## J-PARC Hadron Hall : EXPERIMENTAL REPORT on RUN# 75

		Date(submitted)	7/7
Group	E40	Beam line	K1.8
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## Summary and Results

This beam time was shared with facility members to test an ion chamber for beam intensity monitor. We studied the following things in this beam time.

- Ion chamber was calibrated using pion beams from 1 M/spill to 24 M/spill. E40 group provided pion beams of these intensities. In this time, E40 group also checked the relation between the beam rate and BH1 counts to check the possibility to use this detector as a beam intensity monitor for the interlock. We also measured the radiation levels on the experimental floor with the condition under pi- beam of 20 M/spill.
- (2) E40 group optimized beam line magnet parameters to focus the beam size inside our LH2 target. We confirmed that the beam size could be comparable with the target or smaller than the target.
- (3) E40 group took so called "beam through data" to check the beam position at each detector of the KURAMA spectrometer. The beam regions in the DCs will be masked to make insensitive for the beam particles. We also took data with reaction trigger to study the background events.

SCHEDULED and EXECUTED MACHINE TIME, BEAM CONDITION, DOWN TIME, Priority etc.

Scheduled beam time : 6/30 2:00 – 4:00 (used for determination of beam line magnet parameters)

6/30 15:00 – 7/1 3:00 (12 hours ) including ion chamber study

Beam condition : +1.4 GeV/c pi+ beam, -1.32 GeV/c pi- beam

Intensity: 1 – 24 M/spill

Down time: 6/30 18:00 – 22:37 (trouble of the Q8 magnet in the K1.8 beam line)

Executed beam time : 6/30 2:00-4:00, 15:00 – 7/1 4:30

Net executed beam time : 11 hours including ion chamber study

Comments/Requests