Results from HyperCP on the search for CP violation in hyperon decays

Craig Dukes

University of Virginia
HyperCP Collaboration

May 18, 1998

Abstract

The HyperCP collaboration is searching for direct CP violation by comparing the proton angular distribution in charged Ξ hyperon decays to that of the CP conjugate decays. Over one and a half billion Ξ and $\overline{\Xi}$ decays were collected in the 1997 fixed–target run at Fermilab, which should enable a measurement of the CP asymmetry to a precision of about 2 10^{-4}. Results from a preliminary analysis of approximately 10% of the data will be presented.