Subject: Re: Tracking uncertainties Posted by StefanoSpataro on Thu, 11 Jul 2013 15:28:15 GMT View Forum Message <> Reply to Message

Hi Ralf,

few technical comments from my side.

First, you choose not the perfect channel, since you produce electrons which undergo to bremmstrahlung, and their tails are not gaussian. I would suggest to analyse the channel with J/psi->mu+mu-, to avoid such problems.

Second, as coordinates and momentum of the first params, I would suggest to do something different: you could take the first hit, from the hit you go to the point, and from the point you retrieve the montearlo position and momentum. You can take a look into macro/pid/check_trackcand.C to see what I) did some time ago to explore the coordinates of all the hits, but you need tot ake only the first hit. In this way you avoid the geane sistematics.

Third, i would suggest to selct only candidates with fitted track parameters (GetFitStatus()>0), and to be sure that they are coming from the same detector, i.e. the first hit should be on the mvd pixel. if not, your resolution plots could be the sum of different detectors with different errors, and a bit misleading. I would separate also barrel tracks from forward tracks.

Hope it helps somehow. I did not check your code or plots yet.