
Subject: Re: MisID vs Impurity

Posted by [Malgorzata Gumberidze](#) on Thu, 22 Nov 2012 09:17:47 GMT

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Hi,

Unfortunately i have missed full discussion after i have presented my slides ... In principle what i do i think is

correct, but i simple call it differently. Reading entry of Klaus i realized, that what i call impurities, he is calling mis-identification.

Just to be sure I recall what i do. I run simulation for of the electrons and pions for example and then what i do:

X is some value of the cut on the PID for given particle to be in this case electron.

electron efficiency:

$$\text{ele_eff} = \text{PID}_{\{e\}} > X / e_{\text{all}}$$

and than to study what i call impurity (but probably should be called mis-identification):

$$\text{pi_imp} = \text{PID}_{\{e\}} > X / \text{pi_all}$$

$\text{PID}_{\{e\}}$ - i call here probablity of being an electron for given particle. In this case for pion.

greetings,
gosia
