Subject: Tracking: Kalman Task with STT,(electron hypo)
Posted by M.Babai on Tue, 21 Dec 2010 10:47:42 GMT
View Forum Message <> Reply to Message

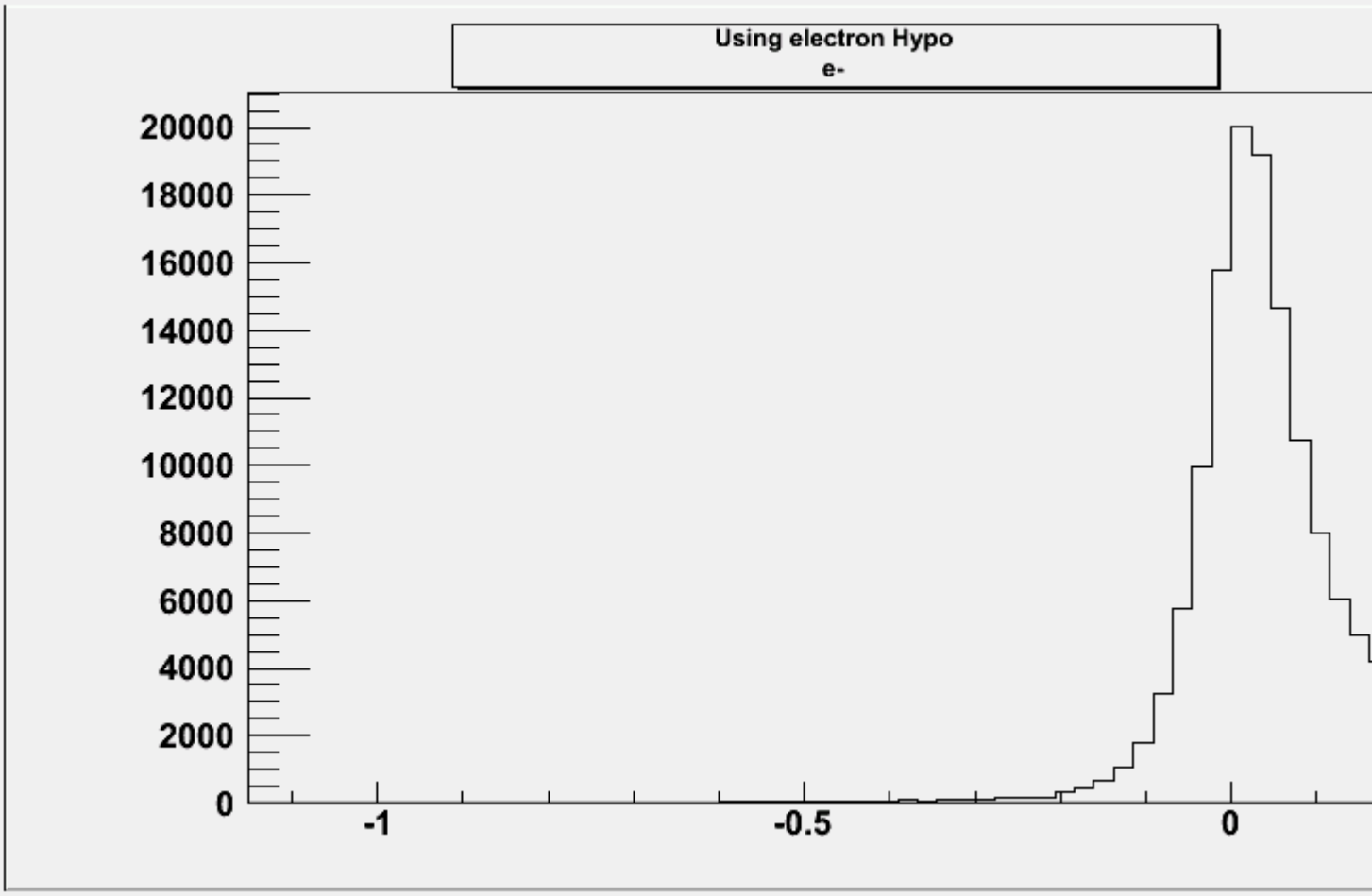
Dear all,

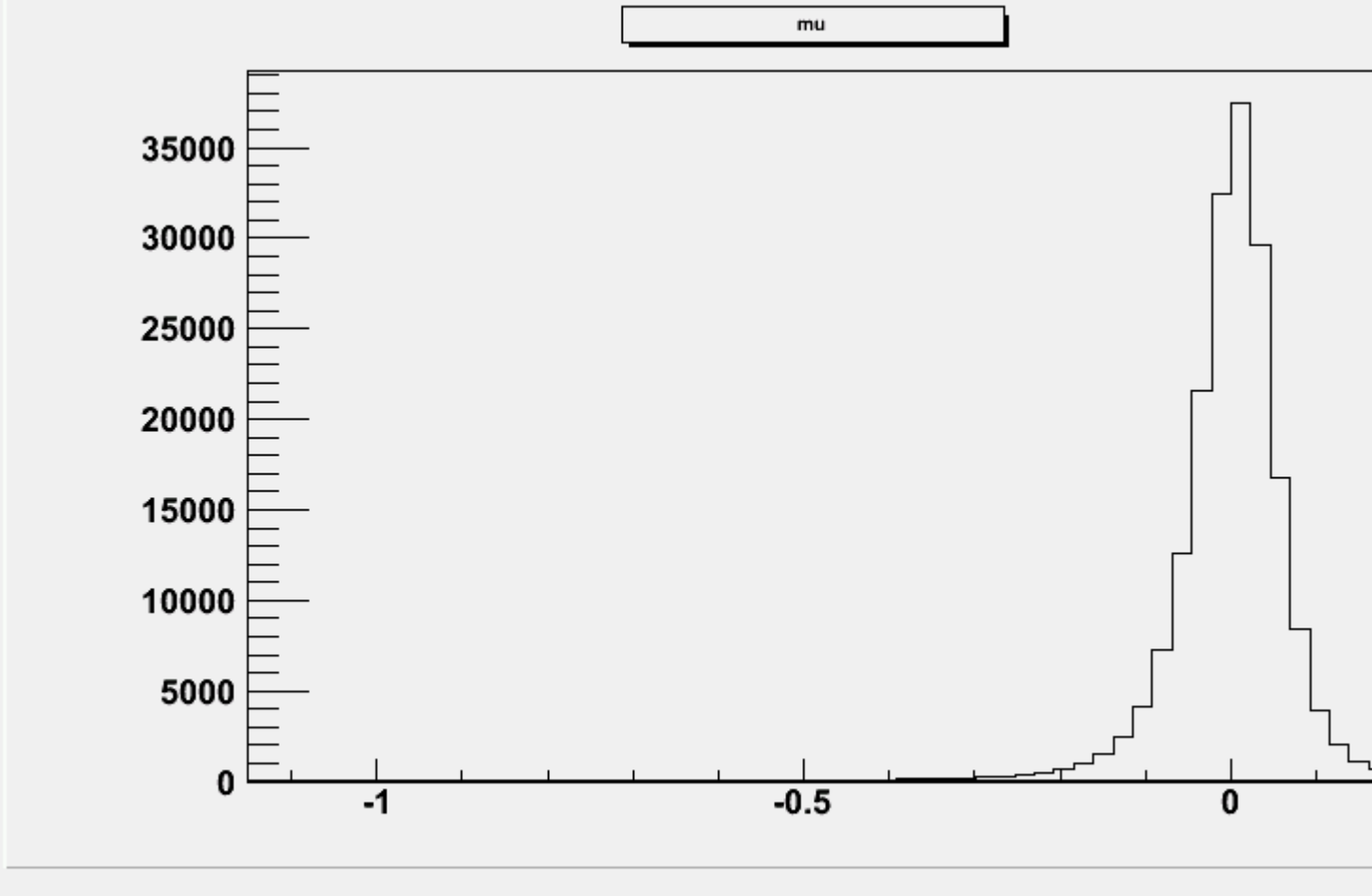
I was playing around to produce new datasets for the EMC pid stuf. Using the PndRecoKalmanTask I could get the reconstructed momentum for each track. Also, I saw that it is possible to change the particle hypothesis. As I could see the default value is set to muon. I have changed this to electron for electron simulations to see either the results get better or not. Unfortunately I saw that changing the hypothesis leads to even worse results for electrons. The graphs are included here (p_mc = Monte Carlo momentum and p = momentum obtained from the track after Kalman); the macro's are available in "PndTools/MVA/macro/". Am I doing something wrong or is it expected to be like this?

