

Abstract Submitted
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STAR Forward Silicon Tracker Upgrade Status XU SUN, University of Illinois at Chicago, STAR COLLABORATION — The STAR Collaboration at RHIC plans to install a suite of new detectors in the forward rapidity region ($2.5 < \eta < 4.0$), enabling a program of novel measurements in pp, pA and AA collisions after Beam Energy Scan Phase II. This upgrade comprises new electromagnetic and hadronic calorimetry and a new Forward Tracking System (FTS), which consists of a Forward Silicon Tracker (FST) and Forward small-strip Thin Gap Chambers (sTGC). The FST is essential to discriminate hadron charge for transverse asymmetry studies and separating electrons and positrons for Drell-Yan measurements. In this talk, we will present the design and the construction status of the FST together with the mechanical support and integration plan. We will also briefly discuss the performance studies of the FST prototype modules in cosmic ray and laser tests.

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