Subject: Re: MisID vs Impurity
Posted by Malgorzata Gumberidze on Sat, 24 Nov 2012 06:04:39 GMT
View Forum Message <> Reply to Message

Hello

I'm wondering about the PID_{e} > X.
Is it "selected true pion after doing MC PID match and requiring PID probability"

Yes this is exactly what am I doing. I ask, that the particles is really pion by cross-checking MC id and than i apply to the primary PION cut on PID to be an electron.

You have selected only one reconstructed particle, which has a closest momentum value to MC one.
We can have usually more than one track after reconstruction even from one event.
That means, all values of impurity shown in your categories are too ideal in some point.
Could you tell me the number, how much % of such event can we have from tracking?

Of course we have more than one particle per event, but ideally you will try later in the experimental analysis also select one particle per event, assuming that you want to analyze one particle per event. If you do not do such selection, than in case of efficiency you will get more than 1.

For example in our case pbarp->e+e- in the old framework we were doing all combination of +- pair in the event, and than we were selecting to have only one
per event. The best one, looking to CHi2 from kinematical fit for example.

So I THINK that in this case it is fine what i do.

gosia