
Subject: Re: Lhe tracking results: reconstruction error for transverse momenta <= 1 GeV/c, all five partic

Posted by [David Pohl](#) on Wed, 24 Nov 2010 12:57:34 GMT

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

Hi Stefano,

okay. This means that the Kalman task does not take the bremsstrahlung correctly into account?

The x-y plane plots for the LheHits are not to easy to judge.
I think to recognize cirlces is not easy for the human brain .

On the first view one can assume that the kaons for 200 MeV/c transverse momenta do not lie on a circle.
Especially in the outer regions:

Corresponding reconstructed transverse momenta:

For 300 MeV/c transverse momenta the kaon tracks do not look that bent:

Corresponding reconstructed transverse momenta:

For electrons its an issue of the Kalman task I think:

Corresponding reconstructed transverse momenta:

Honestly I am at the moment quite busy with writing my thesis and have no time to do dedicated "bug search".

I just wanted to show this issue to inform the tracking experts.

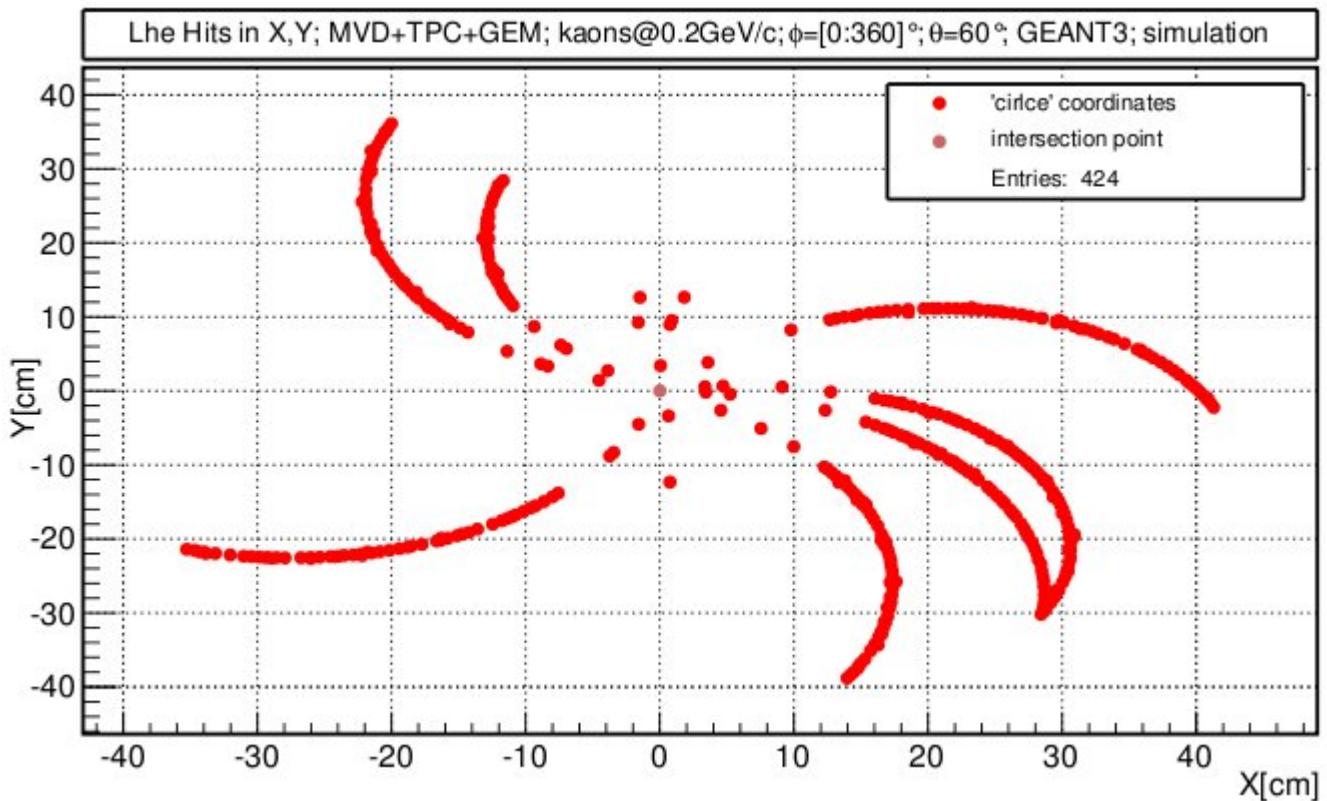
greetings,
David

p.s.: the plots in conformal mapping space are better to judge:
little bit bent

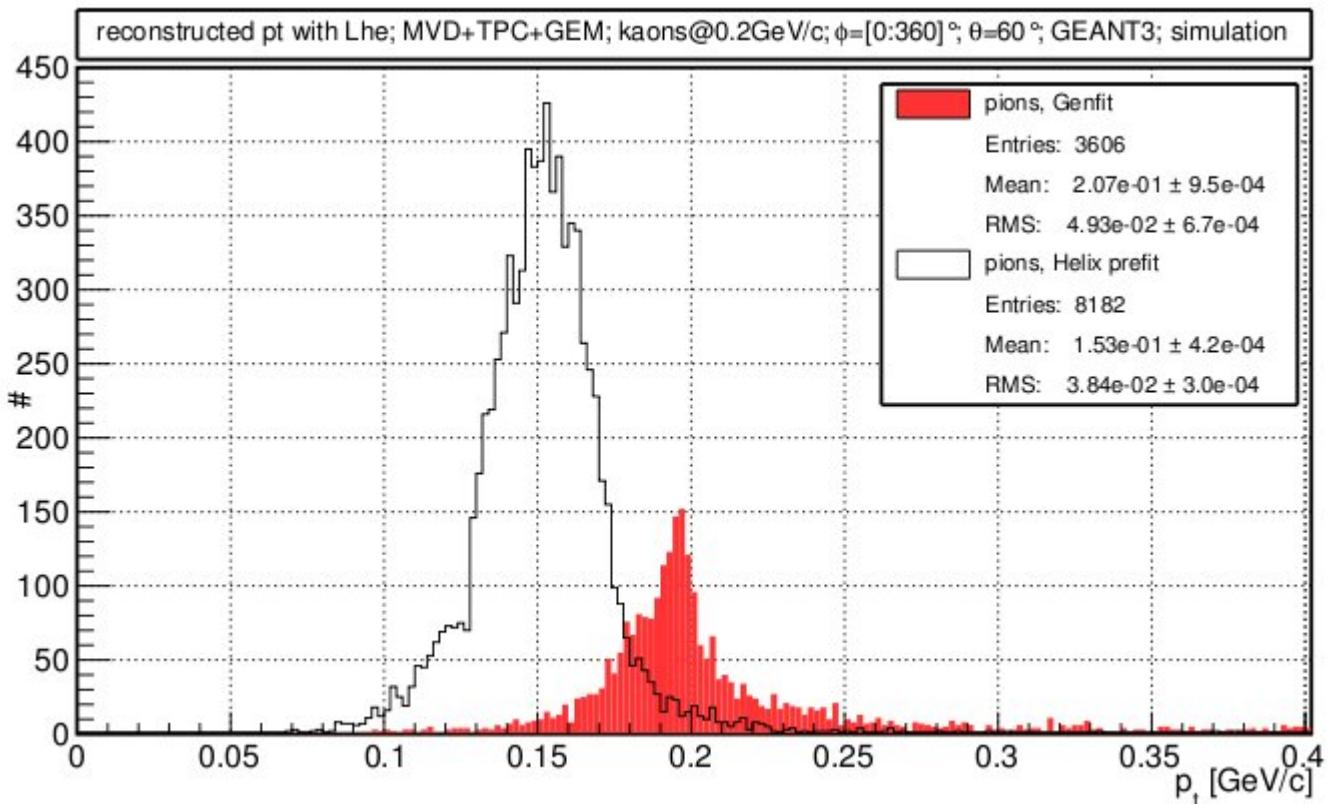
straight line

File Attachments

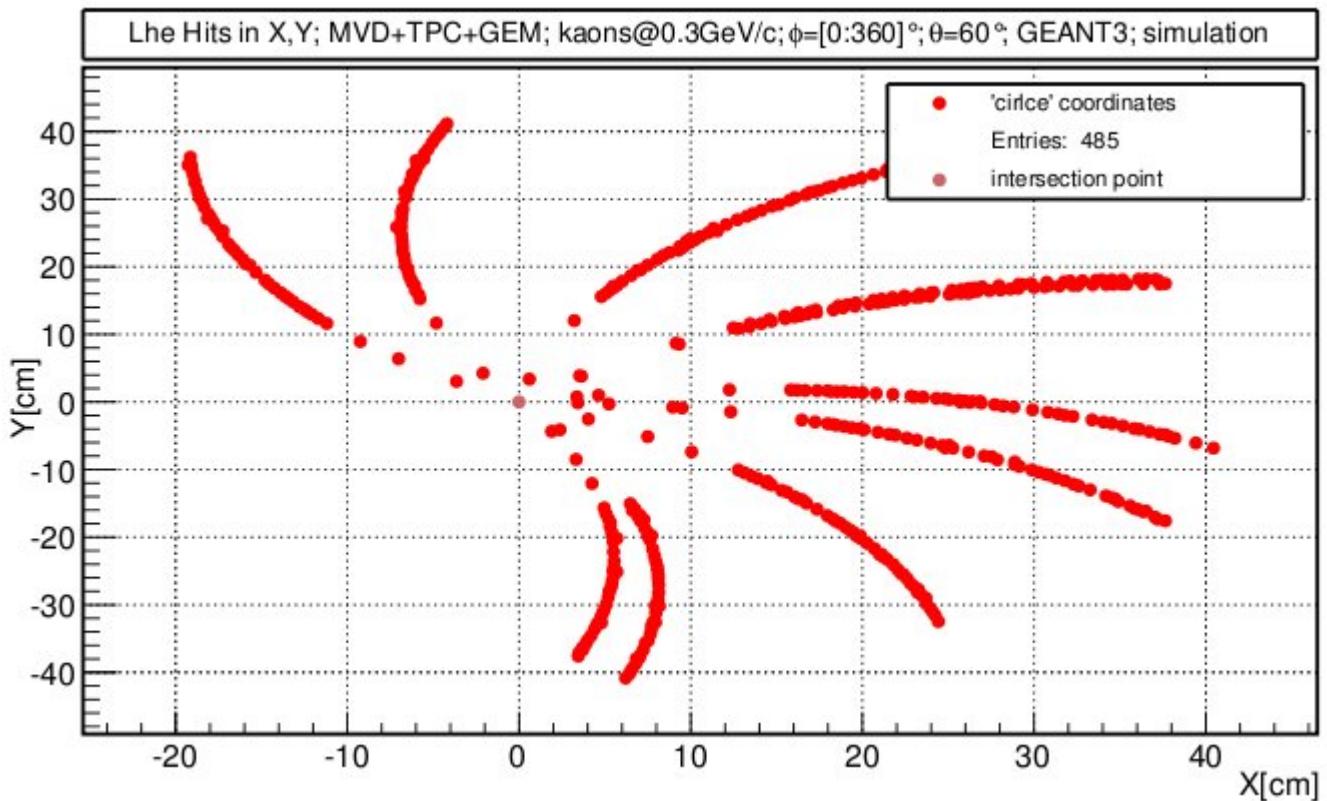
- 1) [LHEhelix_reco_tpc_200_kaons.jpg](#), downloaded 835 times
-



