

CEPC Jet&Clusters

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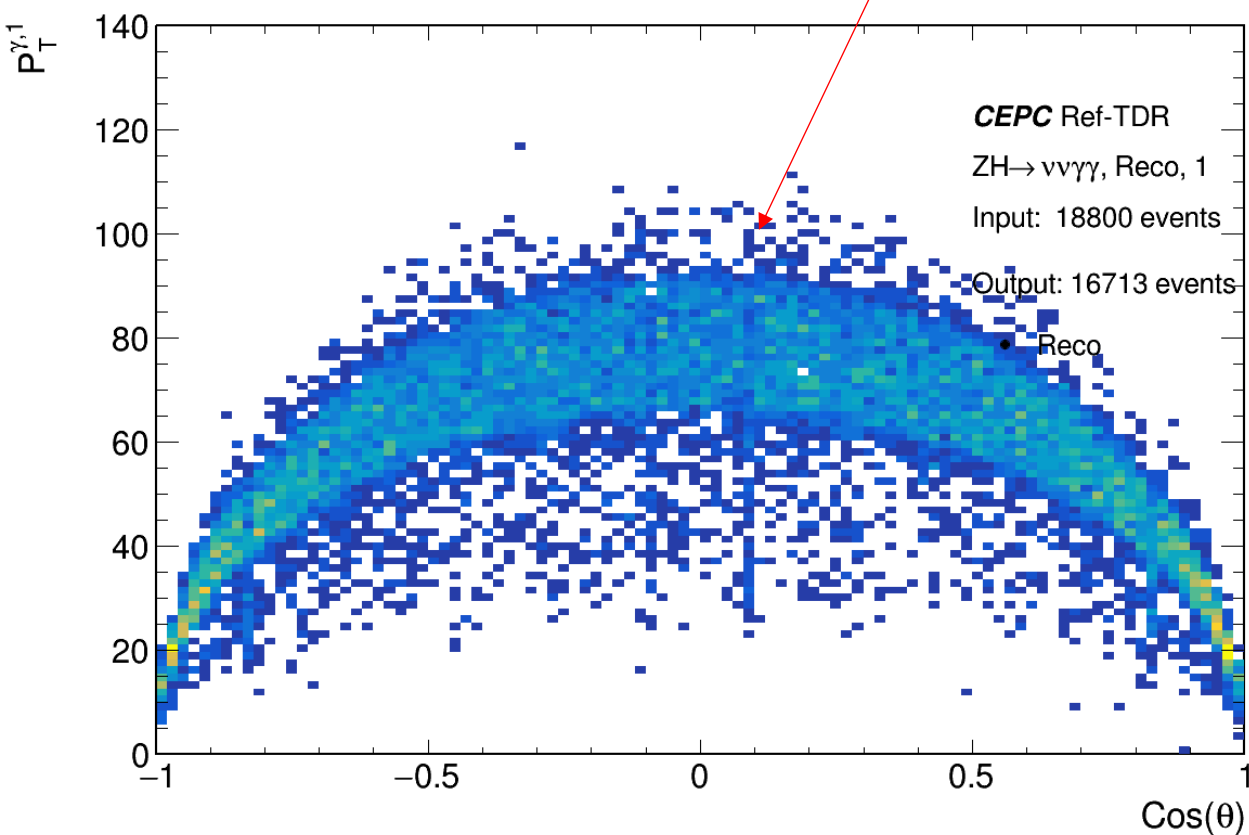
Quick look at Endcap



- Latest Release 25.01.
- Memory usage: sim, digi, trk ~6GB. rec: 8GB.
- Path: /cefs/higgs/zhangkl/Production/2501

$ee \rightarrow ZH \rightarrow \nu\nu\gamma\gamma$

Cos theta=0.1 crack?

