Subject: Re: genfit in pandaroot - trunk rev 25180: test macros
Posted by Gianluigi Boca on Thu, 29 May 2014 15:13:32 GMT
View Forum Message <> Reply to Message

Elisabetta Prencipe (2) wrote on Thu, 29 May 2014 15:30Dear Gianluigi et all,

I would like to do some tests for comparison in pandaroot, when using genfit (trunk version 25180) and the new vesion of genfit which Johannes and me just introduced in pandaroot. You can find the code here:
https://subversion.gsi.de/trac/fairroot/browser/pandaroot/development/ge nfit2/genfit_brach

this is a full branch development. The packages which had to change/add/modify to make genfit2 runing smooth in pandaroot are in:

https://subversion.gsi.de/trac/fairroot/browser/pandaroot/development/pr encipe/

I tried some bacis test amcros in analysis/rho. They look running without main troubles.
Then, I tried to run some macros from

/macro/stt/

but I found problems. In particular, two of thiose:

/macro/stt/chechgenfit.C
/macro/stt/checkdedx_helixhit.C

Could you suggest to me what shall I do in order to run those macros, please? these are exactly the tests which I would like to perform. I need to check the resolution/pull of the trackign parameters. Maybe they are not updated to the trunk version rev 25180. Could you provide help, please, and try to update/run those and see what is needed to correct them, in order to make them working?
Do you have any suggestion, any standard macro existing which I can use to make standard test, in pandaroot?

Thank you very much for your very useful help!
cheers
Elisabetta

Seher gelibte Elisabetta,

first of all, if you want to run tests without the Mvd hits (only the Stt hits), there are two options as far as the Pattern Recognition is concerned:
1- in the simulation phase you use the Mvd system but you declare it passive, so that no Mvd hits are produced.
If you do so then you can run all the rest of the pattern recognition + PID etc. normally, without doing anything special.
At the end of the PR you will obtain PndTrackCand etc. in the usual way;

2- you have already simulated the Mvd hits (ie you don't want to rerun the simulation) and now

you want to analyse the data as
if the Mvd hit were not present.
This is possible but it requires a small modification in PndTrkTracking2.cxx; actually I could write a method , say,
PndTrkTracking2::SetMvdNoAnalysis()
that the user could call to "switch off" the Mvd hits.

As far as the Macro is concerned, I think that those macro/stt/checkgenfit.C and macro/stt/checkdedx_helixhit.C are obsolete.

Which quantities are you interested in checking? Actually right in this period I am running some macros with single
muon particles at different angles and momenta to see which is the resolution in angles and momenta when the Mvd system
is not used (but present physically).
These are the Macros that Susanna and Lia wrote some years ago; I am slightly modifying them for my purposes.

If you tell me exactly what you need maybe it you can use those as well.

Cheers
Gianluigi