

## J-PARC Hadron Hall : EXPERIMENTAL REPORT on RUN# 49c

		<b>Date (submitted)</b>	7 June 2013
<b>Group</b>	KOTO	<b>Beam line</b>	KL
<b>Reporter</b>	<b>Name</b>	<b>e-mail address</b>	
	Tadashi Nomura (KEK)	<a href="mailto:tadashi.nomura@kek.jp">tadashi.nomura@kek.jp</a>	
<b>Experimenters</b>	Komatsubara, Lim, Nomura, Watanabe (KEK), Togawa, Shiomi, Sugiyama (Osaka), Nanjo, Maeda, Seki, Hineno (Kyoto), J. Xu, N. Whallon, C. Carruth, J. Micallef (Michigan), J. Ma (Chicago), Y.C. Tung (NTU), J.W. Ko (Cheju), L. Gunho (Chonbuk)		
<b>Summary and Results</b>			
<ul style="list-style-type: none"><li>- Study for future detector upgrade<ul style="list-style-type: none"><li>- A prototype gas chamber, as a candidate of new charged-particle detectors in the neutral beam with higher rate capability, was tested.</li></ul></li> <li>- Detector calibration<ul style="list-style-type: none"><li>- Special data taking for detector calibrations were done periodically.</li></ul></li> <li>- Trigger tuning<ul style="list-style-type: none"><li>- Further optimizations for level 1 (L1) and level 2 (L2) triggers were performed for 20kW or more beam power. Minimum energy deposit in the calorimeter, energy thresholds of veto detectors, etc., were adjusted in L1 trigger, Requirement on the center of energy in the calorimeter in L2 was also tuned.</li></ul></li> <li>- Physics run<ul style="list-style-type: none"><li>- Production of physics data started first from the night of 5/17.</li><li>- Production with 23.8kW beam started from 0:30 on 5/19 (Sun).</li></ul></li></ul>			
<b>SCHEDULED and EXECUTED MACHINE TIME, BEAM CONDITION, DOWN TIME, Priority etc.</b>			
[Scheduled machine time]			
Nights of 5/13-17, and from the night of 5/18 to the morning of 6/11			
5 half-days (shared with accelerator study) + 20 full-days + 3 half-days (maintenance)			
[Executed time]			
15.5kW: 5/13 22:36 - 5/14 09:35, 5/14 22:34 - 5/15 09:05, 5/15 21:28 - 5/16 09:30			
20kW: 5/16 21:30 - 5/17 09:38, 5/17 23:00 - 5/18 09:31			
23.8kW: 5/18 21:25 - 5/22 09:00, 5/22 21:45 - 5/23 16:14			
[Down time] (>20 minutes)			
5/14 01:55 - 06:04 LI: DTL1_DTQPS11 (Q11) MPS; trouble in power supply for Q magnet in Linac DTL (4 hour 9 minutes)			
5/23 03:02 - 03:31 LI: Krystron HVPS 1,2 down (29 minutes)			
5/23 05:21 - 05:55 MR: SX-6pole1 MPS (34 minutes)			
5/23 11:55 - 12:34 MR: EQ MPS (10 minutes) and re-targeting			
5/23 14:27 SX to HD was stopped in order to investigate higher radiation level in HD hall.			
5/23 15:32 SX was resumed to do targeting again. The targeting was finished at 15:58.			
5/23 16:14 SX was stopped due to higher radiation level in HD hall.			
→ SX operation in this cycle was cancelled.			
[Access inside the KL sub-door]			
- None in user's beam time. (Done on accelerator maintenance days.)			
- 5/17 morning (at the beginning of MR study; 25minutes)			
<b>Comments/Requests</b>			