Abstract #132
Parallel sessions: 9
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Search for CP Violation in Inclusive B Decays

The SLD Collaboration

A search for CP violation in the $B^0 - \overline{B^0}$ system is performed by studying the time-dependent inclusive asymmetry $\mathcal{A}(t) = \frac{\Gamma(B^0 \to all) - \Gamma(\overline{B^0} \to all)}{\Gamma(B^0 \to all) + \Gamma(\overline{B^0} \to all)}$. A data sample of 200K Z^0 events collected by the SLD at the SLC is used. The SLC electron beam polarization provides an excellent initial-state tag, and the high-resolution 3-D vertexing of SLD yields a high final-state reconstruction efficiency. A 95% C.L. limit on the CP-sensitive parameter $a = Im\frac{\Gamma_{12}}{M_{12}}$ is derived.