Subject: antiprotons lost above 10 degrees
Posted by Karin Schönning on Thu, 30 Oct 2014 14:24:25 GMT
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Dear colleagues,

I am studying the pbar p -> Lambdabar Lambda benchmark channel at 1.64 GeV (Lambda -> p pi-, Lambbabar -> pbar pi+). When "turning off" the MVD/GEM (to do tests for the scrutiny campaign) very few antiprotons are reconstructed above 10 degrees. Other particles (protons and pions) have a "band" with very low efficiency between 10 and 20 degrees (see attached pictures, hopefully the titels are self-explanatory).
I use ideal pattern recognition, and have tried with and without ideal hypothesis in the Kalman filter, with qualitatively the same result.

Before the summer I did the same exercise but got a different result, then tracks in this area were reconstructed.

Does anybody have an idea what the reason may be?

Best regards,
/Karin

File Attachments

1) th_p_pbar_full.pdf, downloaded 532 times
2) th_p_p_full.pdf, downloaded 553 times
3) th_p_pbar_nomvdgem.pdf, downloaded 549 times
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