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# Reconstruction Studies for a Scintillator-Tungsten Electromagnetic

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We have performed a number of reconstruction studies for an electromagnetic calorimeter with tungsten absorber and 5cm square scintillator tiles, offset by 2.5cm in alternating layers. The offset gives us nearly the same performance as a detector with 2.5cm square tiles. These studies use the SLIC/org.lcsim simulation and reconstruction
framework.

We have established good cluster-finding performance in 500GeV ZZ to 4-jet
events, and have developed algorithms to distinguish single photons from
merged pi^0 clusters at high energies, and to determine the direction of
incident photons with high precision.

We are investigating methods to study hadrons that interact in the EM calorimeter, and the effect of constraints on dynamic range in data acquisition on energy measurements for very high energy photons and electrons.

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**Session Classification:** Detector/ Simul - Recon