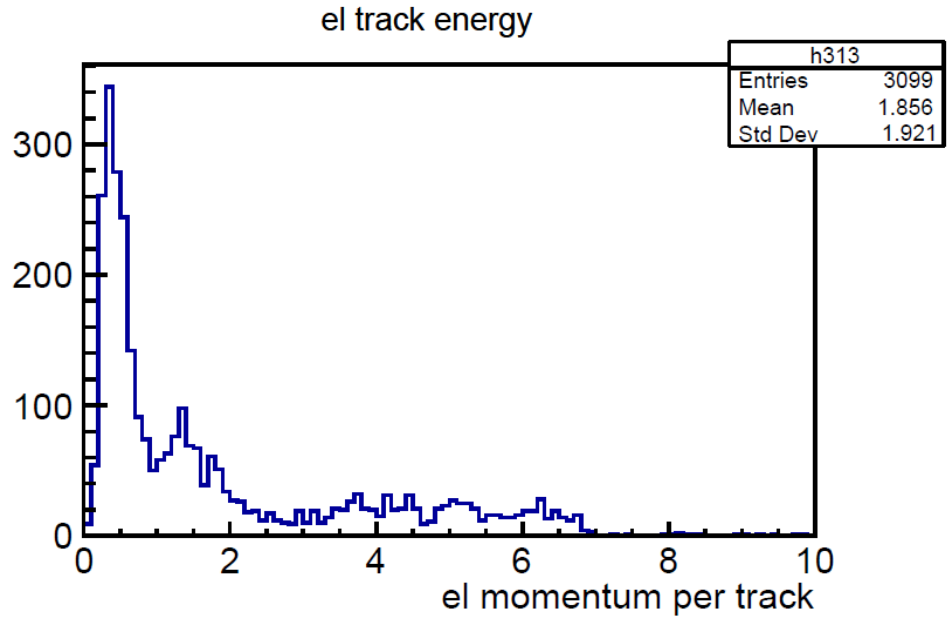
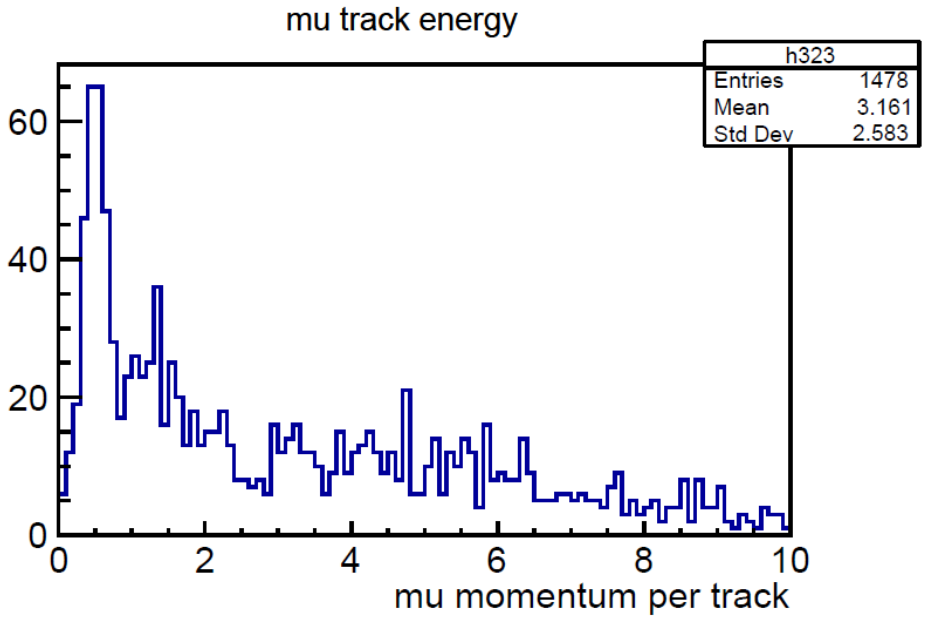
