

Photoproduction of the η meson

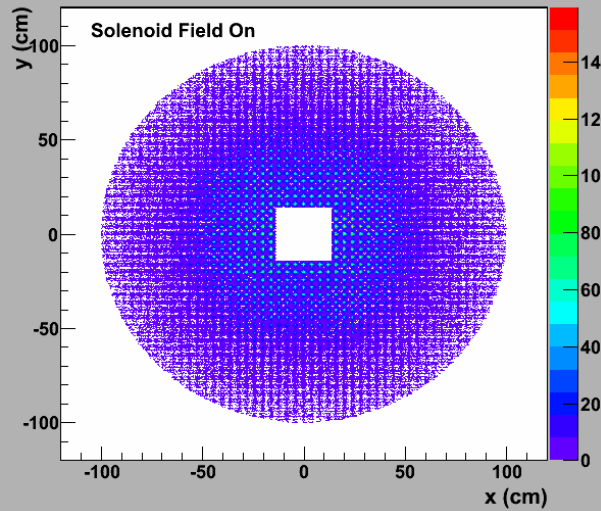
Pawel Ambrozewicz

NC A&T

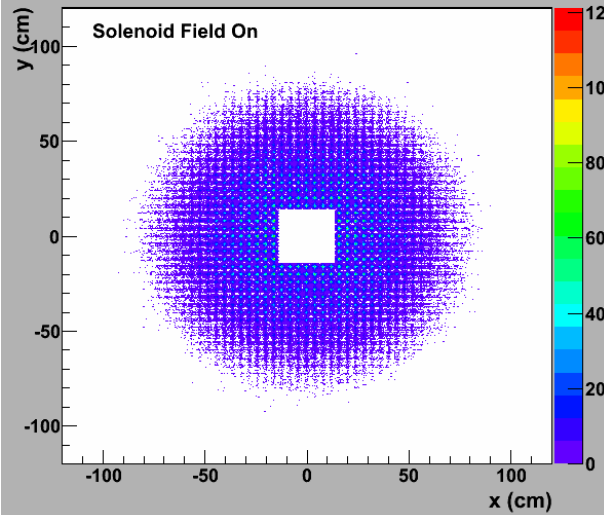
- Two prong analysis/simulations
 - Signal – Radiative Width Fit
 - Backgrounds

