
Subject: Re: vertex reconstruction without fitting?

Posted by [Klaus Götzen](#) on Sat, 08 Nov 2014 15:46:54 GMT

[View Forum Message](#) <> [Reply to Message](#)

Hi Anna,

just to make it clear: a single track (=charged particle) cannot have a reconstructed vertex (or origin), since tracking only determines the trajectory (helix) of a charged particle, but not the starting point of the track on that helix. A vertex information can only be assigned by combining it with at least a second track and the constraint, that both particles originate from the same point.

If you want to know the POCA to the IP of the reco track, you can also use

```
muons[i]->Pos();
```

As Stefano wrote (I was just typing when he answered), unit is cm.

Best,
Klaus
