**Siyuan Ma(马思源)**



**Short Biography:**

Born on October 31th,1990 in Hebei province. Now, Ma is a PhD student of Department of Modern Physics, University of Science and Technology of China. He received B.S. degree in physics from University of Science and Technology of China. He joined Shubin Liu’s group of the State Key Laboratory of Particle Detection and Electronics in 2013. His research interests are focused on the electronics for high energy physics.

**Talk:** A Portable Readout System for Micro-Pattern Gas Detectors

**Abstract:**

A system of readout electronics used in Micro-pattern Gas detectors is introduced in this paper. The system is intended as a general purpose multi-channel readout solution for a wide range of detector types and detector complexities. A 32-channel charge sensitive ASIC VATA160 from IDEAS company is adopted in this method. With its features of high integration, low noise and large dynamic range, this system handles up to 128 electronic channels. With a integration time of 1.8 us, each channel’s dynamic range is from -3pC to +13pC with a noise of better than 2.5fC and nonlinearity of better than 0.5%. As a portable system, it is able to generate trigger itself or get external trigger. This system transfers data to a PC host and gets controlled by PC via only one Universal Serial bus (USB).