
Subject: Re: Solenoid field effect on the particle track theta!
Posted by [Inti Lehmann](#) on Tue, 18 Aug 2009 13:59:26 GMT
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Hi Huagen and Jost,

That effect seems a stronger effect to me that I would have naively expected from the slight asymmetry of the door iron. In particular as we are talking about the field only 1.5cm off the beam axis, right?

Another thing which strikes me odd is that the deviation in theta seems more (at least double) than the rotation in phi. It also seems to bend the tracks to lower theta only. (It is difficult to read from the plots, but I would take ~5.5 without field, and 0.5-1deg less with field, right?) I'm not sure, if I am just confused, but wouldn't that mean, we had to have a circular field component larger than the radial one? Maybe I'm just lost....

Could you check what happens to protons? Will this be opposite and equal?

As I understand you only switch the solenoid on and off. What happens if you add a dipole field? Ideally the whole thing should just be shifted, but...

Cheers,
Inti