Best regards,

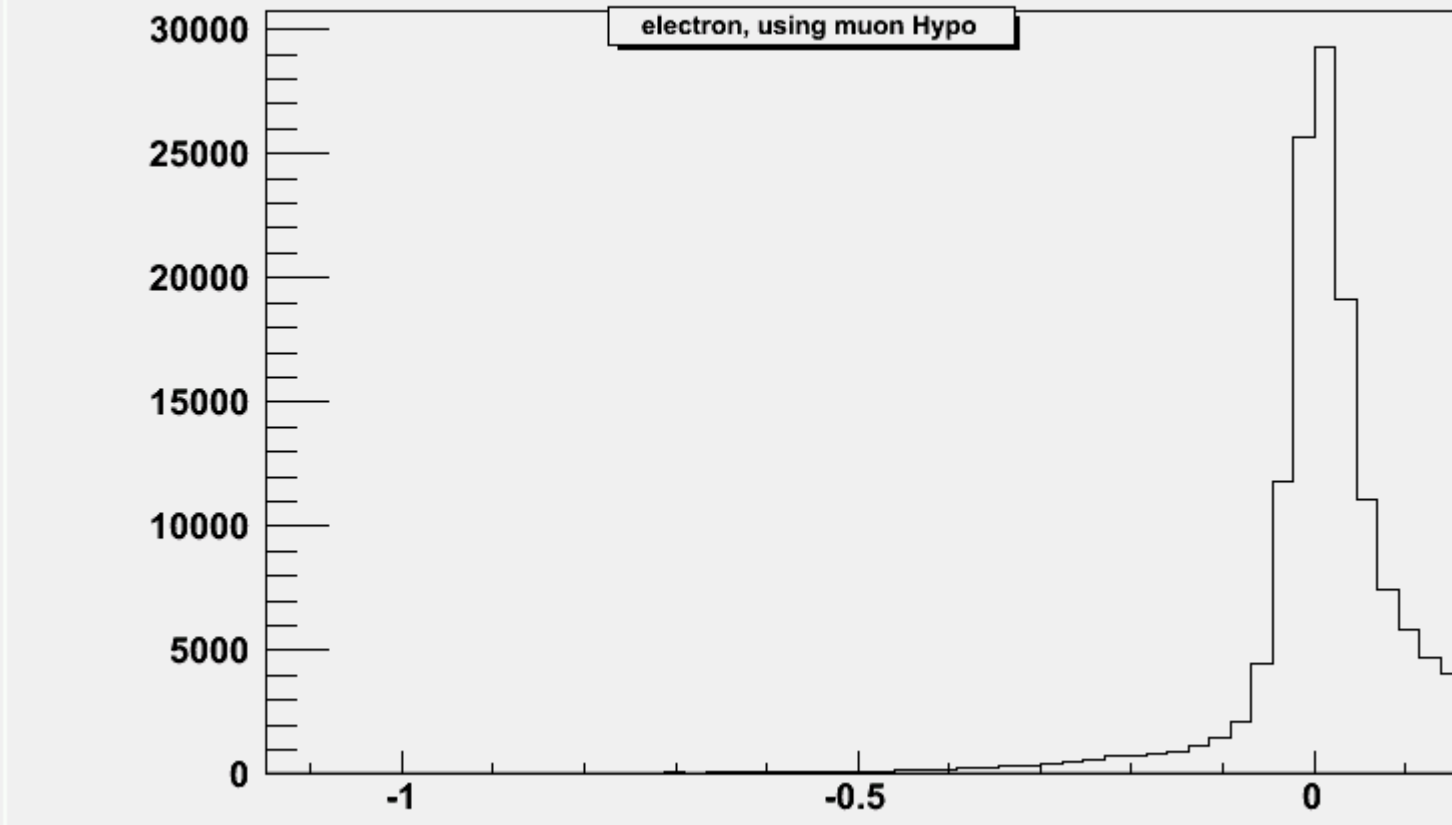
File Attachments

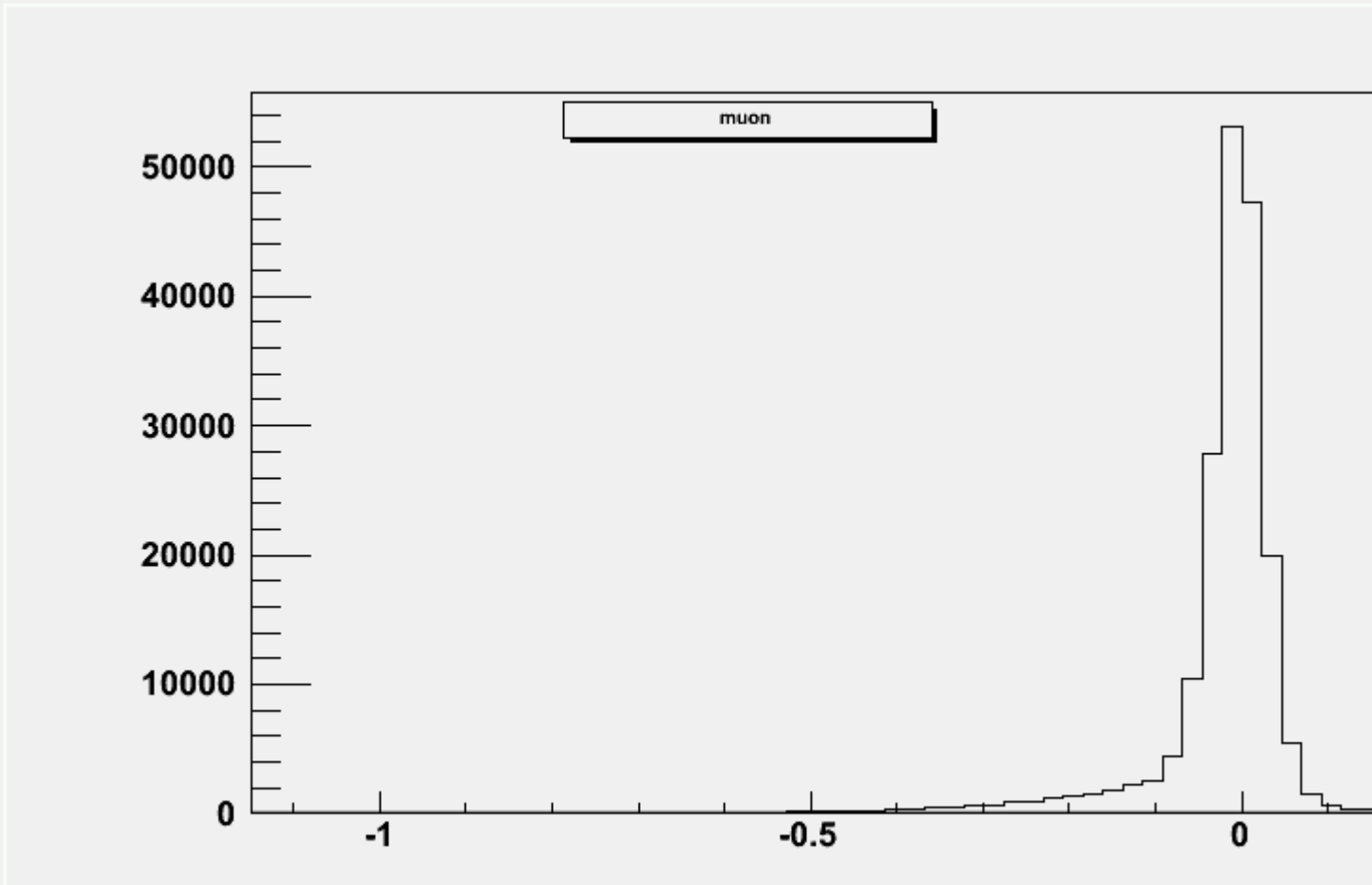
1) electronHypo.png, downloaded 1953 times


Using electron Hypo
e-
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
-1
-0.5
0


mu
35000
30000
25000
20000
15000
10000
5000
0
-1
-0.5
0

2) muonHypo.png, downloaded 1962 times


electron, using muon Hypo
30000
25000
20000
15000
10000
5000
0
-1
-0.5
0


muon
50000
40000
30000
20000
10000
0
-1
-0.5
0