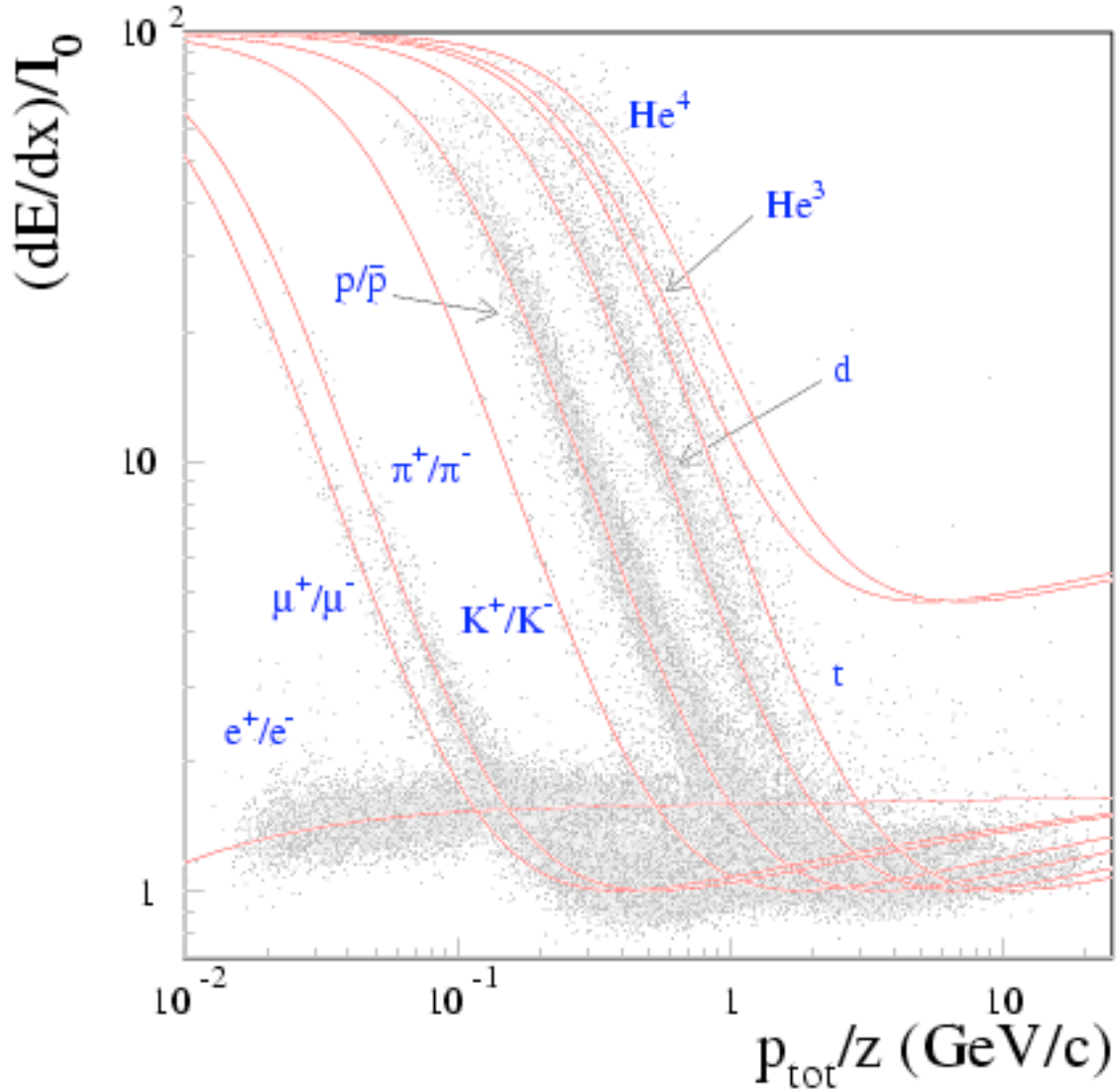
MIPP dE/dx Plans

From Xihong's
E910 Thesis:

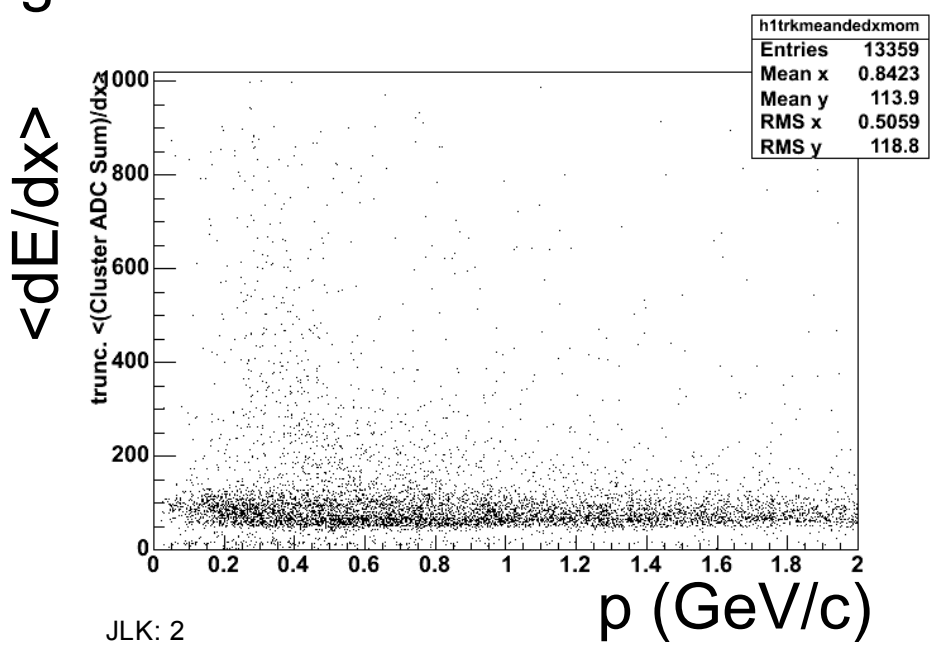


MIPP TPC dE/dx Status

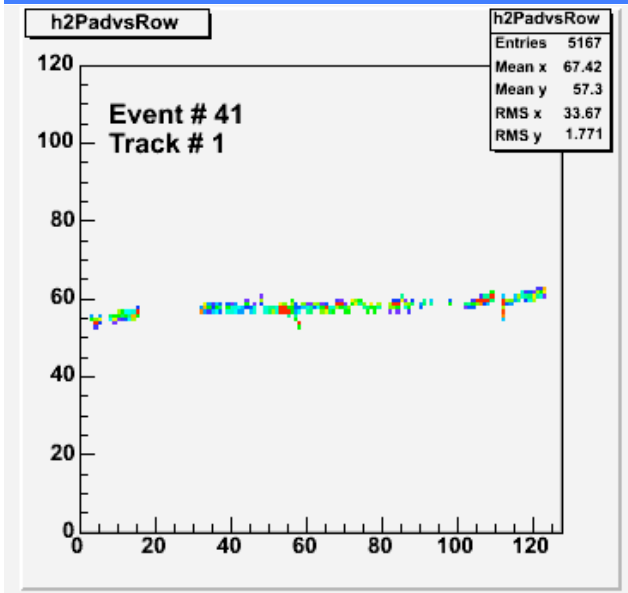
- Code is in CVS to calculate dEdx for tracks in TPC:
  - TPCRecoJP/TPCRTrackFind.h
    - void TPCRTrackFind::CalcDedx(TPCRTrack* trk)
  - TPCRecoJP/TPCRTrack.h
    - const double GetDedx()
- Cluster ADC Sum currently used for “dE”, track slope parameters and pad length gives “dx”

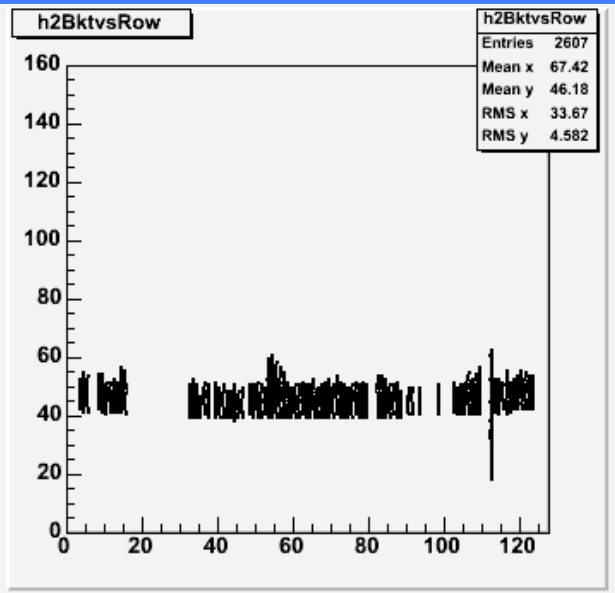
Nhits > 20

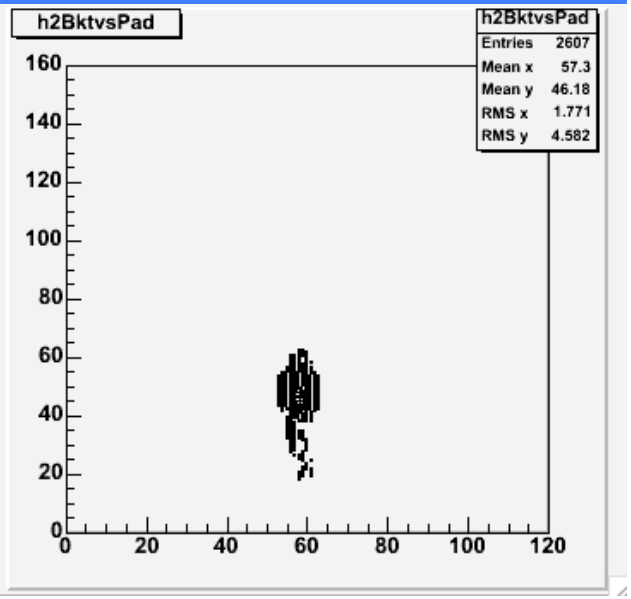
Can you see the 1/β region?

