Progress Report

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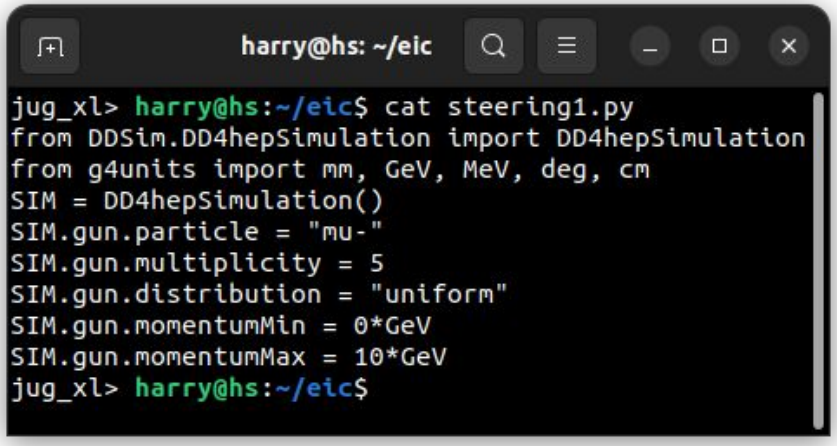
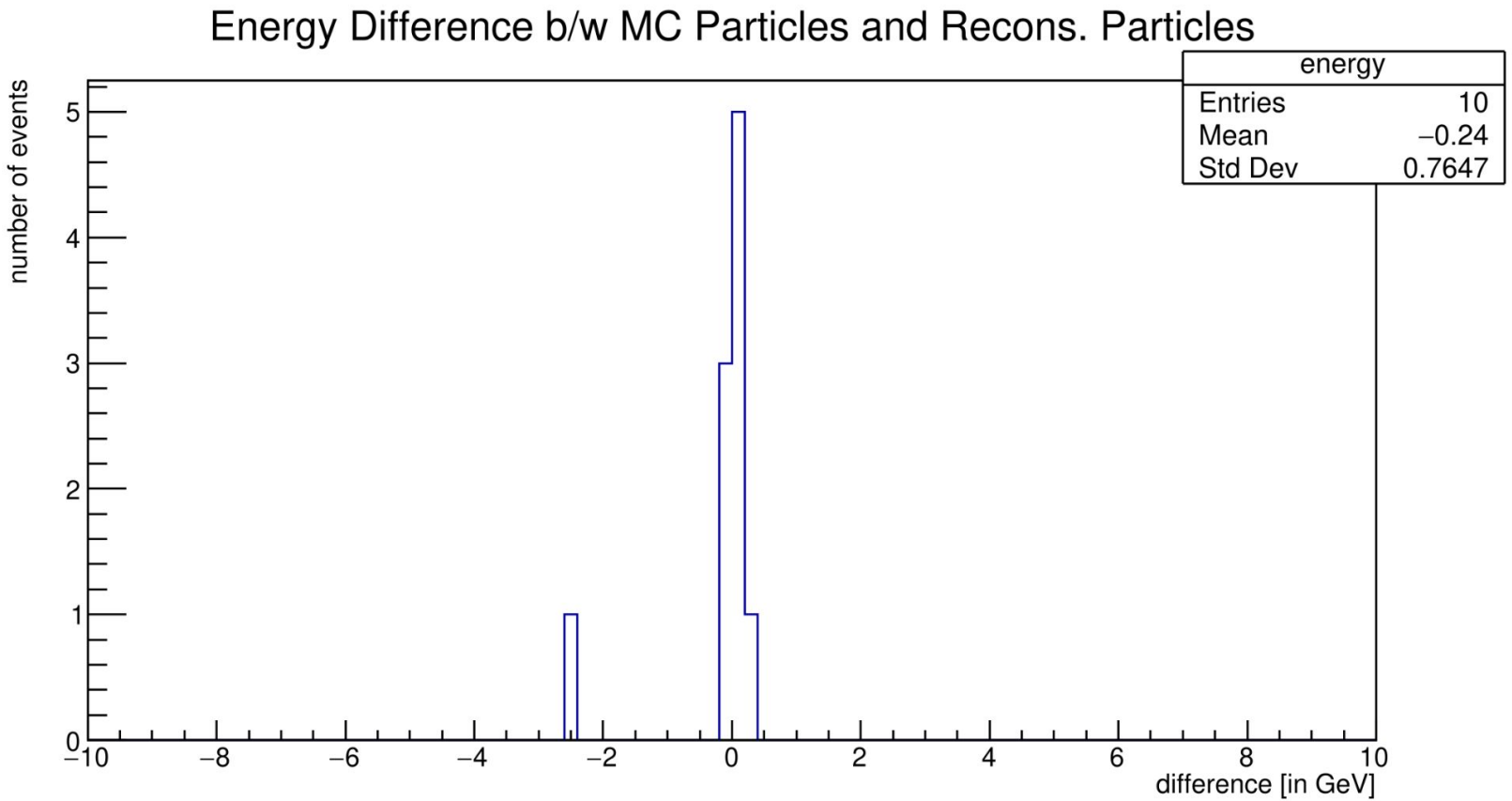
List of commands for first task:

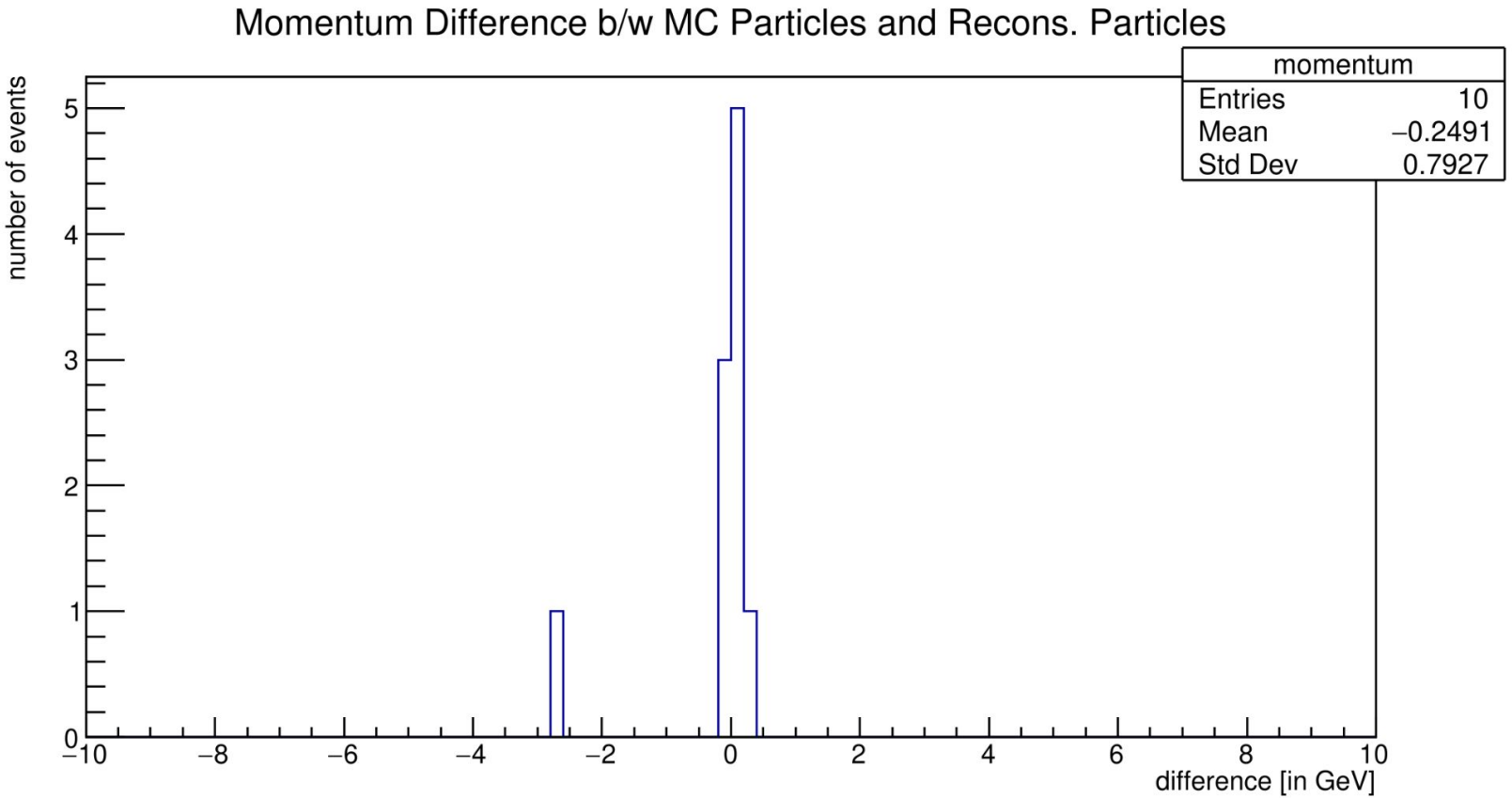
- ddsim --steeringFile=steering1.py --compactFile=$DETECTOR_PATH/$DETECTOR_CONFIG.xml --outputFile=output1.edm4hep.root -G -N=10
- eicrecon -Ppodio:output_file=result1.root output1.edm4hep.root
- root -l analysis.C'("result1.root", "analysis1-out.root")'
- steering1.py



