

Characterisation of pALPIDE-2 chips at Pusan

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A new ITS (inner tracking system) is currently being developed as a core upgrade project of the ALICE (A Large Ion Collider Experiment) setup for increasing luminosity beam at LHC in 2020.

The new ITS is designed to have reduced pixel size and material budget for improved vertexing and tracking capabilities and data taking rate, in particular for low momentum particles.

In order to satisfy the requirements of the new ITS, ALPIDE(ALice Pixel DETector) is developed with MAPS(Monolithic Active Pixel Sensors) technology. A pALPIDE-2 is the second prototype of ALPIDE which includes the full size chip and the same circuitry as new ITS.

We have tested the pALPIDE-2 chip with 60MeV electron in PAL(Pohang Accelerator Laboratory) for checking the performance with low momentum particles. In the presentation, its recent results of detector performance will be presented.

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