Subject: Re: Problem with mass constraint fit for two gamma
Posted by donghee on Wed, 16 Jul 2014 18:28:56 GMT
View Forum Message <> Reply to Message

Dear Stefano,

Thanks a lot.
I submit a job with this new EMC reconstruction part.

Probably, I focused on the wrong direction before getting your e-mail.
You can see what I was suspicious about and discussion with Dima at today morning.

See you soon,

Hi Dima,

I am produing emc data(photon) to get error matrices according current geometries.
Everythings is more or less smooth.

I found that the position resolution of backward endcap are really bad, if I compare with forward end cap.
Did you see also same behaviour?

I assume that our main problem is the scaleing factor in the PndEmcErrorMatrix.cxx
We are calculating the position error at z or R=100cm when we estimate errors and save it from the analysing photon data.
Then in PndEmcErrorMatrix we make a rescale with 54/100*error, which 54 is the radius of barrel for example and 100 is previouly given in the error matrix data that have to be subtracted during the access this information at analysis (fit) level.

But I think that this is something wrong. we don't need any scale factor. All error are estimated by differences at certain position.
It has been already taken into account during transformation in which is TMatrix trans(4,3).

I am trying to do with following way.
In PndEmcErrorMatrix, I change
from
pos1Err *=scaleFactor
pos2Err *=scaleFactor

to
pos1Err *=1/100
pos2Err *=1/100

let see what should happen.
Donghee