Contribution ID: **256** Type: **Poster**

Analysis data of sensitive layer and charge collection electrode of monolithic pixel sensors for the ALICE ITS upgrade

Thursday 25 May 2017 17:45 (15 minutes)

In this work we will present the analysis results of the explorer-0 chips which have been irradiated by 5.9 keV X-ray from ^{55}Fe sources. The explorer-0 chip is a prototype CMOS imaging sensor designed for new Inner Tracking System of ALICE detector. Here we focus on four important parameters, the pixel pitch, the collection electrode size, the distance between the electrode and the surrounding electronics, and the reverse bias voltage on the collection diode. The optimized values of these parameters will be used in the final design of pixel chips.

Primary author: POONSAWAT, Wanchaloem (Suranaree University of Technology (TH))

Co-authors: VAN HOORNE, Jacobus Willem (CERN); KOBDAJ, Chinorat (Suranaree University of Technology (TH)); YAN, Yupeng (Suranaree University of Technology)

Presenter: POONSAWAT, Wanchaloem (Suranaree University of Technology (TH))

Session Classification: Poster Presentation II

Track Classification: Instrumentation, Metrology and Standards