Photon enrergy correction

Khachatryan Vachik

September 18, 2014

1 Introduction

We apply photon energy correction for same and different sectors. Minimum enrgy for registered neutral particles was choosen 0.2GeV. Function that have benn used for correction is $f/(E) = 1.185 - 0.03272/E + 0.00243/E^2 - 0.0001301/E^3$ and for different sectors $f/(E) = 1.213 - 0.03917/E + 0.003065/E^2 - 0.00009897/E^3$

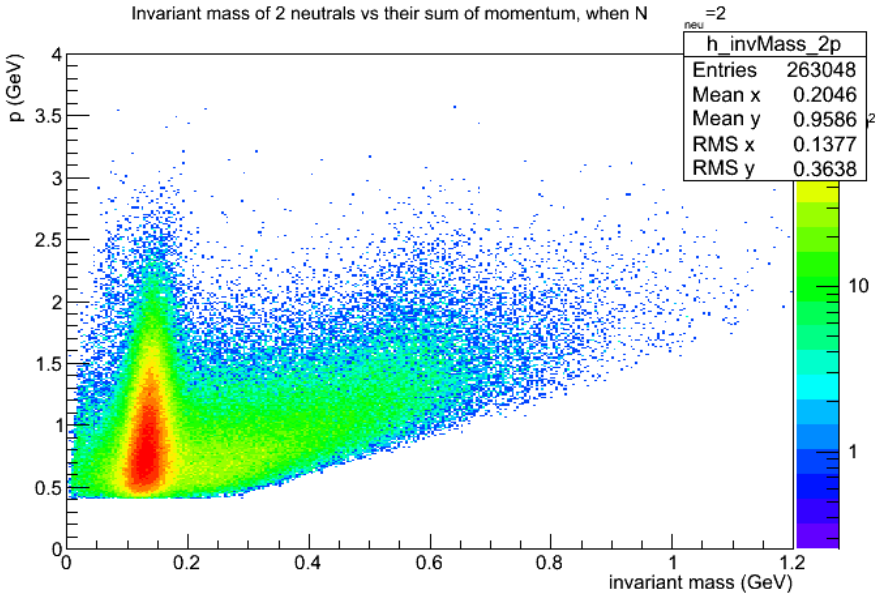

Figure 1: The invariant mass vs momentum of 2 γ for all registered photons.

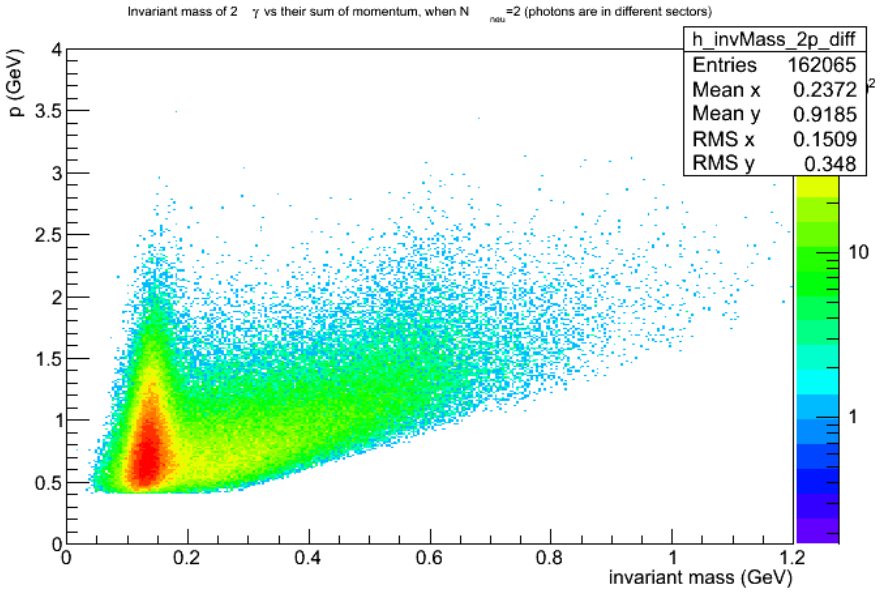

Figure 2: The invariant mass vs momentum of 2 γ for photons which registered in the different sector

