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Subject: Re: E/p vs p + energy and momentum  
Posted by [Dmitry Khanef](#) on Mon, 30 Jan 2012 16:17:26 GMT  
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Gianluigi Boca wrote on Wed, 25 January 2012 13:14

dear Dmitry,

do you understand why the Emc energy plot (emc\_raw\_lab\_3.3\_0.0e.eps) has a dip at 3 GeV ? And do you understand that very peculiar momentum distribution (mom\_lab\_3.3\_0.0e.eps) ?

Gianluigi

Dear Gianluigi,

sorry for the late answer.

This energy drop on the emc\_raw\_lab\_3.3\_0.0e.eps plots is explained by the transition from the barrel to forward endcap. Below you will find 3 plots for the backward/forward endcaps and for the barrel.

emc\_raw\_ba\_lab\_3.3\_0.0e.eps - EMC barrel

emc\_raw\_bw\_lab\_3.3\_0.0e.eps - EMC backward endcap

emc\_raw\_fw\_lab\_3.3\_0.0e.eps - EMC forward endcap

As for momentum, I think it is a consequences of momentum distribution of initial electrons and positrons (see mom\_neg\_lab\_3.3\_0.0e.eps)

Dmitry

#### File Attachments

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- 1) [emc\\_raw\\_ba\\_lab\\_3.3\\_0.0e.eps](#), downloaded 294 times
  - 2) [emc\\_raw\\_bw\\_lab\\_3.3\\_0.0e.eps](#), downloaded 306 times
  - 3) [emc\\_raw\\_fw\\_lab\\_3.3\\_0.0e.eps](#), downloaded 289 times
  - 4) [mom\\_neg\\_lab\\_3.3\\_0.0e.eps](#), downloaded 278 times
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