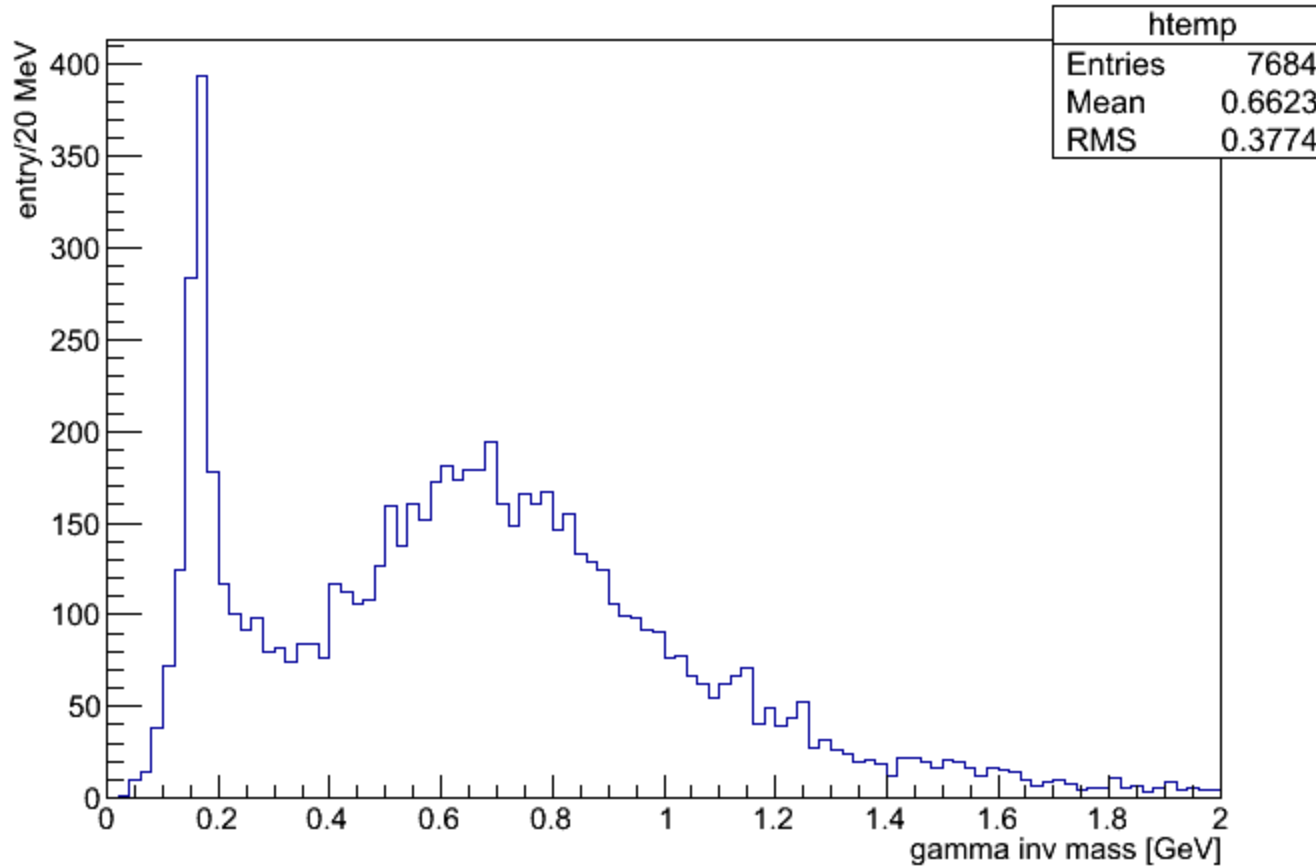