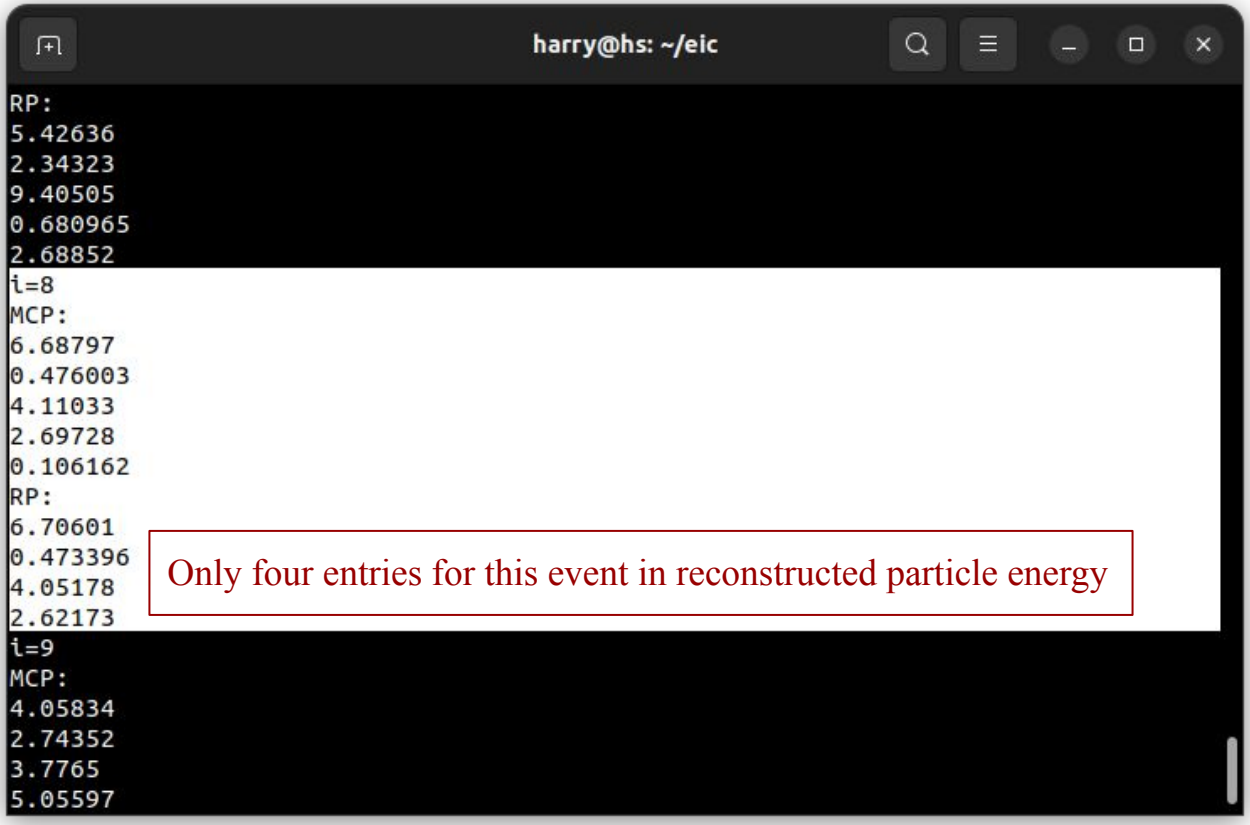
Results


Energy Difference b/w MC Particles and Recons. Particles
energy
Entries 10
Mean −0.24
Std Dev 0.7647
number of events
0
1
2
3
4
5
−10
−8
−6
−4
−2
0
2
4
6
8
10
difference [in GeV]

Results