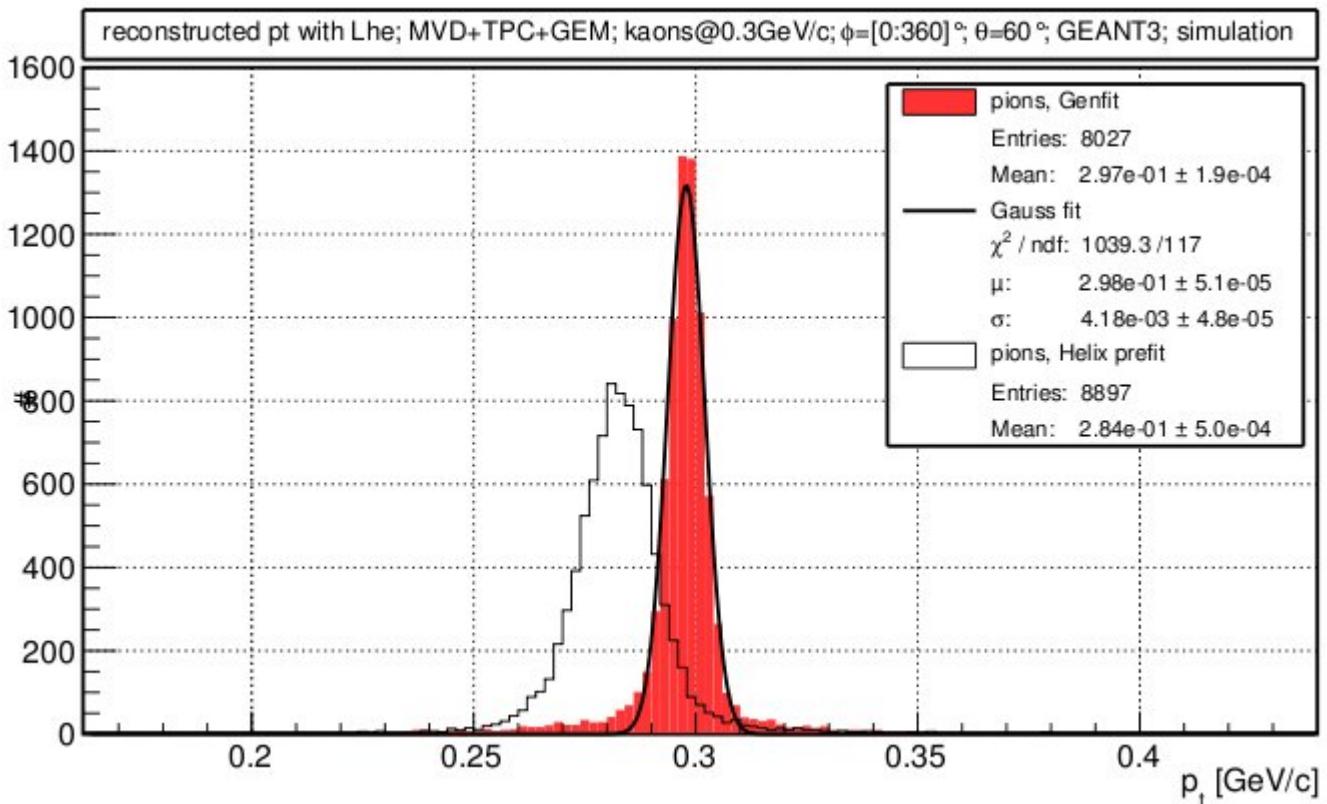
2) [pt_reco_tpc_200_kaons.jpg](#), downloaded 837 times



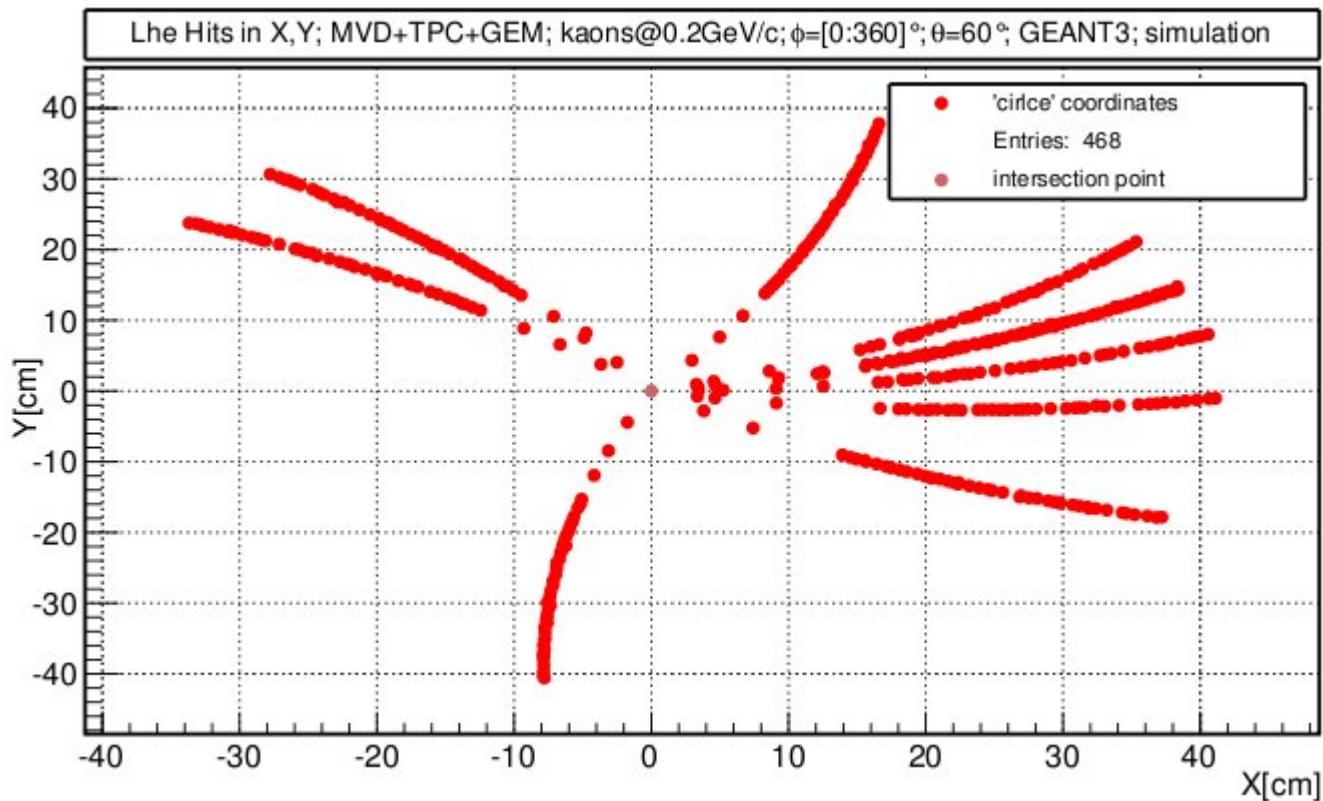
3) [LHEhelix_reco_tpc_300_kaons.jpg](#), downloaded 819 times