Data Selection – Magnetic Field On

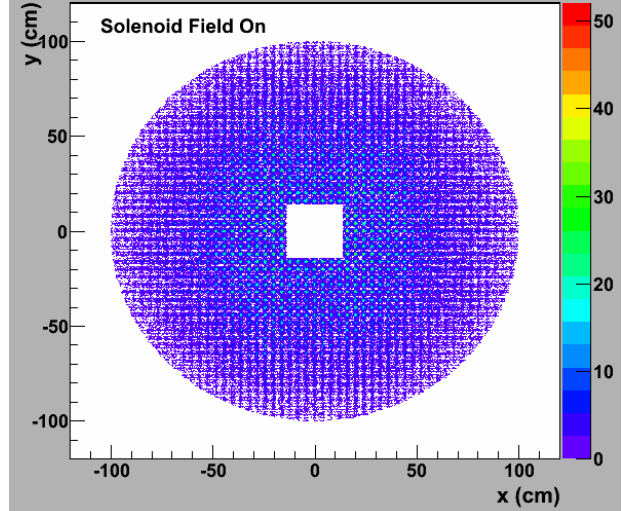
Cluster X vs. Y



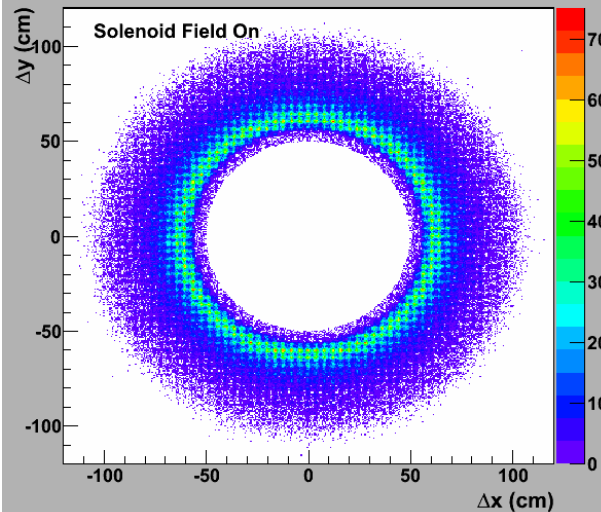
Higher Energy Cluster X vs. Y



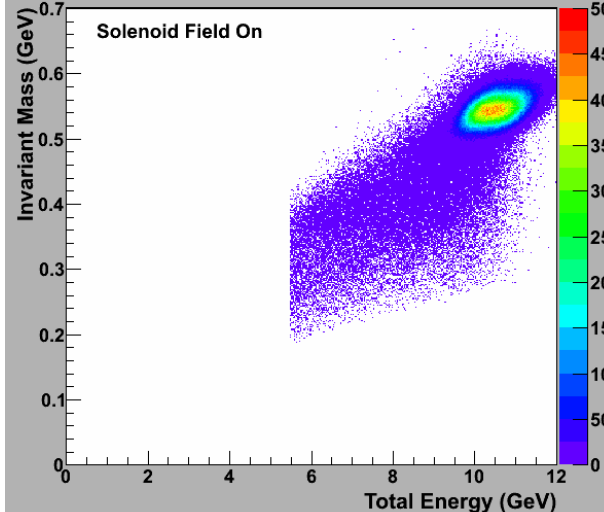
Lower Energy Cluster X vs. Y



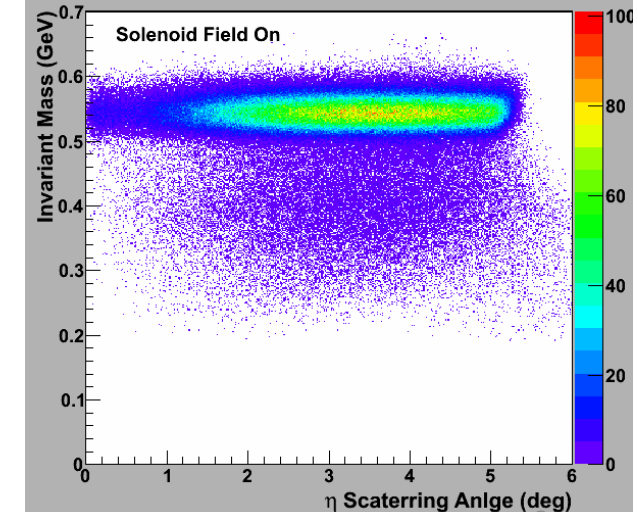
Cluster Separation



Invariant Mass vs Energy

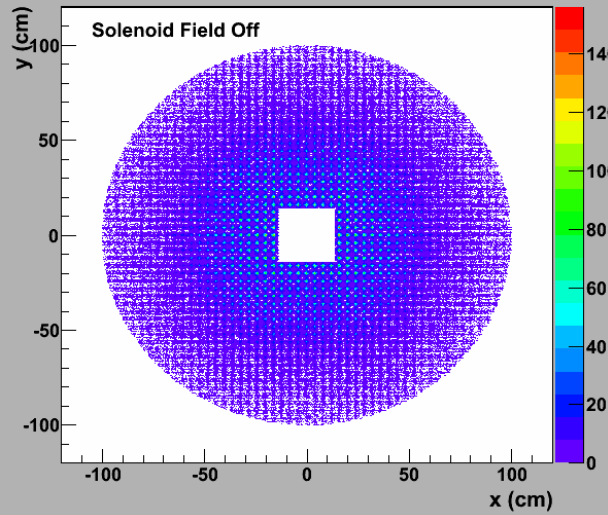


M_0 vs θ_η

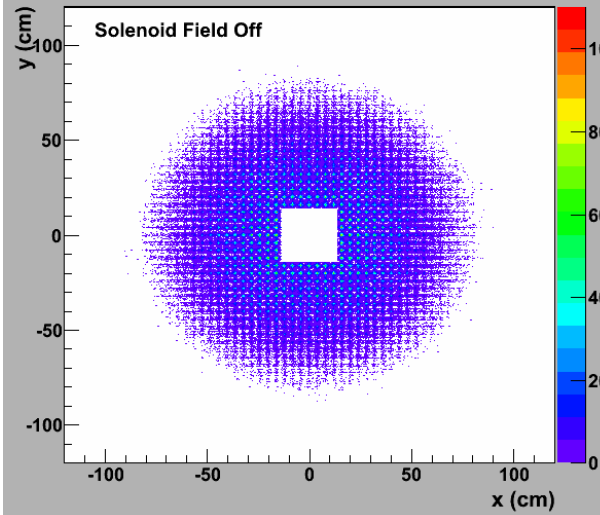


Data Selection – Magnetic Field Off

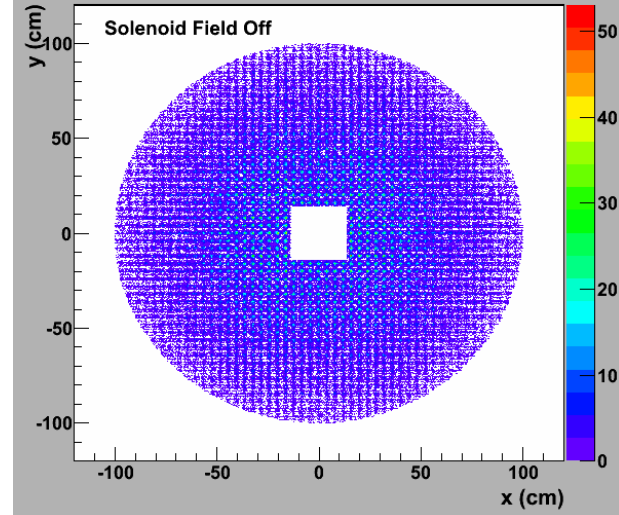
Cluster X vs. Y



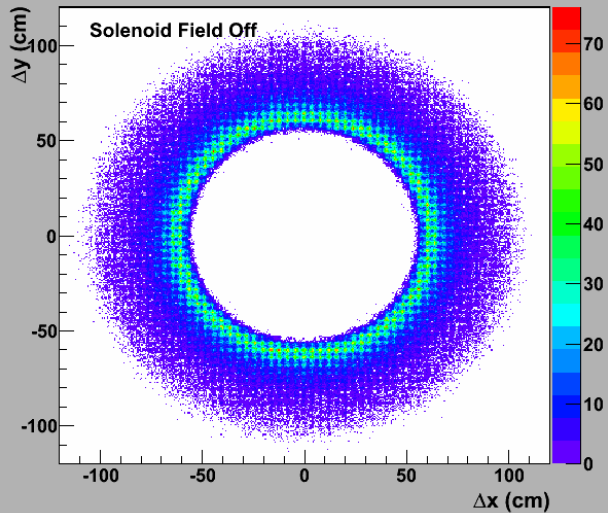
Higher Energy Cluster X vs. Y



