Subject: Re: Mc Truth Match
Posted by Simone Esch on Tue, 20 Aug 2013 14:40:15 GMT
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Ciao Stefano,

Quote:
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 becut away, simply you don0t 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.

If we talk about real pid I agree with you. But if I am using the ideal algo, I expect all particles to have the right prob and not a prob in between which is not 1 or 0. If for the ideal algo something goes wrong I would like to know.

Quote:
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 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?

This is the point, the FillList picks not just the correct particles, but also wrong ones.
In my case (and for others the same) it collected also neutral particles and wrong particles in, due to there wrong charge. So I had to filter afterwards on the MCTruth characteristics to have a clean list.

And I think that this is missleading, that one has to filter afterwards for wrong particles, despite using a ideal algo.

Best Regards
Simone