Subject: An option in the PID selector
Posted by donghee on Sat, 08 Dec 2012 20:45:48 GMT
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Dear PID users,

I'm wondering how can I use the option "Variable" in PndAnaPidSelector.

In my analysis macro, I have introduced a electron selector
Quote:
PndAnaPidSelector PIDelectron("PIDelectron");
PIDelectron.SetSelection("ElectronVeryLooseMinus");

The parameter of "VeryLoose" indicate the value of 0.1 into the selection as a set value.
I would like to test and make a tuning this global PID cut value from 0.01 to 0.5 for each particle.
I have seen there are an option "Variable" for this purpose in PndAnaSelectorPar.cxx
and I assume that one can adjust directly the input value in the analysis macro.

but I couldn't find the function, what I can control parameter.
How can I set the value with PndAnaPidSelector?

Thank you for your help,
Donghee

Subject: Re: An option in the PID selector
Posted by StefanoSpataro on Sat, 08 Dec 2012 21:50:57 GMT
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Check the end of macros/params/all.par

Subject: Re: An option in the PID selector
Posted by donghee on Sat, 08 Dec 2012 22:35:36 GMT
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Hi Stefano,

I'm talking about the way, that I control parameters in analysis level.If I change the value in all.par then will follow changing the value in my analysis macro?
How does it work?

Donghee

Subject: Re: An option in the PID selector
Posted by Simon Reiter on Fri, 07 Jun 2013 17:12:46 GMT
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Hi,

I'm interested in those parameters, too. What is the "variable" set for? And what is used if I use "Best" in FillList?

Simon

Subject: Re: An option in the PID selector
Posted by StefanoSpataro on Fri, 07 Jun 2013 18:04:00 GMT
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variate -> you can modify macro/params/pidana.par and all.par to set your own settings there.
Best -> the particles which has the highest probability.

Subject: Re: An option in the PID selector
Posted by Simon Reiter on Fri, 07 Jun 2013 18:18:02 GMT
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But isn't the value to insert the probability? Because I got better results with VeryTight than with Best. And with better results I mean less wrong detected particles.

Subject: Re: An option in the PID selector
Posted by StefanoSpataro on Fri, 07 Jun 2013 18:39:28 GMT
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VeryTight means prob > 0.90.
Best is just the pio with the highest probability. This means that if your track has 0.25 probability being electron, 0.20 being a muon, 0.20 being a pion,0.20 being a kaon, 0.15 being a proton, it will be set as electron, even if with a poor probability.
Beast is not the best selection, is only setting the best hypothesis for such track.