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Subject: Re: Psi3770 study with run981 tpc mode  
Posted by [donghee](#) on Thu, 21 Jul 2011 12:44:37 GMT  
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Dear Stefano,

I'm using vertex fitter for D- in following procedure.

kip is positive kaon candidate and pim is negative pion candidate, respectively.

Then I do

Quote:

```
Dminus.Combine(kap, pim, pim);  
PndKinVtxFitter Dmvtxfitter(Dminus[jj]);  
Dmvtxfitter.Fit();  
double chi2 = Dmvtxfitter.GlobalChi2();  
unsigned ndf = 1;  
TChisqConsistency cons(chi2,ndf);  
double prob = cons.Likelihood();
```

Concerning resolution issue, if I have wrongly used the vertex fit, then I can understand bad resolution of D+ and D-.

but if I was using correctly the fit function, then I have to have order of ~100 micrometer = 0.1mm = 0.01cm

I have still ~1.4mm(=0.14cm) after subtracting value between

Quote:

```
TVector3 Dvertex = (TVector3)mckaontrack->GetStartVertex();  
TVector3 DpVtx = Dpvtxfit->Pos();
```

Unit is here cm... because the smearing is visible with same unit in the D vertex distribution. Upper plots are generated true vertex of D, and belows are reconstructed one, as I show you already few times.

I will check some bug..

Best wishes,  
Donghee

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## File Attachments

1) [Dmeson\\_vertex\\_distribution.eps](#), downloaded 354 times

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