

## **Preliminary Results of the Primex Experiment**

- M. H. Wood, University of Massachusetts, Amherst, for the Primex Collaboration.

The Primex experiment is a measurement of the neutral pion lifetime by means of the Primakoff effect with an expected precision of 1.5%. This result is a rigorous test of the axial anomaly which is a fundamental prediction of low-energy Quantum Chromodynamics. The data was collected in the Fall of 2004 in Hall B at the Thomas Jefferson National Accelerator Facility with an unique hybrid calorimeter. This detector contains an inner region of  $\text{PbWO}_4$  crystals which provide high angular-resolution and span the angular range of  $0^\circ - 2^\circ$ . An outer region of Pb-glass detectors extends the angular acceptance to  $4^\circ$ . Analysis techniques will be discussed, and preliminary results will be presented.