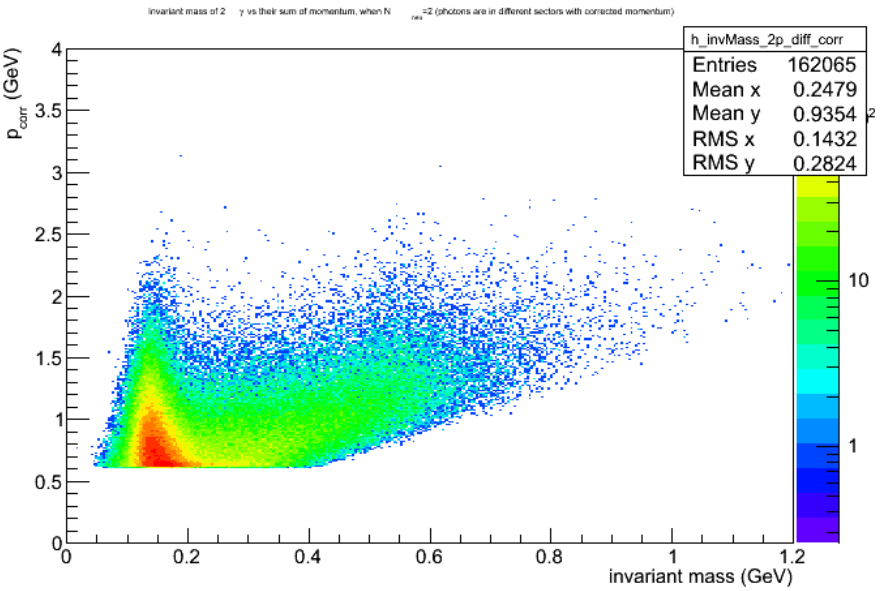

Figure 3: The invariant mass vs momentum of 2 γ after applying photon energy correction for photons which registered in the different sector

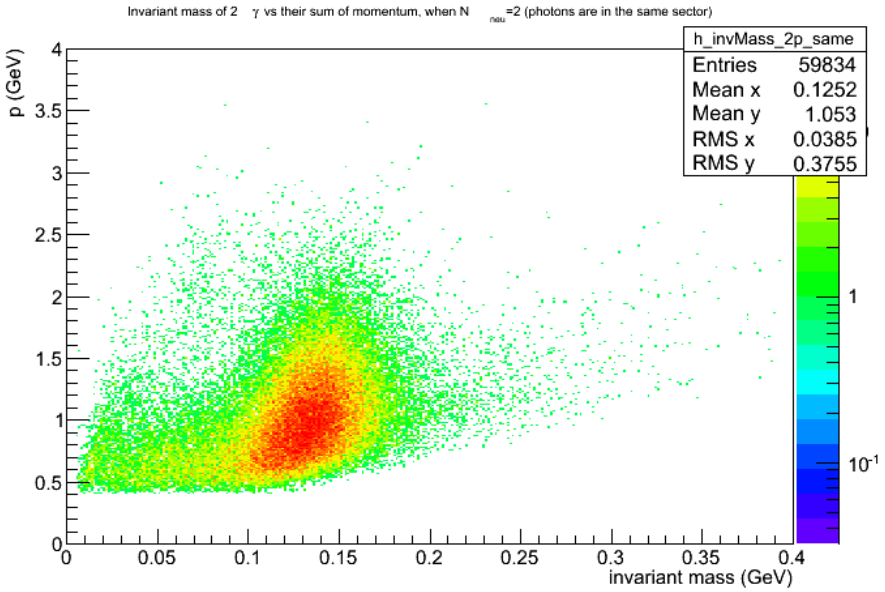

Figure 4: The invariant mass vs momentum of 2 γ for photons which registered in the same sector

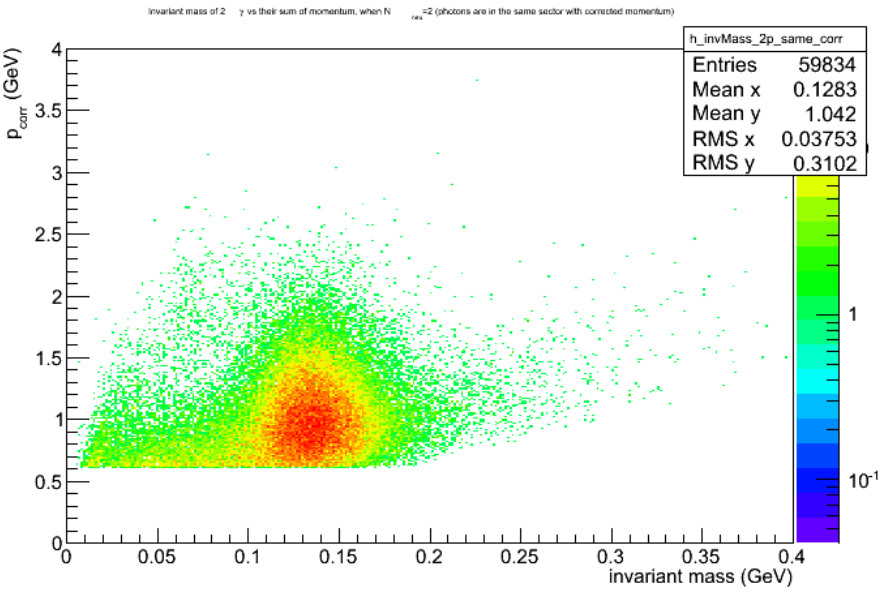

Figure 5: The invariant mass vs momentum of 2 γ after applying photon energy correction for photons which registered in the same sector

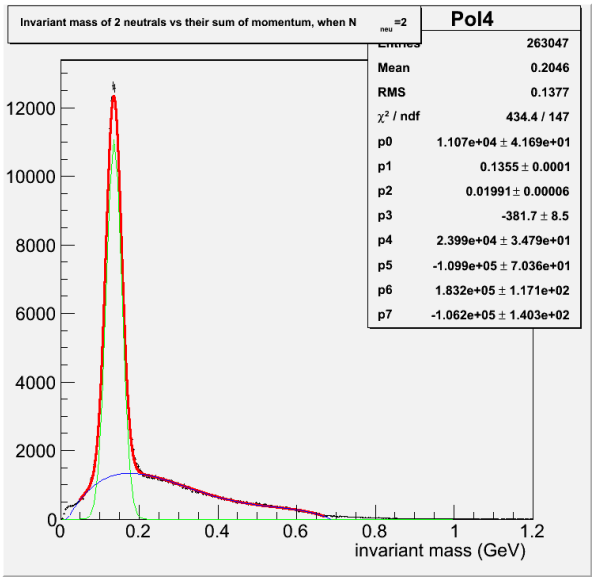

Figure 6: The invariant mass of 2 γ for all registered photons. Invariant mass distribution was fitted with a Gaussian plus a polynomial of 4rd degree.

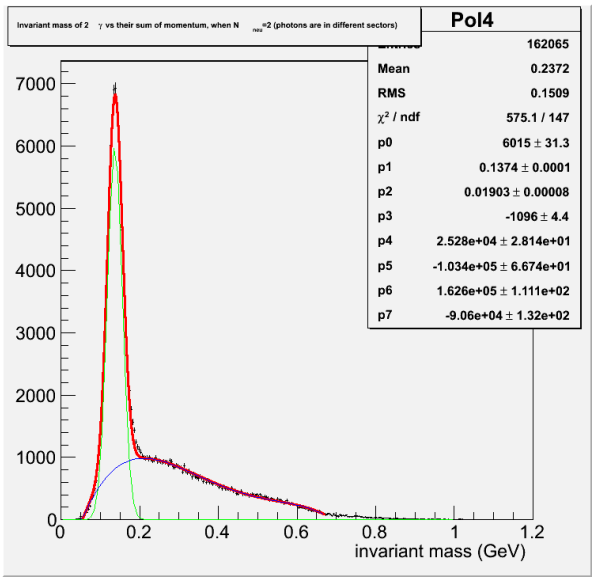

Figure 7: The invariant mass of 2 γ for photons which registered in the different sector.Invariant mass distribution was fitted with a Gaussian plus a polynomial of 4rd degree.

