
Subject: Re: MisID vs Impurity

Posted by [Stefano Spataro](#) on Thu, 22 Nov 2012 16:21:31 GMT

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Hi Klaus,

I believe that if you add more detectors, the meaning of the cut in the value we call "probability" has a different meaning, then cutting $P > 90\%$ for EMC is different from $P > 90\%$ in EMC+STT. If you compare the plots, once you add more detectors your efficiency with the same cut increases -> this means that you have more signal candidates in your selection -> your selection is looser, the misID increases.

In order to crosscheck really the numbers, one should select two algorithms cutting a value which provides the same efficiency. In such case one can compare purity and understand what is good and what is not good. The ROC curves could be helpful, maybe for the moment just integrated in separated momentum ranges.
