Subject: Re: Lambda Lambdabar simulations
Posted by donghee on Thu, 17 Apr 2014 12:56:08 GMT
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Dear Stefano,

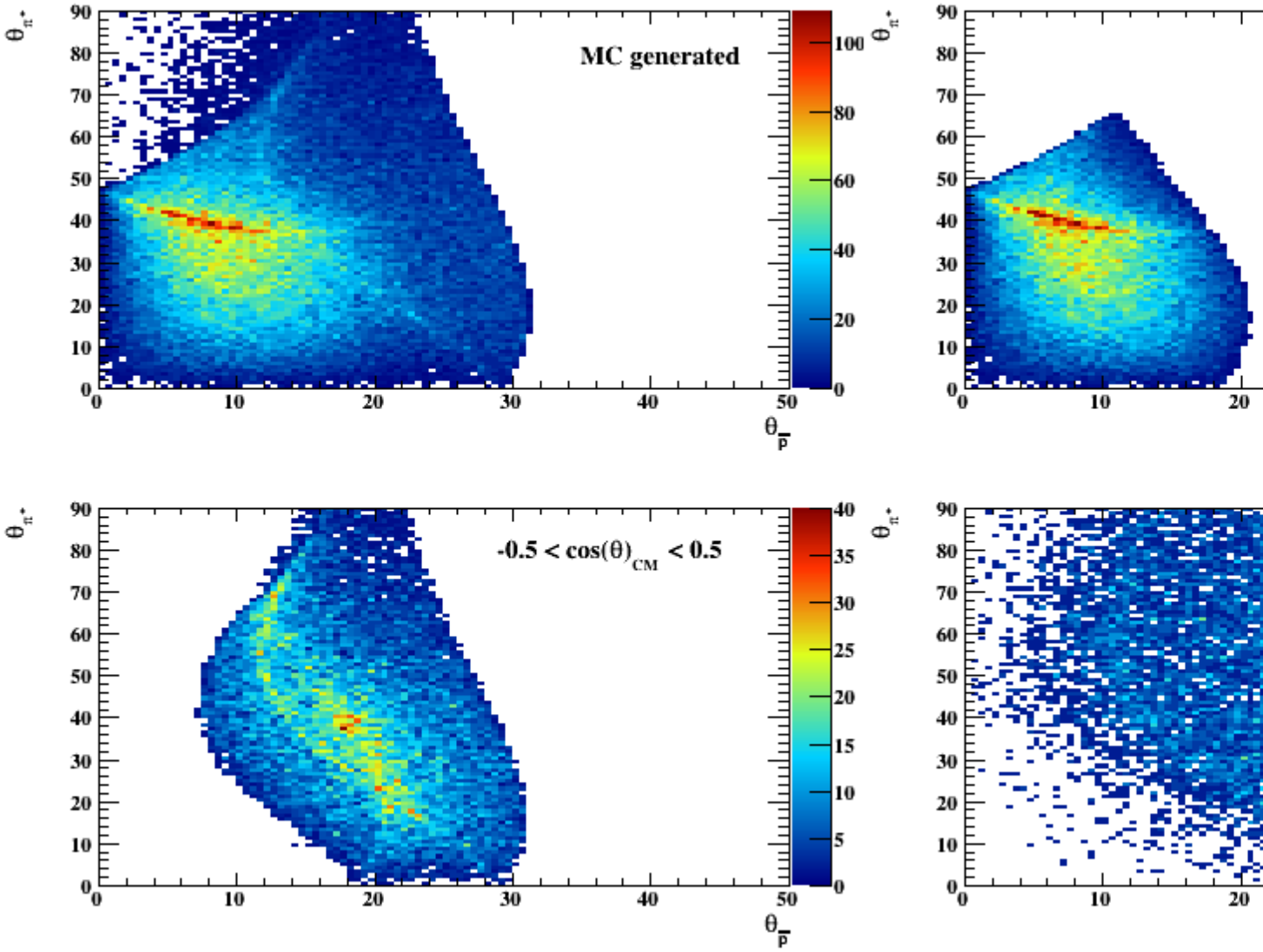
I want to show you theta distribution for anti-proton and pi+ from the antilambda decay in the lab frame.
Each 2D plots show that thata_antiproton vs theta_pion in the lab frame for the case of generated and reconstructed.

I used LambdabarLambdaPol 1.64GeV model and a perfect detector, which covers from 0 to 160 degree with perfect resolution and efficiency.
In each panel, you can find the dependence of theta_{lab} distribution on the different cos(theta)_{CM} region.
I think that Panel2(Right up) is quite important clue for the acceptance lost.
In lab frame, theta between 0 and 7 degree we could not reconstruct at all, due to V0 decay topology.

