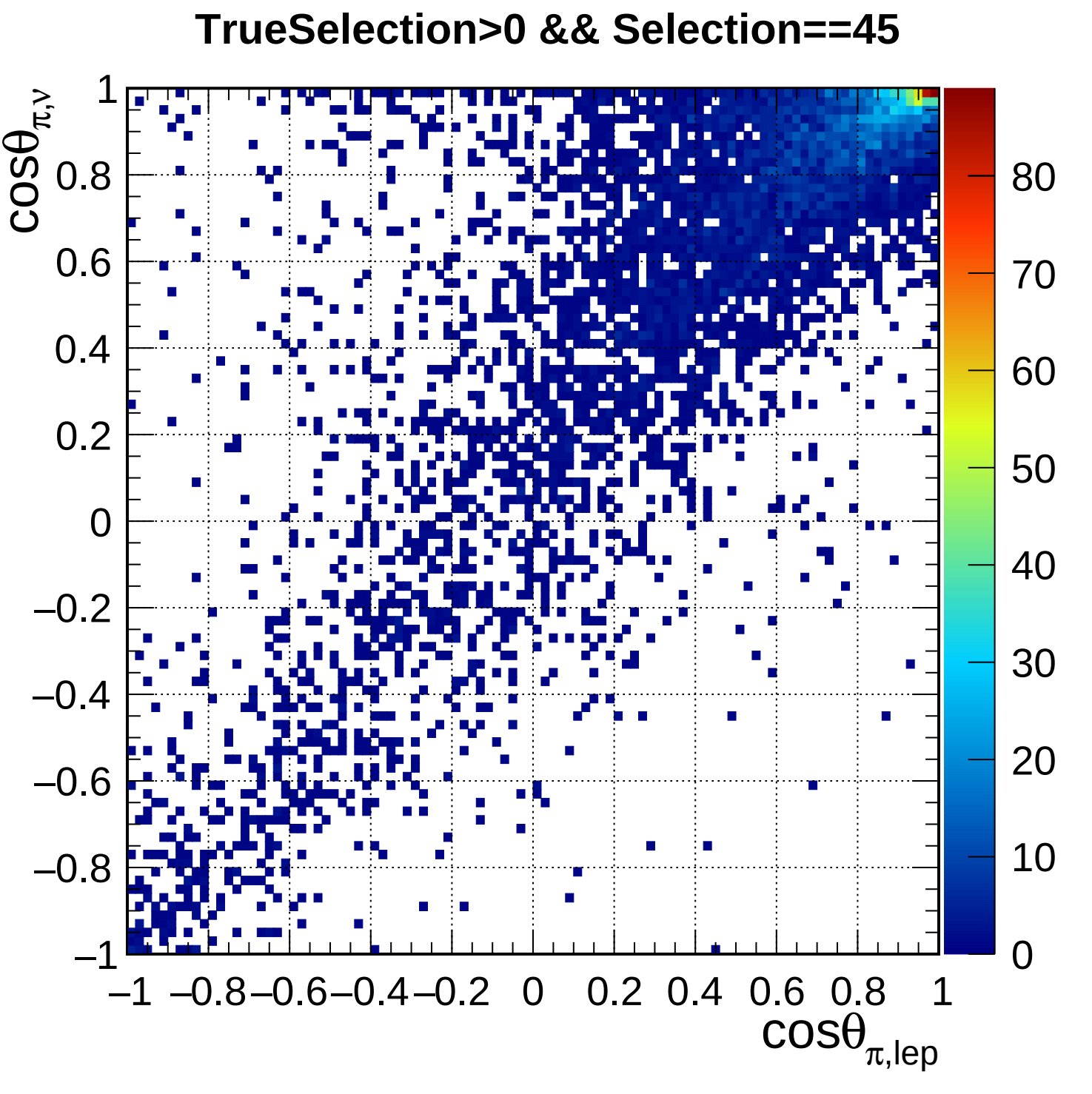

(TrueSelection>0 && Selection==21)/(TrueSelection>0)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

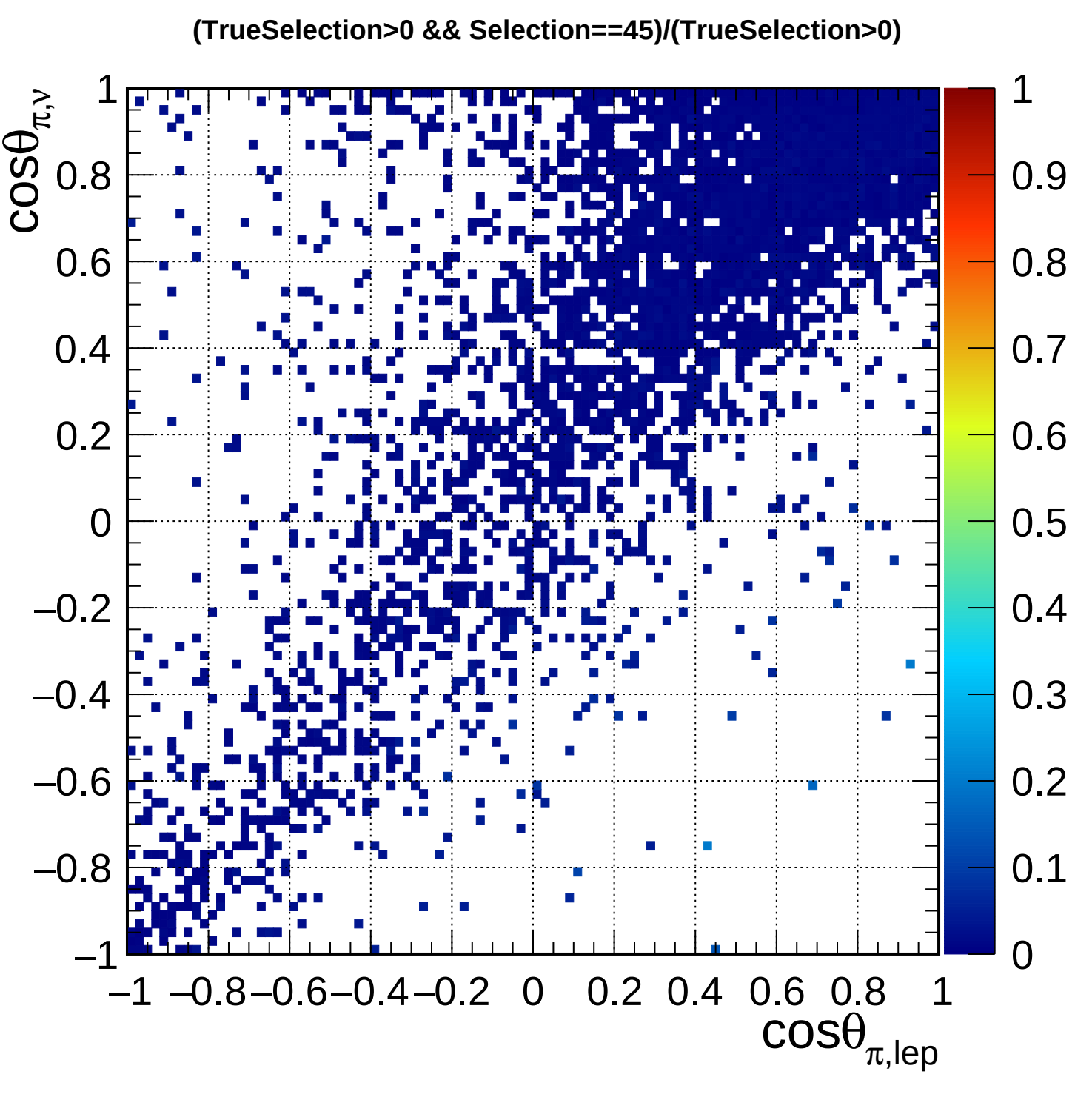

TrueSelection>0 && Selection==43
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
60
50
40
30
20
10
0

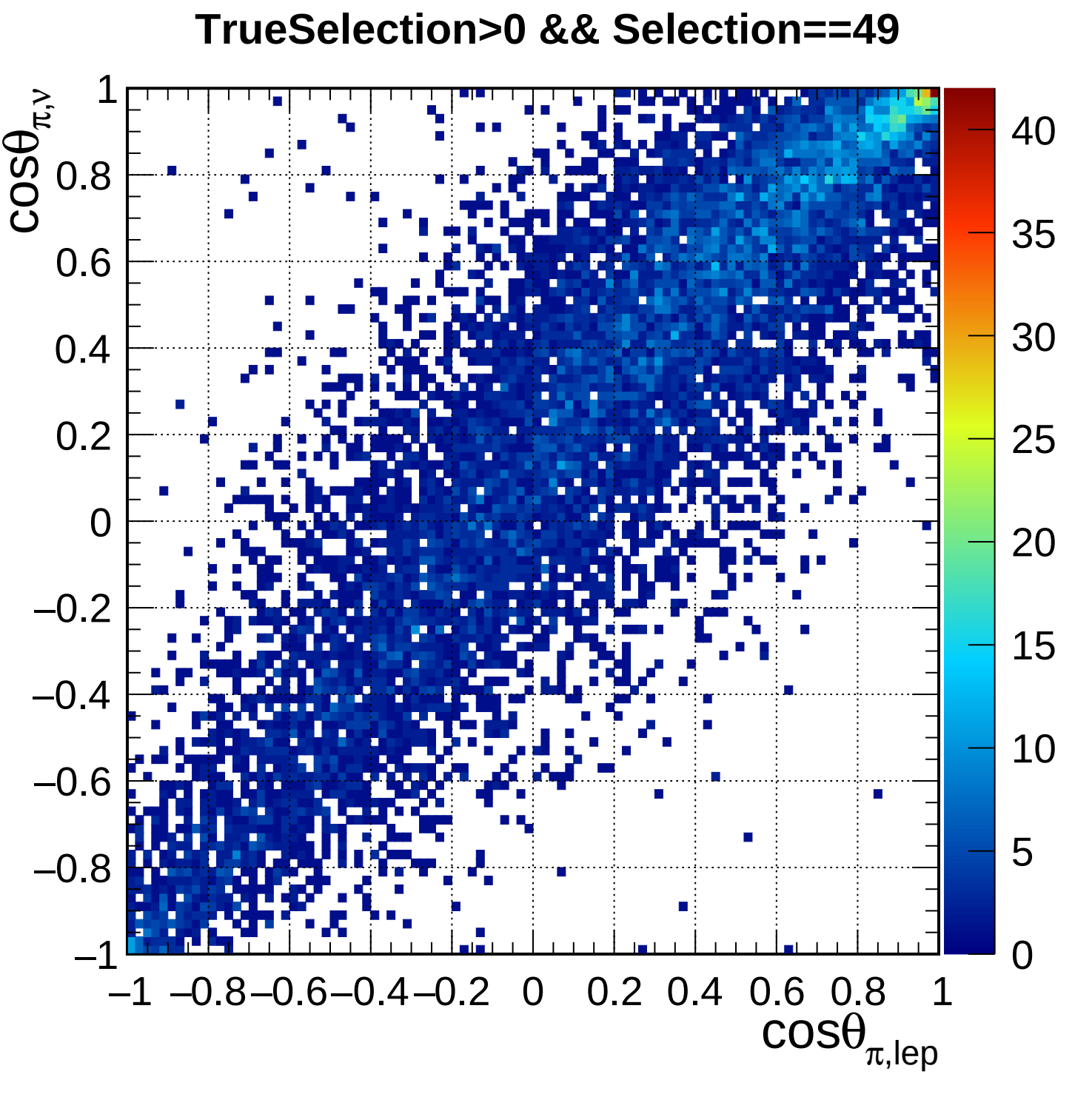

(TrueSelection>0 && Selection==43)/(TrueSelection>0)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

