

Abstract Submitted
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Search for CP Violation in Positronium Decay CHELSEA BARTRAM¹, UNC Chapel Hill — We present a new experiment to search for CP violation in the charged lepton sector by studying positronium decays. Positronium, a bound state of an electron and positron, occurs in both a singlet and triplet state. The triplet state, orthopositronium, decays primarily into three photons. Our experiment searches for CP-violating correlations between the directions of the three gamma-rays using the APEX annular array of NaI detectors, combined with a tagged source. This array will increase the angular acceptance by a factor 25 over previous experiments. We will present the current status of the experiment and a projected sensitivity.

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