Subject: Ideal PID in full simulation
Posted by Lu Cao on Wed, 30 Apr 2014 13:09:22 GMT
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Dear all,

I tried to use ideal PID algorithm in the full simulaiton with PidAlgoIdealCharged (true particle probability=1, other p=0), but the criteria "Loose", "Tight", "VeryTight" return 0 candidates. This problem has been found since #24328, but the older version #24300 works fine.

Could someone check or fix it?
Thanks in advance.

Best,
Lu

Subject: Re: Ideal PID in full simulation
Posted by Ralf Kliemt on Wed, 30 Apr 2014 13:28:34 GMT
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Hello Lu,

Do you specify "PidAlgoIdealCharged" in your FillList or leave it out? You should specify it.
e.g.
RhoCandList pions;
theAnalysis->FillList(pions,"PionLoose","PidAlgoIdealCharged");

Cheers
Ralf

Subject: Re: Ideal PID in full simulation
Posted by Lu Cao on Wed, 30 Apr 2014 13:46:48 GMT
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Hi Ralf,

It works fine after specifying. I didn't take care about it, since the tutorial said "When this parameter is not specified, it defaults to PidAlgoIdealCharged."
Thanks for your help.

Best,
Lu

Subject: Re: Ideal PID in full simulation
Posted by Klaus Götzen on Wed, 30 Apr 2014 13:51:26 GMT
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Hi,

indeed it was like this, but we removed it for the Fast Sim I believe. I should update the tutorial in that respect. Thanks for reminding us!

Best,
Klaus

Subject: Re: Ideal PID in full simulation
Posted by Elisa Fioravanti on Thu, 08 May 2014 14:21:40 GMT
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Dear all,

I'm using the full simulation with Ideal PID.
I wrote:

```
theAnalysis->FillList(muplus,  "MuonVeryTightPlus","PidAlgoIdealCharged");
theAnalysis->FillList(muminus, "MuonVeryTightMinus","PidAlgoIdealCharged");
```

but if I change VeryTight with Loose or Tight, the number of
events is always the same.
(I tried also with the standard macro of the psi(2S)->J/psi pi pi in macro/run)

The pandaroot version is 24830.
What is the standard procedure to set the Ideal PID? Where am I wrong?

Thank you in advance
Elisa

Subject: Re: Ideal PID in full simulation
Posted by Ralf Kliemt on Thu, 08 May 2014 14:27:10 GMT
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Hello Elisa,

This behaviour is exactly as you observe it. "Ideal" PID means that a candidate is associated to it's Monte-Carlo true PID. The values in PidAlgoIdealCharged are 0 for the wrong particle type and 1 for the correct type. Cutting at 0.9 (VeryTight) or at 0.2 (Loose) will not alter anything.

Cheers
Ralf