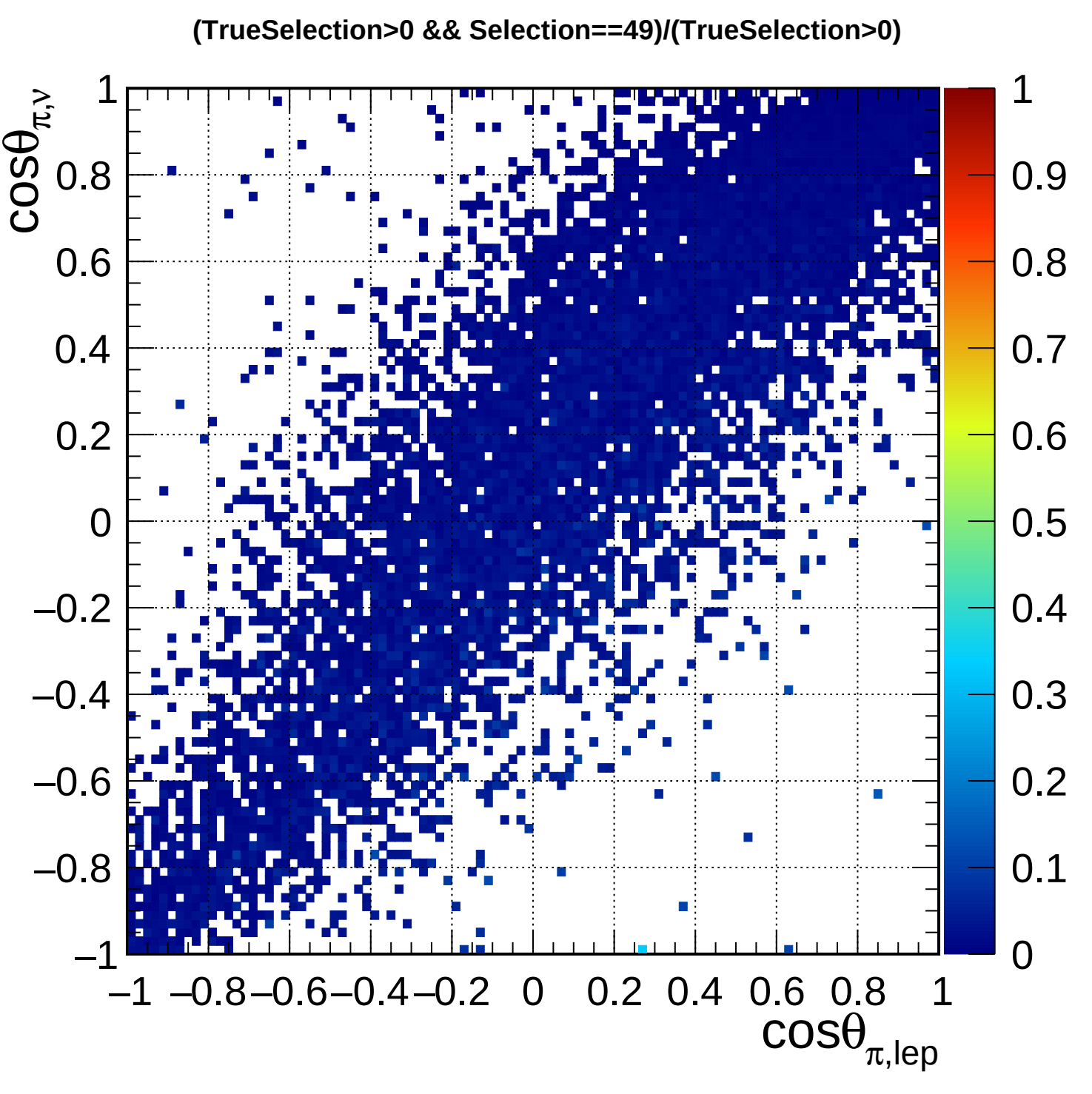

TrueSelection>0 && Selection==44
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
100
80
60
40
20
0

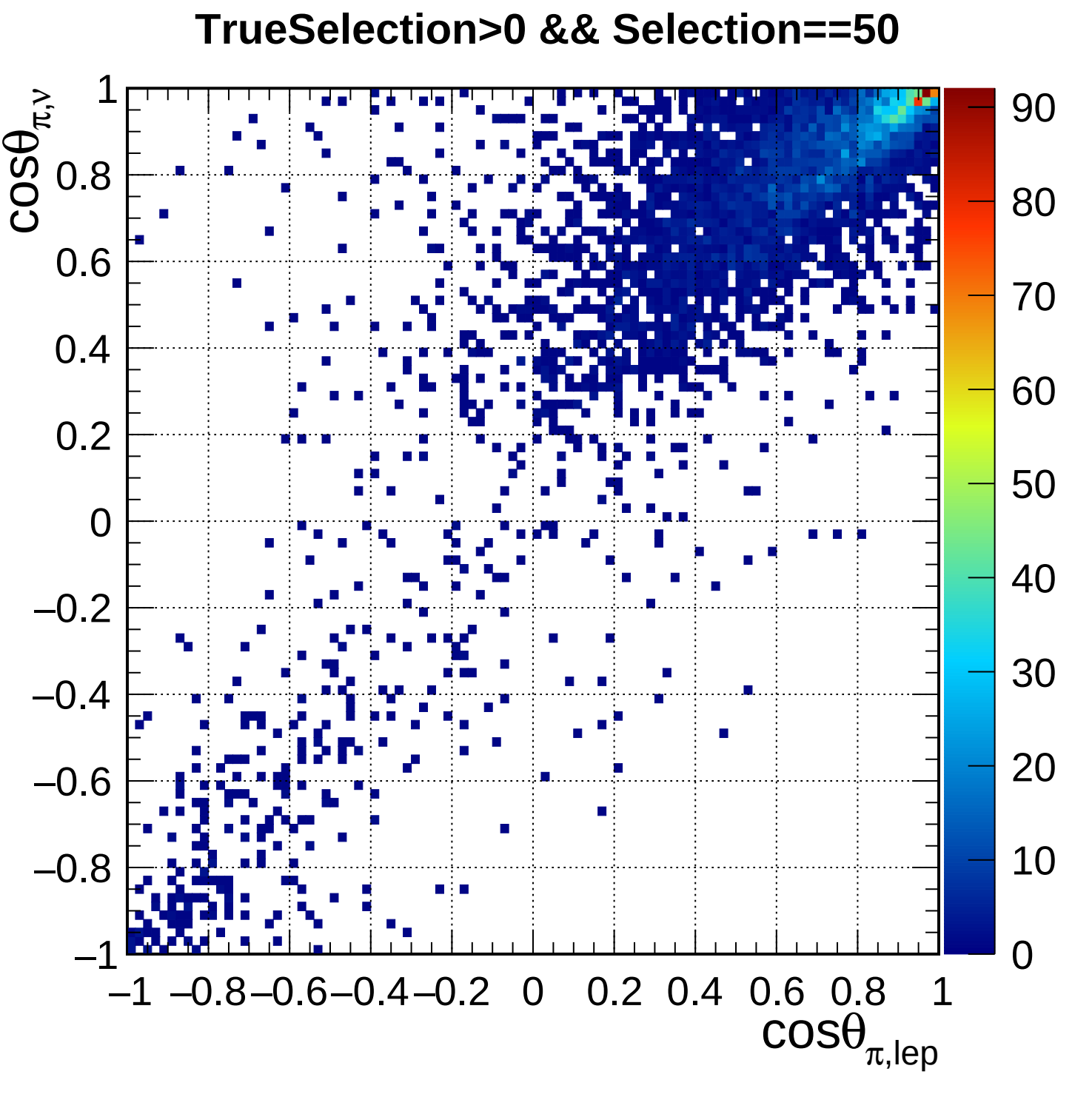

(TrueSelection>0 && Selection==44)/(TrueSelection>0)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