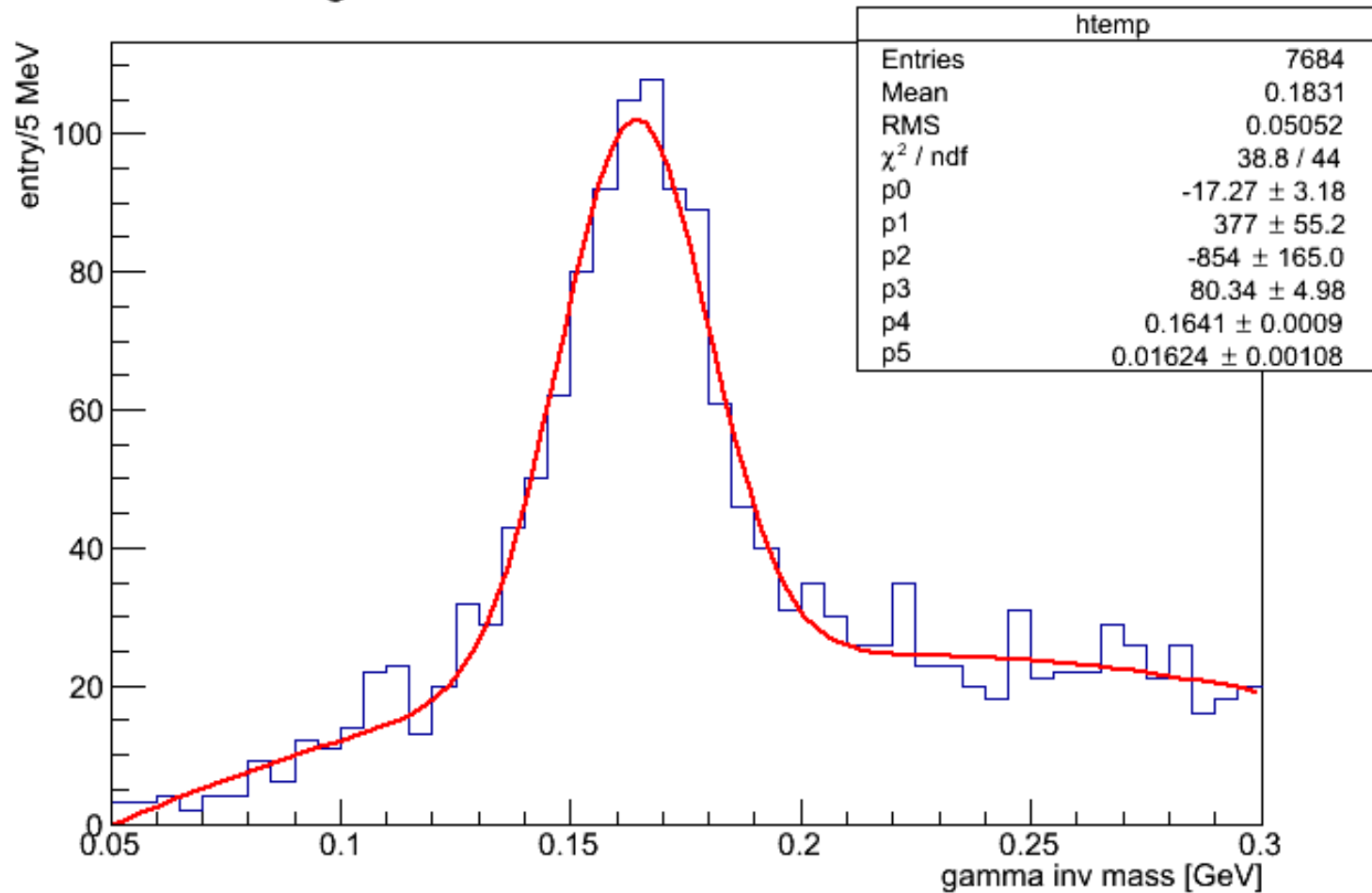


