Subject: Bug in PndGenfitAdapters Posted by StefanoSpataro on Wed, 27 Oct 2010 09:33:29 GMT View Forum Message <> Reply to Message

Exploring the warnings, I have found something very interesting. This is one of the main reasons why I stress that it is important to remove all the warnings, even if they are just warnings!

In particular:

[80%] Building CXX object GenfitTools/adapters/CMakeFiles/genfitAdapters.dir/PndGenfitAdapters.o /home/spataro/test/trunk/GenfitTools/adapters/PndGenfitAdapters.cxx: In function `GFTrackCand* PndTrackCand2GenfitTrackCand(PndTrackCand*)': /home/spataro/test/trunk/GenfitTools/adapters/PndGenfitAdapters.cxx:36: warning: passing `Double_t' for converting 4 of `void GFTrackCand::addHit(unsigned int, unsigned int, double, unsigned int)'

Linking CXX shared library ../../lib/libgenfitAdapters.so [80%] Built target genfitAdapters

If you check PndGenfitAdapters.cxx line 36 you find:

retVal->addHit(candHit.GetDetId(),candHit.GetHitId(),0,candHit.GetRho());

In reality, the correct GFTrackCand::addHit function is:

void addHit(unsigned int detId, unsigned int hitId, double rho=0., unsigned int planeId=0);

Then, in the adapter the order criterion "rho" is switched with the detector plane "planeld". We are giving alway the same rho=0, and giving rho as plane id!!

Before committing the correction, I would like to ask to genfit expert if this is correct and in particular if this could affect the kalman global fit performances.

Many thanks.