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Subject: Re: Mc Truth Match

Posted by [MartinJGaluska](#) on Thu, 22 Aug 2013 16:57:16 GMT

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If I just rerun the analysis macro I see differences between

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

and

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

For a simulations of 10k events simulated with the rho tutorial macros I get (in total) 3 piplus and 1 piminus more with "Loose" than with "Tight". 3 misidentified particles have PdgCode 1000010020 and 1 has 1000010030. PID probability arrays are 0.2 0.2 0.2 0.2 0.2 in all cases.

If I only simulate 1k such events, I get no differences.

For a simulations of 1k events of psi(4040) to D0 anti-D0 / D+ D- and all D decays allowed I get (in total) 3 piplus and 1 piminus more with "Loose" than with "Tight". All misidentified particles have PdgCode 1000010020 and PID probability arrays are 0.2 0.2 0.2 0.2 0.2

I will rerun all simulations starting from the simulation macro and check again, but that will take until tomorrow.

[EDIT: I have just noticed that I incremented the event counter twice per event, so the number of inspected events is only half of what I wrote above]

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