inv\_mass {E1>1&&E2>1&&vertexZ<68&&vertexZ>62&&TMath::Abs(t1-t2)<5}



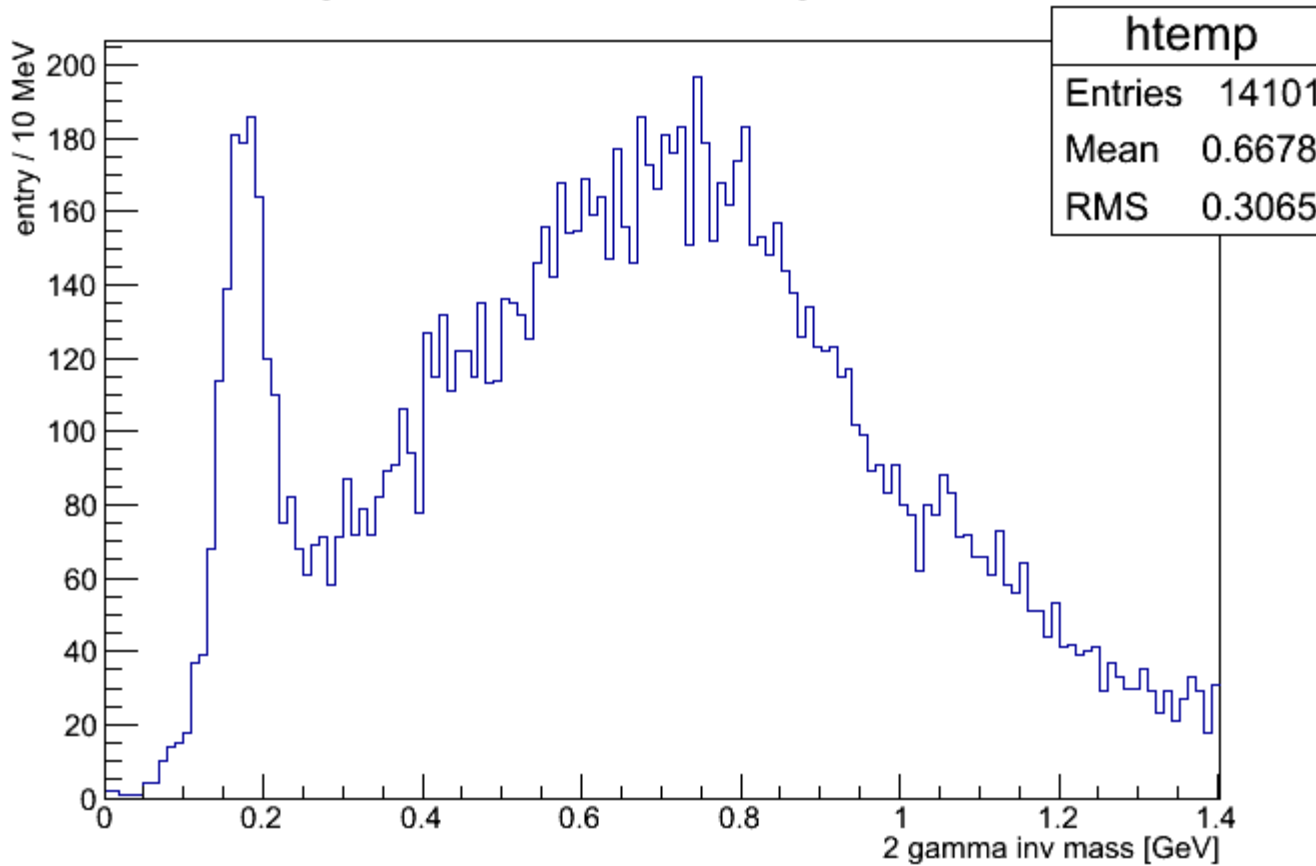
- About 90% of data taken before 12/11/14 ( 3 nights of running and mix between FCAL and BCAL triggers)
- Both gammas in the BCAL
- Both gamma shower energies > 1 GeV
- Z-position of vertex between 62 cm and 68 cm
- Time difference between showers less than 5 ns.