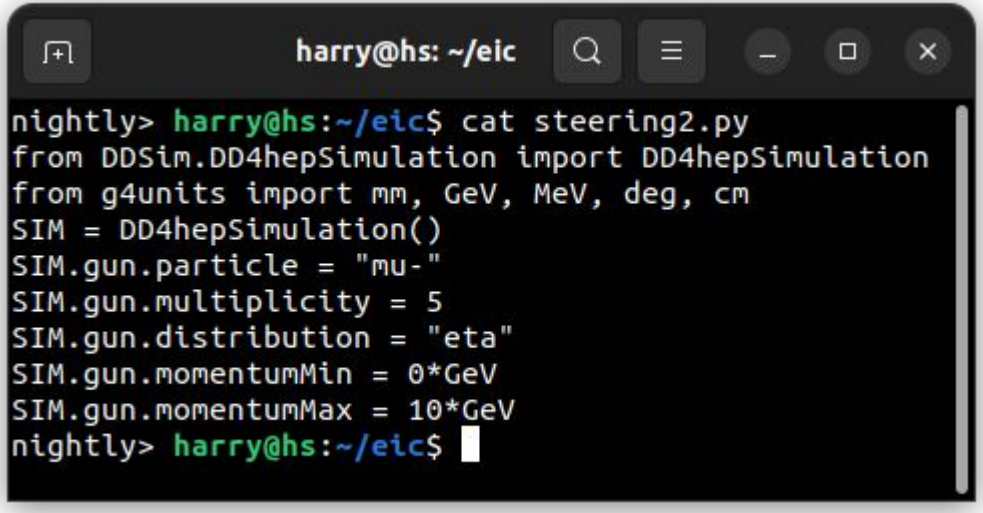

Momentum Difference b/w MC Particles and Recons. Particles
momentum
Entries 10
Mean −0.2491
Std Dev 0.7927
number of events
difference [in GeV]
0
1
2
3
4
5
−10
−8
−6
−4
−2
0
2
4
6
8
10

Possible cause of this weirdly large deviation:

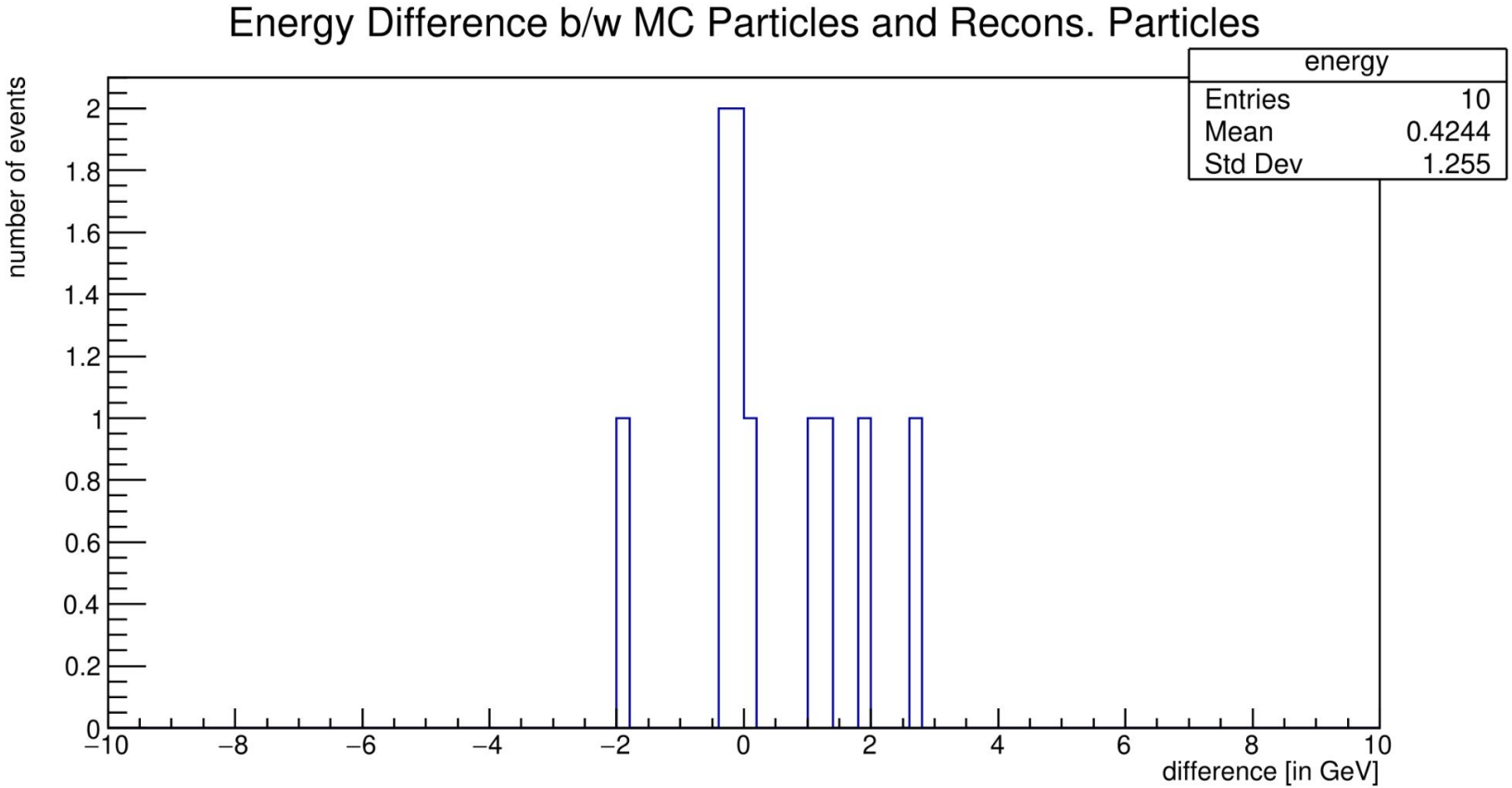


List of commands for second task:

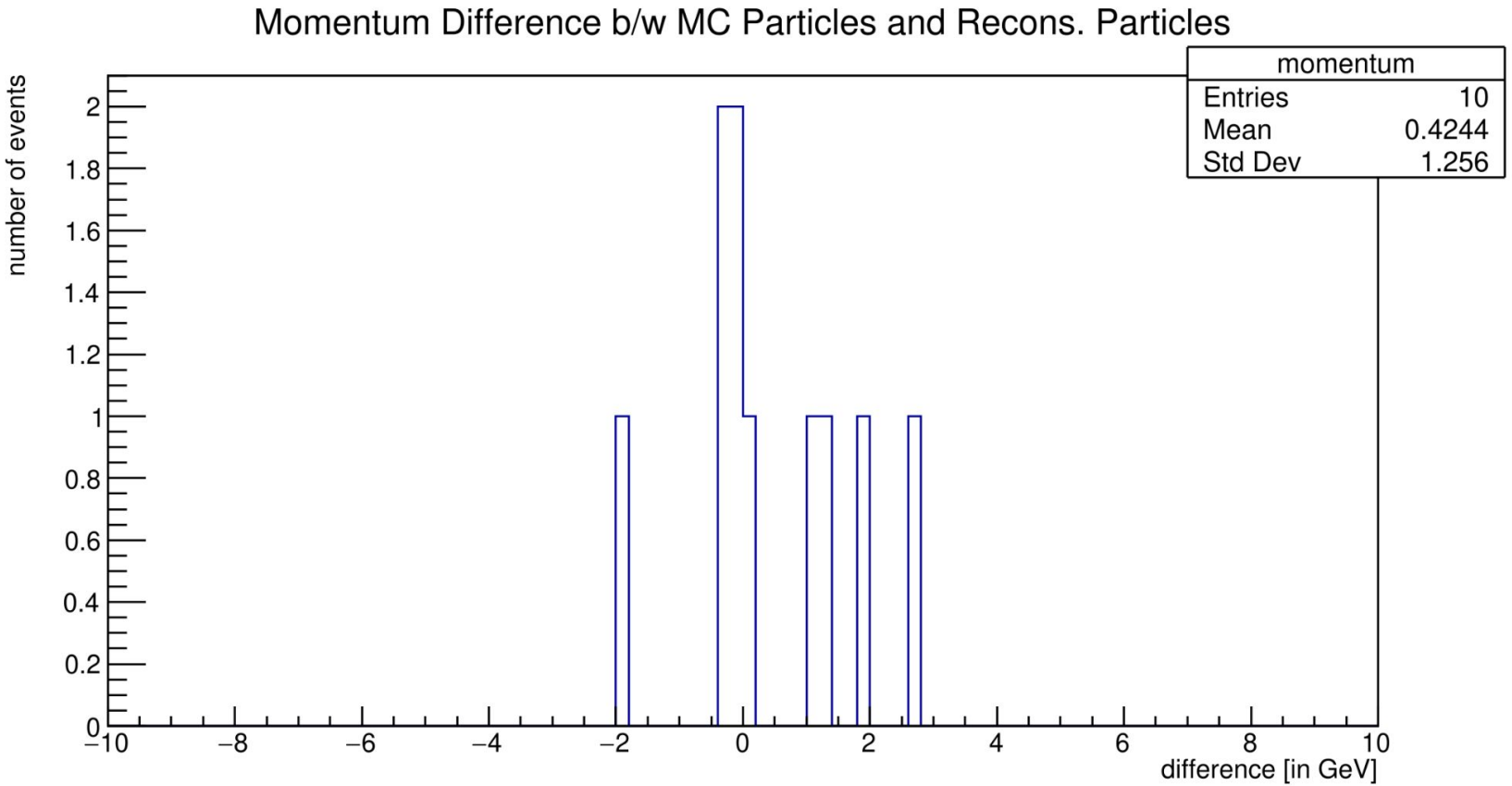
- ddsim --steeringFile=steering2.py --compactFile=$DETECTOR_PATH/$DETECTOR_CONFIG.xml --outputFile=output2.edm4hep.root -G -N=10
- eicrecon -Ppodio:output_file=result2.root output2.edm4hep.root
- root -l analysis.C'("result2.root", "analysis2-out.root")'
- steering2.py



Results


Energy Difference b/w MC Particles and Recons. Particles
energy
Entries 10
Mean 0.4244
Std Dev 1.255
number of events
difference [in GeV]
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2
−10
−8
−6
−4
−2
0
2
4
6
8
10

Results


Momentum Difference b/w MC Particles and Recons. Particles
momentum
Entries 10
Mean 0.4244
Std Dev 1.256
number of events
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2
−10
−8
−6
−4
−2
0
2
4
6
8
10
difference [in GeV]

Possible cause of this weirdly large deviation: