

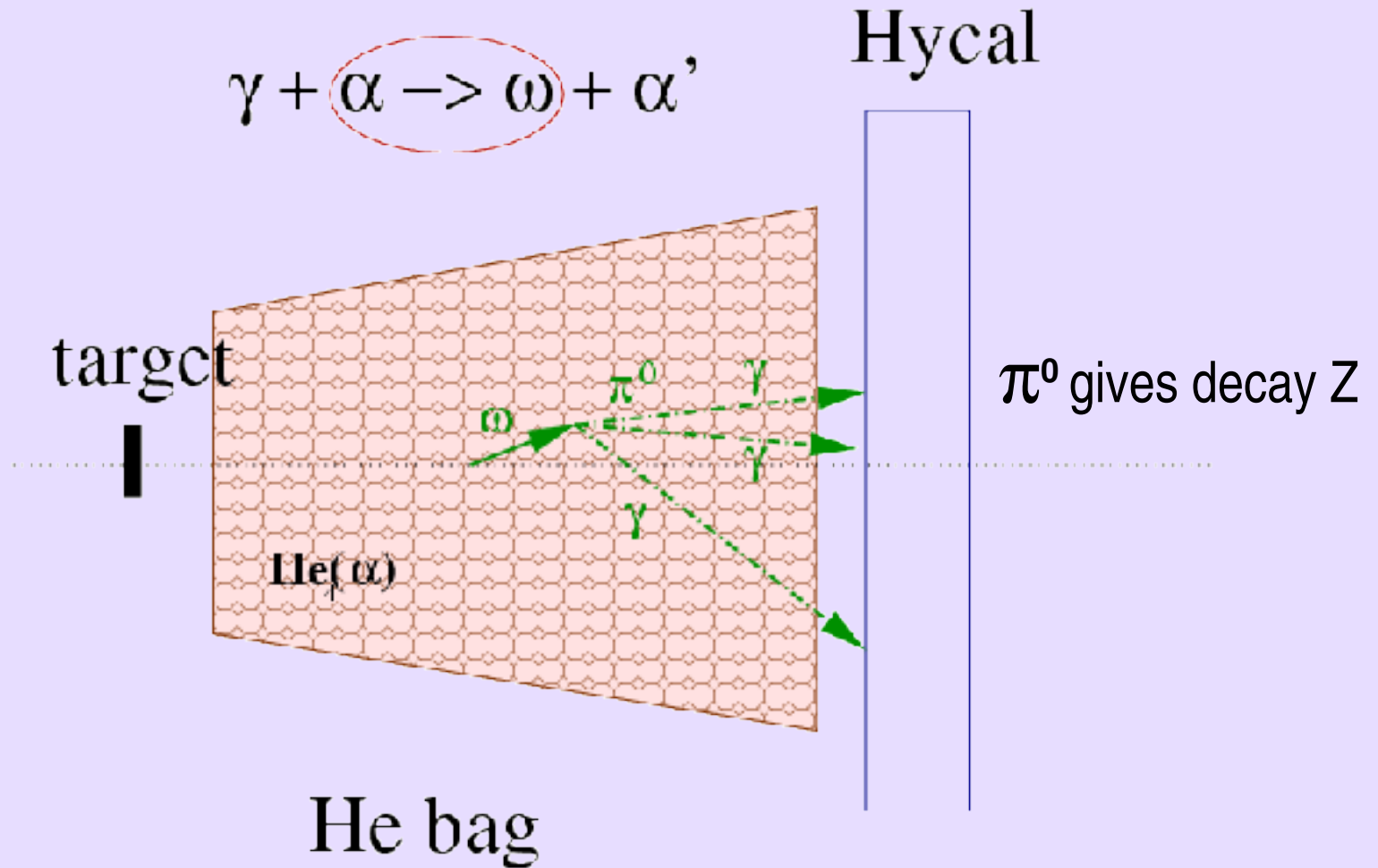
PrimEx:

From α to

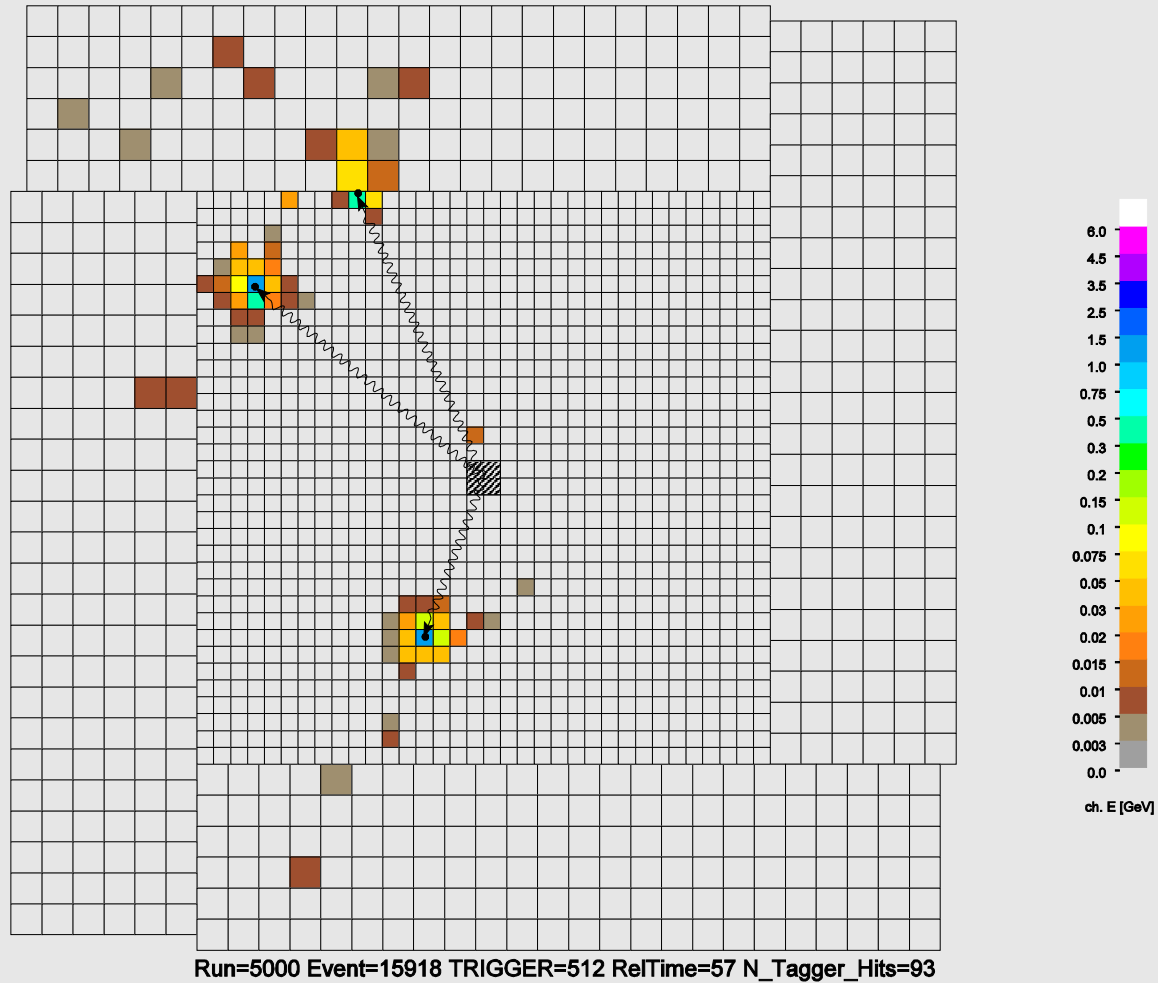
ω



ω photoproduction in PrimEx

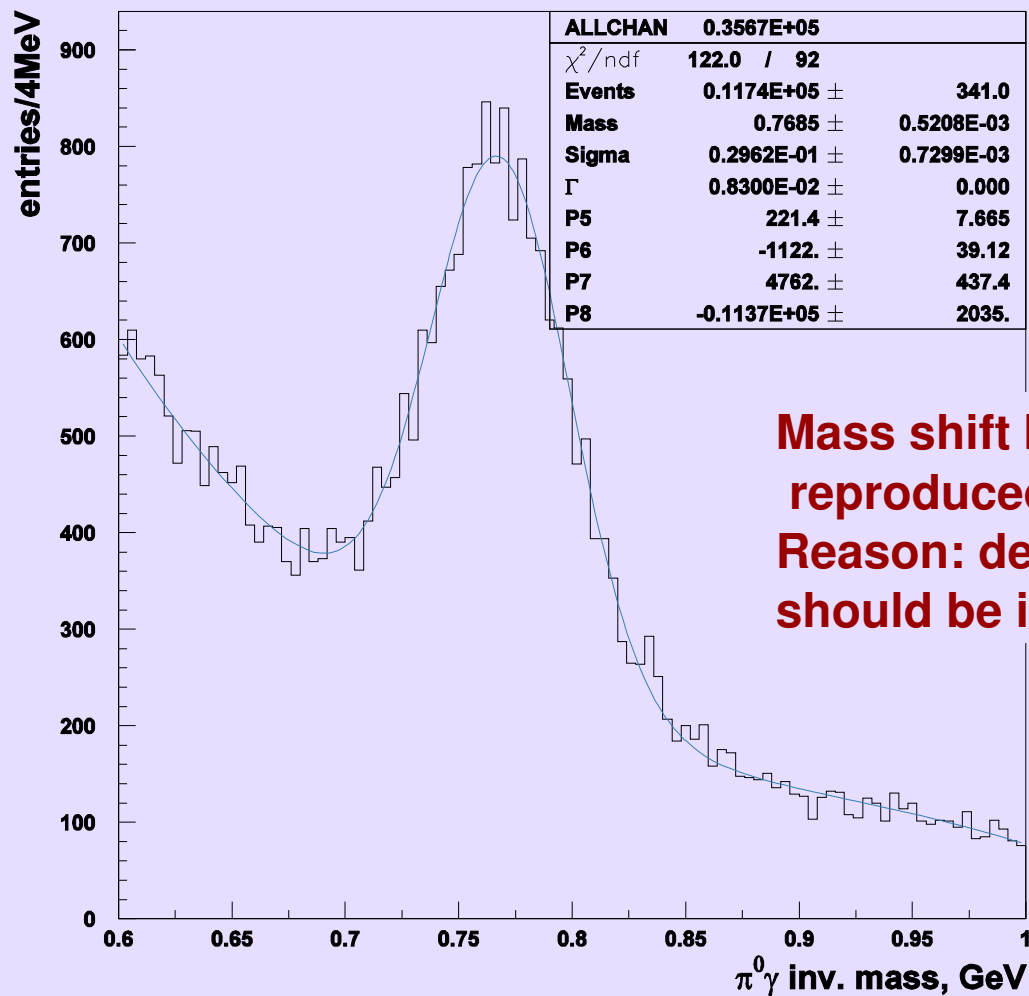


Typical event view



3γ invariant mass