## two gamma in bcal invariant mass



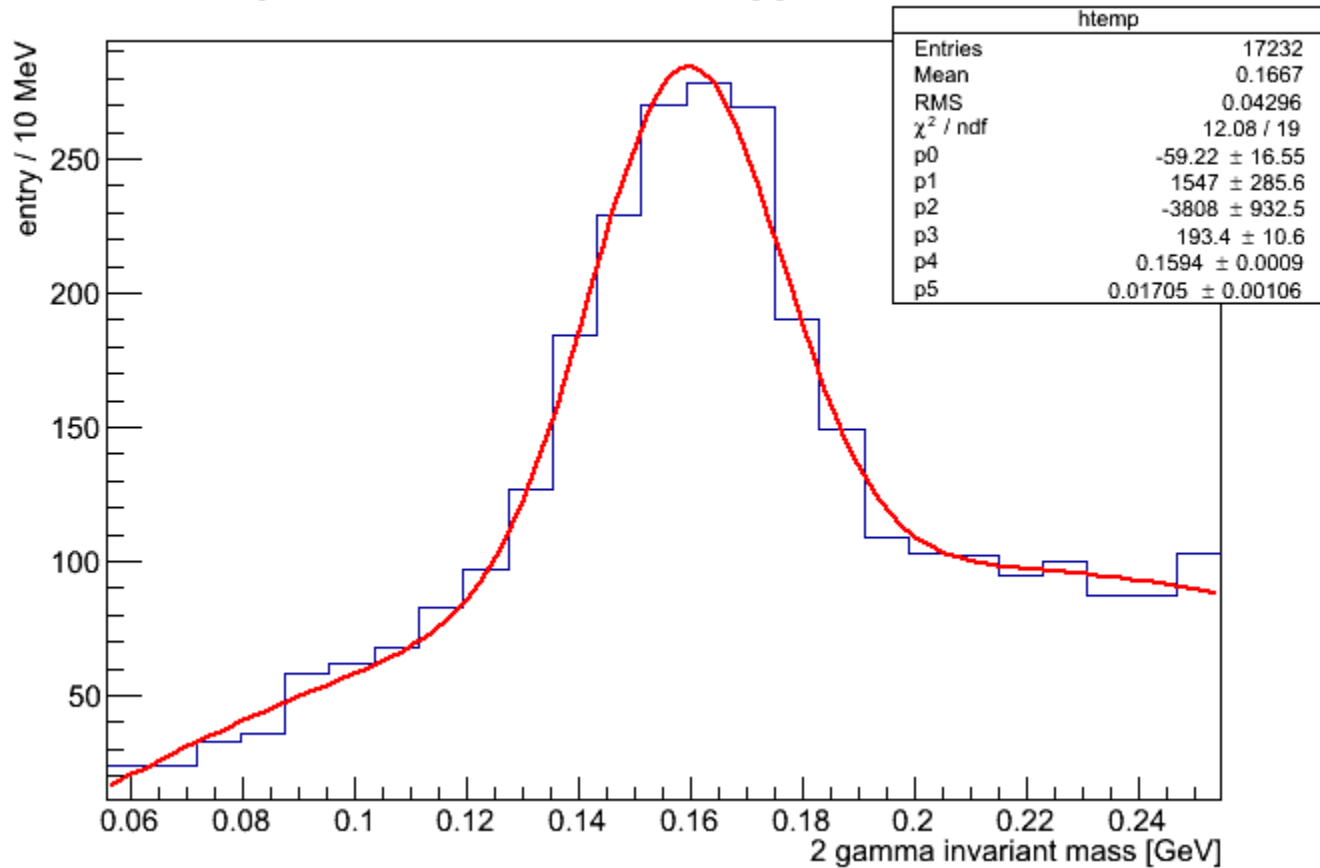
- Same statistics and cuts as previous plot (FCAL and BCAL triggered data combined)
- Both gammas in the BCAL
- Pol2 + gaus fit
- P4 fit parameter is the gaussian mean = 164.1 MeV
- P5 fit parameter is the gaussian sigma in GeV = 16.24 MeV

