Subject: Geane update
Posted by Lia Lavezzi on Fri, 16 Nov 2007 10:59:07 GMT
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Hi,
I have uploaded to svn repository in the directory geane a new version of CbmGeanePro, to fix a bug: now the errors are no more reset to zero when the PropagateToPlane function is called.

I have also committed in trackbase a new version of CbmTrackParP with a new constructor, where I added the "spu" variable, which "tells" GEANE if the momentum of the particle is parallel or antiparallel to the axis perpendicular to the plane surface.

In order to use this, some changes should be done in GeaneTrackRep. I mean:
- a variable fspu should be added;
- just after the creation of CbmTrackParP par(pos,...), the fspu should be filled:
fspu = par.GetSPU();
- then in GeaneTrackRep::extrapolate function, the new constructor should be used:
CbmTrackParP par(state[3][0], state[4][0], state[1][0], state[2][0], state[0][0], cova, ofrom, ufrom, vfrom, fspu).
Sebastian, could you please change these points? If you don' t have time soon, don' t worry: I did not delete the old constructor, so no problem in the code compilation should arise even if you don' t do this immediately

I ran 1000 events of single particle muons at 1.5 GeV/c, phi random (0, 360), theta random (-180, 180) with the demo classes changed as alredy described in message #5160 of the discussion "geane propagation: floating point exception" in this Forum and I put the results in attachment: spu.pdf is the new constructor result, nospu.pdf in the old one; we get a gain in efficiency.

Ciao,
Lia.

File Attachments

1) spu.pdf, downloaded 803 times
2) nospu.pdf, downloaded 792 times