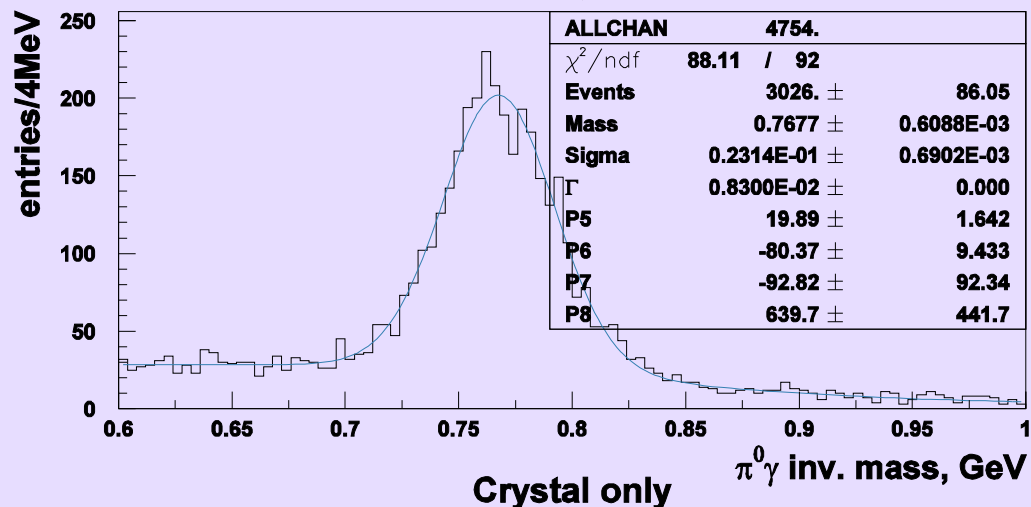
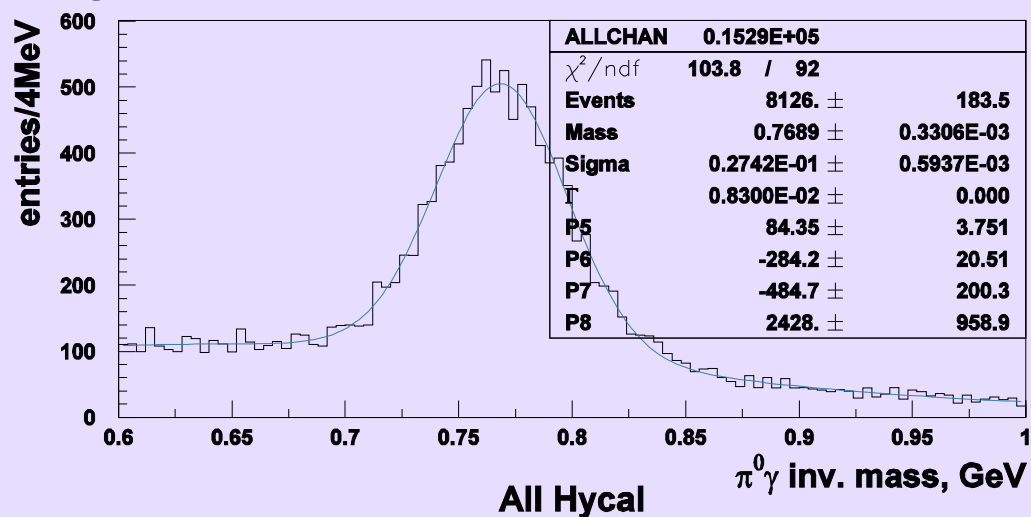
~15K decays were reconstructed from ~half PrimEx statistics (C, Pb, Sn, empty targets)