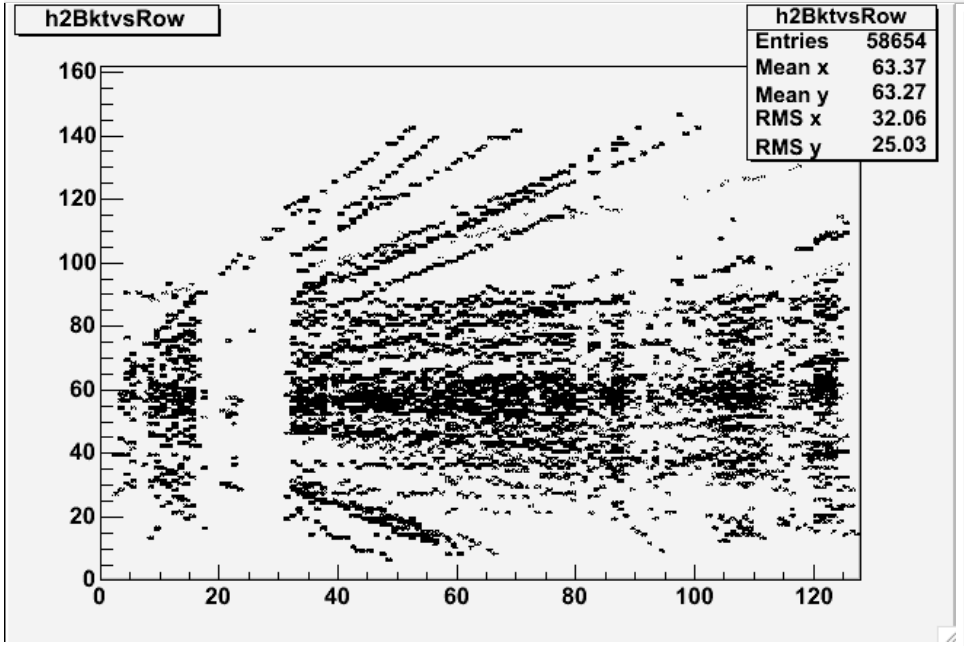


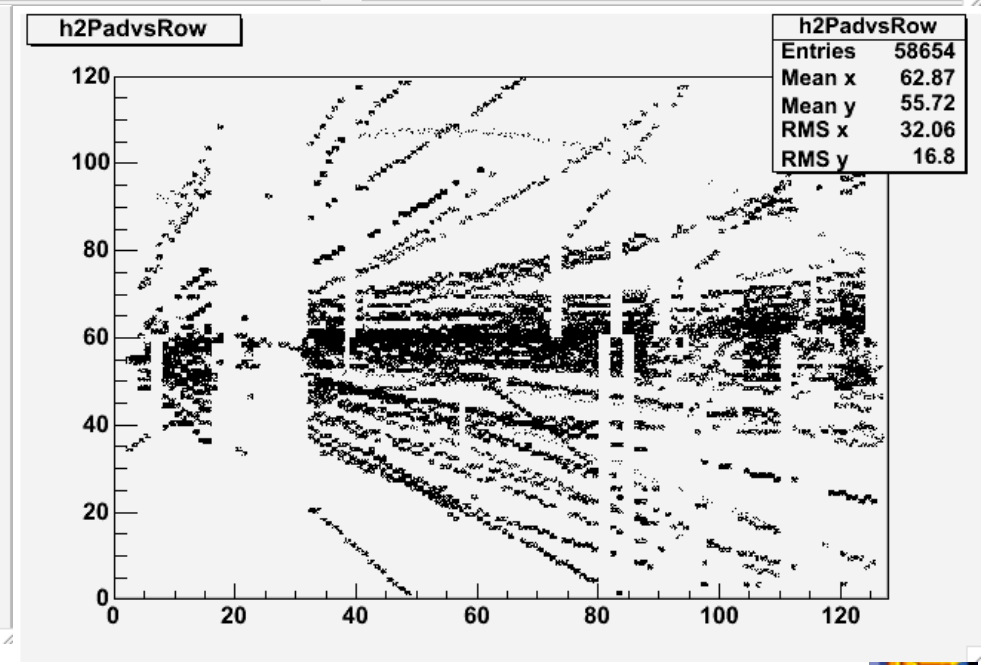
Cluster work…











To-do this week

- Normalize gains
  - For found tracks, fit cluster pad distributions along time direction, for each pad in cluster, record data/fit
  - Repeat N times, where N is Nevts*Ntracks*Nclusters, accumulating statistics for each pad
  - Mean of data/fit distribution per pad is zeroth order gain for that pad
  - Caveats: drift correction, time-variations…
- Repeat dE/dx determination
- Proceed from there…