Subject: Re: Lambda Lambdabar simulations
Posted by Klaus Götzen on Thu, 17 Apr 2014 15:34:56 GMT
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Hi,

I'd like to add some point to the current discussion: Since the tracking detectors in Fast Sim only check for a certain theta region computed from the IP, the acceptance might be wrong for particles coming from displaced vertices. This is due to the fact, that a quite far displaced vertex in radial direction in reality could still be detected with a much smaller theta then that one calculated by connecting the detector edge with the IP. The other way around is also possible: a particle coming from a displaced vertex with large z position could miss the detector even with a theta value being in the acceptance range.

To overcome this limitation, one would need many more geometry parameters for each detector, therefore it was not taken into the initial design of the Fast Sim.

Best,
Klaus