
Subject: Re: WirepointHitPolicy detplane implementation
Posted by [Lia Lavezzi](#) on Mon, 16 Mar 2009 17:31:59 GMT
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Hi,

basically the differences are:

1) the fact that in PndSttRecoHit we make a check on the distance of the poca from the wire:

```
Double_t distance;  
distance =  
TMath::Sqrt(fabs(((wire1-vpf).Mag2()*(wire2-wire1).Mag2()-pow((wire1-vpf).Dot(wire2-wire1),2))))  
// check vpf inside tube  
if(distance>0.5) {  
    cout << "vpf outside the firing tube" << endl;  
    FitterException exc("distance vpf-wire > 0.5", __LINE__, __FILE__);  
    throw exc;  
}
```

while the PndDchRecoHit does not need it;

2) in PndSttRecoHit the origin of the detector plane is set in the center of the tube:

```
TVector3 O = (wire1 + wire2) * 0.5;
```

while in PndDchRecoHit it is in the point of closest approach on the wire:

```
TVector3 O = vwi;
```

Please Ola correct me if I missed something.

Ciao,
Lia.