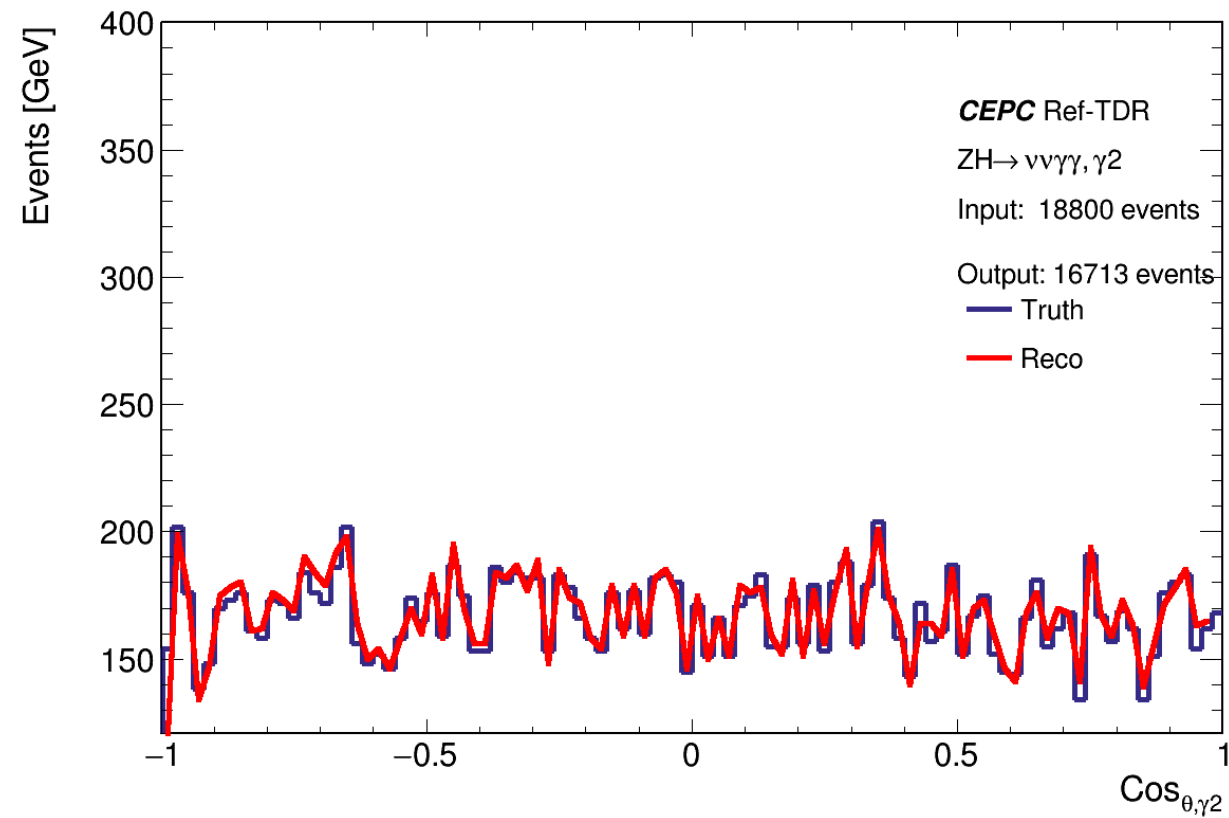
