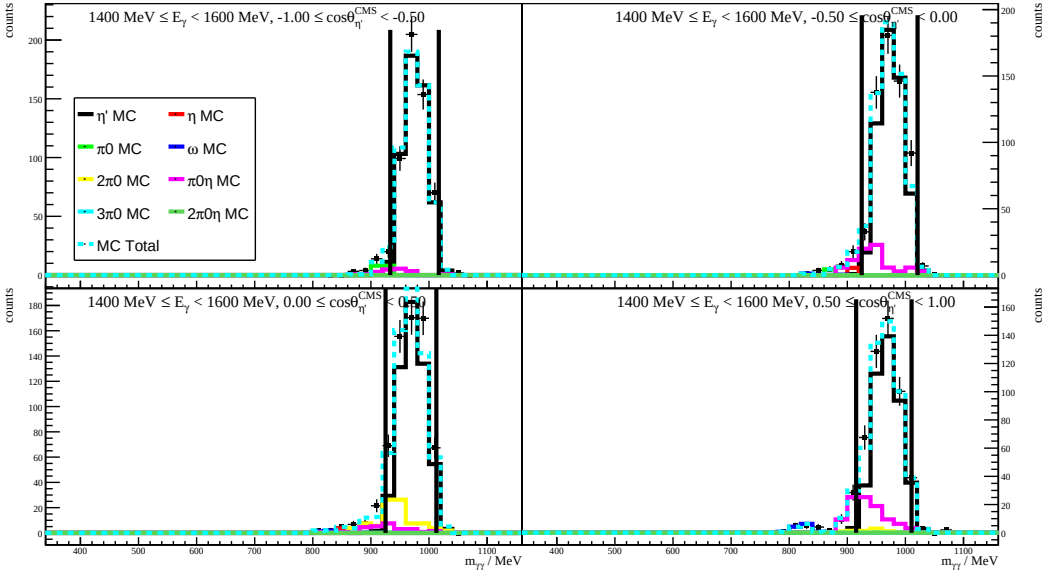
Event selection

2013 hydrogen beam time

- charge cut (3 PED)
- time cuts (prompt peak and bkg substraction)
- $E_\gamma > 1400$ MeV
- $E_\gamma^{\text{calc}} > 1447$ MeV
- coplanarity
- polar angle
- missing mass
- invariant mass

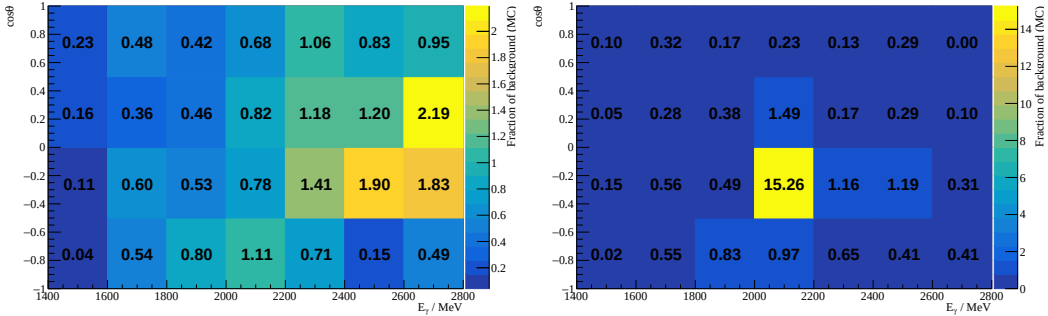
Event selection



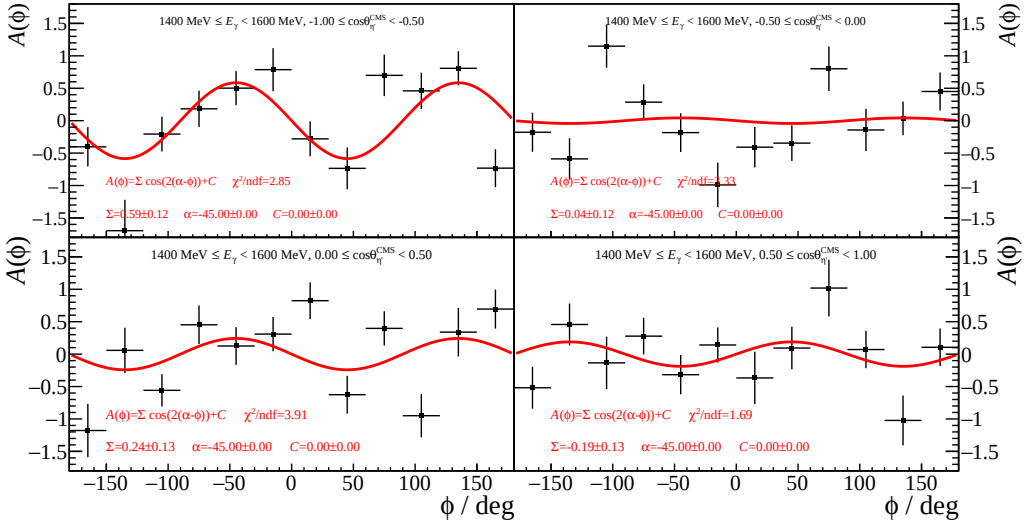
Event selection

Additional cuts to (try to) reduce bkg:

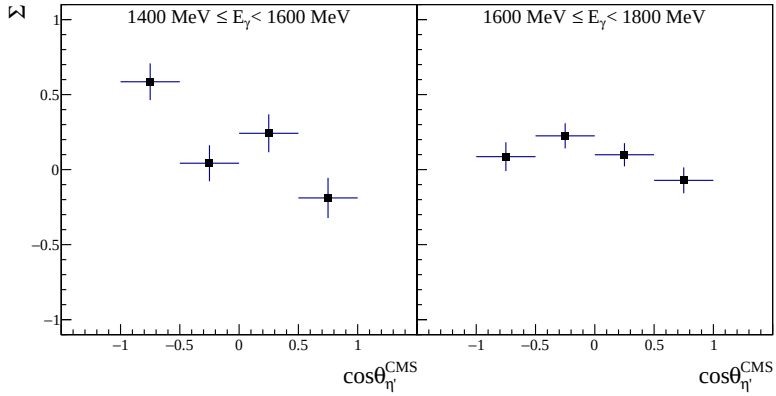
- p in CB for $E_\gamma < 1500$ MeV
- $E_{\gamma_i} < 1500$ MeV
- ClusterPEDCount$(\gamma_i) = 1$
- Clustersize$(p) < 6$
- Clustersize (γ_i) in FW



Asymmetry $A(\phi) = \frac{N^{\perp} - N^{\parallel}}{p_{\gamma}^{\parallel} N^{\perp} + p_{\gamma}^{\perp} N^{\parallel}} = \Sigma \cos\left(2\left(\alpha^{\parallel} - \phi\right)\right)$



Beam asymmetry Σ



to do : determine and substract $\Sigma_{2\pi^0/\pi^0\eta}$ (?), fit with BAYES