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A Search for CPT-Violation in Ortho-Positronium CHELSEA BARTRAM, Univ of NC - Chapel Hill — We present the preliminary results from a search for CPT-violating correlations in the decay of ortho-positronium (o-Ps) with CALIOPE, or CP(T) Aberrant Leptons in o-Ps Experiment. Using a tagged source flush against a cylindrical piece of aerogel, we generate positronium at the center of an annular array of 24 NaI(Tl) bars. PMTs are optically coupled to each end of a bar. Signals from the PMT feed into the DAQ, which uses QDCs and TDCs to record the charge amplitude of pulses and timing information. We isolate o-Ps events with various analysis cuts such as a timing cut and a cut on the number of bars hit. We also include a study of systematics resulting from detailed Monte Carlo simulations.

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