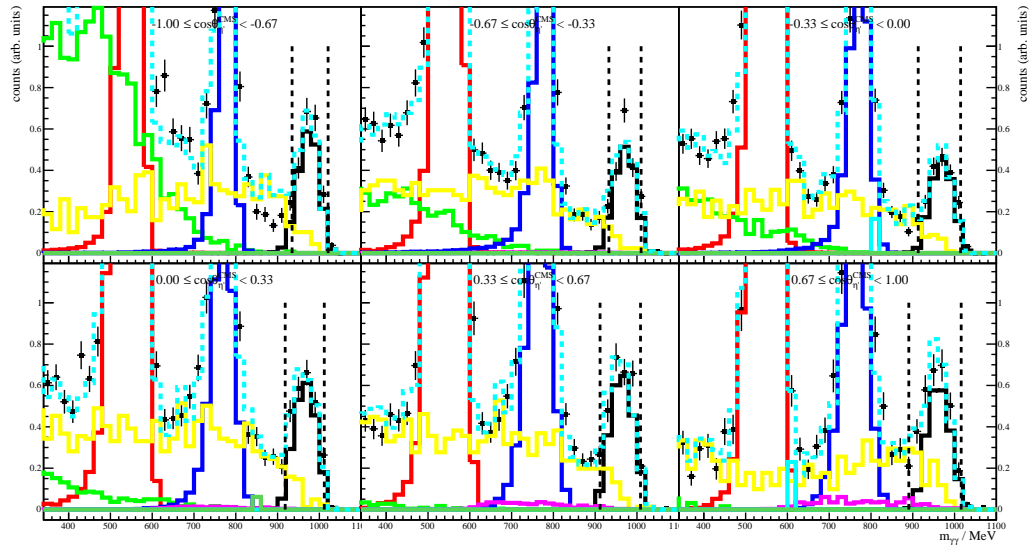# Event selection

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
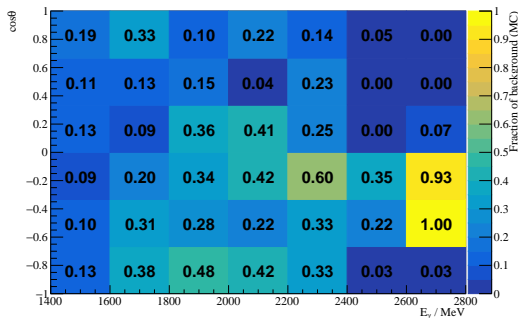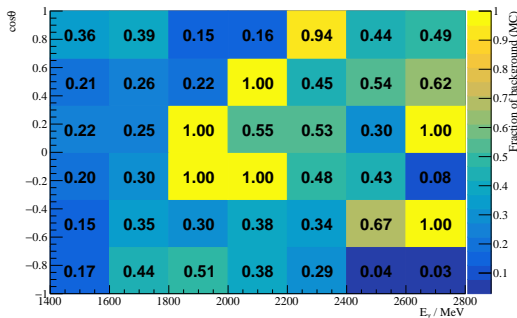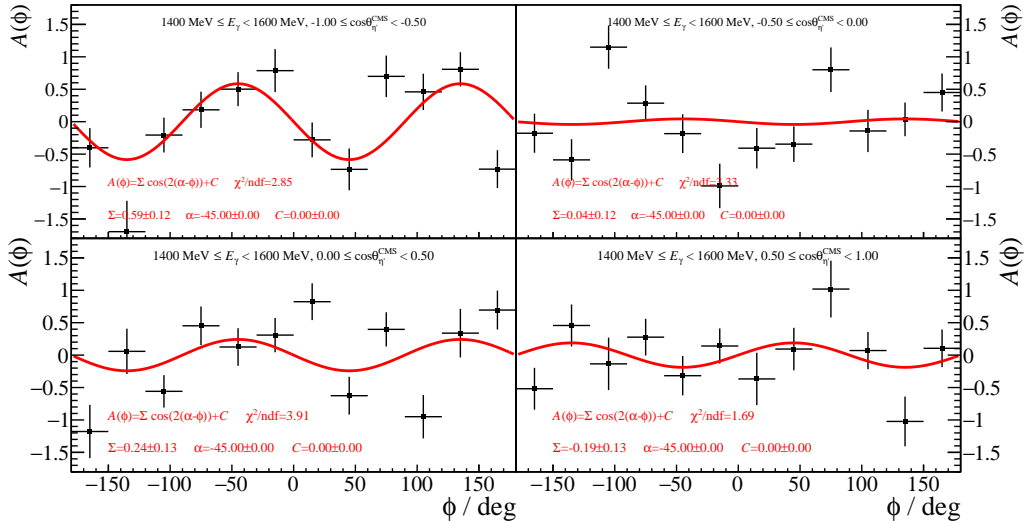- ▶ missing mass
- ▶ invariant mass

Event selection

Event selection

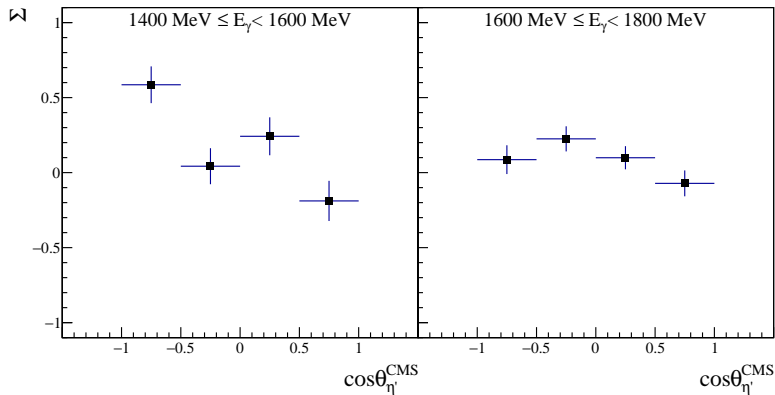Additional cuts to (try to) reduce bkg:

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

Beam asymmetry Σ

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