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Commissioning status of the 1 GeV electron beam test facility (BTF) at Synchrotron Light Research Institute (SLRI)

Tuesday 22 May 2018 15:00 (1 hour)

The Collaboration between A Large Ion Collider Experiment (ALICE), Suranaree University of Technology (SUT) and Synchrotron Light Research Institute (SLRI) have been established to characterize pixel sensors for high energy particle detectors. Under this collaboration, the Synchrotron Light Research Institute (SLRI) - Beam Test Facility (BTF) has been designed and installed to the SLRI accelerator complex. A tungsten wedge target has been carefully designed to reduce the high intensity electron beam for the sensor and detector characterisation purposes. SLRI-BTF provides 1 GeV electron beam (tunable) with a few electrons per burst and the repetition rate of 0.5 Hz. The reference telescope consisting of 7 planes based on the ALICE Monolithic Active Pixel Sensors (MAPS) prototype, pALPIDE, has been set up at the experimental station to measure the sensor tracking detection efficiency.
Keywords: The Synchrotron Light Research Institute (SLRI) - Beam Test Facility (BTF), A number of cluster,An ALICE pixel detector (ALPIDE)

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