Abstract #130
Parallel sessions: 5
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Measurement of the $b \to l$ and $b \to c \to l$ branching ratios in $e^+e^- \to Z$ annihilations with polarized incident electrons

The SLD Collaboration

We present a measurement of the semileptonic branching ratios of primary ($b \to l$) and cascade ($b \to c \to l$) decays of B hadrons. We use a data sample of 200K hadronic Z decays collected by the SLD experiment at the SLC. $Z \to b\bar{b}$ events are identified by means of displaced B hadron decay vertices and their invariant mass. Leptons from primary and cascade decays are largely separated by using the left-right forward-backward asymmetry and the opposite hemisphere jet charge. We extract the branching ratios BR($b \to l$) and BR($b \to c \to l$) with statistical errors of $\pm 3\%$ and $\pm 7\%$, respectively.