Abstract Submitted
for the DNP12 Meeting of
The American Physical Society

Low Voltage Slow Controls for the Silicon Vertex Tracker[1] KALEE HAMMERTON, Christopher Newport University — Nuclear physics research requires the use of detectors, like the Silicon Vertex Tracker (SVT) being developed at Thomas Jefferson National Accelerator Facility, to understand the fundamental properties of particles. This detector is designed to reconstruct the paths of charged particles, aiding in the determination of their momentum. Each of the SVT's 66 individual modules is connected to a High Flex Circuit Board (HFCB). A HFCB requires 4 low voltage channels. A slow controls program was developed to control the voltage. The program allows the user to set the voltage at the 2.5 V required for the HFCB. The program is also capable of reading back the voltage and current. It includes features for real-time data monitoring and offline data analysis. The program will be expanded to control all 264 channels used for the final SVT as well as measure more parameters such as temperature and humidity.

[1]ODU/JLab REU Program

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Date submitted: 31 Jul 2012 Electronic form version 1.4