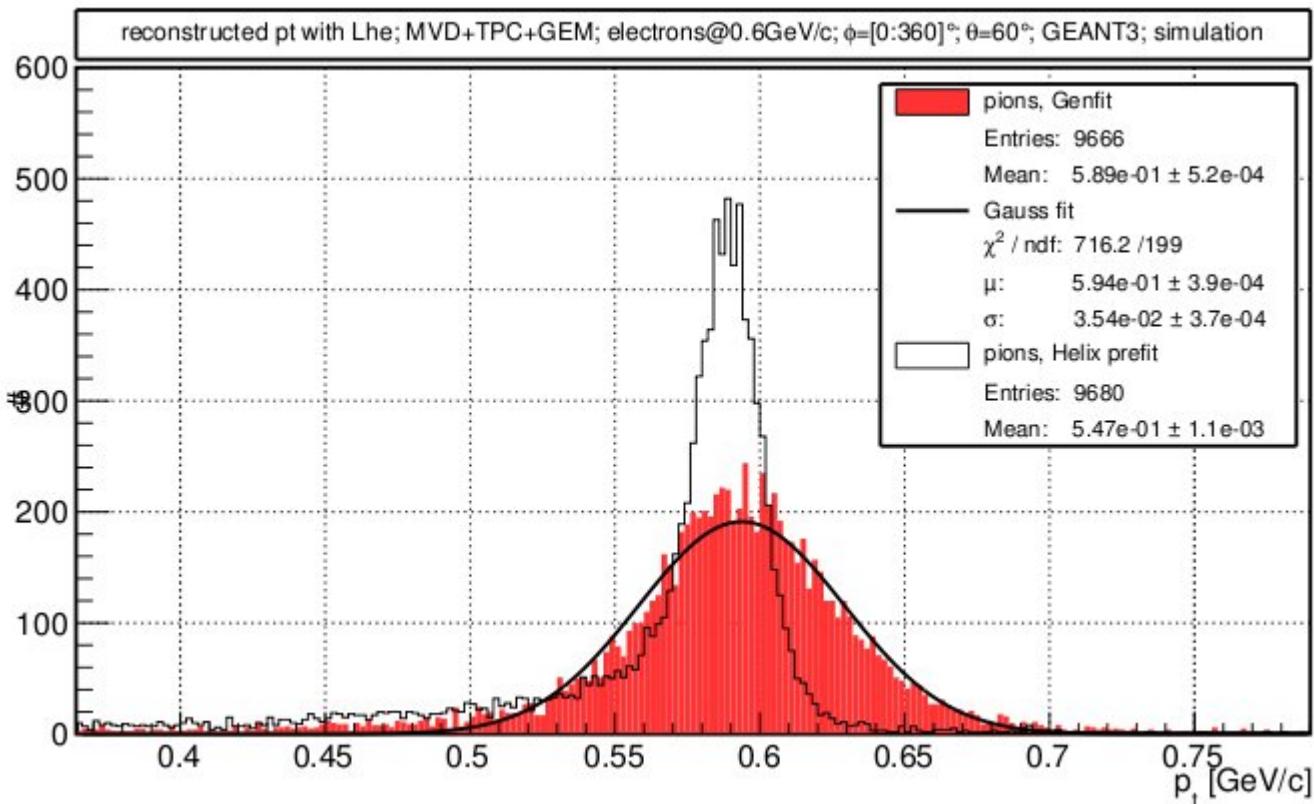
4) [pt_reco_tpc_300_kaons.jpg](#), downloaded 844 times



