

Abstract Submitted
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Measurement of the CP Asymmetry in Semileptonic B Decays at CDF CHRISTOPHER MARINO, University of Illinois, Urbana, CDF COLLABORATION — We present a high-precision measurement of the inclusive CP asymmetry in same sign dimuon events originating from two semileptonic B hadron decays. Using a sample of 1.2 fb^{-1} of $p\bar{p}$ collisions at $\sqrt{s}=1.96 \text{ TeV}$ collected by the Collider Detector at Fermilab, we select events with two identified muons. To isolate the $b\bar{b}$ signal from background sources, we take advantage of the long B lifetime utilizing the impact parameters of the two muons. We correct for charge asymmetries introduced by the detector and other physics effects to extract the CP asymmetry.

Manfred Paulini
Carnegie Mellon University

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