Abstract #131
Parallel sessions: 5,9
Plenary sessions: 7,19

Inclusive Search for $b \to sg$ Decays

The SLD Collaboration

We describe a new inclusive search for $b \to sg$ decays in the SLD experiment at SLC. This analysis exploits the particle identification capability of the Cherenkov Ring Imaging Detector and high precision vertexing capability of the CCD pixel vertex detector at SLD to measure the production of charged kaons with large transverse momentum to the B hadron flight direction. The data sample consists of 200K hadronic Z^0 decays. The sensitivity to $b \to sg$ depends on the model used for the kaon spectrum. Using a simple, JETSET-inspired model, the branching ratio sensitivity is at the $\approx 3\%$ level.