Abstract Submitted
for the DNP98 Meeting of
The American Physical Society

Sorting Category: 3

Electron Identification in PHENIX at RHIC KENTA SHIGAKI, *KEK*, PHENIX COLLABORATION — The PHENIX experiment is in the final stage of construction at the Relativistic Heavy Ion Collider at Brookhaven National Laboratory. It features measurement of lepton/photon/hadron channels from high-energy nuclear reactions to investigate QCD under extreme conditions. One of the major goals of the experiment is electron measurement as a probe of the early stage of relativistic heavy ion collisions. A ring imaging Cherenkov (RICH) counter with a gaseous radiator and photo-multiplier tube readout has been developed as the primary device of PHENIX to identify electrons. Electron identification in PHENIX will be discussed in terms of requirements from the physics goals, hardware design, software algorithm and implementation, and performance studies with Monte Carlo simulations.

[X] Prefer Oral Session
[ ] Prefer Poster Session

Kenta Shigaki
shigaki@bnl.gov
KEK

Date submitted: July 1, 1998 Electronic form version 1.4