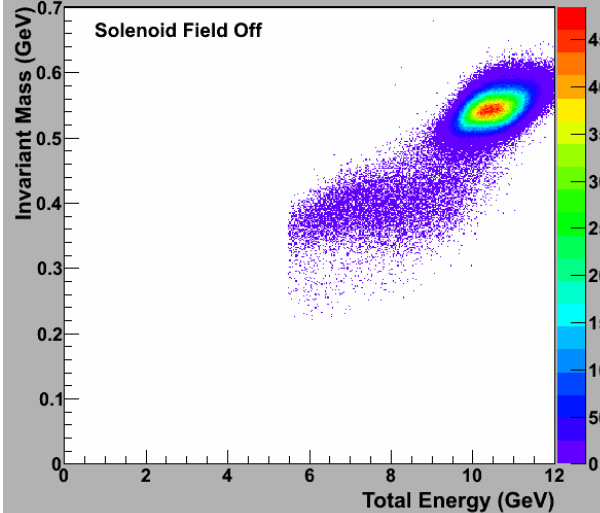
Lower Energy Cluster X vs. Y



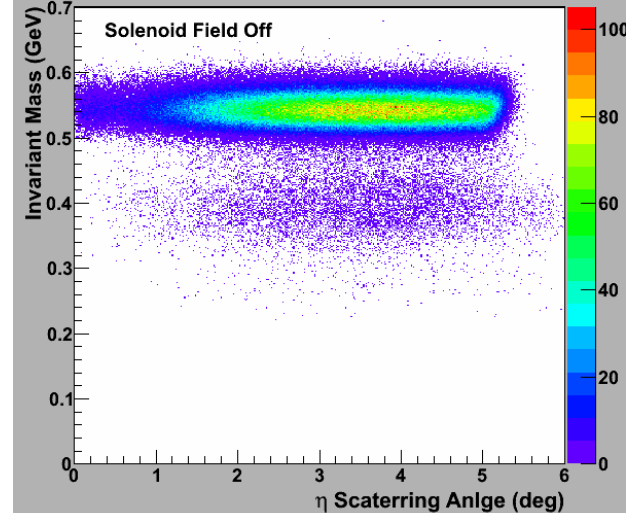
Cluster Separation



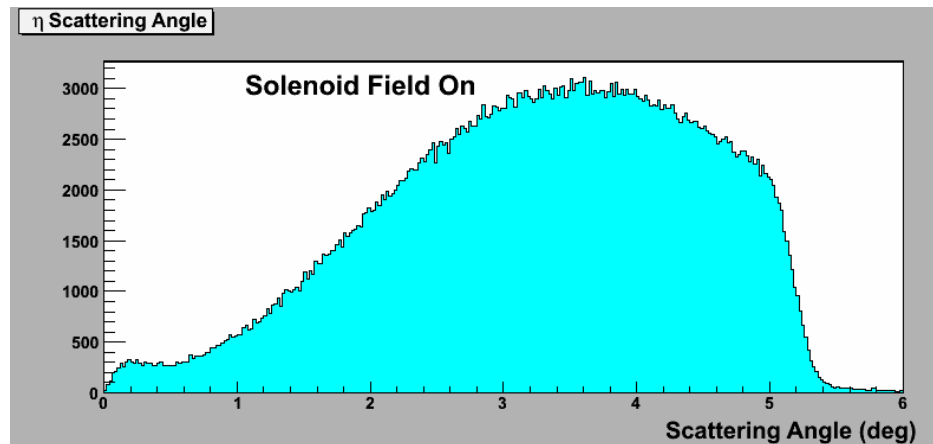
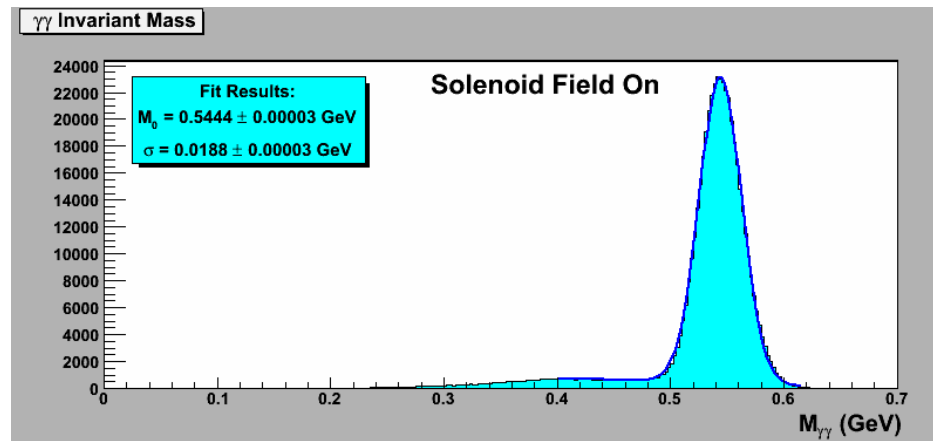
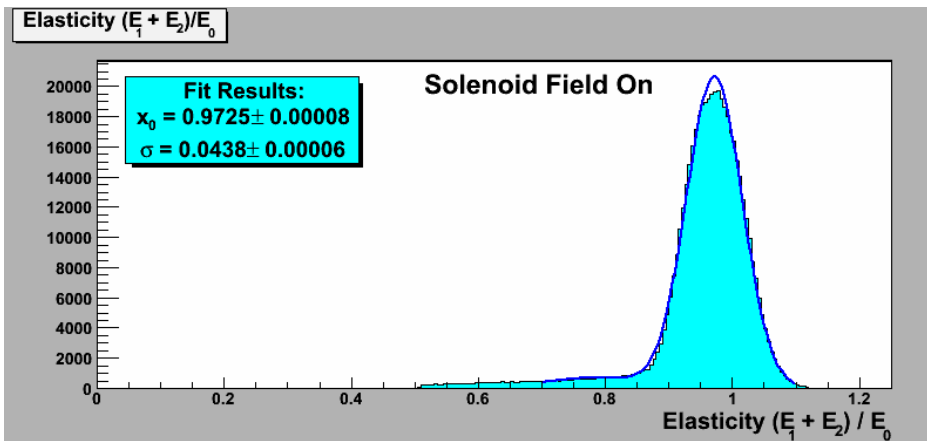
Invariant Mass vs Energy