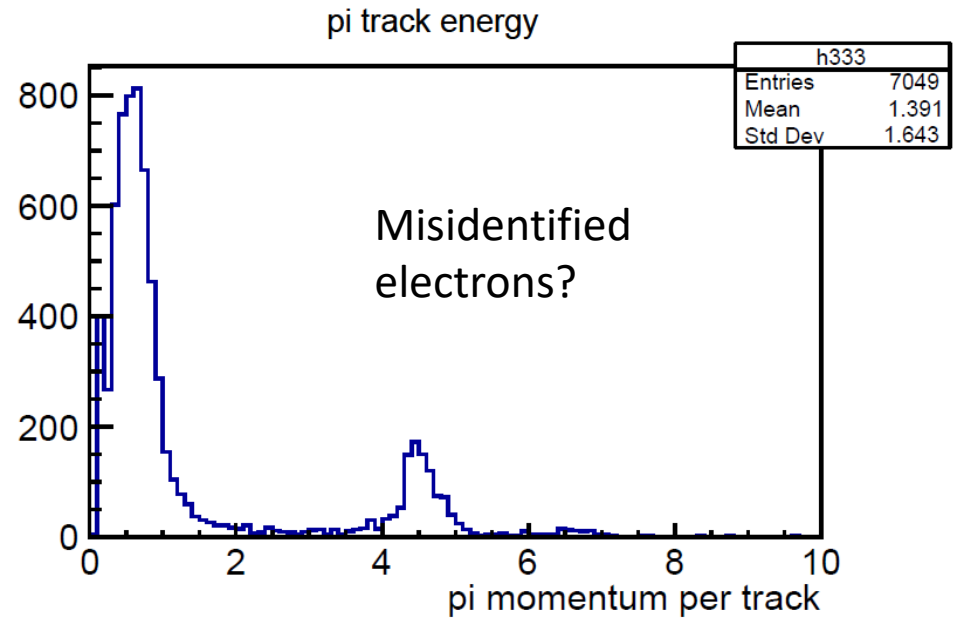
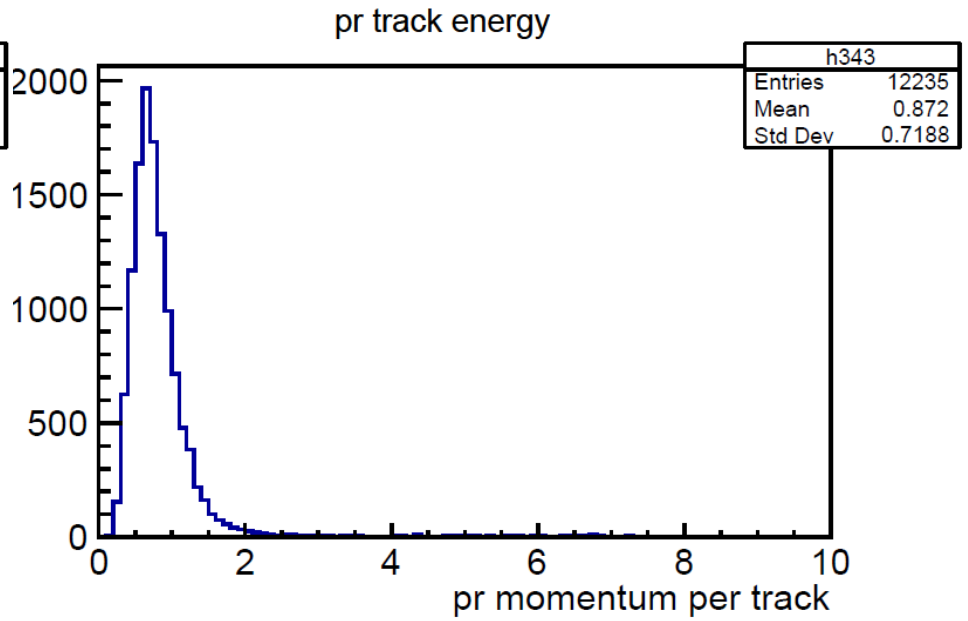
Phase2
Track Analysis
Cont.

