Subject: Re: Geane interface in PandaRoot
Posted by Andrea Fontana on Thu, 21 Jun 2007 19:35:38 GMT
View Forum Message <> Reply to Message

Dear All,
we have received the interface from Mohammad yesterday and
are now working to integrate it with the new features that
we developed with the old interface. So for now you will only
find the standard Geane in svn, not yet, for instance, the propagation to the point of closest approach.
So, please, be aware of this!

I will update the files as soon as we are happy with the results
that we now have with the old interface: only at this point
I would expect meaningful results from the integration in genfit.

Moreover I will also prepare an example in the form of tutorial
to show how to use extrapolate to closest in case of STT.

Coming to the questions from Sebastian:

- it is correct that x_sc in the SC system is zero, but also
  y_sc and z_sc are zero (see eq. 38 of our report and the whole
  section 5). What matters is that in the SC system the
  variations different from zero are: delta_y_perp, delta_z_perp
  and delta_l_perp (l or s is the track lenght). In geane x
  is always along the momentum, but recently also Wittek
  has changed convention(see NIMA 566(2006)687):
  this is however only a convention without any consequence since
  only errors are treated. In the interface we will always
  maintain the old convention (along x).
  Looking at the class CbmTrackParH, there is some redundancy
  as a few variables are useless: we plan to clean it up.

- the covariance matrix is a symmetric triangular 5x5 matrix,
  so it only has 15 independent components: the correspondance
  is again on our report, page 35. I send you in attachment
  2 functions written by Alberto for the conversion.

- I agree on the const!

As we decided in Ferrara, we now are working to release as
soon as possible the new interface to the Collaboration.

Best regards to all,
Andrea

File Attachments
1) FromMat25ToVec15.C, downloaded 470 times
2) FromVec15ToMat25.C, downloaded 386 times