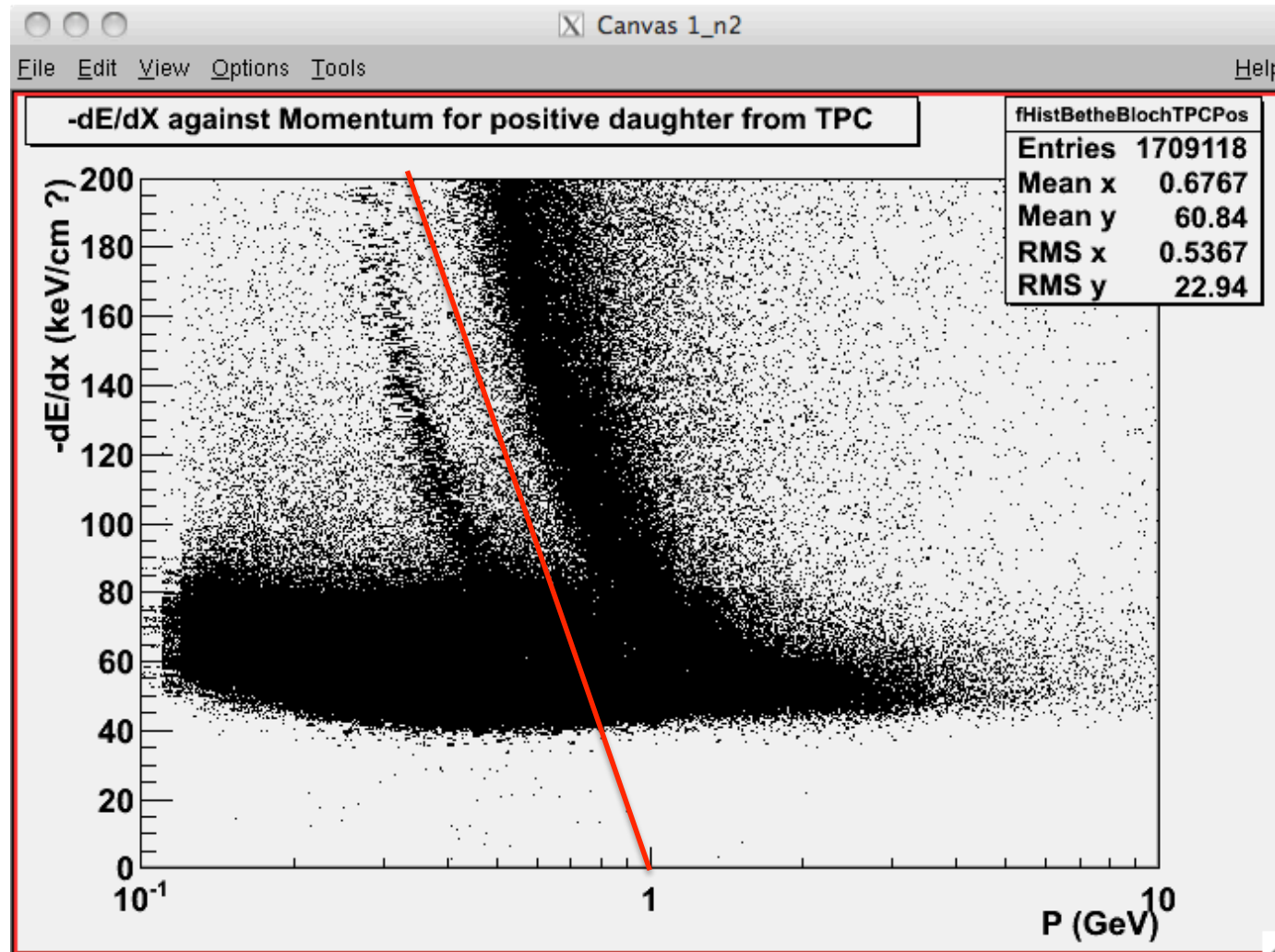


Work over the last week:

- Installed AliEn, Root, AliRoot etc. on my laptop: seemed to go okay, but theres some bug in my Root; Lee's offered to look through it with me.
- Finished my simulation; and checked it and my reconstruction code by feeding one into the other.
- Looked at Bethe-Bloch plot: can eliminate a lot of V0s with a positive daughter that is clearly not a proton.