Run 5187

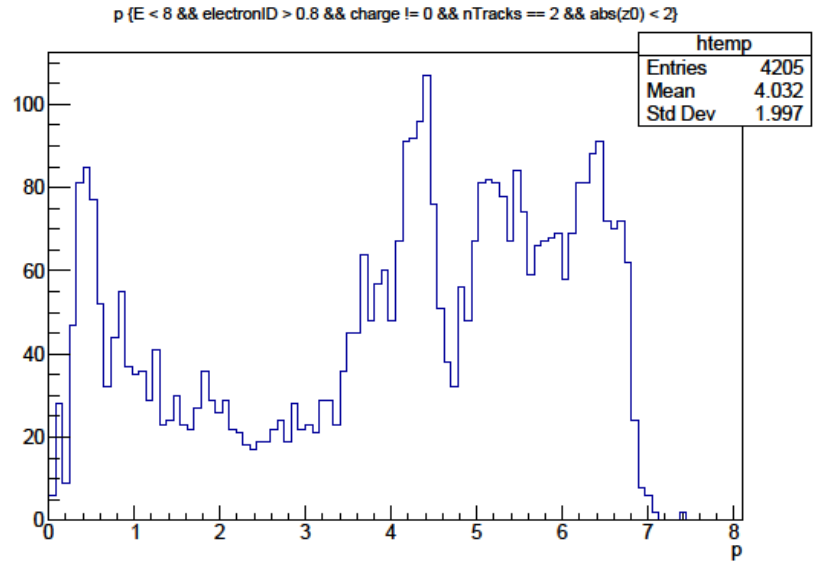

el track energy
h313
Entries 3099
Mean 1.856
Std Dev 1.921
el momentum per track


mu track energy
h323
Entries 1478
Mean 3.161
Std Dev 2.583
mu momentum per track


pi track energy
h333
Entries 7049
Mean 1.391
Std Dev 1.643
Misidentified electrons?
pi momentum per track

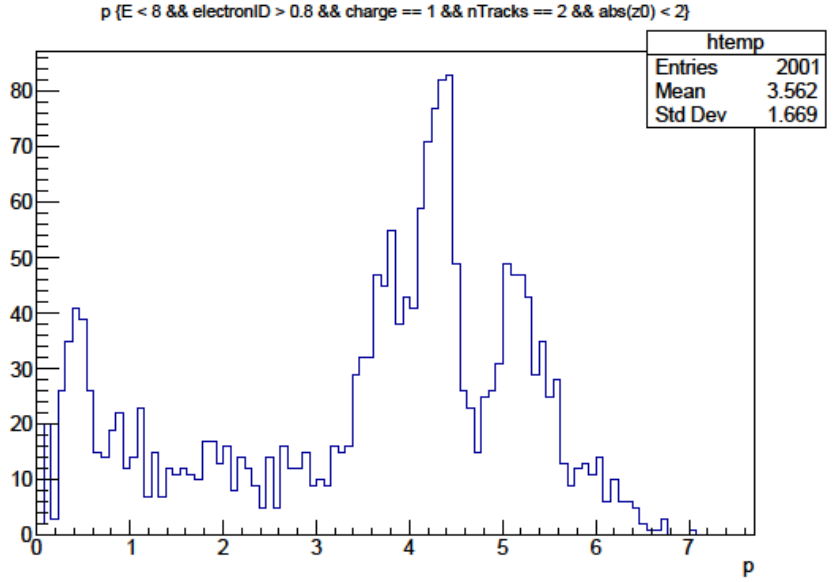

pr track energy
h343
Entries 12235
Mean 0.872
Std Dev 0.7188
pr momentum per track

