

Status of η Rare Decay Background Simulation

Physics meeting, 23 April 2012

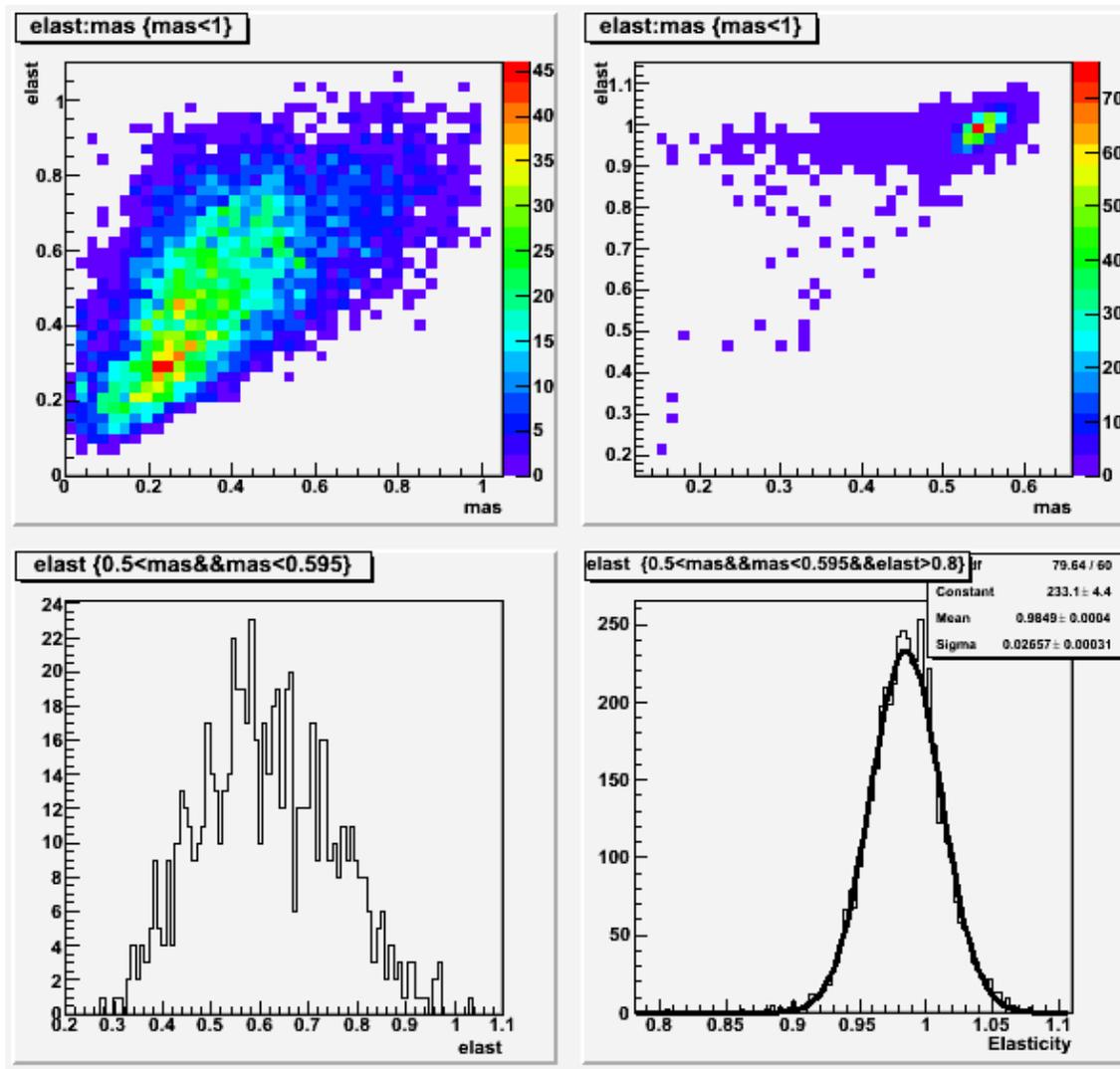
A.Somov, JLab

Study hadronic background using official FCAL reconstruction

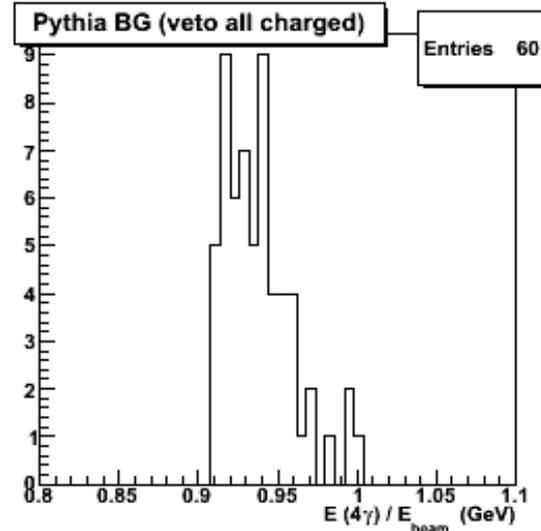
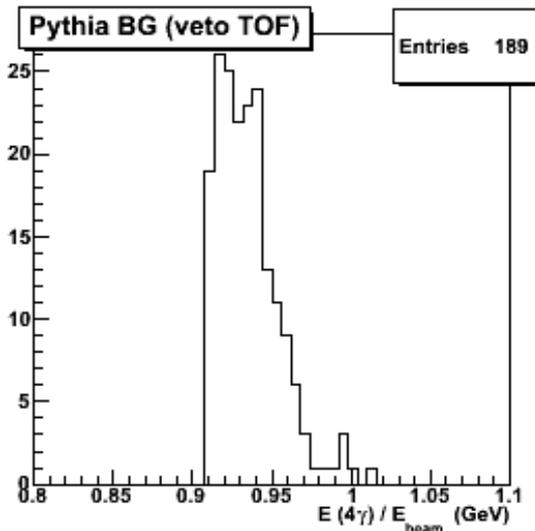
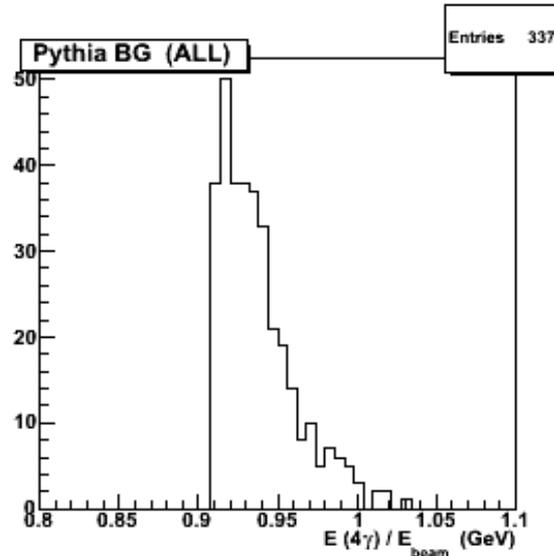
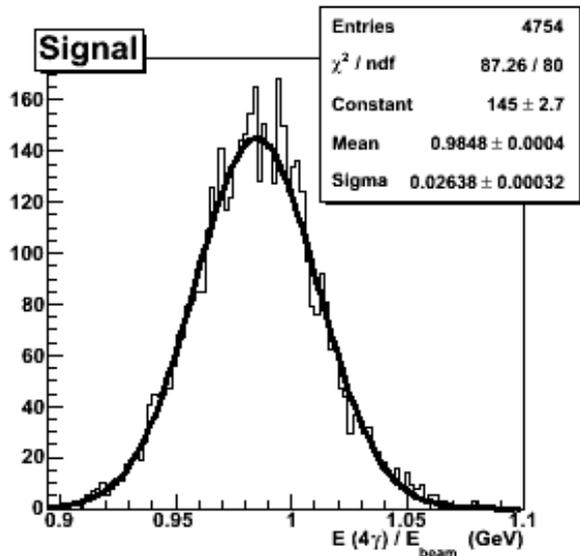
Elasticity

Pythia BG

Signal

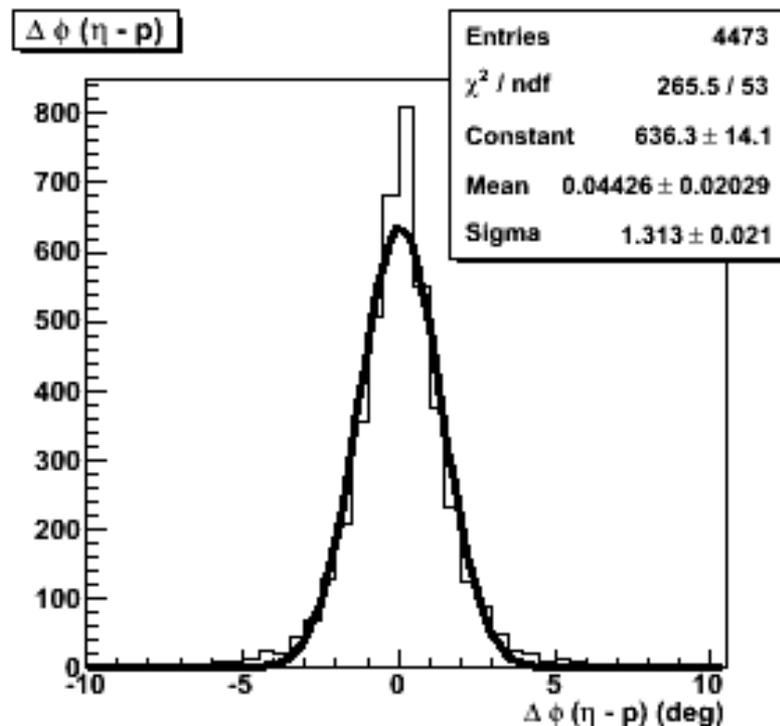
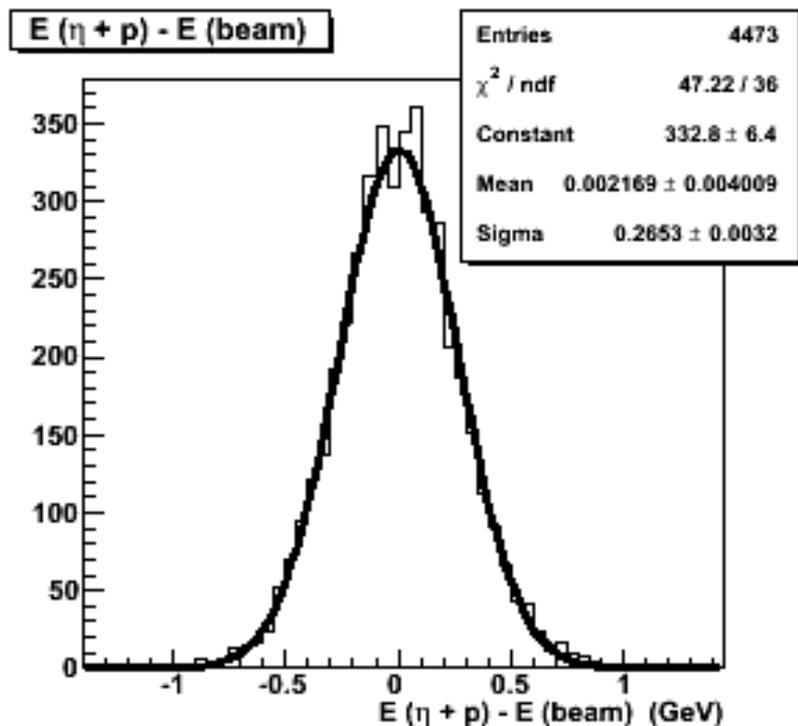


Elasticity



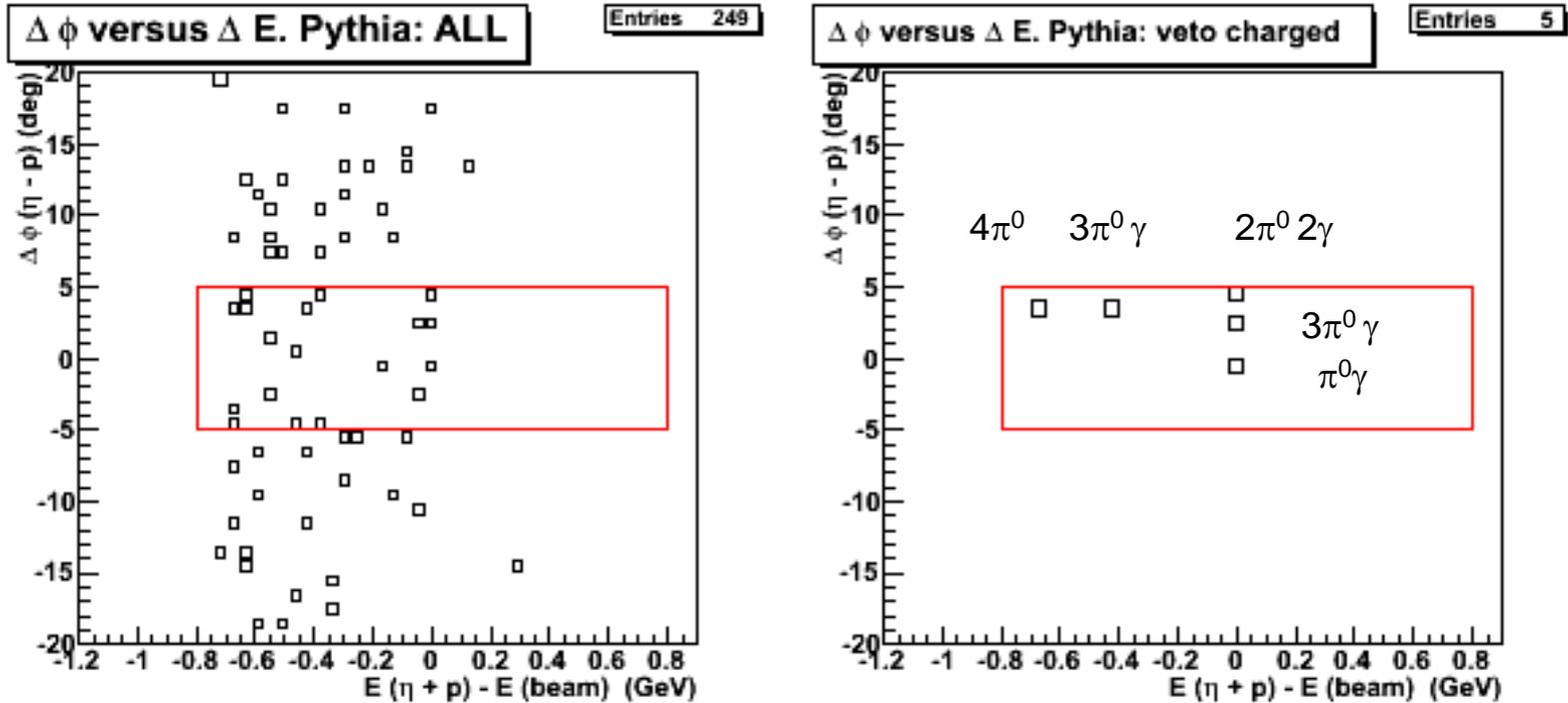
No reconstruction of
recoil proton

Signal: energy and azimuthal angle



$\Delta \phi$ of reconstructed recoil proton ~ 1 deg (see Simon's talk)

Full event reconstruction



Cluster overlapping: FCAL/algorithm is not able to resolve them

Expect to reduce background in PWO calorimeter