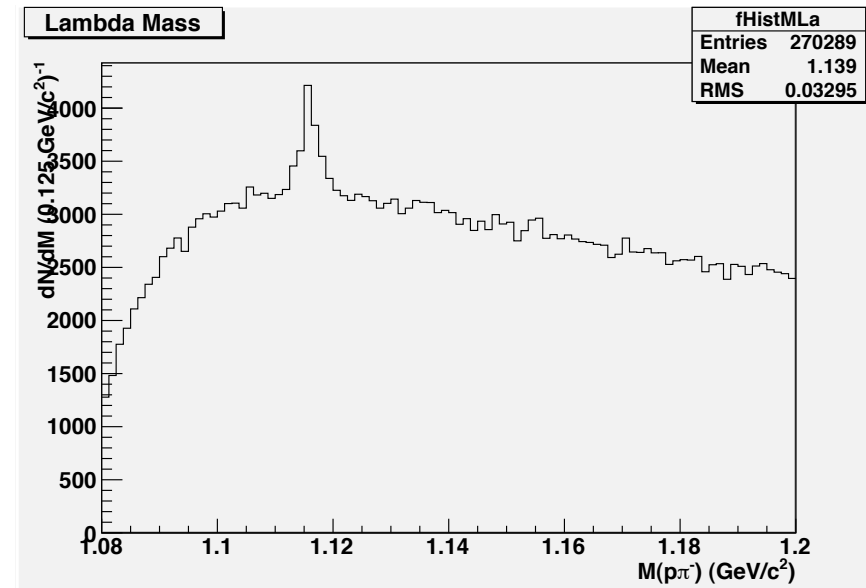
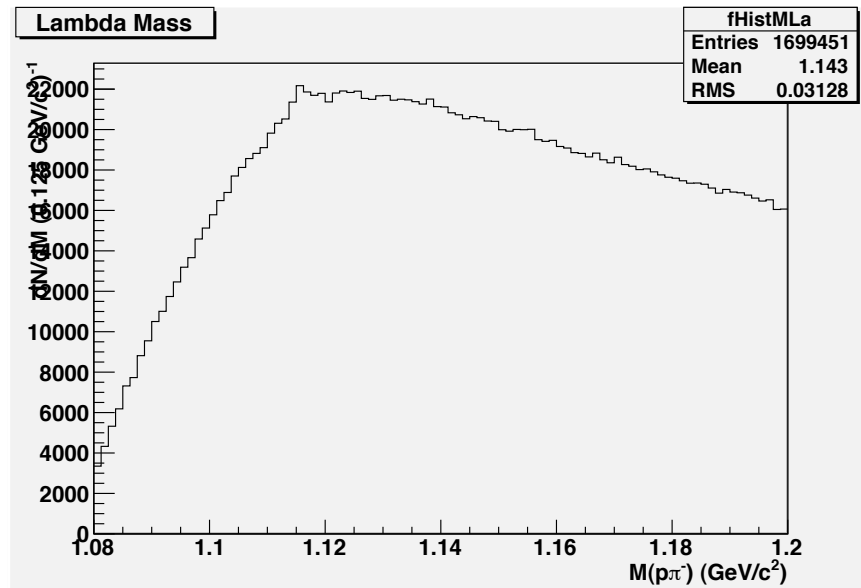
Bethe Bloch plot



Signal taken for the positive track in the TPC. X axis is logarithmic.

- Cut indicated by red line.

Results of Bethe Bloch cut



Left hand plot is the original signal, right hand side is after the cut.

Plots contain all P_T bins.

- Clear enhancement of signal from negligible to $\sim 1/3$ of background.
- From M. Lamonts thesis, have hopes that this in combination with an optimisation of cuts already tried will allow a clear signal extraction.

Work ongoing...

- Simulation showed some potential cuts on E_{π}/E_p , or $\theta_{\pi}-\theta_p$ (in V0 rest frame).
- However, quick trials have found these cuts to be mass dependant, causing pseudo-peaks at $\sim M_{\Lambda}$. Want to confirm this, but will probably avoid these cuts.
- Plan is to set up a simple format & script to allow an iterative optimisation of cuts.