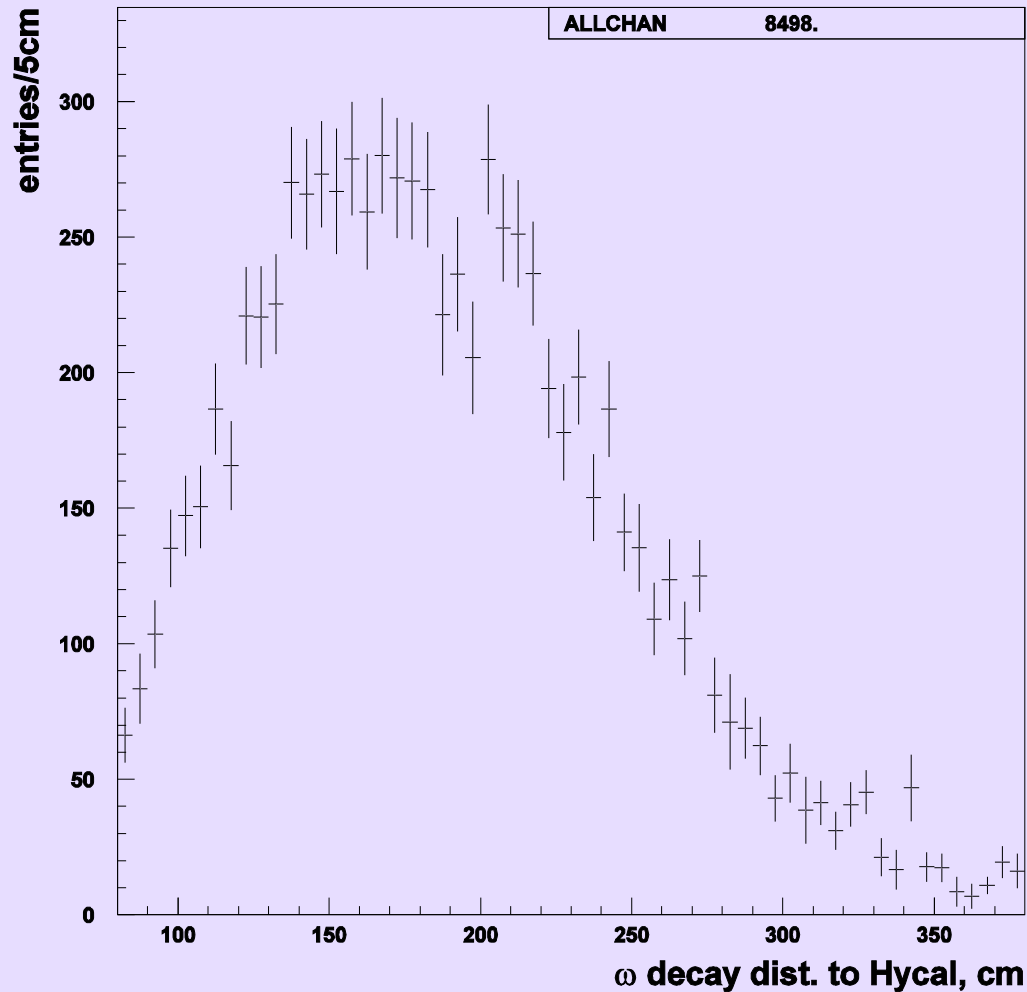
**Mass shift by -14MeV was reproduced by MC;
Reason: depth correction should be increased by 1.1**

