

Hi,
I would use use:

```
fPro->SetPoint(vtx);  
fPro->PropagateToPCA(1,-1);  
fPro->Propagate(fStart, fRes, PDGCode);
```

instead of:

```
fPro->SetPoint(vtx);  
fPro->BackTrackToVirtualPlaneAtPCA(1);//1 means "closest approach to point"  
fPro->Propagate(fStart, fRes, PDGCode);
```

I am not sure the function BackTrackToVirtualPlaneAtPCA is the one you need, but I could be wrong.

What are you using as StartO, StartU, StartV?

Another comment:

```
PndMCTrack* myTrack = (PndMCTrack*)(fMCTracks->At(0));
```

```
//Get Start point and momentum from MC  
PndSdsMCPoint* mcPoint = (PndSdsMCPoint*)(fMCHits->At(0));
```

I am not sure if this works. You should ask that mcPoint and mcTrack are the same particle: mcPoint->GetTrackID()==0. Without this check, you could also take some secondary and call them "antiprotons".