

## J-PARC Hadron Hall : EXPERIMENTAL REPORT on RUN#45

		Date(submitted)	2013/01/04
Group	E10	Beam line	K1.8
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<b>Summary and Results</b>			
<ol style="list-style-type: none"> <li>1. Beam Tuning, Trigger timing tune, Detector check(2-night)</li> <li>2. +1.2GeV/c <math>^{12}\text{C}(\pi^+, K^+)^{12}\text{C}</math> Production(2-night)</li> <li>3. -1.37GeV/c <math>p(\pi^-, K^+) \Sigma^-</math> Production(4 hours)</li> <li>4. -1.2GeV/c <math>^6\text{Li}(\pi^-, K^+)^6\text{Li}</math> Production(5.5 days)</li> </ol>			
<b>Results</b>			
<p>For <math>^{12}\text{C}</math> Production, We could take data about 700 events of bound region.          For <math>\Sigma^-</math> Production, We could take data about 8000 events and mass resolution is about 2.8MeV/c<sup>2</sup>(online analysis)</p>			
<b>Detector Condition</b>			
<p>SSD was some trouble on 22 Dec. This was because pedestal problem.          Other Hodoscope Detector's pedestal were also changed.          BC4 X1 wire was broken. Broken wire position was not beam through region. It seems to be initial failure.          Other detectors were very stable condition.</p>			
<b>SCHEDULED and EXECUTED MACHINE TIME, BEAM CONDITION, DOWN TIME, Priority etc.</b>			
<b>Beam Use</b>			
<p>Total Allocate Time(176 hours), w/Beam(144 hours), Down Time[Acc Trouble](32 hours)          Down Time[User Trouble](8 hours) -&gt; Data Taking Time(136 hours)</p>			
<b>Beam Condition</b>			
<p>+1.2GeV/c <math>^{12}\text{C}</math> Production - 3.6M pions/spill          -1.37GeV/c <math>\Sigma^-</math> Production - 10M pions/spill          -1.2GeV/c <math>^6\text{Li}</math> Production - 10M pions/spill</p>			
<b>Comments/Requests</b>			
Accelerator down time is larger than previous E27 beamtime.			