Subject: Re: Stepsize in TPC Simulation with new external packages
Posted by Mohammad Al-Turany on Wed, 28 Nov 2007 16:53:31 GMT

Hallo Sebastian:

Quote:I just tried with G4 now. There is a stepsize limitation now. But it is 0.005 cm and it appears not to be correlated with what I put into the media file.

Hm... any idea?

As far as I can see if I change the STEPMAX in the media file I can see it in TGeoManager and Also in TG4GeometryManager. In VMC_G4 only the STEPMAX can be set now, so if it is not enough for you we can ask Ivana about this.

So in my media file I put:

TPCmixture   3 20.1797 12.01 15.9994 10. 6. 8. 0.001 0.9 0.0 33 0.067
1 1 20. 0.001
99. 0.0775 0.0001 0.0000777
0

then I put this print out in the TG4GeometryManager:

G4cout << "Adding medium Id=" << mediumId << " name=" << mediumName << " limits=" << limits << " StepMax " << stemax << " StepMax cm "
 << stemax*cm << G4endl;

And As output I get:

Adding medium Id=8 name=TPCmixture limits=0x99c07a0 StepMax 0.0775 StepMax cm 0.775

which correspond exactly to what I put inside the media, and cm in G4 is 10 so the last number is also ok.

So it seems that it works as it is done. Is this now a problem for you that you cannot set the minimum step size yourself? should we discuss with Ivana about this and why she set only the maximum step?

Mohammad