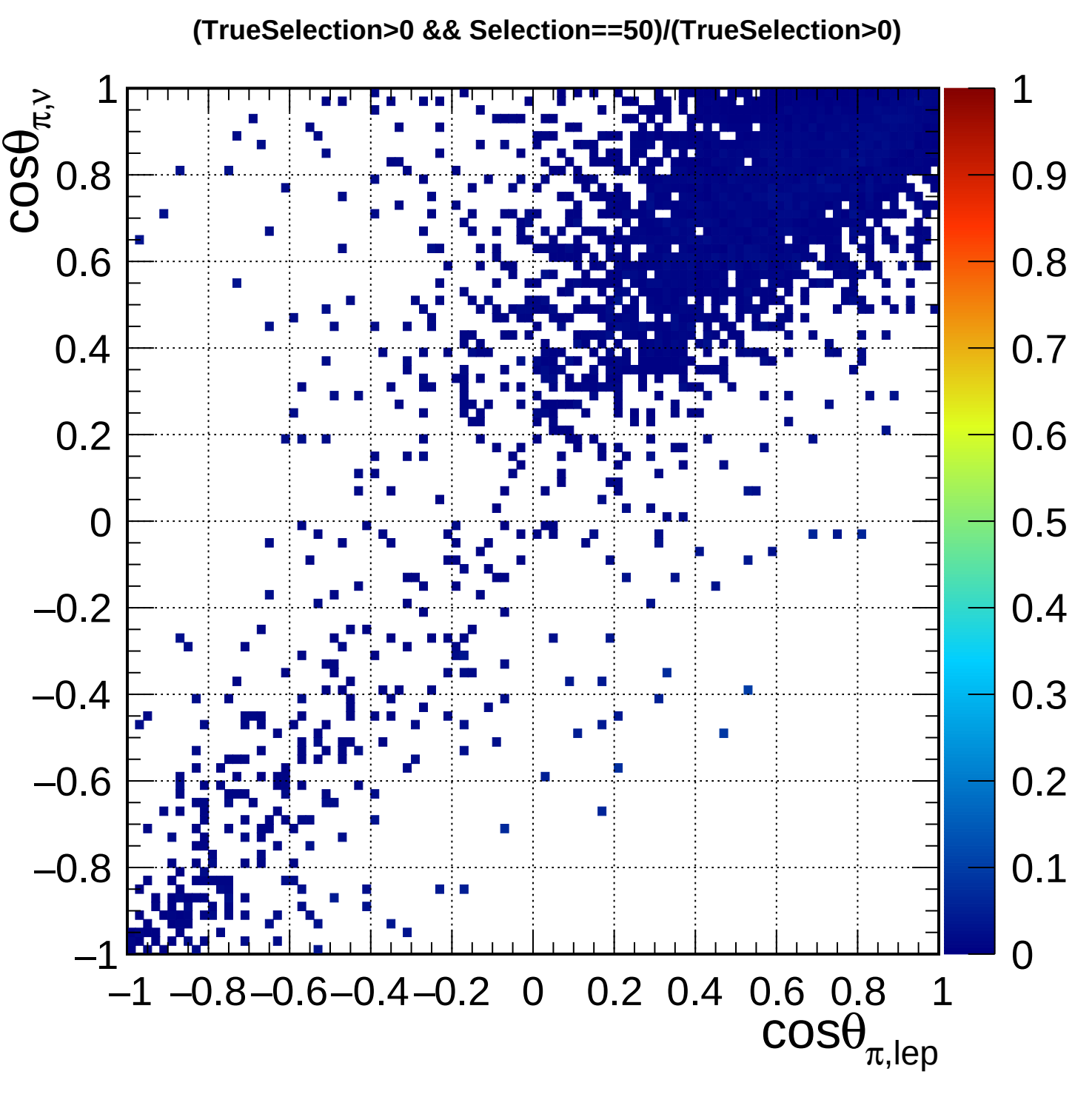

TrueSelection>0 && Selection==45
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
80
70
60
50
40
30
20
10
0

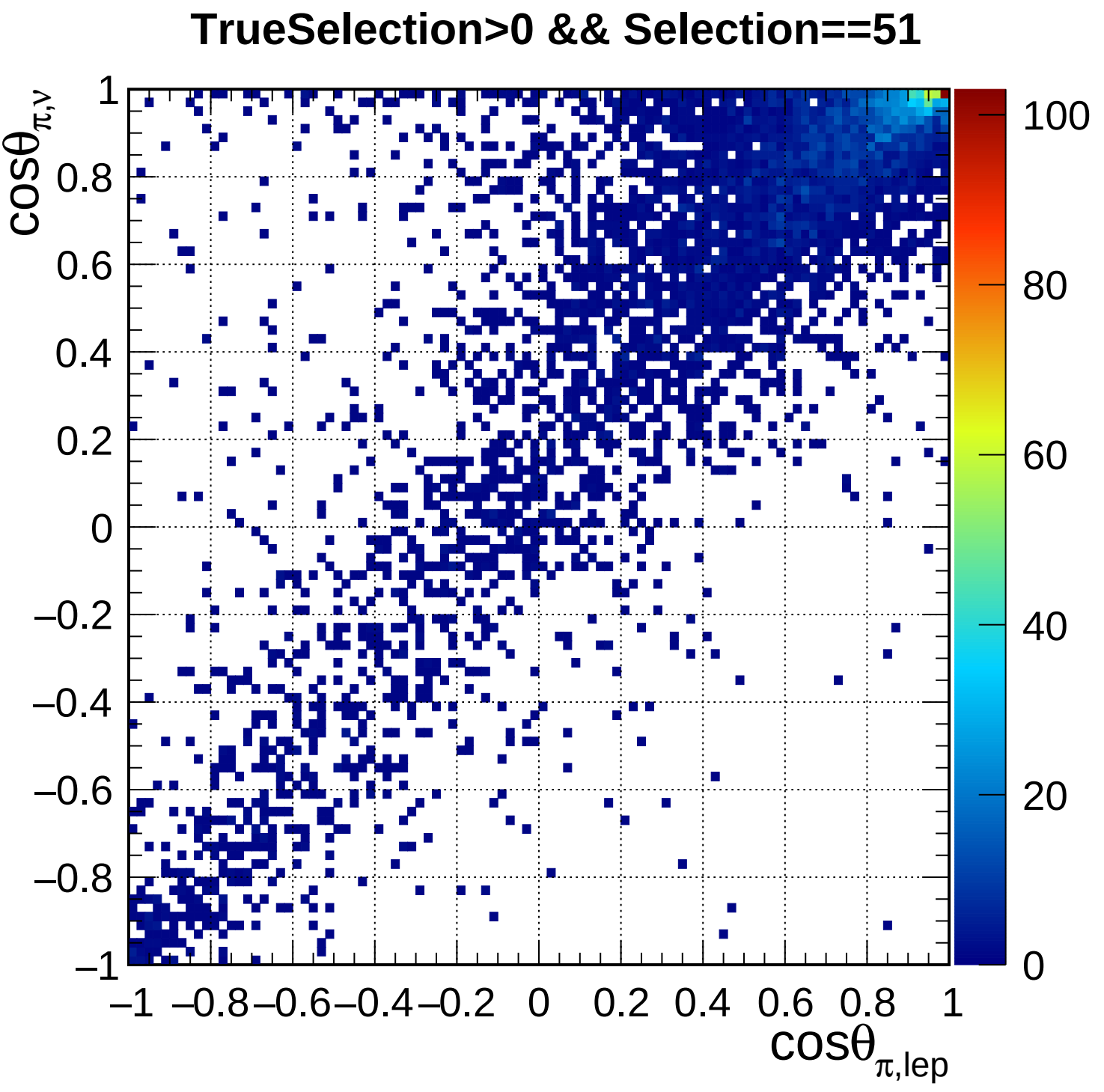

(TrueSelection>0 && Selection==45)/(TrueSelection>0)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

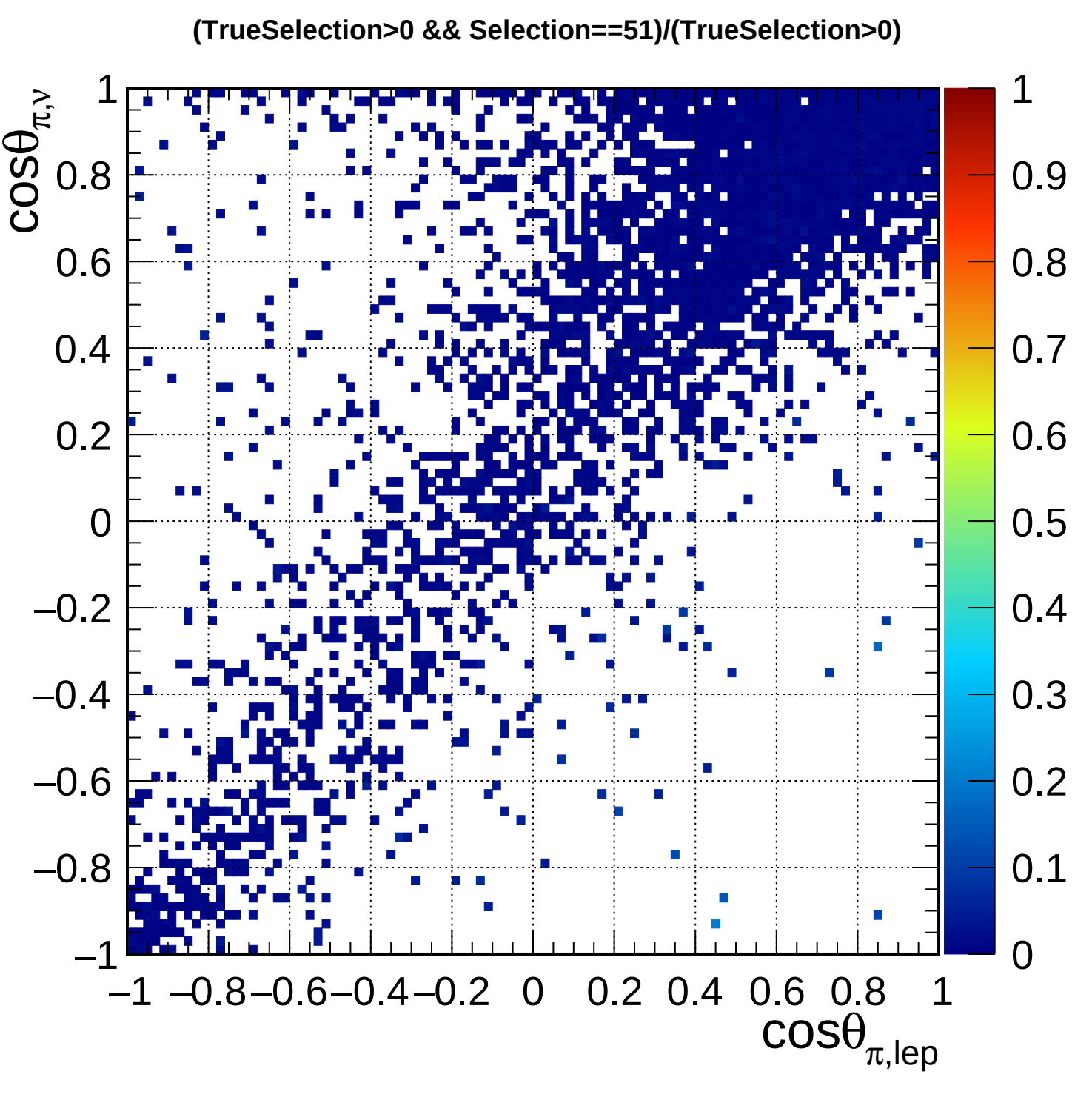

TrueSelection>0 && Selection==49
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
40
35
30
25
20
15
10
5
0

