

## Characteristics of STAR Forward Silicon Tracker

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Beyond BES-II, the STAR Collaboration is currently designing, constructing, and installing a suite of new detectors in the forward rapidity region ( $2.5 < \eta < 4$ ), enabling a program of novel measurements in p+p, p+Au and Au+Au collisions. To fully explore this physics, the forward upgrade needs superior detection capability for neutral pions, photons, electrons, jets and hadrons by adding charged-particle tracking and electromagnetic and hadronic calorimetry to STAR's capabilities at high pseudorapidity. In light of this upgrade, we will discuss measurements of forward silicon tracker (FST) prototype modules with cosmic rays and an infrared laser to determine whether the modules meet the design requirements on particle detection efficiency and position resolution. Results of the sensor leakage current and capacitance as a function of operating voltage will also be presented.