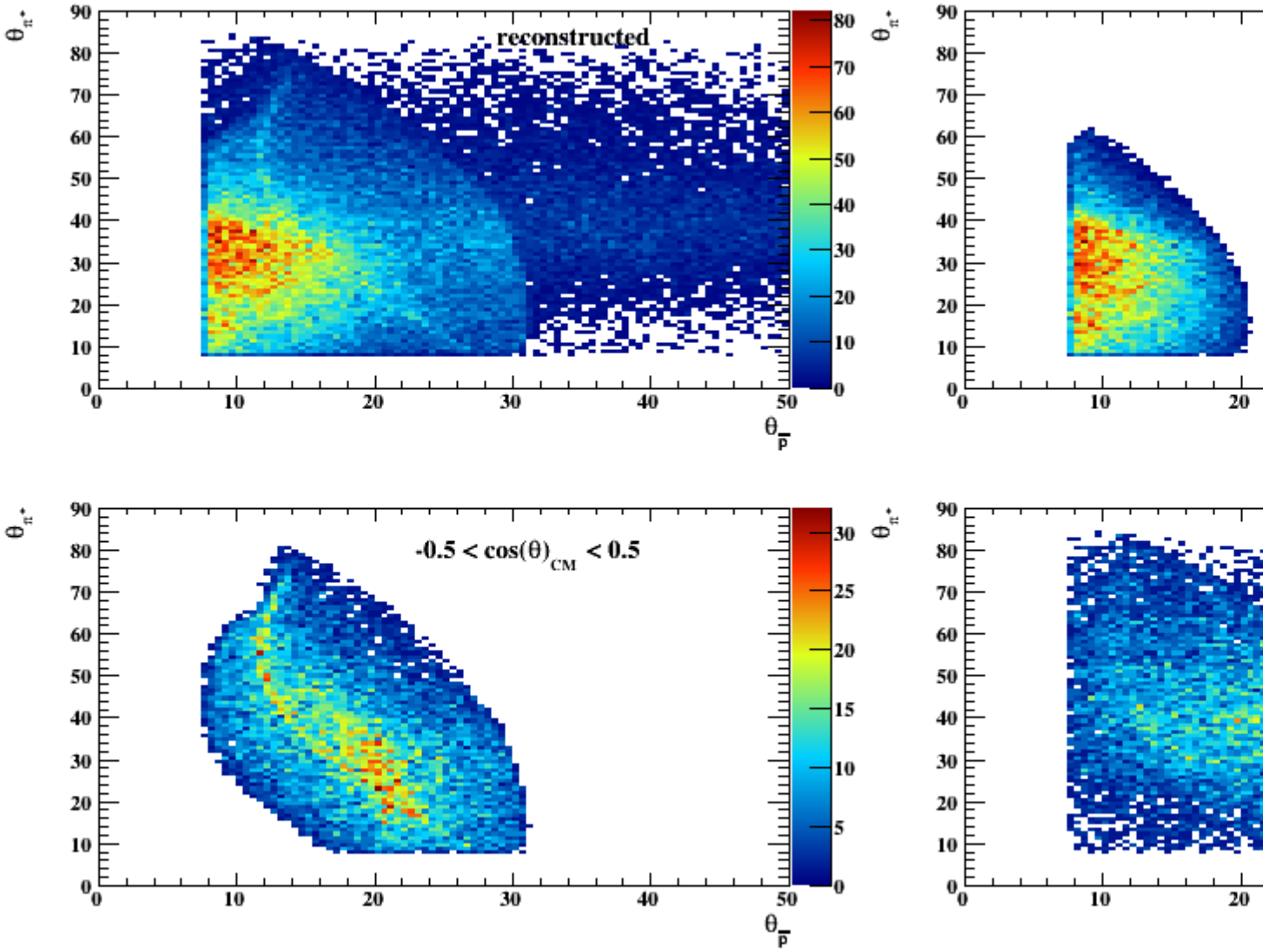
Best wishes,
Donghee

File Attachments

1) setup_test_acceptance_cos_theta_superdetector_gen.png, downloaded 746 times



2) setup_test_acceptance_cos_theta_superdetector_reco.png, downloaded 734 times


reconstructed
θ_{π^+}
$\theta_{\bar{p}}$
-0.5 < cos(θ)$_{CM}$ < 0.5