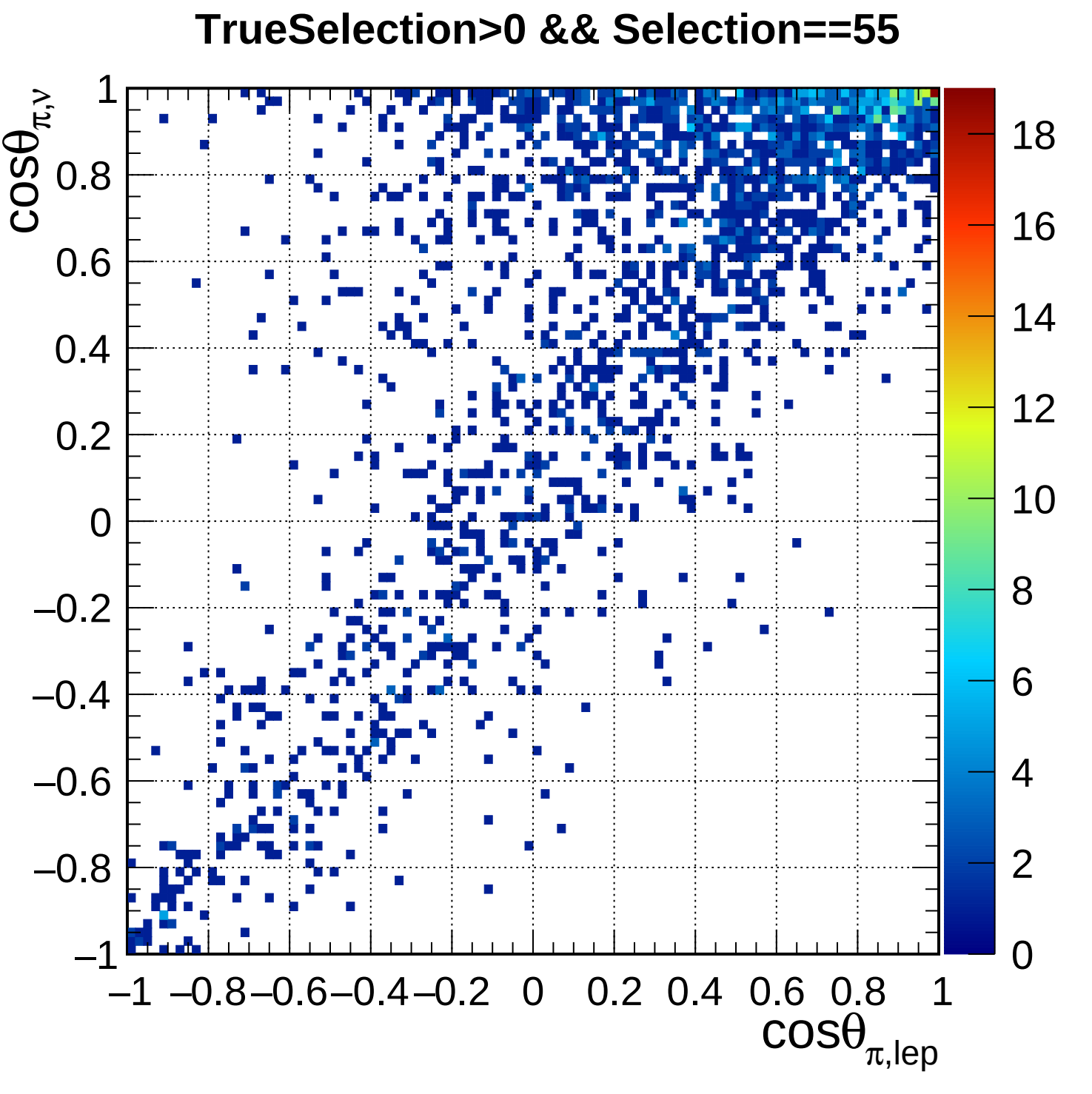

(TrueSelection>0 && Selection==49)/(TrueSelection>0)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

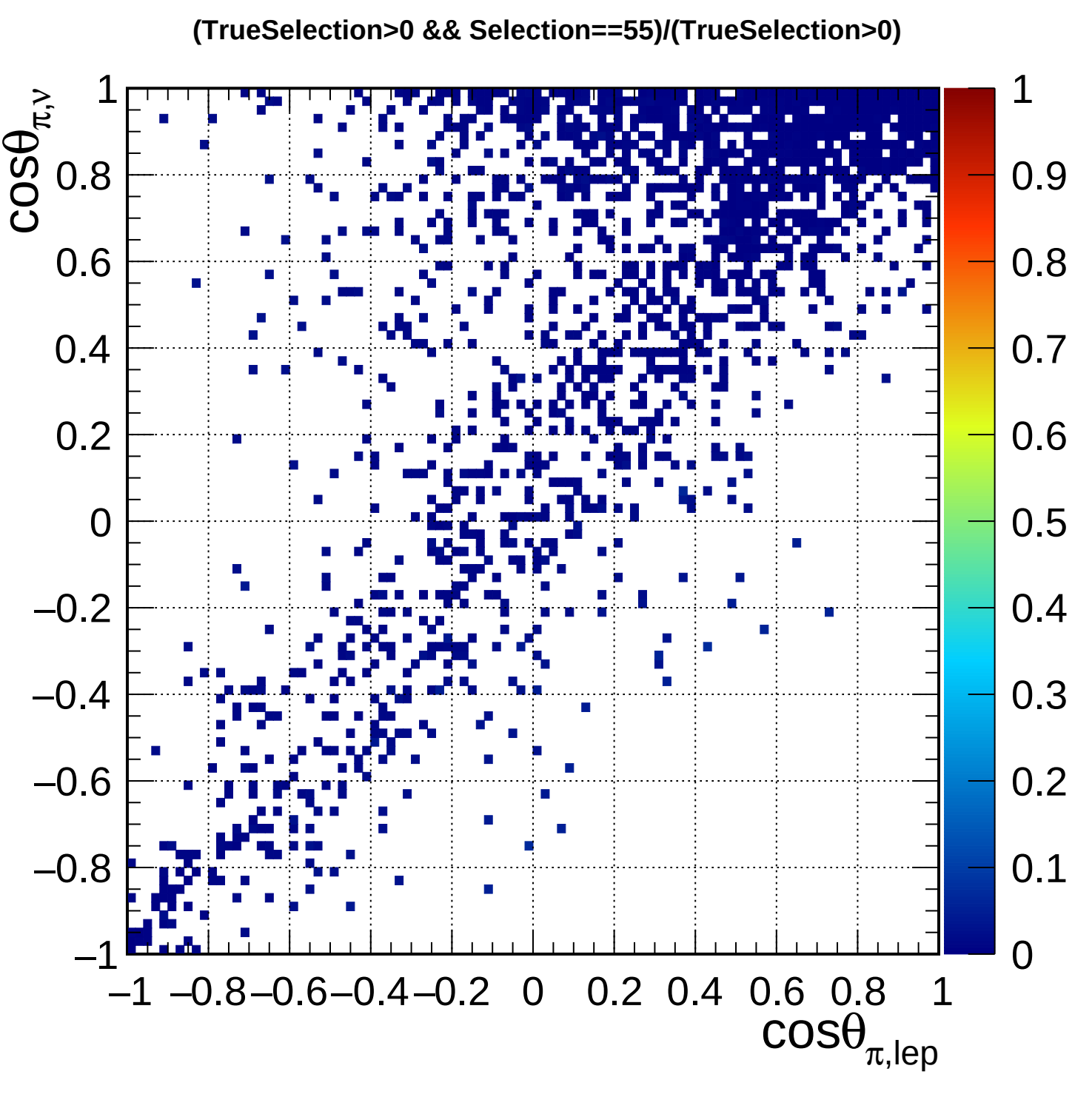

TrueSelection>0 && Selection==50
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
90
80
70
60
50
40
30
20
10
0

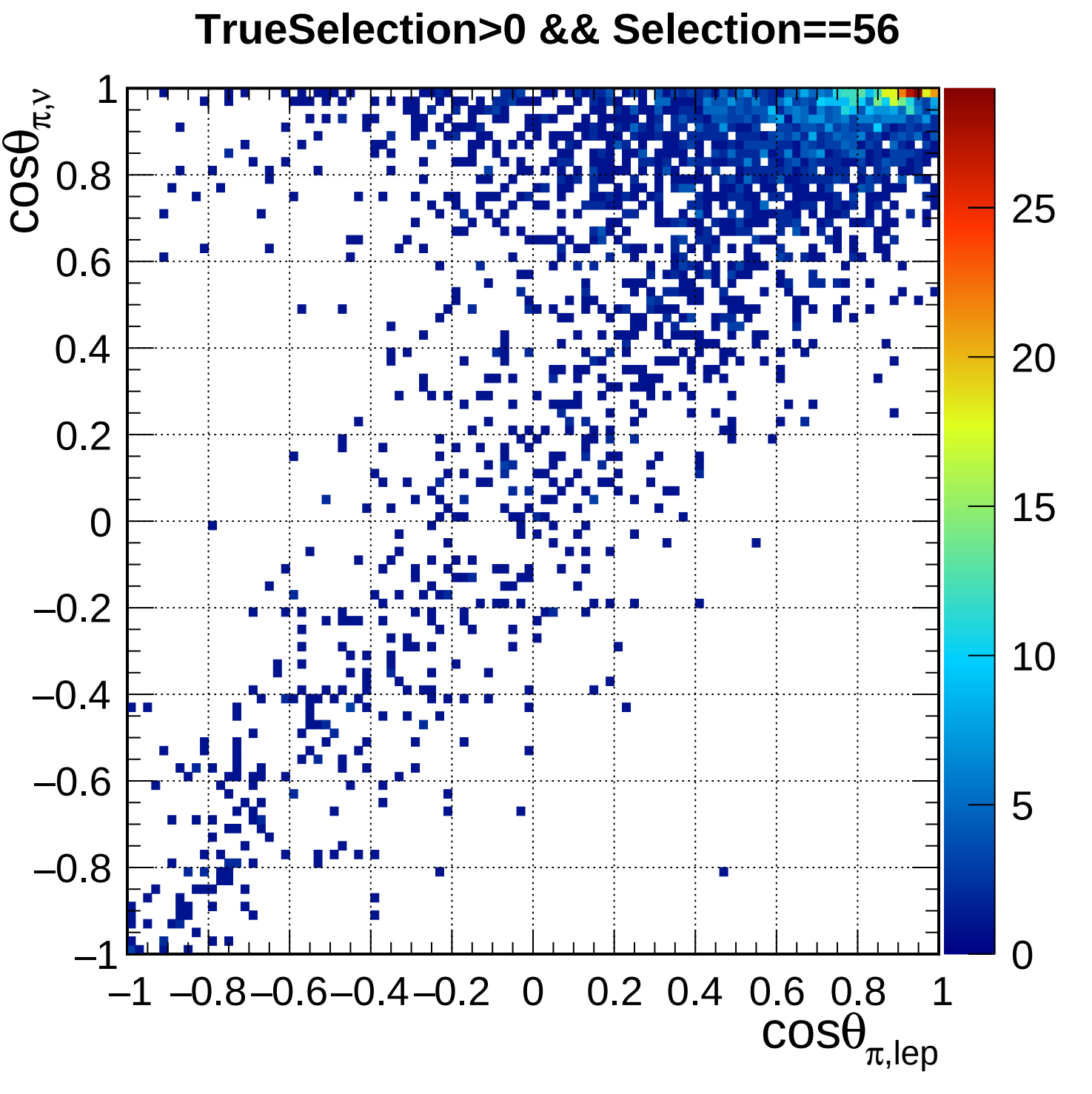

(TrueSelection>0 && Selection==50)/(TrueSelection>0)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

