Subject: new GENFIT release Posted by Anonymous Poster on Wed, 31 Mar 2010 21:33:12 GMT View Forum Message <> Reply to Message

Dear colleagues,

there is a new release of GENFIT for PANDAroot. If you do an update on your trunk you will get revision 183 of GENFIT. The most important changes with respect to the old version are:

- the Kalman filter had a small problem which was leading to slightly wrong error estimations. The covariance matrix must be multiplied with a large factor before the fit is repeated in reverse order of hits. So far this factor was 20, which was too small. Now the factor is 500.
- we now have the possibility to use finite planes for tracking. It means that a MVD wafer for instance has a limited size and shape, e.g. a rectangle. This is particularly important for fitting looping tracks. If you are interested on details, please ask any questions, I will answer them.
- this GENFIT version is compatible with a new track representation we are working on here. It has the same track parametrization as GeaneTrackRep, also uses ROOT geometry, and is based on a Runge-Kutta algorithm. It will work for fitting tracks in the forward spectrometer. It will be introduced in detail at the next PANDA meeting.

Best regards, Christian