Tipp 2014 - Third International Conference on Technology and Instrumentation in Particle Physics



Contribution ID: 78 Type: Poster

Pre-research of Front-end readout electronics system for APD detectors for synchrotron radiation

Since many types of the silicon avalanche photodiode (Si-APD) detector have been developed for synchrotron X-ray experiments on nuclear resonant scattering, a readout electronics system scheme is introduced which includes front-end electronics for amplification, shaping circuit, analog to digital converter and data processing and so on. The designing of the pre-amplifier is described. The programs of front-end electronics are present which includes two types, one is based on peak value readout, and another is based on waveform readout. The two programs's differents are discussed.

Summary

Front-end, readout electronics system, APD detectors, synchrotron radiation

Author: LI, qiuju (I)

Co-authors: Dr ZHANG, y (ph.D); Dr ZHOU, yf (phD); Dr LI, zhenjie (phD)

Presenter: LI, qiuju (I)

Track Classification: Data-processing: 3a) Front-end Electronics