Contribution ID: **34** Type: **Contributed Talk**

Study of Proximity Focusing RICH with Silica Aerogel Radiator

Friday 23 February 2007 14:55 (20 minutes)

Proximity focusing RICH based on silica aerogel Cherenkov radiator has been developed for new particle identification device in the Belle detector upgrade. To further improve detector performance, new concept for Cherenkov ring imaging has been introduced, where multiple aerogel layers with different indices are accumulated to increase detected photoelectrons without making a signle photon resolution worse. By constructing a prototype counter, this idea has been validated in a test beam experiment, and we achieved 5.5 σ π/K separation at 4 GeV/c with more than 9 photoelectrons.

Author: ADACHI, Ichiro (KEK)

Presenter: ADACHI, Ichiro (KEK)

Session Classification: Session 10