Subject: Check of GENFIT effects on reconstructed barrel tracks
Posted by StefanoSpataro on Fri, 05 Apr 2013 17:26:14 GMT
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Dear all,
I have done a small systematic study on the possible bias that GENFIT could introduce on reconstructed barrel tracks, and I attach here a presentation with the results I obtained.

I copy here my final conclusions:

* GENFIT is stable for reconstruction of barrel tracks
* GENFIT loss in efficiency is negligible
* The minimum momentum resolution is ~1.5%, not possible to go below this number (material effects? field? hit resolution?)
* By using “realistic” momentum/position smearing the performance is stable, no big effects
* No need to increase the number of iterations to obtain better results
* No systematic problems at low momentum

We could discuss about at the next SeeVogh meeting, of course.

File Attachments

1) 20130404_genfit.pdf, downloaded 552 times