

Abstract Submitted
for the HAW05 Meeting of
The American Physical Society

First results from the Silicon Strip Detector of the STAR experiment JOERG REINNARTH, LILIAN MARTIN, JONATHAN BOUCHET, STAR, STAR COLLABORATION¹ — A new Silicon Strip Detector (SSD) has been recently installed in the central part of the STAR experiment at RHIC. The detector enhances the tracking capabilities of the STAR experiment in this region by providing information on the positions of hits and on the ionization energy loss of charged particles. Specifically, the SSD improves the extrapolation of tracks in the Time Projection Chamber to the hits found in the Silicon Vertex Tracker. Innovative solutions for electronics, connections and mechanics required to fulfill the constraints of the STAR environment will be presented. The intrinsic performances of the SSD, its impact on the STAR physics capabilities and the significant improvement of the reconstruction efficiency of short-lived hyperons will be detailed.

¹The teams is the Silicium Strip Detector Group from Nantes (France)

Joerg Reinnarth
STAR

Date submitted: 25 May 2005

Electronic form version 1.4