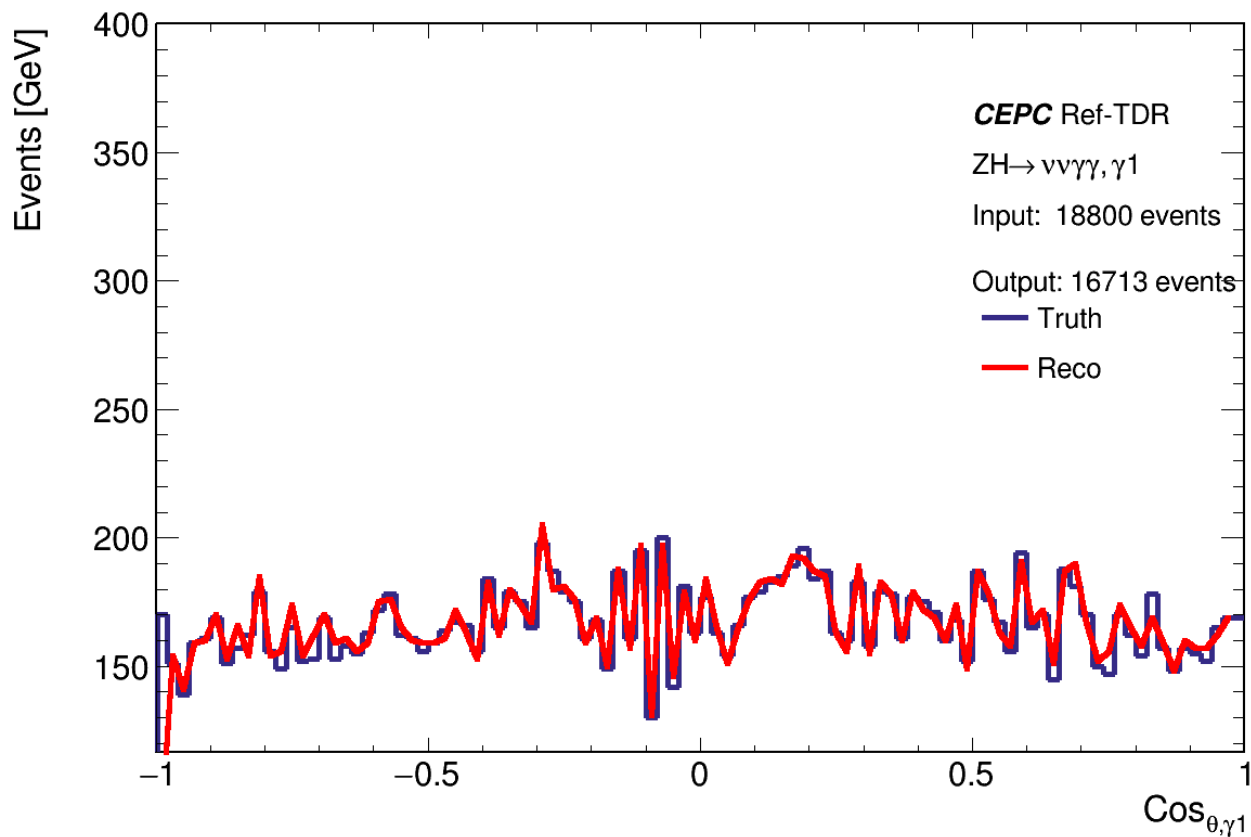