3γ invariant mass, more cuts

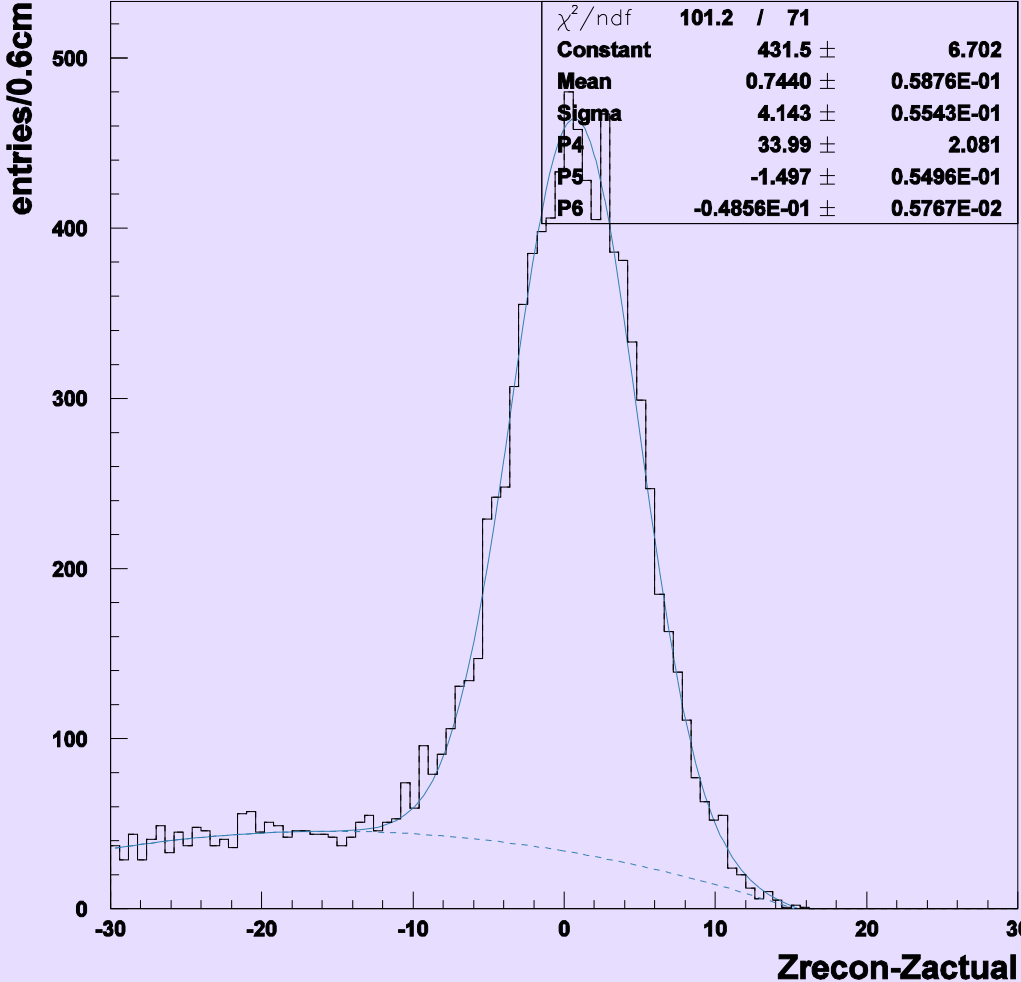
This decay mode could not be seen by many other experiments due to background conditions, PrimEx has a clean sample.



Distribution of the decay distance to Hycal - all points are inside he bag.

