
Subject: Re: GenaeTrackRep DetPlane

Posted by [Lia Lavezzi](#) on Mon, 25 May 2009 10:15:37 GMT

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Hi Alicia,

in GEANE when you define the SD (detector system) frame, which is the one we use with detector planes, you have a u, v, w system of axis and the GEANE plane (let's call it this way) is the vw (so, yz plane of the frame), with the u axis orthogonal to it (I guess this is what you mean, with

Quote:So far i know (please correct me if i'm wrong)

In Geane coordinates system, the direction of the propagation is the X-axis, right??.

is this correct?), but I think that with genfit you don't have to care about this, this is handled directly by GeaneTrackRep (when FairTrackParP is created), you just have to define as DetPlane you detector plane (with any orientation in space).

The only thing you have to pay attention for is that your track momentum must not lie on the plane, but it must have some angle with respect to it, otherwise you have some kind of divergence...

In the Stt case, the yz plane you mention is just a starting plane, in this case it is set in the origin, where no real plane is present, so in principle we could have chosen xy plane as well. If you want to choose the xy plane as starting plane you can do it! ... if you have problems originating from the det plane choice, please let me know

Ciao,
Lia.