PMT Linearity Studies for HAPPEX III
AIMEE SHORE, Smith College, LUIS MERCADO, University of Massachusetts, HAPPEX III COLLABORATION — HAPPEX is an experiment that will run in Hall A at Jefferson Lab in August - October 2009. The experiment will measure the parity violating electron scattering asymmetry with 3.5 GeV electrons from a liquid proton target at $Q^2=0.62$ GeV. The experiment intends to measure the expected asymmetry of 24 ppm to 1% uncertainty. This precision measurement of a small quantity requires minimizing and measuring the non-linearities produced by the detectors.