

## The status of the J-PARC Hadron Experimental Facility

Y. Sato, K. Agari, E. Hirose, M. Ieiri, Y. Katoh, A. Kiyomichi, M. Minakawa, R. Muto, M. Naruki, H. Noumi\*, Y. Suzuki, H. Takahashi, M. Takasaki, K. H. Tanaka, A. Toyoda, Y. Yamanoi, and H. Watanabe

*Institute for Particle and Nuclear Studies, High Energy Accelerator Research Organization (KEK)*

*\*Research Center for Nuclear Physics (RCNP) of Osaka University*

The J-PARC Hadron Experimental Facility aims to provide intense kaon and/or pion beams for nuclear and particle physics experiments with high power (750 kW at maximum) proton beams. Civil construction of the Hadron Experimental Facility was completed in July, 2007. Now many types of equipment for the primary and secondary beam lines, such as the production target (T1), radiation resistant magnets, beam monitors, vacuum system, electrostatic separator, and so on, have been installed in the Hadron Experimental Hall (HD-hall). The completion of the shielding enclosure will be finished by the end of December, 2008. The first trial of the extraction from the 50 GeV Proton Synchrotron is scheduled in early January, 2009. The commissioning of the primary and secondary beam lines in HD-hall will be finished by the end of February, 2009.

The following figure shows the layout of the beam lines and the experimental area at the first beam commissioning. At the first commissioning, maximum power of the primary proton beams is 1.2 kW (30GeV-40nA). The secondary beam line and the experimental area, called K1.8BR, are constructed, and the expected yield of kaon and/or pion beams at K1.8BR is  $3 \times 10^3$  and  $5 \times 10^5$  particles per cycle, respectively. The present contribution will report the status of the J-PARC Hadron Experimental Facility in detail.

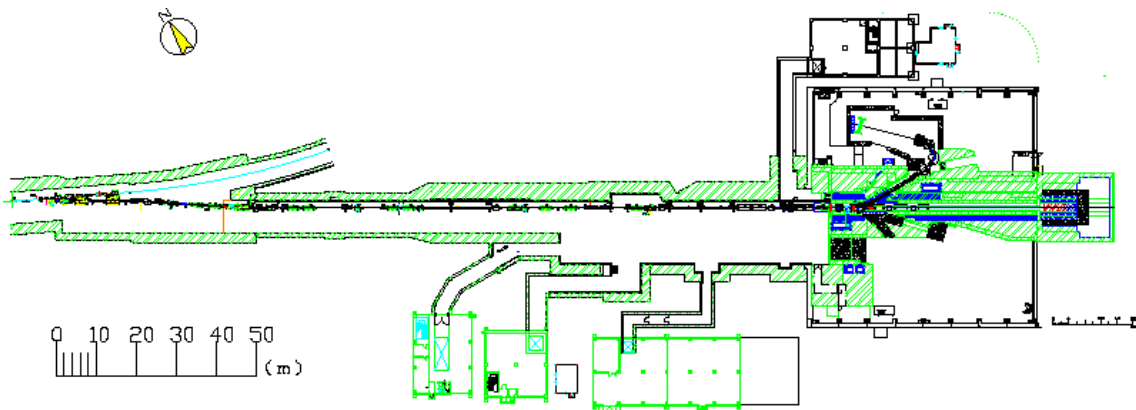


Fig. The overall layout of the beam switching yard and the Hadron Experimental Hall