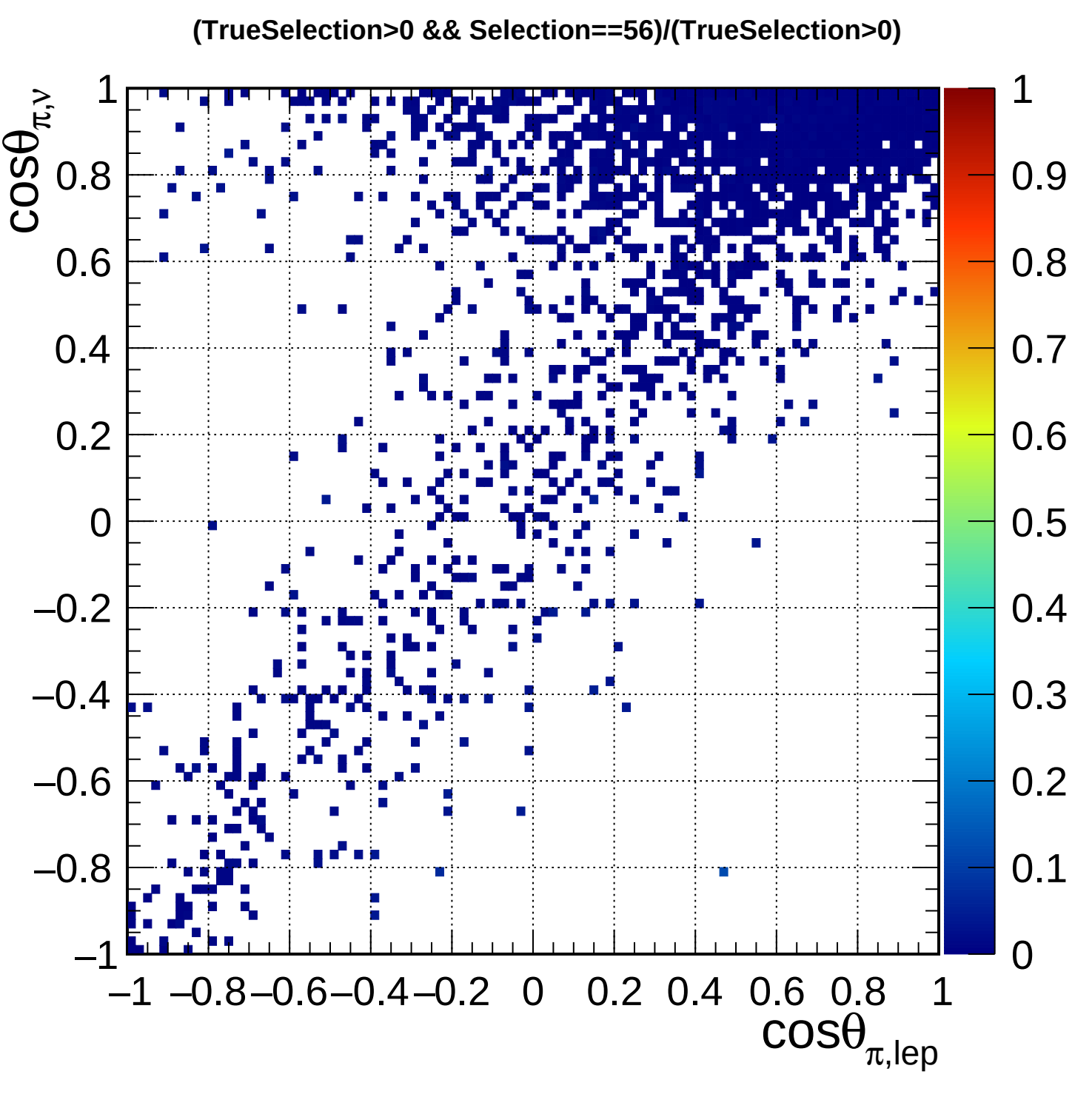

TrueSelection>0 && Selection==51
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
100
80
60
40
20
0

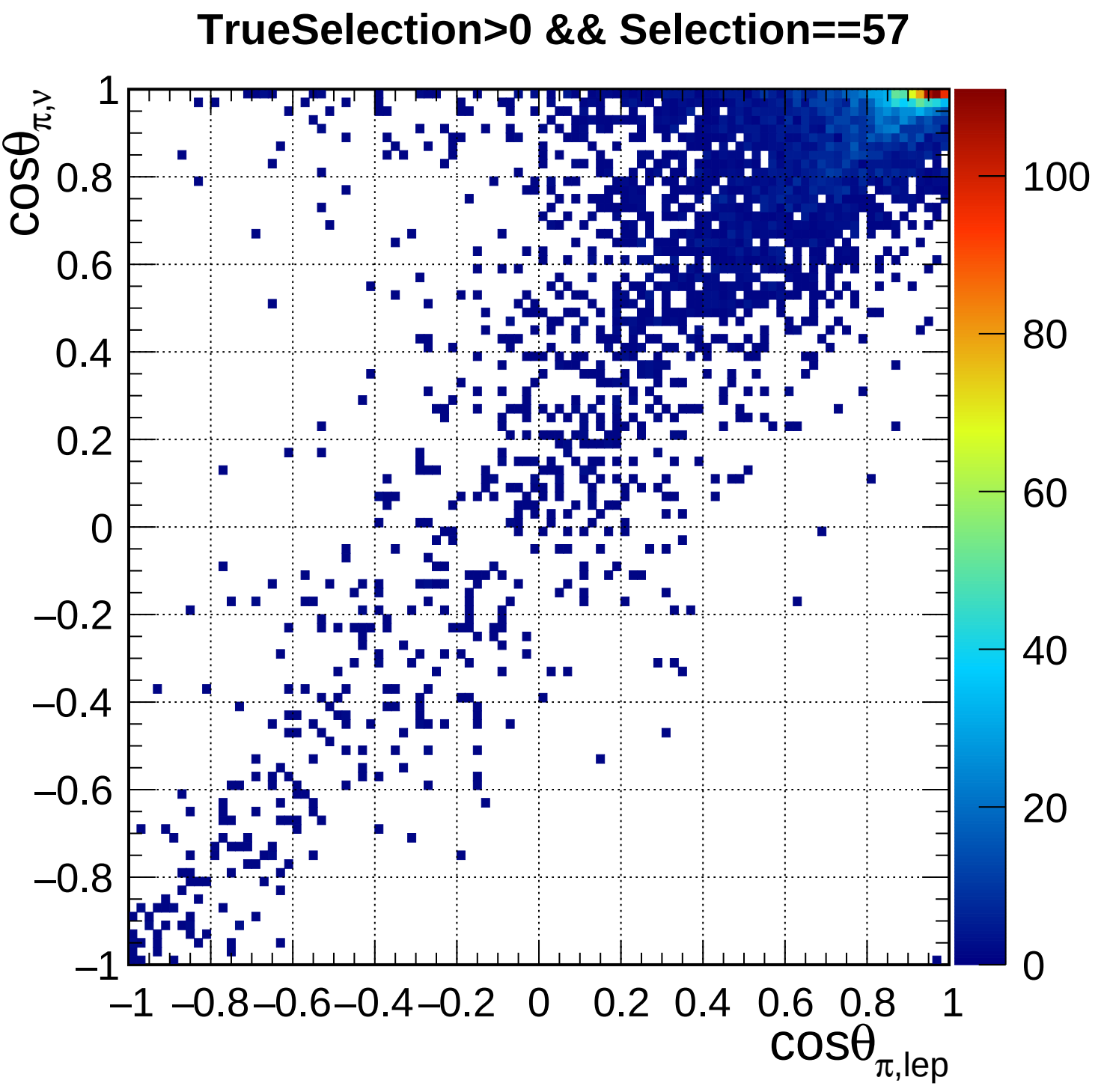

(TrueSelection>0 && Selection==51)/(TrueSelection>0)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

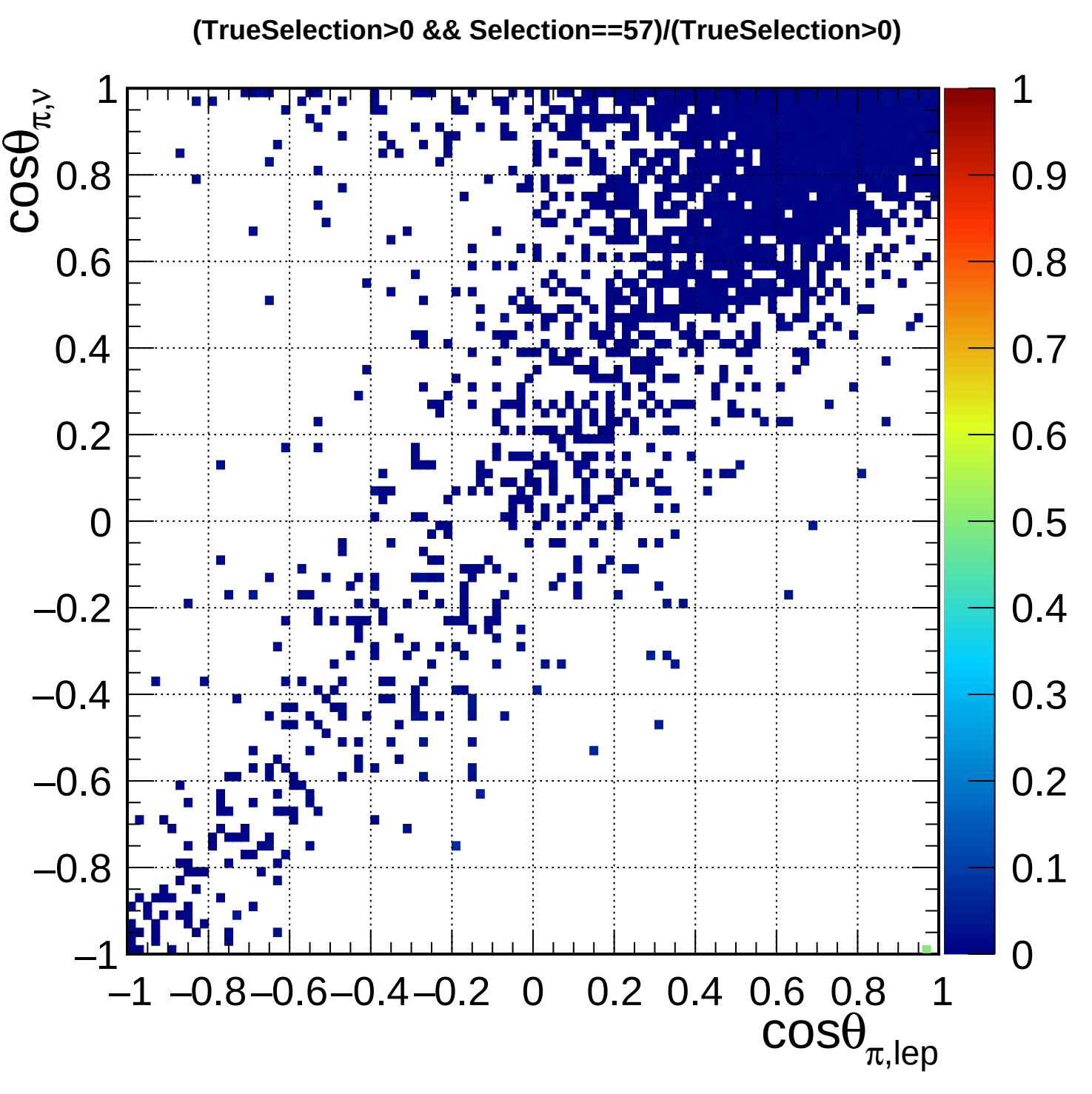

TrueSelection>0 && Selection==55
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
18
16
14
12
10
8
6
4
2
0