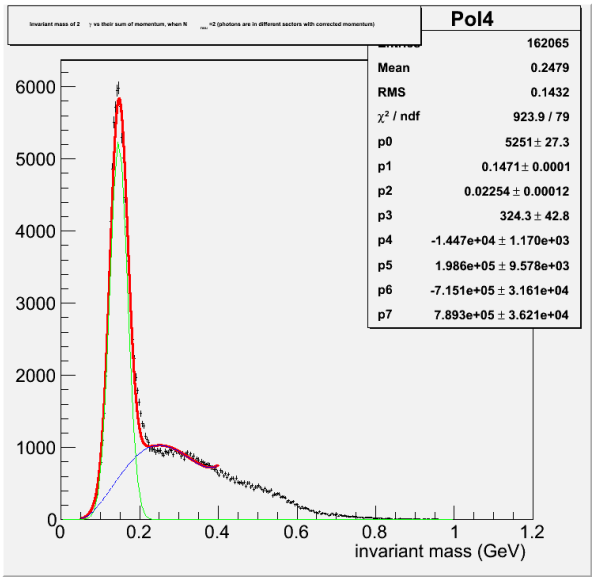

Figure 8: The invariant mass of 2 γ after applying photon energy correction for photons which registered in the different sectorInvariant mass distribution was fitted with a Gaussian plus a polynomial of 4rd degree.

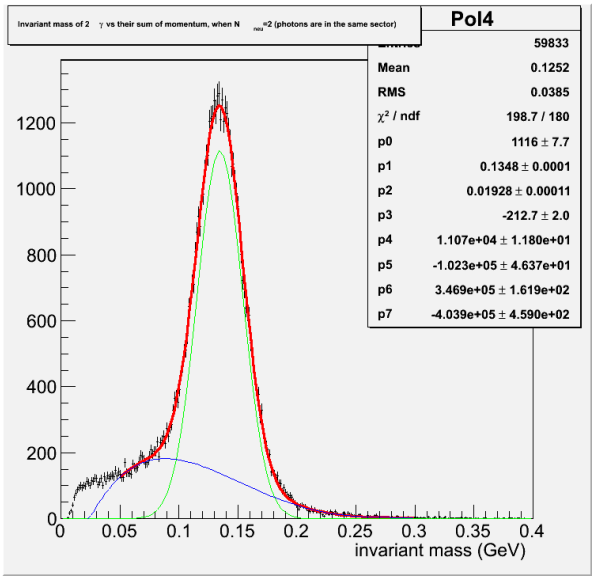

Figure 9: The invariant mass of 2 γ for photons which registered in the same sector.Invariant mass distribution was fitted with a Gaussian plus a polynomial of 4rd degree.

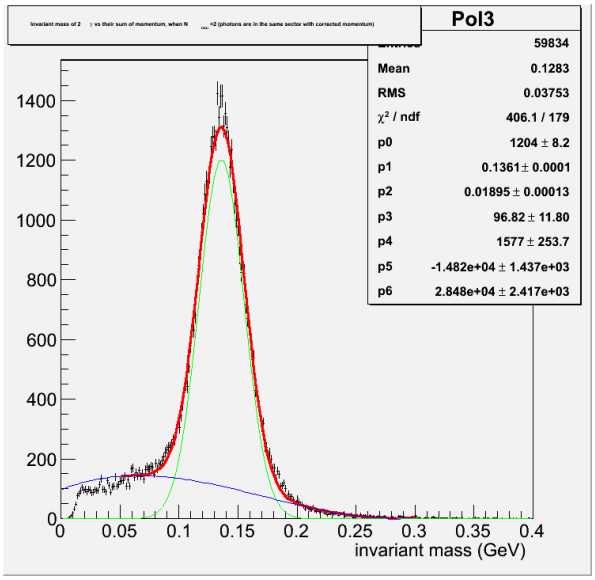

Figure 10: The invariant mass of 2 γ after applying photon energy correction for photons which registered in the same sector.Invariant mass distribution was fitted with a Gaussian plus a polynomial of 3rd degree.