

Radiative decay results from KTeV

Tuesday, 22 May 2007 15:50 (20 minutes)

The KTeV experiment has carried out a broad program of studies of rare kaon decays. In this talk we present results on $KL \rightarrow \pi^0 \gamma \gamma$, $KL \rightarrow \pi^0 e^+ e^- \gamma$ and $KL \rightarrow \pi^+ e^- \nu_e e^-$. These decays provide a window for testing chiral perturbation theory at $O(p^6)$. We find $BR(KL \rightarrow \pi^0 \pi^0 \gamma) = (1.30 \pm 0.03 \pm 0.04)E-6$, $BR(KL \rightarrow \pi^0 e^+ e^- \gamma) = (1.9 \pm 0.16 \pm 0.12)E-8$, and $BR(KL \rightarrow \pi^+ e^- \nu_e e^-) = (1.281 \pm 0.041)E-5$. The KTeV measurements are competitive with or better than the world's best results in these decays.

Presenter: Prof. CHEU, Elliott (Arizona University)

Session Classification: Session II

Track Classification: Non leptonic/ radiative decays