
Subject: Re: WirepointHitPolicy detplane implementation
Posted by [Lia Lavezzi](#) on Thu, 19 Mar 2009 12:35:37 GMT
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Hi Christian,

I implemented the `GeaneTrackRep::extrapolateToLine` but before putting it on the svn I have one question: in STT case we need to know the point of closest approach on wire in addition to the point of closest approach on the track (the usual `poca`) to build the plane, while we don't care about the direction of the track in `poca`, can we change the `TVector3` from `dirInPoca` to `poca_onwire` (or something like that) ?

Concerning the `extrapolateToPoca` I have to look at it more deeply, but since you don't need the state/cov at the `poca` something like the `extrapolateToLine` (but with `pca = 1`) should work (to only find the `poca`, without the need to call the "Propagate" function which performs the actual propagation)... I only see a problem in finding the direction of the track at the point of closest approach... I need to think about this a little, to see if it is possible to get it without any extra extrapolation (a part the one to find the `poca`). I will let you know.

For the `extrapolateToLine`, my implementation is ready, with the change `dirInPoca --> poca_onwire`: I tested it with my stt reco hit and it works fine, so if you give me the "ok" I can put it on the svn.

Ciao,
Lia.