
Subject: Re: Mc Truth Match

Posted by [Stefano Spataro](#) on Tue, 20 Aug 2013 14:18:03 GMT

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Simone Esch wrote on Tue, 20 August 2013 16:09

I think it is not a good idea to put everywhere the 0.2 if something at the pid stage fails.
Is there not a flag to indicate this, to be able to filter it out?

We have 5 particle hypothesis. If the pid algorithm fails, whatever it is, then all the 5 particles have the same probability -> $1/5 = 0.2$ -> 20%. from the statistical point of view this is correct. Those tracks should not be cut away, simply you don't have pid information for them. The point is that one should cut with probability more than such 20%, maybe the Loose condition should be moved to 25% just to be safe.

Quote:

I understand that the `PidAlgoIdealCharged` just sets the right probability and nothing else, but still I think that the name is then misleading. I thought I would use a somehow MC base algorithm which sets all characteristics right so that the `FillList` method really just pick the right ones.

If this is kept like this, this should be mentioned in the tutorial.

I have not understood, the `PidAlgoIdealCharged` assigns the mc id to each candidate, as it should be, using the `PndPidProbability` object -> a mcpion will have probability of being a pion 1 and $\text{prog of } e/\mu/k/p = 0$, so that this info can be used by `FillList`. This is not "ideal" parameters, this is ideal identification. The `FillList` picks the correct particles identified by MC.

In this sense, `PidAlgoIdealCharged` is doing its job coherent with all the other algorithms, and I have not understood the last comment. Could you please be more explicit?