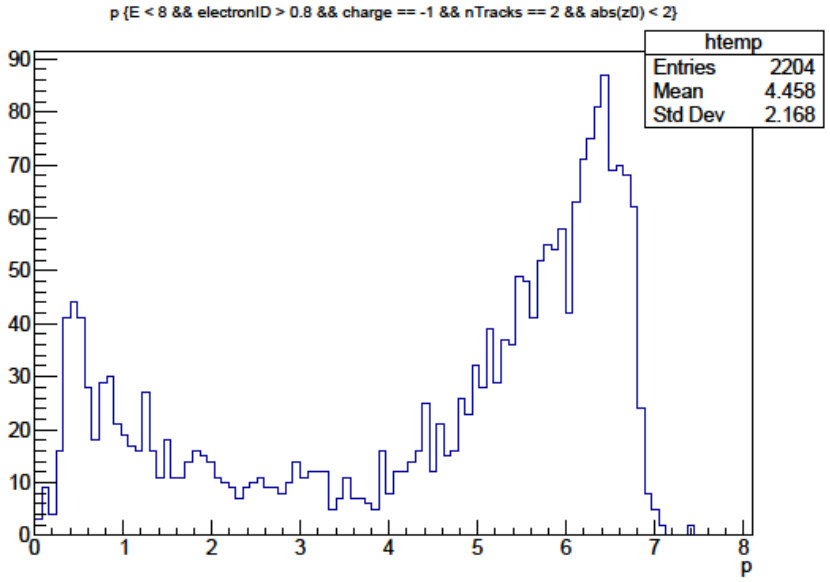
Run 5187



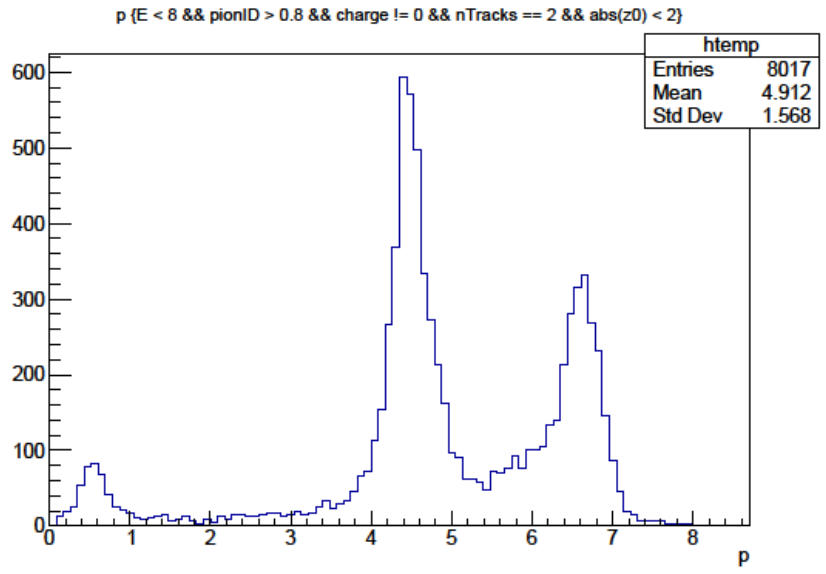
Electrons from the vertex

(|z| < 2 cm)





Run 5187

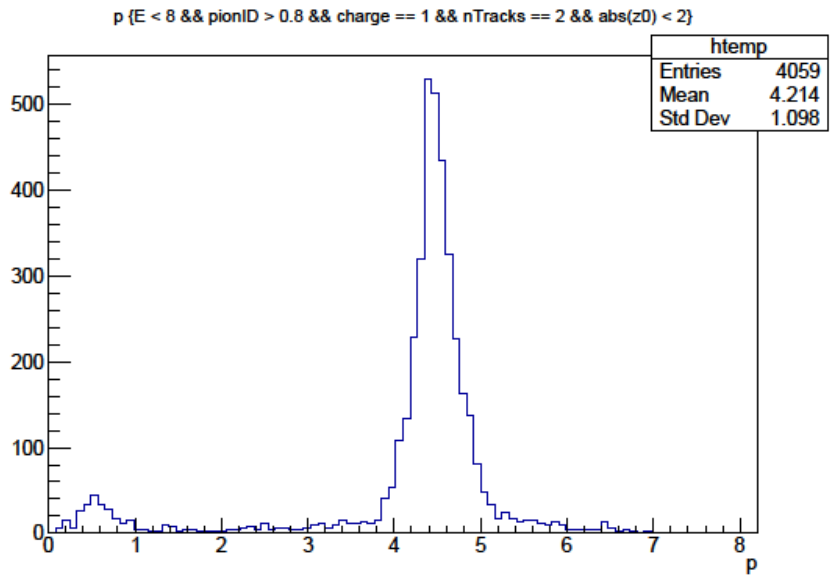


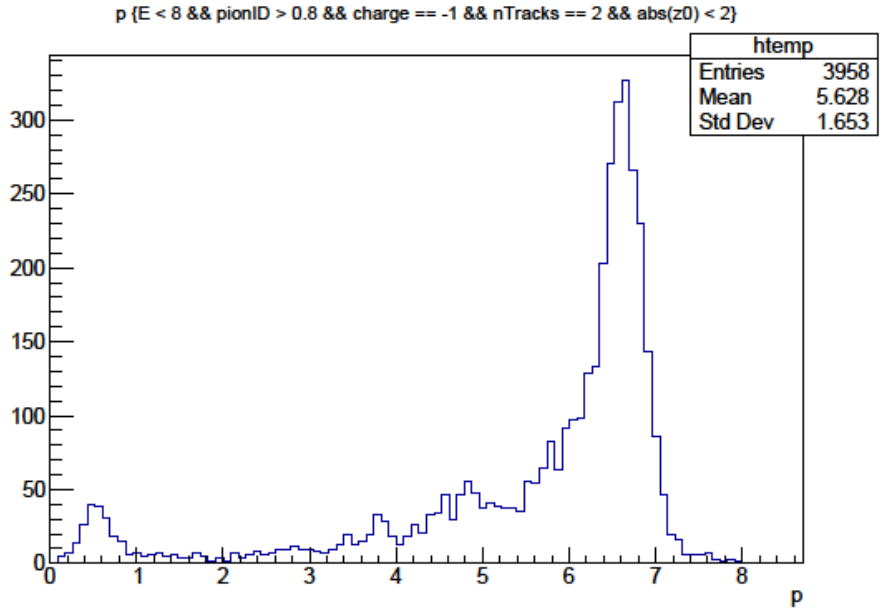
Pions from the vertex

(|z| < 2 cm)