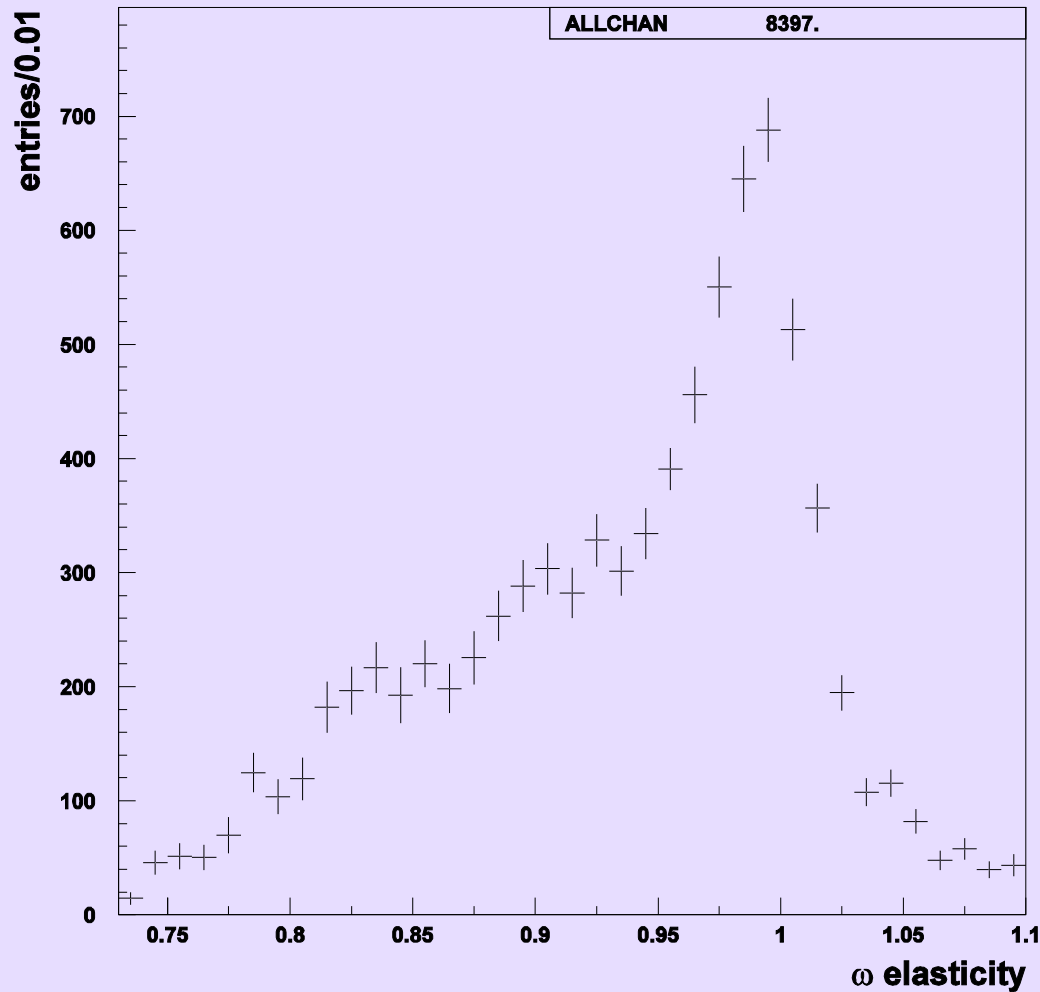


Accuracy of Z reconstruction (4...5cm) mostly defines mass width

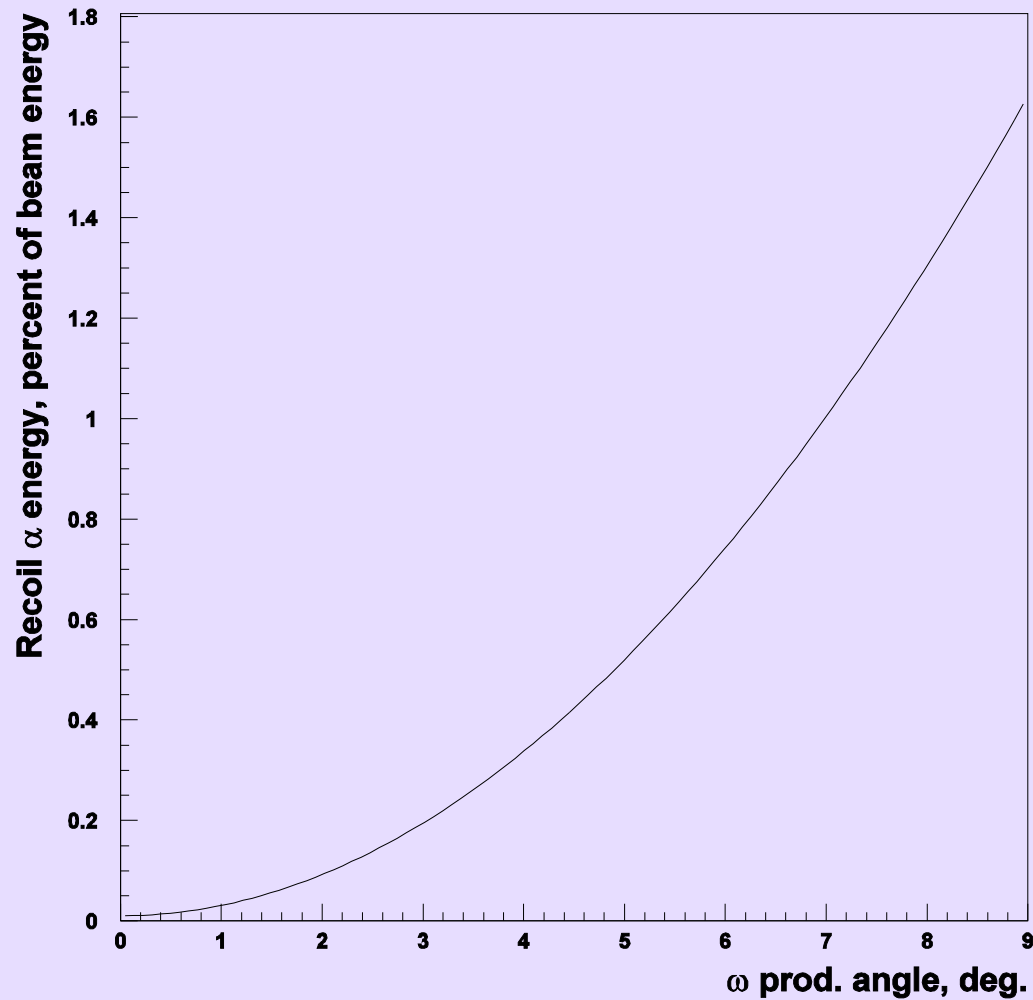


