Subject: GENFIT for transverse momenta < 200 GeV/c strange?! Posted by David Pohl on Thu, 18 Nov 2010 10:48:27 GMT

View Forum Message <> Reply to Message

Hallo everybody,

at the moment I do some tracking tests with the Lhe package.

The parameters are:

- tracking detectors: MVD+TPC+GEM
- 1 pion per event
- theta=60, phi=0..360
- ideal track finder
- kalman task after helix prefit with pion particle hypothesis
- current PndRoot version: trunk, revision 10322
- only primary tracks are taken into account

for momenta down to 200MeV/c everything works great; but for a momentum of pt = 100MeV/c even the simple helix prefit is better. You can see that in the following plots:

works fine:

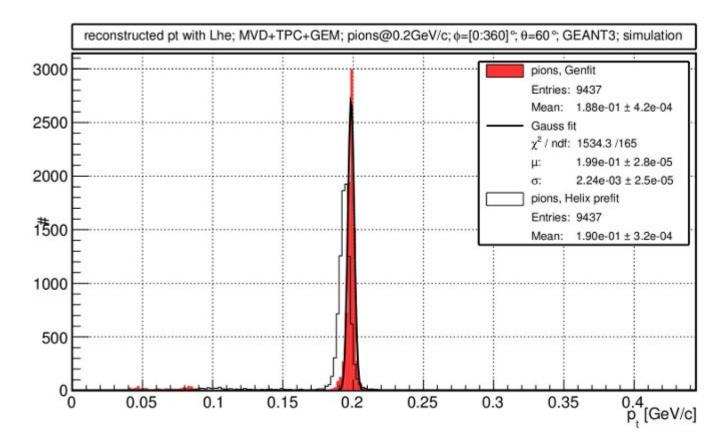
strange:

So I would like to ask the people who have more experience with tracking what the reason is or could be.

greetings David

File Attachments

1) pt_reco_tpc_200.jpg, downloaded 1457 times



2) pt_reco_tpc_100.jpg, downloaded 1378 times

