## Abstract Submitted for the SES06 Meeting of The American Physical Society

Search for CP Violation in Hyperon Decays with the HyperCP Spectrometer at Fermilab EDMOND DUKES, University of Virginia, HYPERCP COLLABORATION — Searches for experimental manifestations of CP violation have born much fruit in recent years with the discovery of direct CP violation and the first evidence of CP violation outside of the neutral kaon system. Nevertheless we still know little about CP violation: its origin remains a mystery and there is little hard evidence that it is the sole province of the Standard Model. Searches for CP violation in hyperon decays offer promising possibilities as they are sensitive to certain beyond-the-Standard-Model sources that are not probed in other systems. We report on results from the HyperCP experiment, which is making high-statistics searches with data samples a thousand times larger than any previously taken, measurements that are beginning to confront beyond-the-Standard-Model theory predictions.

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