To Office of Experimental

Planning and Coordination

Date   12 April 2005

MACHINE TIME EXECUTION

REPORT (2005-1 CYCLE)

Experimental Group	T578	Reporter	T. Tsuboyama (KEK)
Scheduled Period and Shift	Apr 7-Apr 10, 2005 12 shifts	Main, Sub, Para	Main user of PI2 beam line.

Experimenters   M. Pernicka, M. Friedl, T. Tsuboyama, T. Kawasaki, H. Ishino, ...

SUMMARY OF EXECUTION AND RESULTS

The purpose of this experiment is to confirm the APV25 silicon strip detector readout chip can work in environment of Super B factory (SB). APV25 chips were wire-bonded to a DSSD designed for SB. First day was used for taking data to determine the basic performance of the system. We took runs with varying bias voltage, shaping time of the preamplifier, incident angle etc. We borrowed a 1 mCi 90Sr source from the radiation safety center (RSC) of KEK and applied the source to 3 mm from the DSSD. We intended to simulate high background environment at SB, however, the source was not so strong. As a result, we took extra data with much longer shaping time than we prepared. Thanks to perfect preparation of the experiment setup, the data taking was completed at midnight of April 9. Throughout the experiment, we always checked the validity of data using online data monitor.

**EXECUTED MACHINE TIME, BEAM CONDITION, DOWN TIME etc.**

Because of the huge event size (2kB-12kB/event) the trigger rate was limited by DAQ speed. Still we appreciate 14-22 k particles per beam spill on 1cm x 1cm trigger scintillation counter which produced overlap hits, which is one of important items of this experiment. Beam line was cleaned up on 11 April.
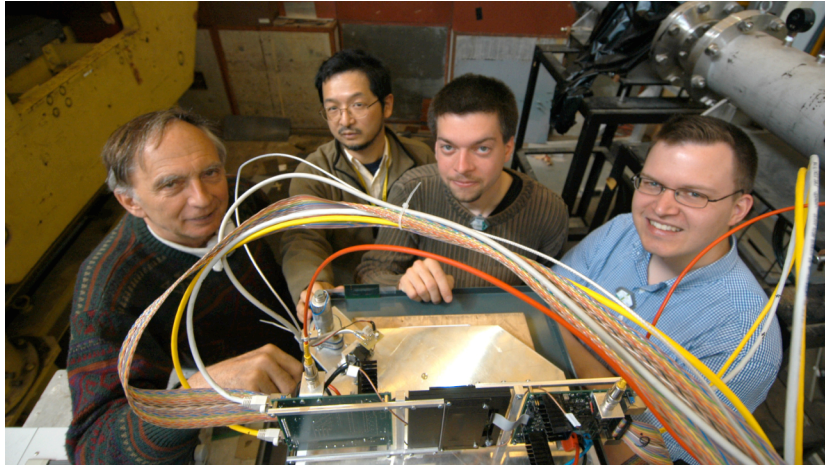
COMMENTS

The experiment was performed smoothly. In order to utilize the 1mCi 90Sr source, we bothered not only KEK RSC but also ATLAS muon group. In addition, we thank KEK online group who provided IP addresses as we requested. Sincerely we thanks to the accelerator group and the physics program coordinators.
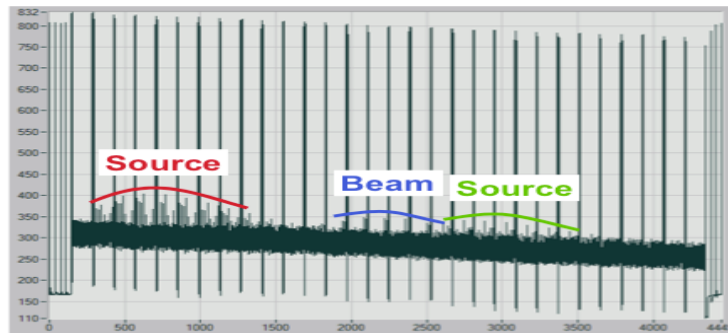
Appendix
Detector module
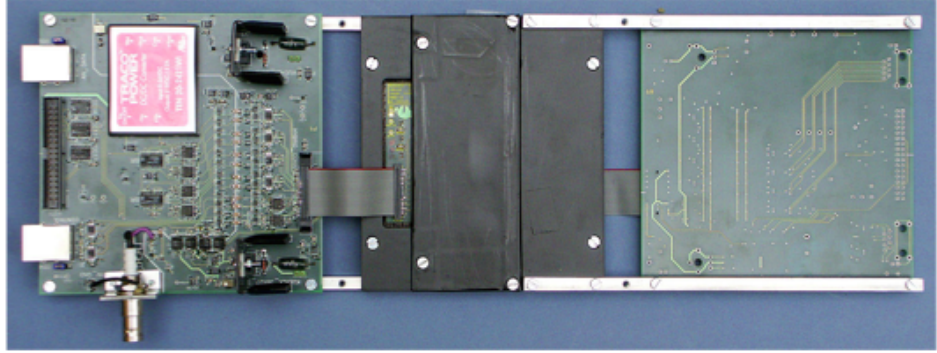
Setup at the PI2 beam line

Online monitor snap shot. Each region shows 25 nsec period. Signal from beam and source overlaps in this event.

End of run photo.