Subject: How to implement Various PID Criteria for the analysis?? Posted by Ajay Kumar on Thu, 10 Dec 2015 11:11:27 GMT

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Dear All,

I am trying to implement different PID criteria by putting key words like as Loose, Tight, Best other then the "All" key word for my analysis.

Somehow, the implementation of different keywords does not effect my results. I had same results after implementation of all PID info key words in case of my analysis.

What should I do more to apply various PID as putting these key word does not help me.

Kindly help me in this regard.

I have attached my analysis macro and output histogram root files here.

Thanking you

Ajay

File Attachments

- 1) run_ana_complete_llbar.C, downloaded 577 times
- 2) all.root, downloaded 512 times
- 3) loose.root, downloaded 507 times
- 4) best.root, downloaded 499 times

Subject: Re: How to implement Various PID Criteria for the analysis?? Posted by StefanoSpataro on Thu, 10 Dec 2015 21:33:09 GMT View Forum Message <> Reply to Message

Please check our wiki documentation:

https://panda-wiki.gsi.de/foswiki/bin/view/Computing/PandaRootRhoTutoria I#A_2.2.3._PID_Algorithms

Subject: Re: How to implement Various PID Criteria for the analysis?? Posted by Ralf Kliemt on Tue, 05 Jan 2016 09:23:49 GMT View Forum Message <> Reply to Message

Hello Ajay.

I can see a few reasons why you don't see differences, those may overlap.

- Selection of keywords: "All" up to "Loose" is for particles with a low likelihood for your hypothesis. Here are the cut values connected to the keywords (defaults in macro/params/all.par):

```
0.00 - "All"
0.00 - "VeryLoose"
0.25 - "Loose"
0.50 - "Tight"
0.90 - "VeryTight"
```

- Your channel: Your signals that survive the simulations/reconstruction and you selection may be just identified very well. Signal Protons should stick out quite well against signal pions.
- Simulation setup. Depending if it is full or fast simulations, how well the forward part is implemented, etc. you'll find various PID efficiencies.

Cheers! Ralf