FCAL

August 13, 2014

The FCAL is concerned about reconstructing π^0's for calibrating the PMTs. A good calibration mode is:

$$\gamma p \rightarrow \omega p, \omega \rightarrow \pi^+ \pi^- \pi^0$$

Expected rates: ω photo-production cross section $\sim 1\mu$barn, reconstruction efficiency $\sim 10\%$

FCAL trigger requirement: Total energy deposited in the FCAL$> E_{threshold}$. Studies need to be done to determine what the energy threshold should be.

Data rates: Needs studying

Conditions: Both magnet on or off data is useful for calibration. Whatever other subsystems need is fine.