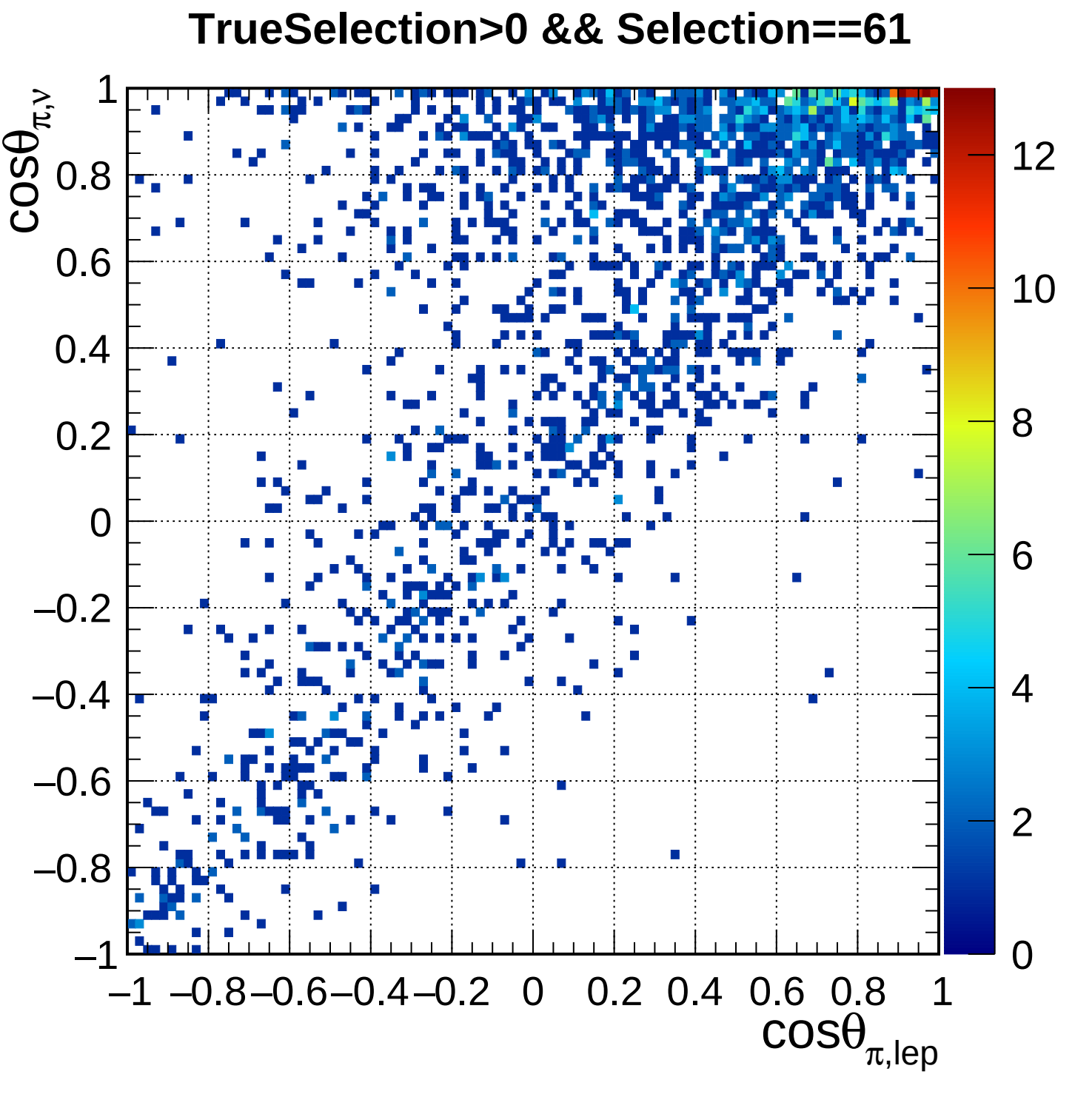

(TrueSelection>0 && Selection==55)/(TrueSelection>0)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

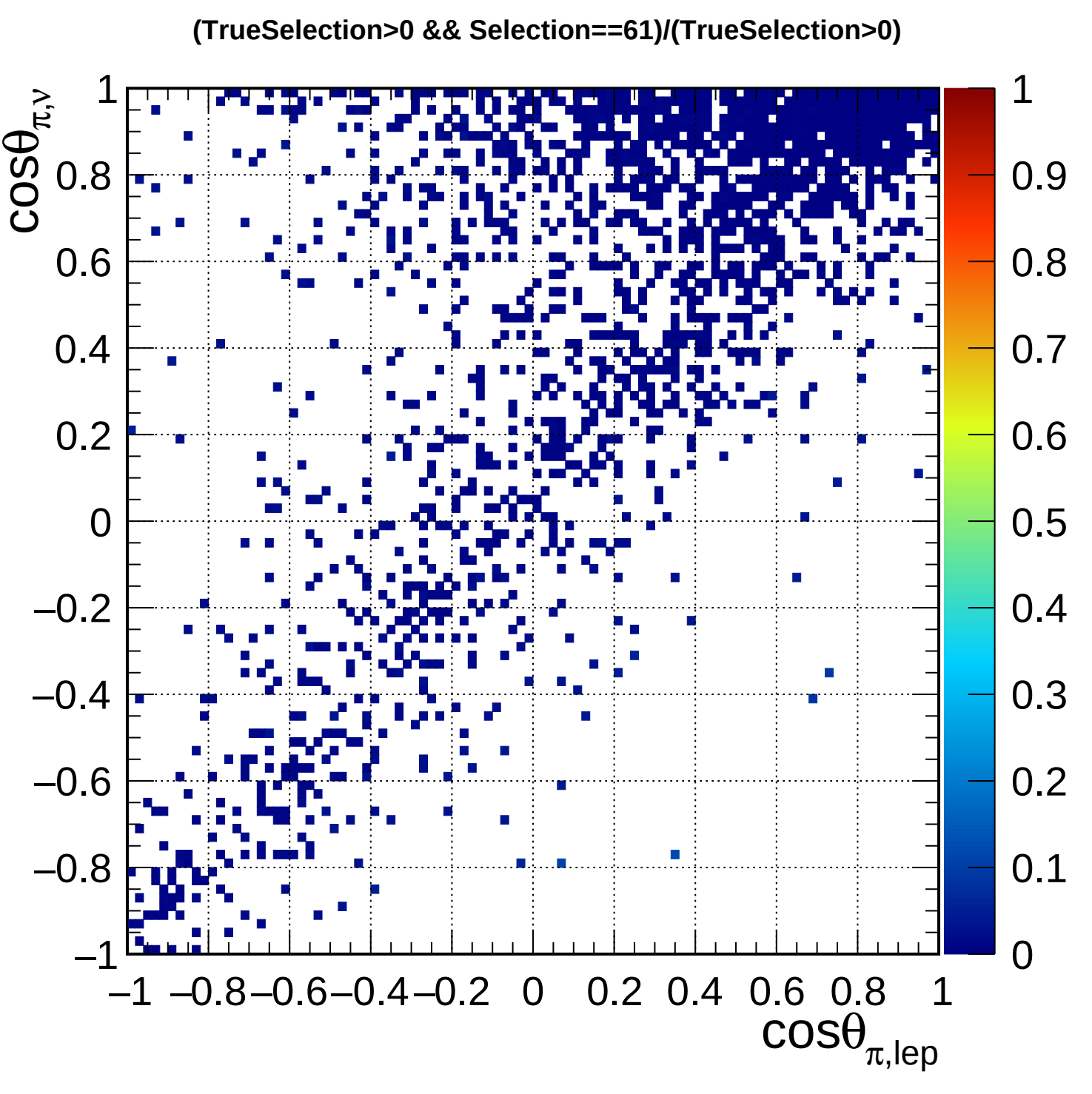

TrueSelection>0 && Selection==56
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
25
20
15
10
5
0

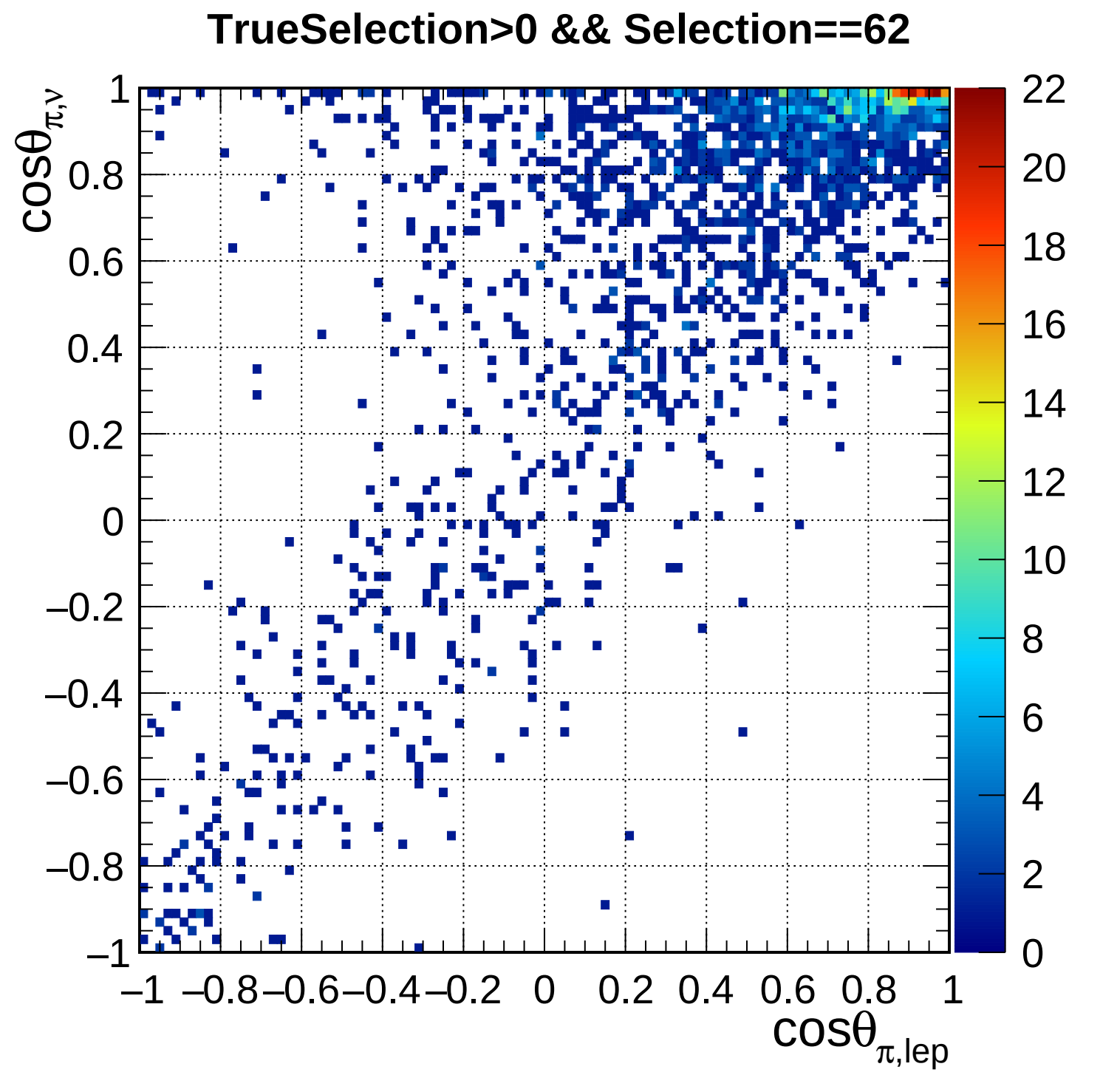

(TrueSelection>0 && Selection==56)/(TrueSelection>0)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