Distribution of ω elasticity

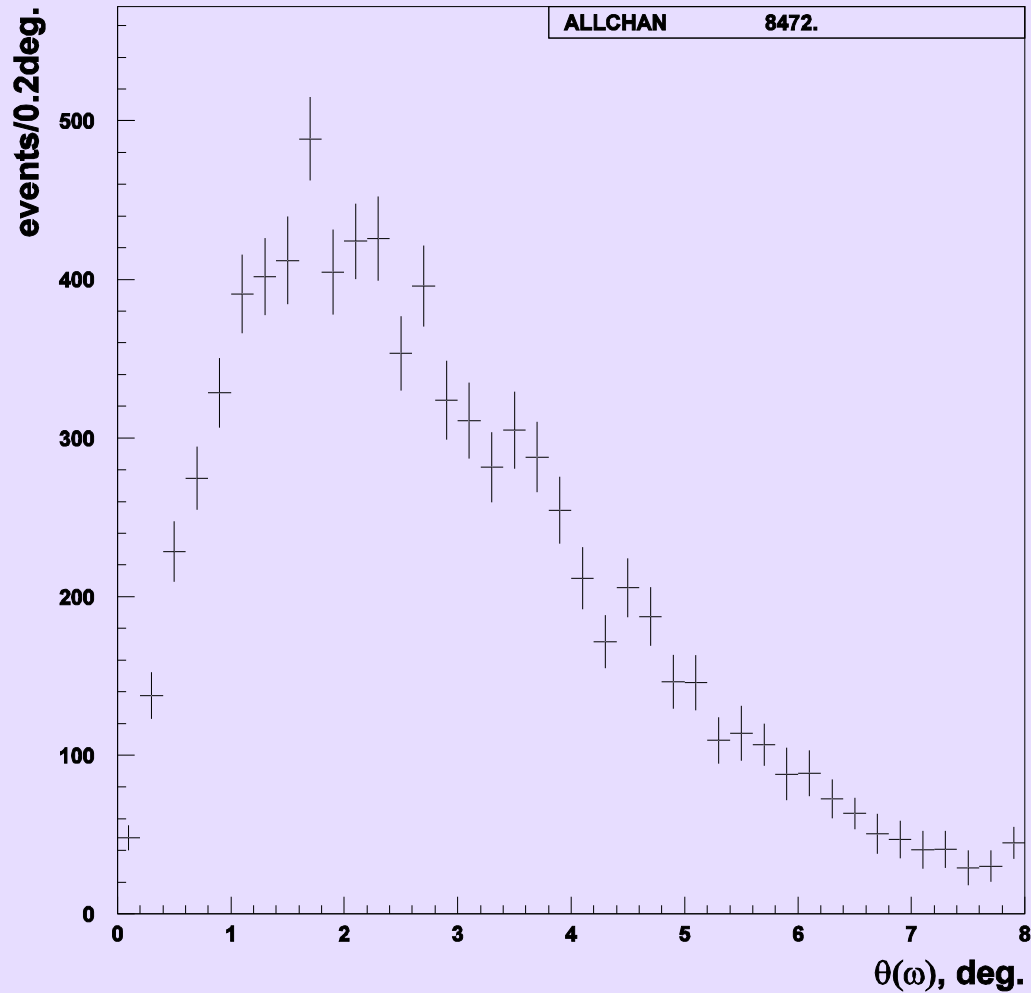
$\eta, \phi \rightarrow \omega + \gamma$ are not seen, other sources like b1 would give deep inelastic ω