- We have the endcap response.
- Continuum costheta distribution and no crack ~ 0.85 .

Truth/Reco photon cos theta

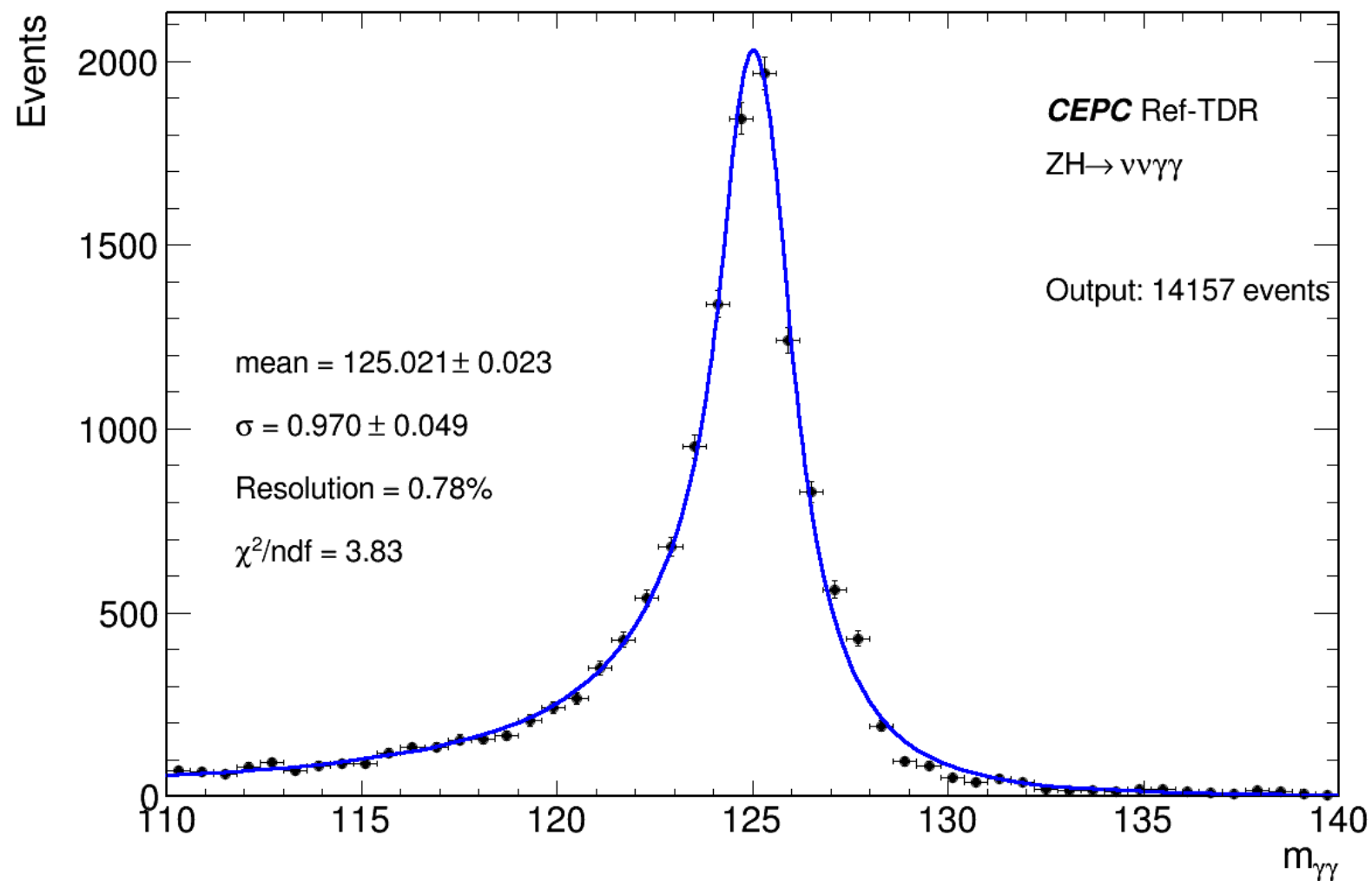


Reco costheta reach to $\sim 0.97, 0.98$.



