Subject: Re: B field scaling for PANDA
Posted by Lars Schmitt on Tue, 03 Feb 2009 10:01:25 GMT
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Dear Stefano,

If you look at Jost's plot in his message it is clear that we need something like 5 field calculations and then can make a linear interpolation in between momenta for which the field was calculated.

I guess the most efficient way is to do the work in the initialization phase and create a new map in memory from the two neighboring maps calculated by Tosca. I don't believe (and Jost agrees) that one can just take the function and scale from 15 GeV/c with it to any value. The plot shown is just the field integral, but the actual field is different in any given point of the map and can have a slightly different behavior everywhere.

Coming back to the values: I made a mistake with J/psi. It should be 4.06 GeV/c. For the higher value I propose either 11.91 (Ds(2460)) or 12.01 (Xi_c) with a slight preference for 11.91.

The 8.9 GeV is the end of electron cooling and the 1.5 GeV/c and the 15 GeV/c are just the extremes we can have.

I would like to know Mohammad's opinion on this subject.

Cheers,

Lars