

# A beam test of prototype TPCs using micro-pattern gas detectors at KEK

*Sunday, 12 March 2006 15:10 (25 minutes)*

We conducted a series of beam tests of prototype TPCs at the KEK PS using GEMs or microMEGAS as a detection device. The prototypes were operated successfully under a magnetic field of up to 1 tesla. Experimental results, such as pad response and spatial resolution as functions of drift distance, are presented with a special emphasis upon comparison to the expectations from an analytical calculation. The spatial resolution in the whole drift region was found to be understood in terms of pad pitch, diffusion, pad response function, and the effective number of electrons.

**Primary author:** KOBAYASHI, Makoto (KEK)

**Presenter:** KOBAYASHI, Makoto (KEK)

**Session Classification:** Tracking and Vertexing

**Track Classification:** Tracking and Vertexing