Tobias Stockmanns wrote on Tue, 20 August 2013 17:47Dear Klaus,

I think your argument that there is no perfect MC match is not right. For this purpose I have written the FairLinks which are working extremly well for comparison between reconstructed data and MC data. Maybe it is time to use them for the analysis as well.

The problem is not in the link, the problem is that one track can be made of different mc ids, i.e. a kaon decaying into a pion w/ a very small kink. In such sense, we take the most common mc index, which could be wrong. Moreover, the mc association depends on the hits, but the momentum reconstruction, the charge and so on depend on tracking. In this sense the MC matching is only our definition, no perfect matching.

It would be good if some FairLink expert could modify the code to get rid of the mctrackassociator and of the PndTrackID TCA, since for this part the code is somehow dupplicated. Do you know if somebody could so such job?

Quote:
For the rest of the discussion I see a discrepancy between what the designers of the code think their code is doing and the expectation of the users what the code should do according to the used names. I fear that the problem Simone and Martin had will happen to other users as well.

If the problem is in the semantics, then the PndPidIdealAssociatorTask count be renamed into PndPidMCAssociatorTask, if this could help.

Quote:
In addition I think there should be a method for an ideal list filling.

What do you mean exactly? The "ideal" information is already stored inside the MCTrack TCA and fully accessible, and this is the info that should be used for montecarlo plots. Even because w/o covariance matrix the fitters will never work on mc tracks, and rho tools cannot be applied to mc info.
From the reconstructed candidate one can access to the mc truth, and this is available in the code.
Then, what is expected from an "ideal list filling"? If it is expected the copy from MCTrack, I remember some time ago (feb12) this was already present in the code, something like:

theAnalysis->FillList(mctrack, "McTruth");

I don't know if this code is still operational, anf if it provides what is expected.