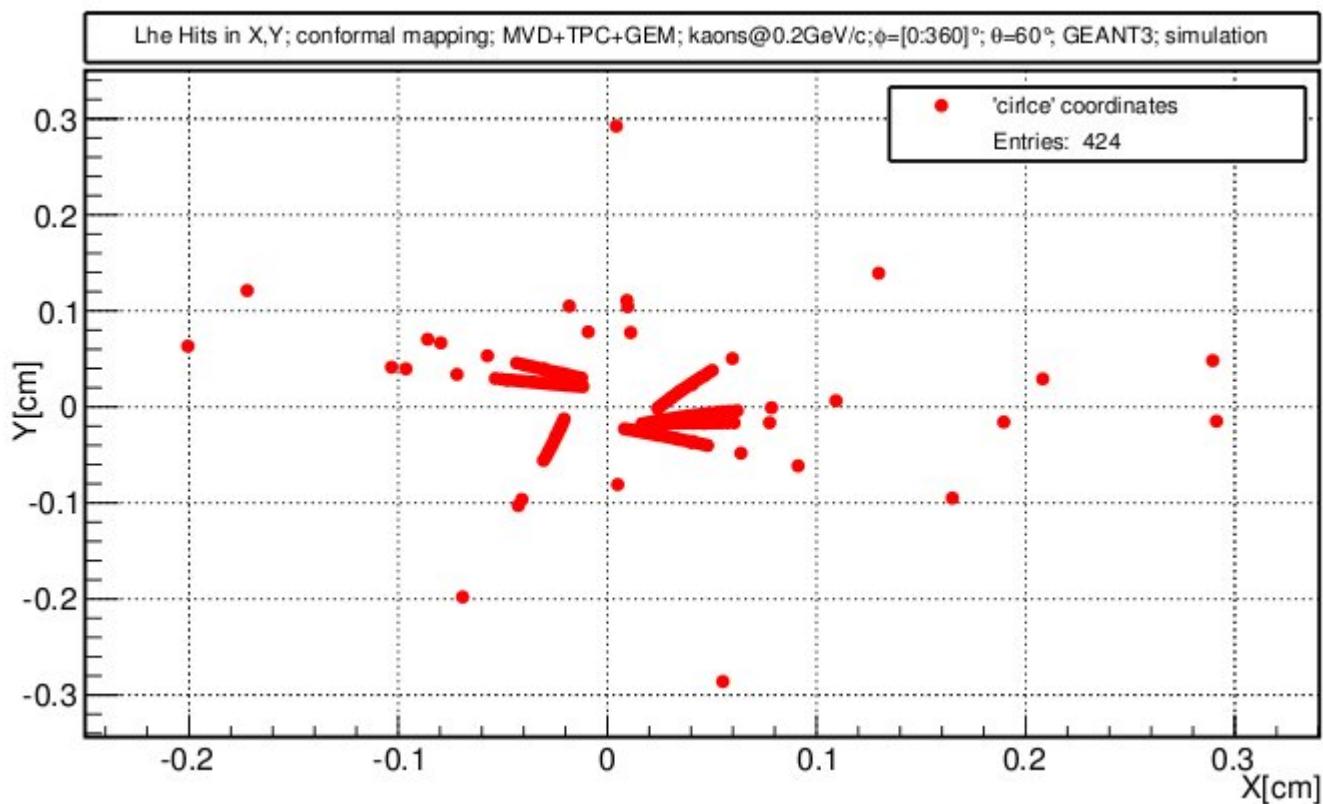
5) [LHEhelix_reco_tpc_600_electrons.jpg](#), downloaded 846 times



6) [pt_reco_tpc_600_electrons.jpg](#), downloaded 838 times



7) [LHEhelixConfMap_reco_tpc_200_kaons.jpg](#), downloaded 744 times



8) [LHEhelixConfMap_reco_tpc_300_kaons.jpg](#), downloaded 816 times