M_0 vs θ_η

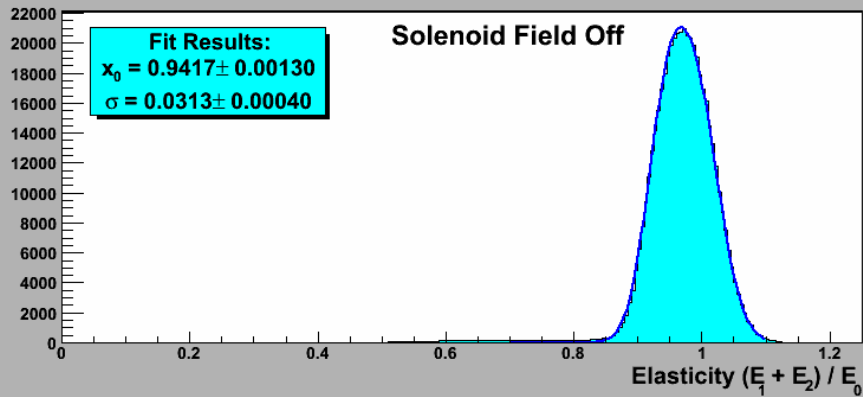


Fit Results – Magnetic Field On

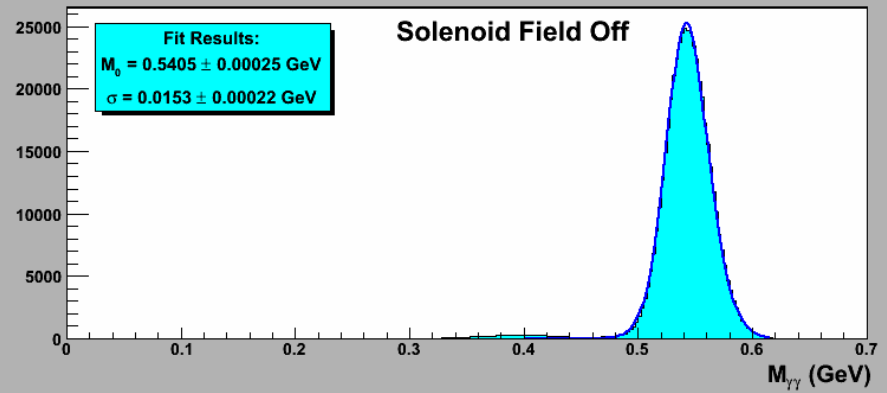


Fit Results – Magnetic Field Off

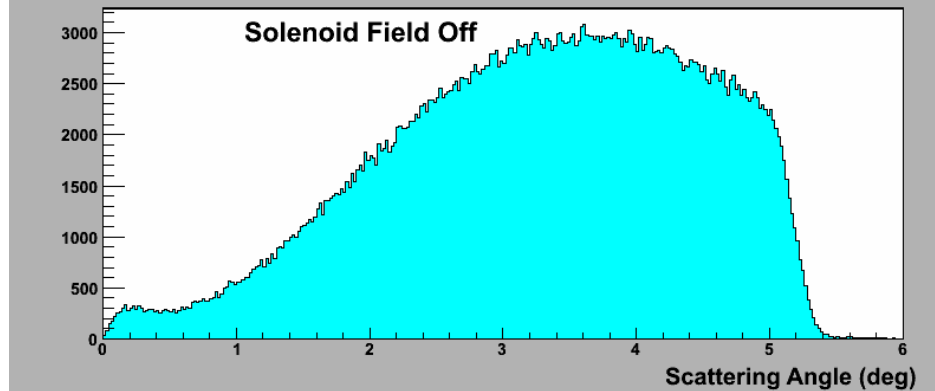
