
Subject: antiprotons lost above 10 degrees

Posted by [Karin Schöning](#) on Thu, 30 Oct 2014 14:24:25 GMT

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Dear colleagues,

I am studying the pbar p -> Lambda Lambda benchmark channel at 1.64 GeV (Lambda -> p pi-, Lambabar -> 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 titles 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
- 4) [th_p_p_nomvdgem.pdf](#), downloaded 554 times
- 5) [th_p_pim_full.pdf](#), downloaded 525 times
- 6) [th_p_pim_nomvd.pdf](#), downloaded 535 times
- 7) [th_p_pip_nomvd.pdf](#), downloaded 541 times
