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Subject: Re: Mc Truth Match

Posted by [MartinJGaluska](#) on Tue, 20 Aug 2013 13:50:19 GMT

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Stefano Spataro wrote on Tue, 20 August 2013 15:22 Can you check using Tight instead of Loose?

The "Loose" corresponds to probability 20%, and if for some reason the ideal algorithm fails then all the pid probabilities will be at 20%... the rounding will give you the final (wrong) pid.

Moreover, checking the ideal algorithm code written by Ralf, there is no neutral id (of course, there is no neutral probability object).

Hello Stefano,

I have observed what you predicted.

With

```
theAnalysis->FillList(mcpiplus,"PionLoosePlus","PidAlgoIdealCharged");
```

I get several particles with pdg code 1000010020 in that list when simulating psi(4040) to D0 anti-D0 / D+ D- and all D decays allowed.

When I change the line to

```
theAnalysis->FillList(mcpiplus,"PionTightPlus","PidAlgoIdealCharged");
```

these entries disappear!

I have also checked the GetPidInfo() array for such RhoCandidates and the first 5 entries (index 0 to 4) have 0.2 as values.