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Subject: Cluster energy overestimated

Posted by [donghee](#) on Tue, 04 Aug 2009 11:00:18 GMT

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Dear EMC experts,

I have seen that estimated energy with finding cluster in EMC is slightly overestimated.  
You find related 3 plots in attached files.

MC true and reconstructed energy are compared in theta and momentum bin.  
You can clearly see the overestimated energy in energy resolution 2D plot.

EMC\_g\_mom\_the\_distribution.eps (red=MC, blue=reconstructed)

EMC\_g\_energy\_resolution\_2D.eps

EMC\_g\_theta\_resolution\_2D.eps

If I have a look for electron case, same amount of energy is also shifted.  
I'm wondering how the calibration have been done. and how do we can correct wrongly  
reconstructed energy in EMC.

Best regards,  
Donghee

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#### File Attachments

- 1) [EMC\\_g\\_mom\\_the\\_distribution.eps](#), downloaded 494 times
  - 2) [EMC\\_g\\_energy\\_resolution\\_2D.eps](#), downloaded 443 times
  - 3) [EMC\\_g\\_theta\\_resolution\\_2D.eps](#), downloaded 494 times
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