

---

Subject: Re: Problem with mass constraint fit for two gamma  
Posted by [Dima Melnychuk](#) on Wed, 02 Jul 2014 10:26:50 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

Hi,

It's pity that it does not help, i.e. usage of `emc_error_matrix_1.root` instead of `emc_error_matrix_default.root`.

Comment to Stefano, that `emc_error_matrix_1.root` was calculated for geometry which is different from current only for forward endcap and modification in reconstruction code should not be (?) relevant for this case.

Comment to Donghee

> It means that in fast simulation the error matrix "`emc_error_matrix_1.root`" has been accessed correctly but in full simulation old parameterization `emc_error_matrix_default.root` was used up to now.

No, in fast simulation the error matrices were calculated/parametrized independently.

> Did you make parametrizations for Barrel, Forward endcap, Backward endcap, forward EMC, all 4 parts separately?

There is a separate parametrization for each EMC part but I calculated them in one macro.

But the conclusion is that error matrices should be recalculated at least for modified forward endcap, but parametrization/fit should be checked anyway, since I do not suppose that only forward endcap introduces problems.

So it makes sense to start with some QA macro to look for pull distribution for  $\pi^0$  before/after 4C-fit and only later to recalculate error matrices.

Dima