Subject: Re: MisID vs Impurity
Posted by donghee on Fri, 23 Nov 2012 16:59:54 GMT
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Dear all,

I have a idea about the definition of impurity and misID.
before getting the answer from Gosia

Gorsia showed us...
pi_imp = PID_{e} > X / pi_all
PID_{e} - it calls here probablity of being an electron for given particle. In this case for pion.

If we define PID_{e} > X as a
"selected true pion after doing MC PID match and requiring PID probability", then it refer to impurity.
or
"any kind of tracks passed required PID probability", then this quantity should be misID.

Above one is impurity as 1-purity and tell us how much % of wrong type particles are contributed in given PID selection.
Below quantity can have a meaning, how much % of a particle type can participate to other list of track candidate according given particle type.

Could we think two definition with this way?
Have a nice weekend,

Donghee