

Abstract Submitted  
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**Calibration Aspects of STAR experiment's Heavy Flavor Tracker (HFT)** AYMAN HAMAD, Kent State University, STAR COLLABORATION — The Heavy Flavor Tracker (HFT[1]) is a silicon detector in the STAR experiment at RHIC. It consists of three subsystems and four layers of silicon detectors. The heart of the system is the two inner layers of PXL (pixel) detector. The PXL uses ultra thin sensors 50 microns with 20x20 microns active pixel MAPS (Monolithic Active Pixel Sensors) technology. The air-cooled lightweight pixel detector is surrounded by two subsystems; the SSD (Silicon Strip Detector) and IST (Intermediate Silicon Tracker). These two layers of silicon help us interface and connect the PXL hits to the Time Projection Chamber (TPC) tracks. The full system is capable of a track pointing (DCA) resolution of about 30 microns for 1 GeV/c pions. In Spring-2014 the HFT system had its first physics run with Au+Au collisions at 200 GeV/c. In this poster we report on several performance and calibrations efforts like masking, alignment and track pointing resolution.

[1] STAR Heavy Flavor Tracker Technical Design Report:  
<https://drupal.star.bnl.gov/STAR/starnotes/public/sn0600>

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