I though a little about the ordering in STT.

If I remember correctly in the real track finder the hits are ordered via the 3D distance from (0, 0, 0): Gianluigi, is this correct? In fact in the real track finder an hypothesis on the reconstructed x, y, z coordinates is available.

In the ideal track finder this is not true, but what about using here the MC true coordinates xtot, ytot, ztot from the PndSttPoint and calculate the 3D distance using them instead of the x, y, z from PndSttHit (which give only the coordinates of the center of the tube)? They can play the role of the reconstructed x, y, z.

It is more or less what Stefano was suggesting with the SttHelixHit, but instead of using SttHelixHits for both finders (since as I said in the last mail we don' t have them at this stage), we use PndSttPoint coordinates in the ideal finder and reconstructed coordinates in the real one.

What do you think?
        Ciao,
         Lia.

P.S.: indeed tests are ongoing (as Gianluigi said at last EVO meeting). If it turns out that the local stt helix fit does not improve the track finder hypothesis on coordinates and momentum we can also decide to get rid of the local track fitting and produce the SttHelixHit directly via the track finder (or just after it)... but this has still to be decided!