Abstract Submitted for the DNP10 Meeting of The American Physical Society

**PHENIX Silicon Stripixel Detector at RHIC** SWADHIN TANEJA, Stony Brook University, PHENIX COLLABORATION — A novel design for a silicon sensor consisting of "spirals" of silicon strip-pixel was developed at the Brookhaven National Laboratory. This strip-pixel silicon sensor is a single-sided, DC-coupled, two-dimensional detector. A silicon vertex tracker (VTX) is now under construction and will be installed at PHENIX in fall 2010. The strip-pixel ladders will form the two outer barrels of the VTX. The VTX will substantially enhance the physics capabilities of the PHENIX central arm spectrometer and will enable precision measurements of heavy-quark production (charm and beauty) in A + A, p(d) + A, and polarized p + p collisions. In this talk I will focus on the silicon modules and the ladder assembly. I will show the performance results of the ladders.

> Swadhin Taneja Stony Brook University

Date submitted: 01 Jul 2010

Electronic form version 1.4