Subject: rho-tuple structure
Posted by Elisabetta Prencipe (2) on Fri, 20 Feb 2015 09:44:00 GMT
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Dear rho-experts,

I am trying to optimize my analysis macro, in rel oct14. The basic analysis tool that I use is /rho/.

In
/PndTools/AnalysisTools/PndRhoTupleQA

I see that several blocks are already prepared with useful variables, and actually I make use and I checked some of those. For example:

```
qa.qaP4("beam", ini, ntp2);

qa.qaComp("Dsm", DslistM[j], ntp2);

qa.qaDalitz("Dsm", DslistM[j], ntp2);

qa.qaVtx("Dsm", DslistM[j], ntp2);
```

work properly.

I would like to use also the block: qa.qaRecoFull("Dsm", DslistM[j], ntp2);

Is it correct to inizialize it in such a way? Actually the macro runs, but I do not see the variables which I expect to see in my ntuple, once I write this latter line in my macro. Can anybody of you give help? for example, if I wish to see the distribution of de/dX, or if I wish to have the chi2 and probChi2 distributions inside my ntuple structure (I called it 'ntp2'), what shall I do?

Thank you for your useful help,

Elisabetta

Subject: Re: rho-tuple structure
Posted by Ralf Kliemt on Fri, 20 Feb 2015 10:30:53 GMT
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Dear Elisabetta,

Please give us a snippet of your code, especially where you do the various calls with the QA tool.
The reason is that you don't want to mix logically independent things within the structure of loops. You don't want to write event based variables (multiplicity, best Chi2...) with candidate based variables (momenta etc.). If you have such differing things, you need separate ntuples

for that.

On the other hand, try another prefix for the qaRecoFull() call (e.g. "DsmFull") because it may try to overwrite existing variables.

Cheers
Ralf

Subject: Re: rho-tuple structure
Posted by StefanoSpataro on Fri, 20 Feb 2015 13:20:51 GMT
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Only one comment: it is always better to use compiled tasks instead of macros. The compiler usually helps on this side, and the processing time is much less.

Subject: Re: rho-tuple structure
Posted by Elisabetta Prencipe (2) on Fri, 20 Feb 2015 13:29:19 GMT
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Hello Ralf,

here I attach a simplified version of my macro, and the pid.root and simparams.root. It is only for 20 generated events, as a test. Even if I change the name for the block qaRecoFull, the variables are not seen in the tree.
I even tried to comment out all blocks, except the block called "qaRecoFull". No way to get those variables in my ntuple. Then, I suspect that I am still missing something.

If you could kindly have a look, it would be great!
As you see, the histogram of the chi2 is filled. I am trying to get the variables of the block "qaTrk", actually.
Thank you in advance,

Elisabetta

File Attachments
1) ana_complete.C, downloaded 255 times
2) pid_complete.root, downloaded 219 times
3) simparams.root, downloaded 218 times

Subject: Re: rho-tuple structure
Posted by Ralf Kliemt on Fri, 20 Feb 2015 22:21:20 GMT
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Dear Elisabetta,

I found the problem and there is a patch in the svn trunk. Please use now qa.qaRecoFullTree("Dsm", DslistM[j], ntp2);.

Explanation: You told the QA tool to plot the full Reco information - basically the content of the PndPidCandidate. Unfortunately the PidCands only exist for measured particles, not for composites, such as your D_s. I introduced an iterative loop to fetch the pidcands from all final states of your composite.

Cheers!
Ralf

Subject: Re: rho-tuple structure
Posted by Elisabetta Prencipe (2) on Sat, 21 Feb 2015 20:33:33 GMT
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Dear Ralf,

I uploaded the package /AnalysisTools/ to the last rev, 27013. Unfortunately ,
your patch is not in. What shall I do in order to get your fixes? which packages shall I update? which trunk revision?

thanks, Elisabetta

Subject: Re: rho-tuple structure
Posted by StefanoSpataro on Sat, 21 Feb 2015 20:38:24 GMT
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The rev with inside the AnalyisTools patch is 27102.