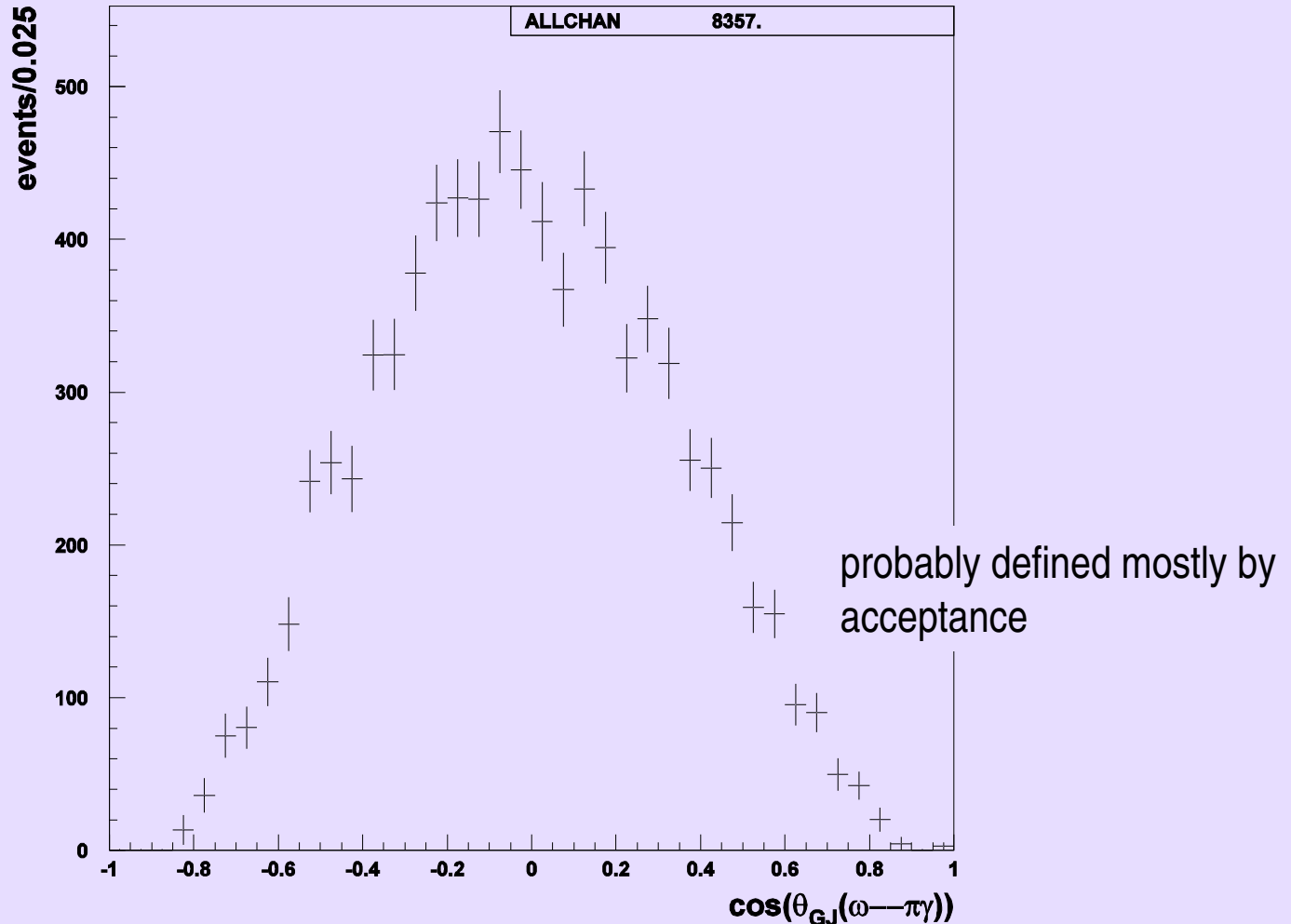
Percentage of beam energy transferred to recoil nucleus VS ω production angle



$dN(\omega)/d\theta$, events per 0.2°



Distribution of cosine of Gottfried-Jackson angle, $dN(\omega)/d\cos(\theta_{GJ})$



Distribution of Treiman-Yang angle, $dN(\omega)/d\cos(\phi_{TY})$