M_{γγ} resolution

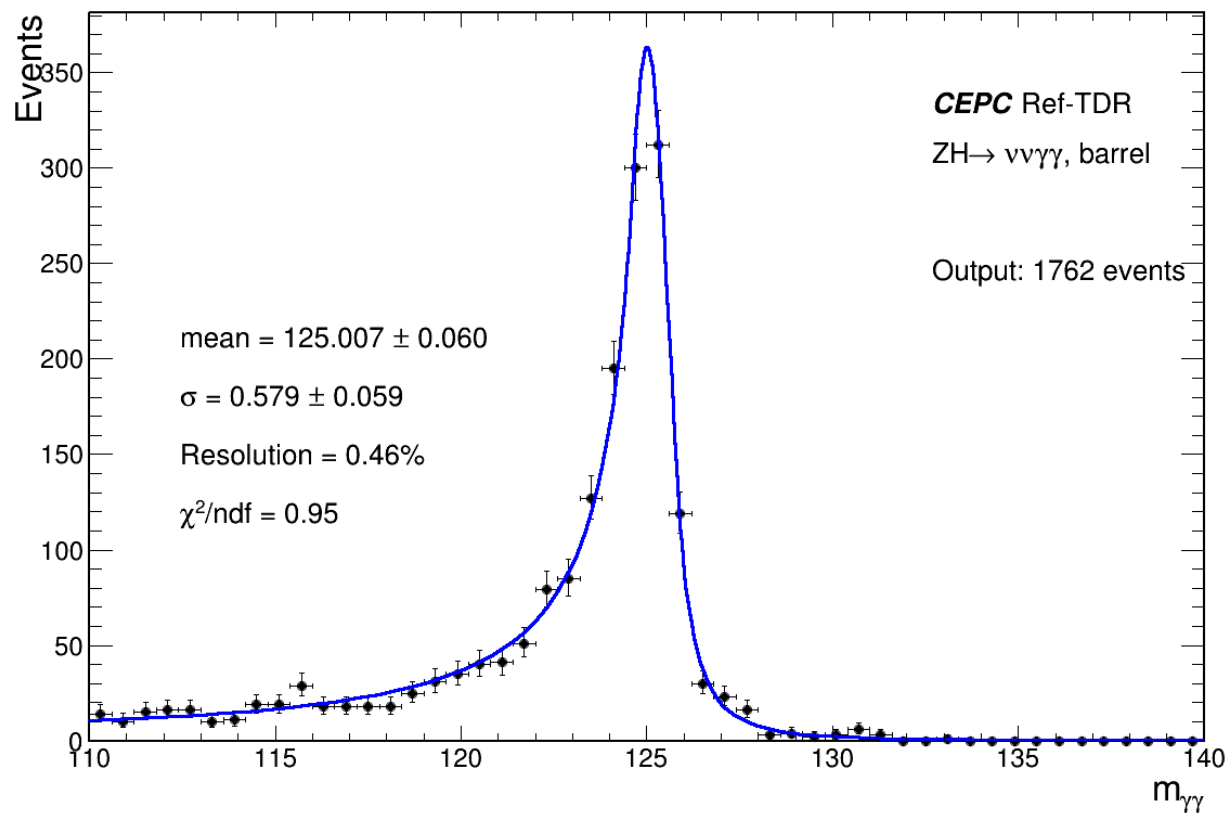
Barrel + Endcap



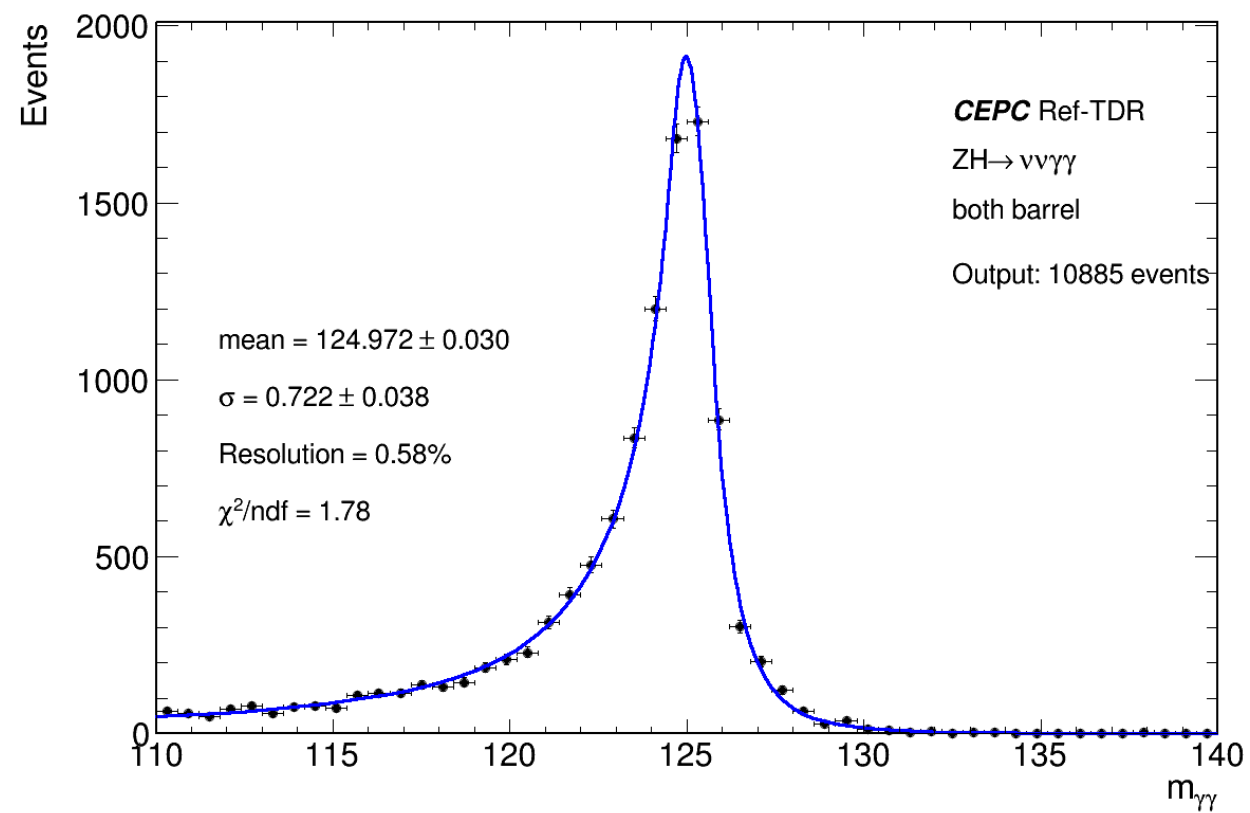
Barrel resolution

Both $y_1, y_2 \cos\theta < 0.85$

Before tdr25.1, only barrel



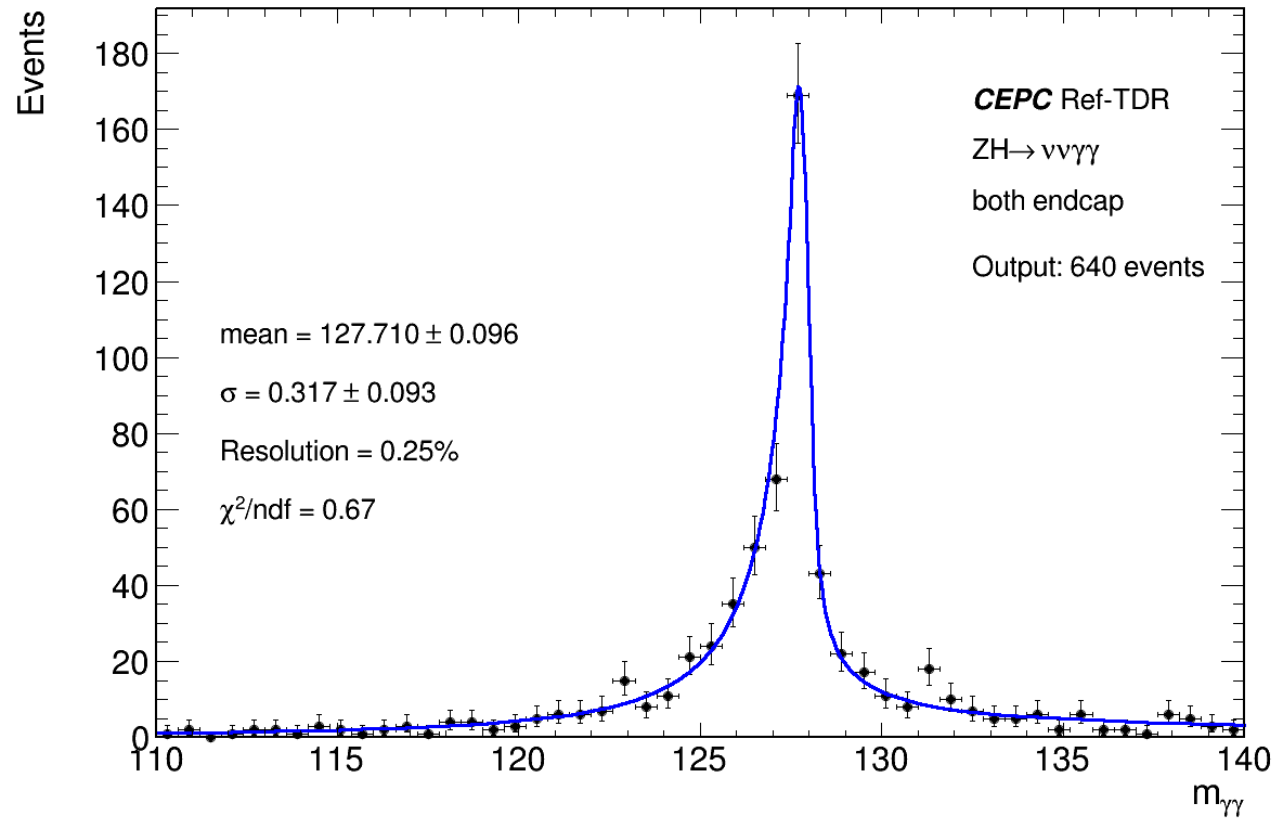
Latest



From PFA group, barrel BMR reduced from 3.8% to 4.2%. Also found in diphoton channel. By 25%.

Endcap resolution

Both $y_1, y_2 \cos\theta > 0.85$



- Endcap with better resolution.
 - Better than barrel
- Right side tail
- Mean value \rightarrow Calibration.
- We have endcaps. But may need further validations.