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Subject: Re: Helix and FairTrackParH

Posted by [Stefano Spataro](#) on Fri, 24 Jul 2009 11:18:58 GMT

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Quote:

Ok, it's just a matter of names

Ok, but you can

If you have a look in the FairTrackParH.h, the comment at the beginning contains the 5 parameters:

q/p, lambda, phi, y\_perp, z\_perp

In the code the name of the parameters are:

fLm = lambda

fPhi = phi

fX\_sc = x\_perp

fY\_sc = y\_perp

fZ\_sc = z\_perp

It is a matter of names only if you know what those names mean (not my case) And once they are also called in a different way, the amount of confusion in my mind increases.

However, it seems I do not need those parameters for my helix, even because all the definitions are to move from one system to another, but what I need is how the position/momentum varies along the track.

I have found a document in internet that explains what I need, to characterize my track:

center of the helix (to calculate drho, and phi0)

radius of the helix (to calculate drho)

pt (to calculate k)

lambda

Of these 5 params, I have already lambda, pt, and the radius can be calculated from p. I am only missing the center of the helix, that can be calculated with the suggested method of Gianluigi.

I will try and cross my fingers hoping that it will work.