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Subject: Re: DIRC preshower

Posted by [kamalpdutta](#) on Mon, 18 May 2015 18:47:17 GMT

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Hi,

Thanks for your reply. In my case too, I have generated single photon events for energy 1 GeV originates just before DIRC (45,0,0) using box generator. The starting point of the EM shower has been identified from the starting vertices of secondary particles. The minimum of radial part ( $\sqrt{x^2 + y^2}$ ) of the starting vertices of secondaries is taken as the radial distance of the starting point of the EM shower for each event. The gamma conversion probability is calculated as (number of gamma starts EM shower within DIRC)/ (number of generated gamma). To reproduce the figure 9.13 (EMC tdr), this process has been iterates over different values of theta (from 22 to 140) and the gamma conversion probability has been plotted Vs theta. I attached the plot here.

Moreover I am not able to match EMC cluters with the primary photons.

regards'

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### File Attachments

1) [gamvstheta.eps](#), downloaded 675 times

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