



Contribution ID: 23

Type: **Poster presentation**

Design of Adaptive and Fast Readout System Based on Wire Scanner

Tuesday, June 7, 2016 3:00 PM (1h 30m)

A new adaptive and fast readout system for the front-end signal of wire scanner is designed, which is used to measure the beam profile and emittance. This system is capable of handling constantly changing current signal, the case rate of which can reach up to 1000 counts/s and the input range is from 1 nA to 1 mA. The development of this new adaptive and fast front-end readout system which is applied to beam diagnostic, plays a crucial role in improving the accuracy of beam diagnostic, shortening the time of adjustable beam, improving the efficiency of accelerators. At present, this system has been used in the beam diagnostic of the injector II for accelerator driven sub-critical system (ADS), it also can read out some detectors outputted in wide-range current signal, which are widely used in nuclear physics experiments and accelerator systems.

Primary authors: Mr SU, hong (Institute of Modern Physics, Chinese Academy of Sciences); Mr ZHAO, hongyun (Institute of Modern Physics, Chinese Academy of Sciences); Ms KONG, jie (Institute of Modern Physics, Chinese Academy of Sciences); Mr ZHANG, jingzhe (Institute of Modern Physics, Chinese Academy of Sciences); Mr SHE, qianshun (Institute of Modern Physics, Chinese Academy of Sciences); Ms QIAN, yi (Institute of Modern Physics, Chinese Academy of Sciences)

Presenter: Mr SU, hong (Institute of Modern Physics, Chinese Academy of Sciences)

Session Classification: Poster session 1

Track Classification: Front End Electronics and Fast Digitizers