

Abstract Submitted
for the APR11 Meeting of
The American Physical Society

Forward Vertex (FVTX) detector for PHENIX experiment
SERGEY BUTSYK, University of New Mexico, PHENIX COLLABORATION —
The PHENIX detector at the Relativistic Heavy Ion Collider (RHIC) has been built with a strong heavy quark particle identification capability. These unique probes of matter are essential to adequately understand in-medium energy loss and to test the basic properties of QCD. The current PHENIX heavy flavor physics program will be significantly enhanced by the addition of the Forward Silicon Vertex upgrade detector (FVTX) in the acceptance of the existing Muon Arm detectors ($1.2 < |y| < 2.4$). Each arm of the FVTX detector consists of 4 disks of silicon strip sensors combined with FPHX readout chips and provides a precision measurement of the radial coordinate of the charged particle track. The fully assembled detector will consist of more than 1 million readout channels. The detector is planned to be put into operation in FY2012. I plan to present the overview of the detector design, demonstrate the importance of the FVTX upgrade for the future of the RHIC heavy quark program and will concentrate on the current status of the detector construction.

Sergey Butsyk
University of New Mexico

Date submitted: 14 Jan 2011

Electronic form version 1.4