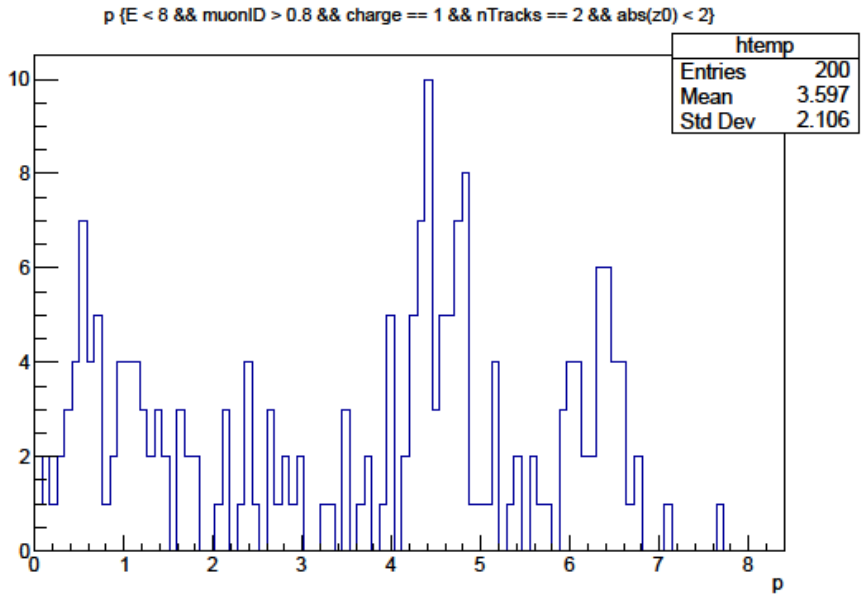
The „pions“ are „electrons“

(the „electrons“ are pions“)



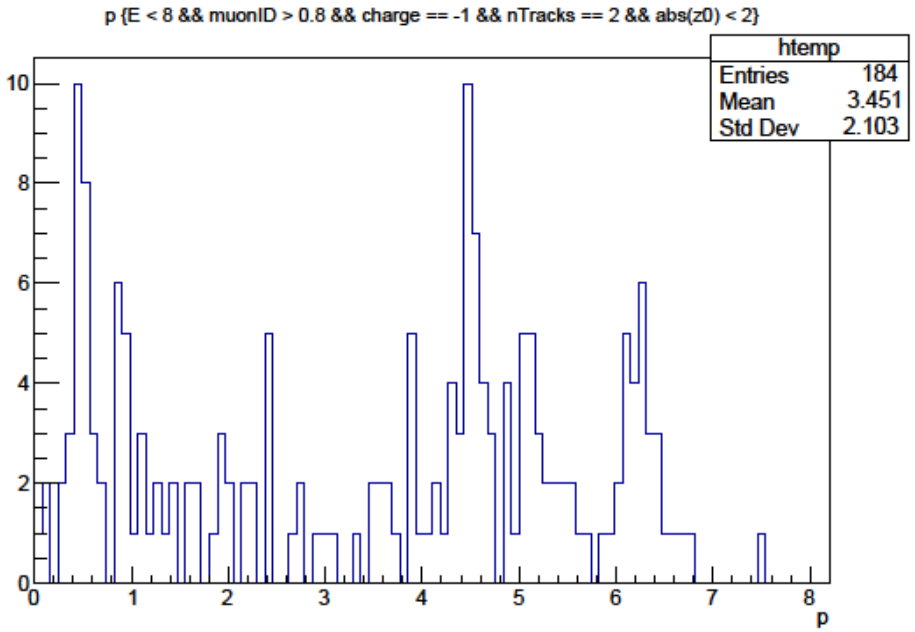


Run 5187



Muons from the vertex

(|z| < 2 cm)



Conclusions

Looking at different particle types:

- muons are dominated by cosmics
  but we see muon pairs from the vertex
- Bhabhas clearly visible in the 2-track sample

- what is the 4 GeV peak for pions (misidentified electrons?)
  yes, looks like a bug in basf2