

Abstract Submitted
for the HAW09 Meeting of
The American Physical Society

Future measurement of Charm and Beauty Using the Silicon Vertex Detector at PHENIX XIAORONG WANG, New Mexico State University, PHENIX COLLABORATION — The study of heavy quarks (c and b) is essential to adequately understand in-medium energy loss and to test the basics properties of QCD. The current PHENIX heavy flavor physics program will be significantly enhanced by addition of the Silicon Vertex Detector (VTX) and Forward Silicon Vertex upgrade detector (FVTX) in a much broader acceptance than existing PHENIX detectors. These silicon trackers are planned to be put into operation in FY2011. They will provide precision tracking, reconstruction of the primary vertex and the recognition of secondary decay vertices in the collisions. This capability will enhance the heavy-quark signal and greatly reduce backgrounds. The description of tracking performance and some of the physics goals and capabilities from the simulations will be presented.

Xiaorong Wang
New Mexico State University

Date submitted: 30 Jun 2009

Electronic form version 1.4