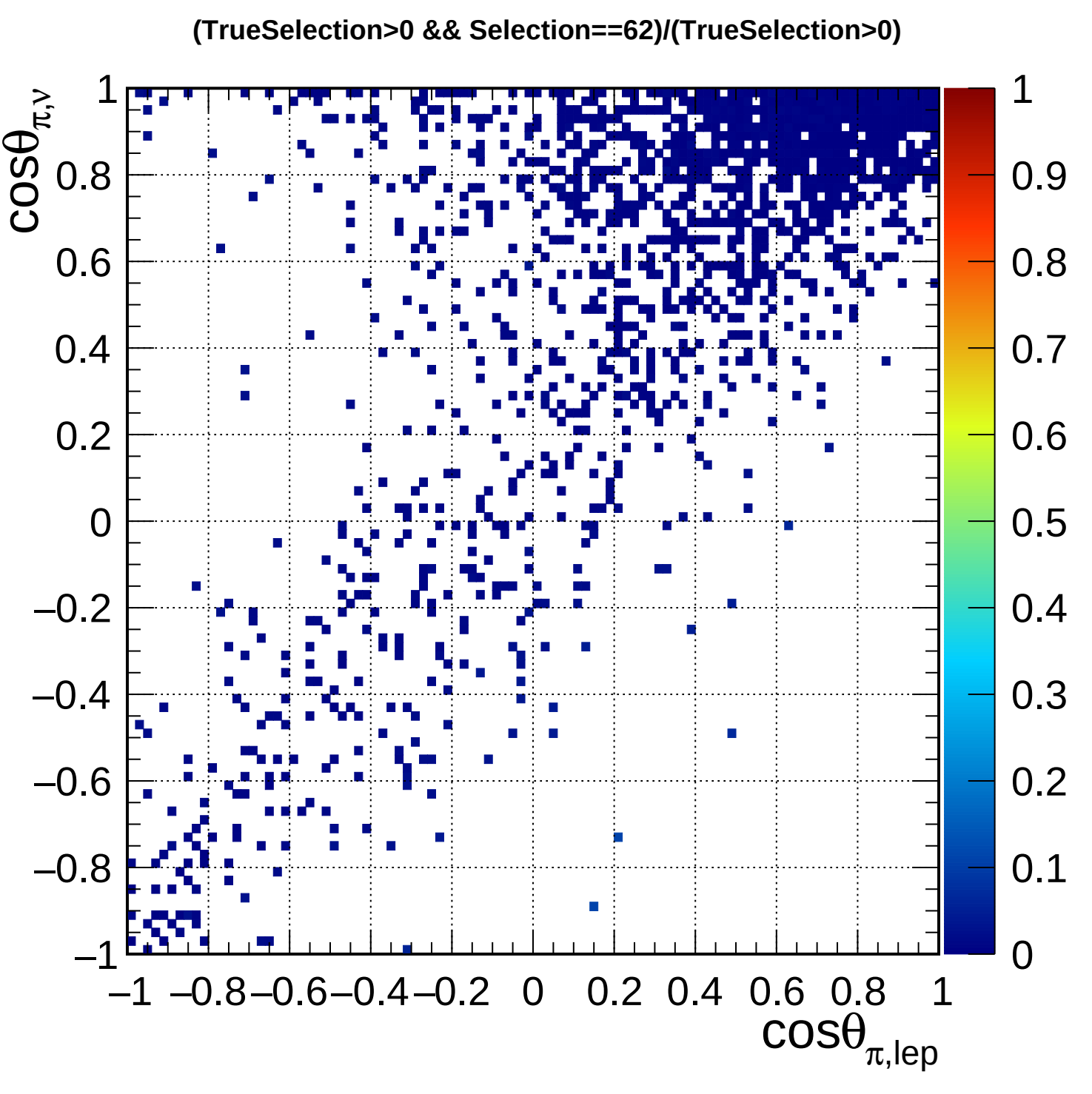

TrueSelection>0 && Selection==57
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
100
80
60
40
20
0

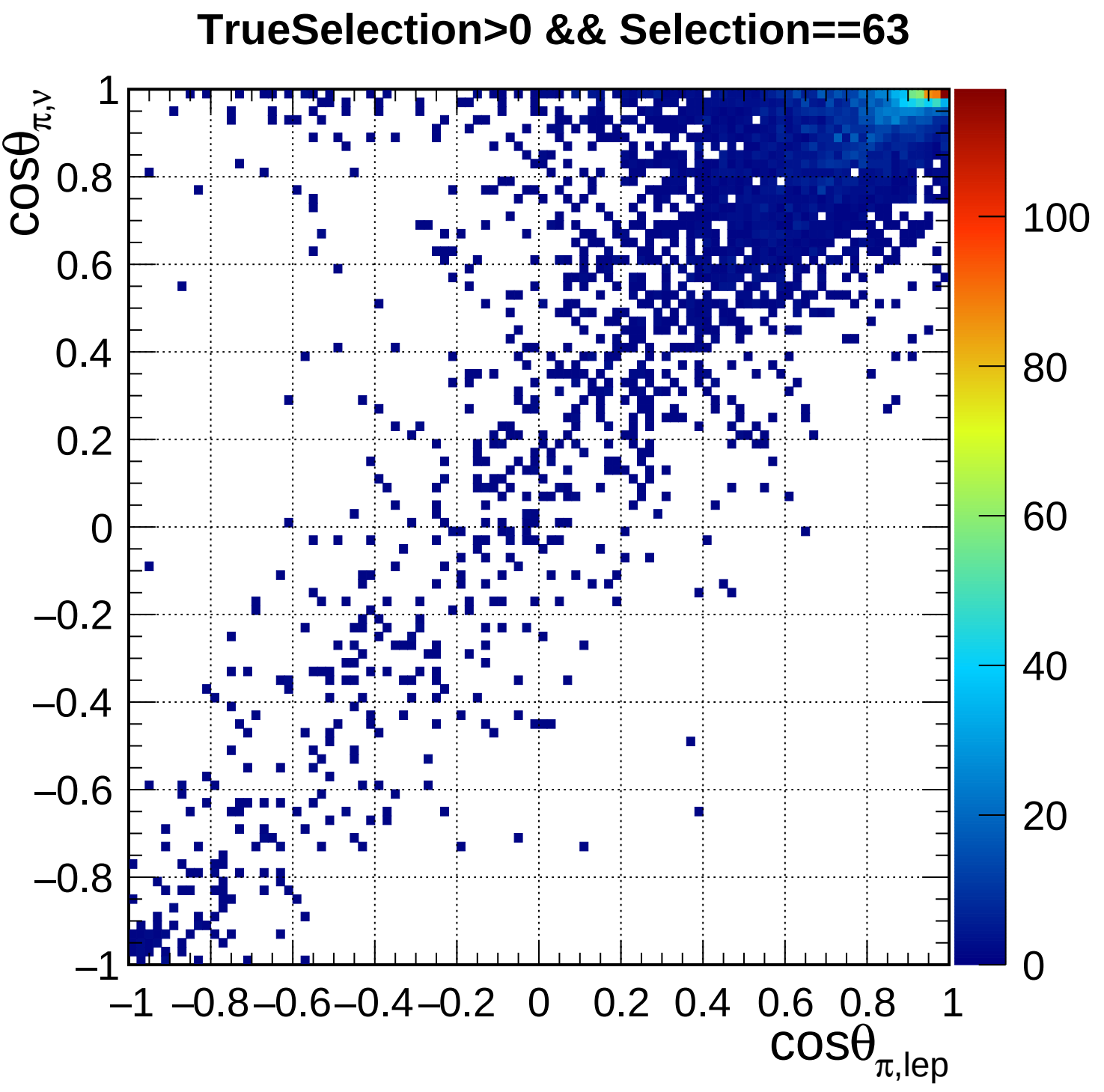

(TrueSelection>0 && Selection==57)/(TrueSelection>0)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