Elasticity $(E_1 + E_2)/E_0$



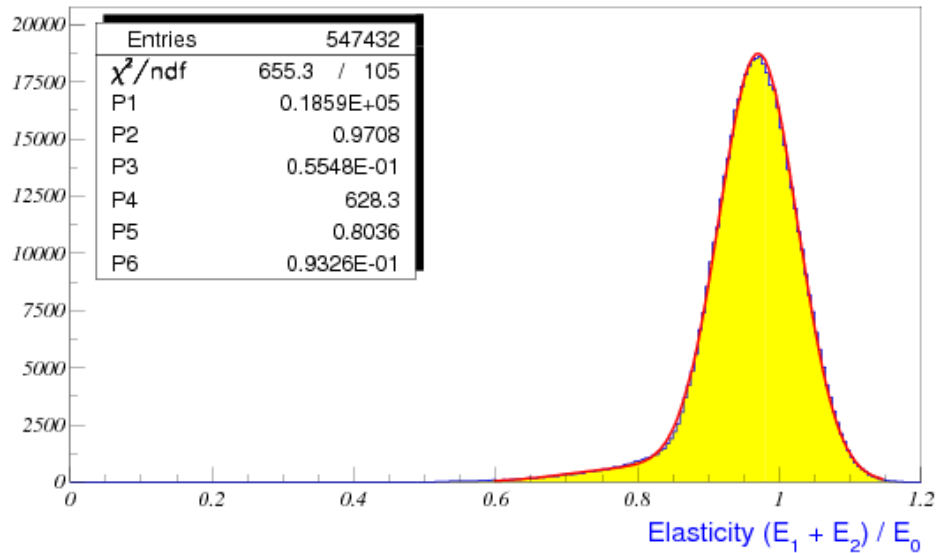
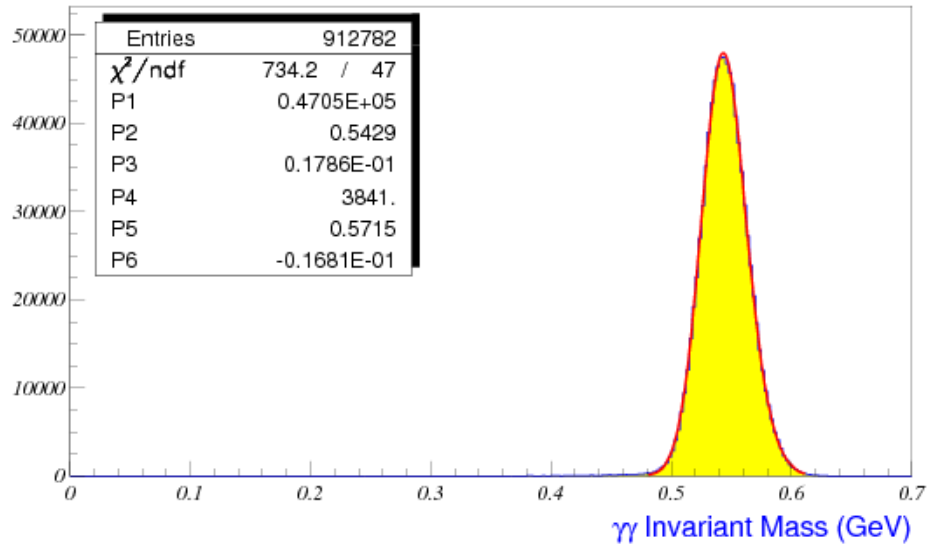
$\gamma\gamma$ Invariant Mass



η Scattering Angle



Analysis Tools



Electromagnetic Background

