
Subject: Re: Momentum resolution and reconstruction efficiency of LHE tracking
Posted by [Gianluigi Boca](#) on Wed, 10 Feb 2010 22:18:20 GMT

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Stefano Spataro wrote on Wed, 10 February 2010 21:05Hello,
this is a feature of the lhe tracking for straw tubes.

The alorythm is mainly designed for 3D points, and for STT one has to do some tricks in order to have a "decent" reconstruction. This results in a lower efficiency, as reported more than one year ago, the same plot that you are showing now. Lhe tracking reaches good performances tpc, while with stt it has this efficiency loss, in particular for low momentum tracks.

Naturally this doesn't mean that the STT system is unable to reconstruck tracks.

In a comparison between montecarlo momenta and momenta as obtained by a real Pattern Recognition alone (therefore without all the bonuses of a Kalman filter etc.) I am getting very encouraging results after all the improvements recently added to the code. I will speak about this in 2 weeks as promised today.

Gianluigi
