Subject: Re: genfit in pandaroot - trunk rev 25180: test macros
Posted by Elisabetta Prencipe (2) on Fri, 30 May 2014 09:37:52 GMT
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Hi Stefano and Gianluigi,

 the analysis macros available in /macro/run give no troubles. I have access to all information as for my analysis on DsJ(momentum, vertex position, angular distributions; and of course resolution of those). I have a question related to how to get access to the informations like GetZ0(), GetRadius(), GetTanL(), ..., which I see are accessible by mean of PndTrkTrack objects, or PndTrackCand.

The question is the following:

after I run sim-, digi-, reco-, pid-, I can write in a macro something like this:

```
 TClonesArray* cand_array=new TClonesArray("PndPidCandidate");
 tree->SetBranchAddress("PidChargeCandidate", &cand_array);
```

[..]

```
  for (Int_t pp=0; pp<track_array->GetEntriesFast(); pp++)
  {
    PndPidCandidate * mytrack = (PndPidCandidate*)cand_array->At(pp);


    rec_mom = mctrack->GetMomentum().Mag();
    rec_theta = mctrack->GetMomentum().Theta()*TMath::RadToDeg();
    rec_phi = mctrack->GetMomentum().Phi()*TMath::RadToDeg();


    cand_mult++;

  // end of candidate loop
}
```

*****
This works (thank you Susanna for this macro!). It is available in the macro/pid/track_check.C However, a PndPidCandidate gives access to limited informations, compared to the most generic PndTrkTrack candidates.

But if I try:
```
 TClonesArray* track_array=new TClonesArray("PndTrkTrack");
 tree->SetBranchAddress("Track", &track_array);

  for (Int_t pp=0; pp<track_array->GetEntriesFast(); pp++)
  {
    PndTrackCand * mytrack = (PndTrackCand*)track_array->At(pp);
    cout<<"Could you eneter in the loop?"<<endl;

    //rec_d0  = mytrack->GetDist();
```

```
rec_z0 = mytrack->GetZ0();
rec_tanL = mytrack->GetTanL();
rec_R = mytrack->GetRadius();
cout<<"test = "<<mytrack->GetZ0()<<endl;
rec_charge = -(Int_t) mytrack->GetCharge();
double  rec_pt = mytrack->GetRadius()*0.006;
double rec_pl = mytrack->GetRadius()*rec_tanL*0.006;
rec_mom = TMath::Sqrt(rec_pt*rec_pt + rec_pl*rec_pl);
if(rec_mom!=0) rec_omega = rec_charge /  rec_mom;

// }

cand_mult++;

} // end of candidate loop


*****
```

I cannot enter neither in the loop. What am I doing wrong here? How should I write this?
I attach my macro. Could anyone help, please?

Thank you in advance.

Elisabetta

File Attachments