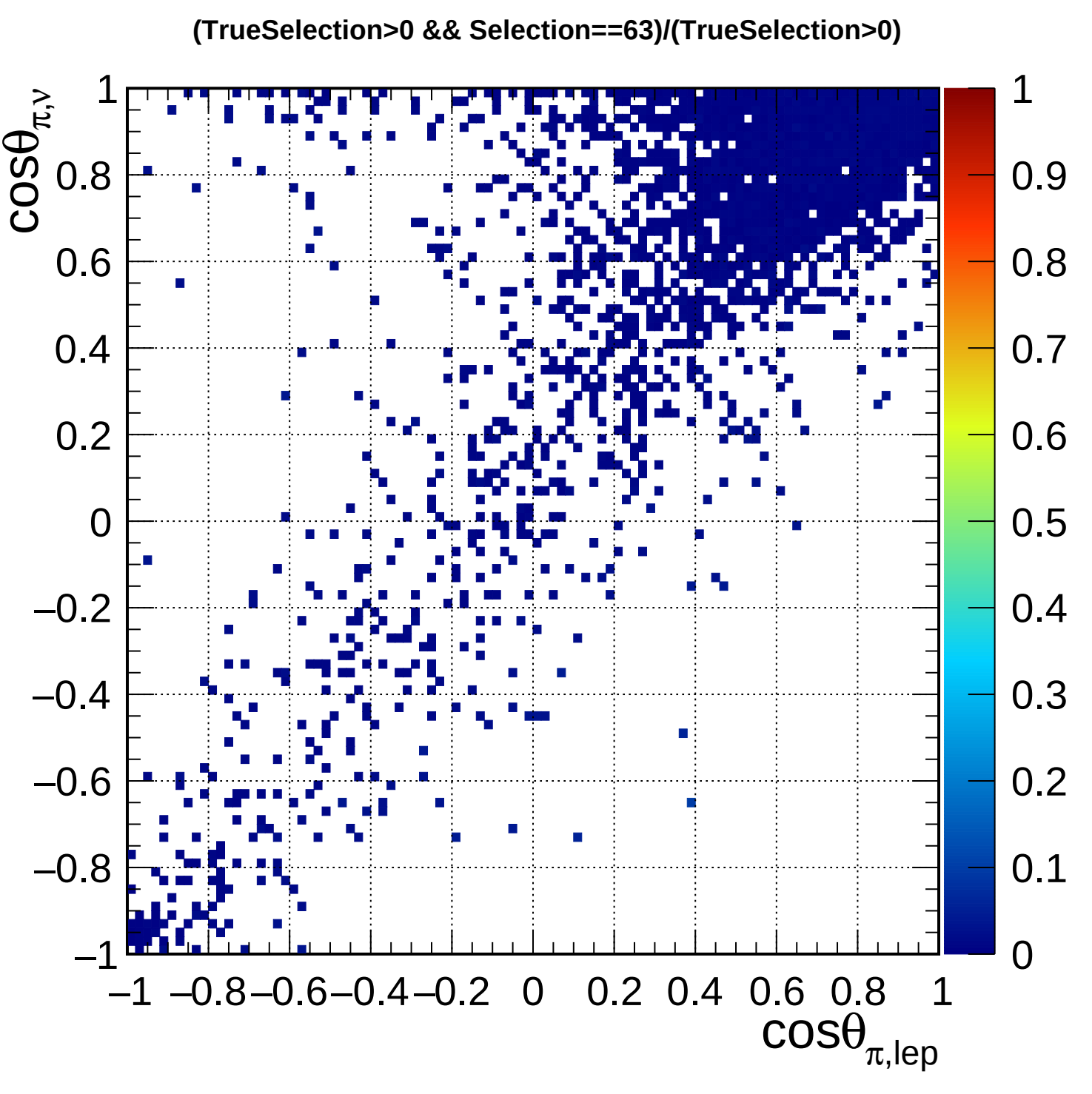

TrueSelection>0 && Selection==61
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
12
10
8
6
4
2
0

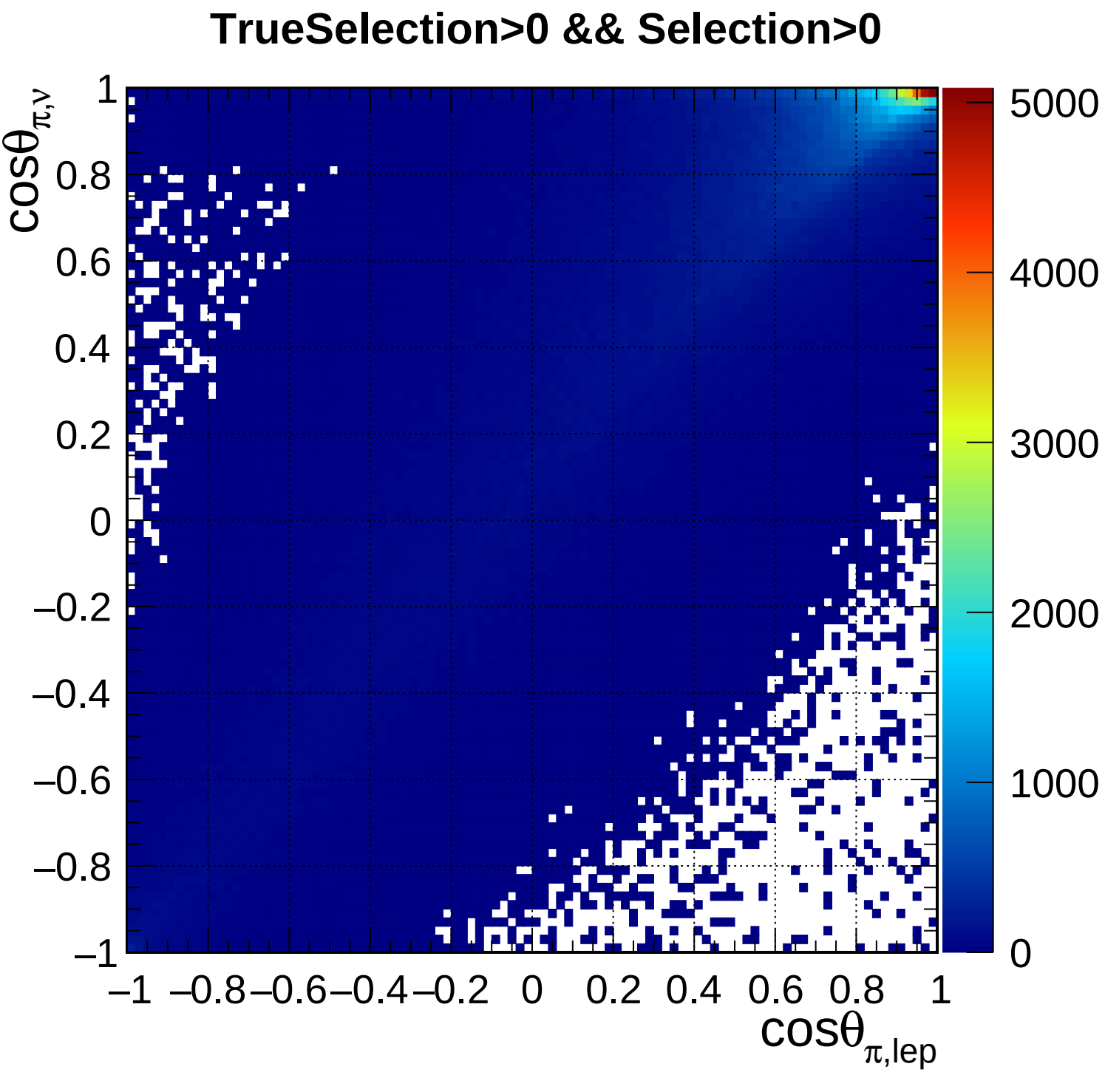

(TrueSelection>0 && Selection==61)/(TrueSelection>0)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1

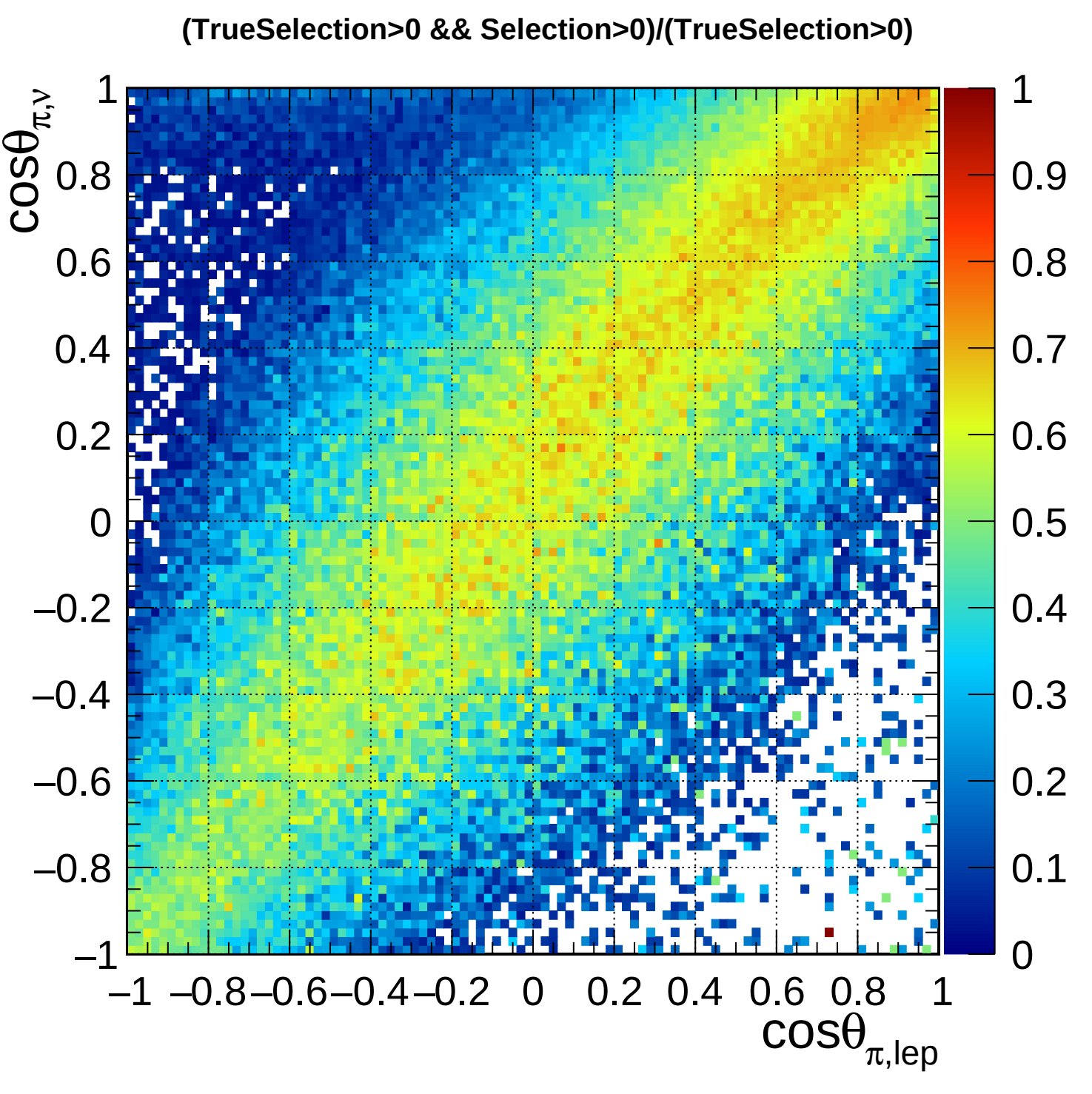

TrueSelection>0 && Selection==62
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
22
20
18
16
14
12
10
8
6
4
2
0


(TrueSelection>0 && Selection==62)/(TrueSelection>0)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1


TrueSelection>0 && Selection==63
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
100
80
60
40
20
0


(TrueSelection>0 && Selection==63)/(TrueSelection>0)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1


TrueSelection>0 && Selection>0
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
5000
4000
3000
2000
1000
0


(TrueSelection>0 && Selection>0)/(TrueSelection>0)
cosθπ,ν
cosθπ,lep
1
0.8
0.6
0.4
0.2
0
–0.2
–0.4
–0.6
–0.8
–1
0.9
0.7
0.5
0.3
0.1