Subject: Detector response analysis
Posted by Raghav Kunnawalkam on Tue, 22 May 2012 23:07:33 GMT
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Hi All

I have been trying to analyze the detector response of my EIC for di lepton processes, but for that i have to have a radiation length scan first.

I created my simulation properly with geantinos and tried to capture the radiation length using a macro with help from Ralf in panda.
https://subversion.gsi.de/trac/fairroot/browser/pandaroot/trunk/macro/mv d/Ralf/materialana.C as suggested to my by Mohammad.

I am trying to get it to work with my output root file but i am having a lot of difficulties in understanding what i am trying to do.

Maybe this is very basic but i would like to know if the format for output created in panda is the same for the examples you have in fairroot? Cause i built my detector based on the examples. I am asking this because i am not able to run any of the code in panda due to lack of config files or data missing.

Next, i am not getting what does the push_back mean. In most of the analysis macros i am seeing it. (line 78 of the panda macro)

So i am kinda stuck here and i have attached my output file that i want to analyze and also the macro that i am trying to use. (it is mostly a mixture of things that i saw from elsewhere and thought that i needed it). right now i am getting an error with my definition of TGeoManager. in line 133 of rad_length.C.

Any help, even the slightest would be massively appreciated.
Thanks a lot guys
Raghav

File Attachments

1) eic_rad_length.mc.root, downloaded 506 times
2) rad_length.C, downloaded 567 times

Subject: Re: Detector response analysis
Posted by Ralf Kliemt on Wed, 23 May 2012 09:34:28 GMT
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Hi,

I played around with your data and finally made a macro which can read some RadLen data. I reused my own approach, because I have no patience these days to understand what you want to analyze. The file is attached and cleaned of most "weight".
Be reminded that reading data needs the correct setup of file, tree and branch, as well as the

TClonesArrays. Taking an object has also follow the way it is done here.

"push_back(x)" is a function of std::vector which adds the value or object x at the end of the array.

Cheers. Ralf

File Attachments

1) materialana.C, downloaded 513 times

Subject: Re: Detector response analysis
Posted by Raghav Kunnawalkam on Wed, 23 May 2012 12:23:18 GMT
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Hi Ralf

Thank you so much. After going through your example i now understand what i want and am able to start working towards it.

Cheers
Raghav
