Subject: Re: Question on R3BNeutronTracker2D
Posted by C. A. Douma on Wed, 13 Jul 2016 12:32:11 GMT
View Forum Message <> Reply to Message

Dear Mr. Kresan,

Thank you for sending me the documentation on the GitHub repository. However, in a few days
I will go on holiday for 4 weeks. I will not have time to set up this git environment before I leave. May I therefore ask you to commit my changes? I have adapted the software to work without the need of a VETO class, etc, so it can be committed right away.

I tested the compilation on the Dev Branch of 26 May, and it compiles without errors. After testing the code on my own simulations, all I did were some changes in how to collect inputs in the Init()-functions. It should therefore work during runtime as well.

The changes I made comprise the following:

1) Digitizer: coordinate transformations between local and global frames work OK now.
   The user can also adapt energy thresholds & time resultions if he/she desires.
2) Clusterfinder: Clusters will now be merged if they touch/overlap. Cluster radius
   in both space and time can also be set by the user now.
3) NeutronTracker: The beta-test (& the rest of the tracker) is now invariant under
   global/local differences. The user can smanually set the beam start position and
   the target position, so that Time Of Flight will now be computed only between
   the target and NeuLAND (as it should be).
   In addition, the tracker now automatically takes any number of energy cuts
   specified in the calibration file. You are no longer bound to exactly 5 cuts.
   Furthermore, depending on the number of hits in the VETO, the tracker can also
   use a set of cuts for 1-5 neutrons, or a set for 1 proton + 0-5 neutrons, or a
   set of 2 protons + 0-5 neutrons, etc. Multiple calibration files will be read
   automatically and the right file is selected in each event based on the number of hits
   in the VETO. The user has to specify an upper bound for the number of protons
   (it is set to 0 by default) and calibration files up to this upper bound should
   be provided. If the VETO digitizer ouput is not specified by and AddFriend-call,
   the tracker will automatically revert back to the 0 proton case for every event.

Thanks in advance!
Christiaan.

File Attachments

1) R3BRoot.tar.gz, downloaded 596 times