
Subject: Re: Vertex Fitter in Fast simulation
Posted by [donghee](#) on Tue, 01 Apr 2014 09:58:29 GMT
[View Forum Message](#) <> [Reply to Message](#)

We have few choice including your suggestion.

1. take a reference track, then get position.
2. Access poca in RhoTupleQA ntuple, which is already stored as "prefix"+pocax(y,z,qa) in your ntuple.
3. Re-do poca by hand as like this where dp[j] is your candidate list.

```
PndVtxPoca POCAvtx;  
    TVector3 POCAvertex(0,0,0);  
double POCA=-10000;  
    double POCAdist=-10000;  
    POCA = POCAvtx.GetPocaVtx(POCAvertex,dp[j]);  
  
double poca_x = POCAvertex.X();  
double poca_y = POCAvertex.Y();  
double poca_z = POCAvertex.Z();
```

I think that this way one may avoid ambiguity for choice of reference track.
But disadvantage is that POCA approach cannot be used with neutral composite as like pion0
k_s or Lambda0, unfortunately.

Best wished,
Donghee