## One gamma in FCAL and one gamma in BCAL



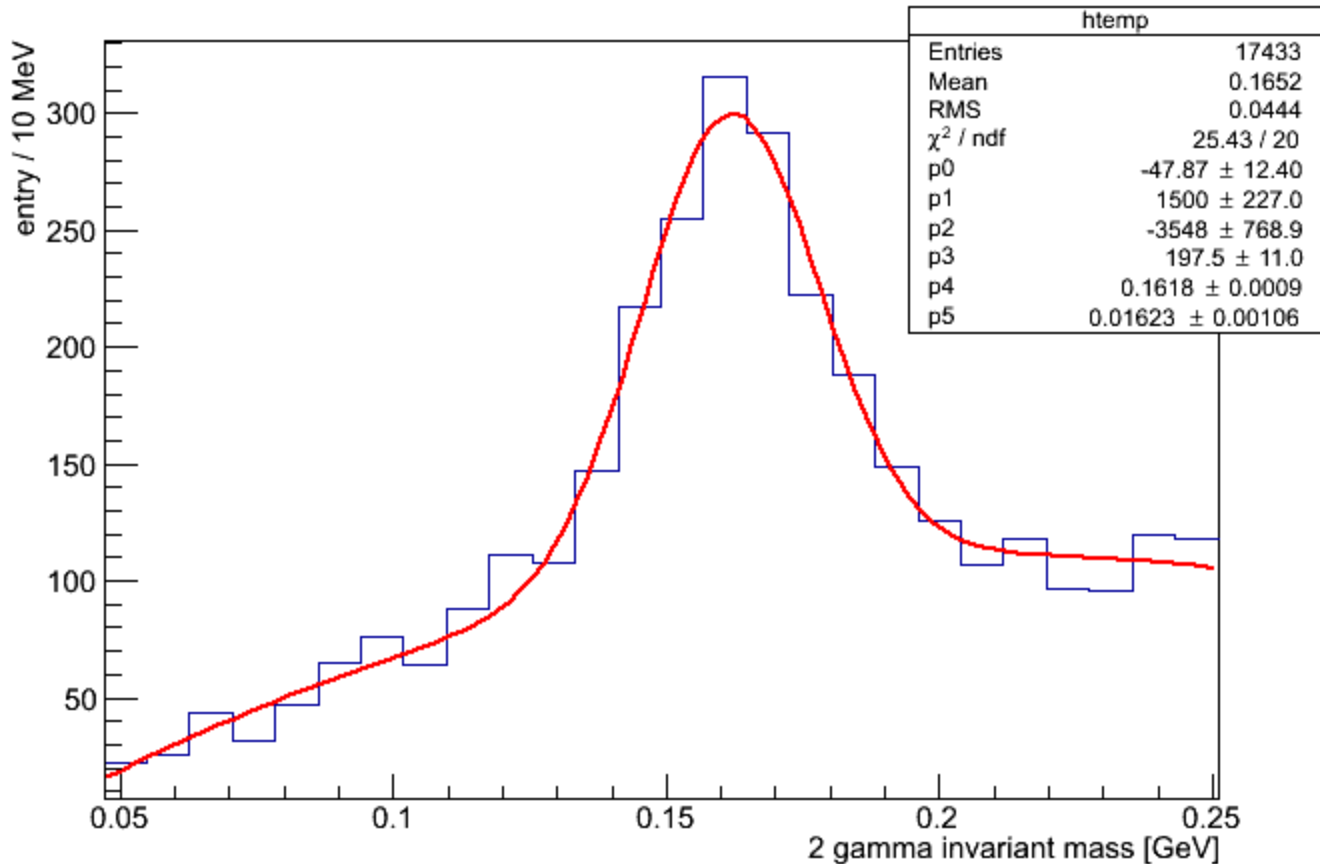
- About 90% of data taken before 12/11/14 (BCAL and FCAL data combined)
- One gamma in FCAL and one gamma in BCAL
- FCAL and BCAL shower energies  $> 1.5$  GeV
- Z-position of vertex between 62 cm and 68 cm

## 2 gamma in bcal with bcal trigger invariant mass



- Using data that was taken with only the BCAL trigger from before 12/11/14
- 2 gammas in the BCAL
- Each shower energy  $> 0.7$  GeV
- Z-position of vertex between 62 cm and 68 cm
- P4 fit parameter is gaussian mean = 159.5 MeV
- P5 fit parameter is gaussian sigma = 17.05 MeV

## 2 gamma in BCAL with FCAL trigger invariant mass



- Using data with only FCAL trigger from before 12/11/14
- Both gammas in the BCAL
- Each shower energy  $> 0.7$  GeV
- Z-position of vertex between 62 cm and 68 cm
- P4 fit parameter is gaussian mean = 161.8 MeV
- P5 fit parameter is gaussian sigma = 16.23 MeV