The STAR Forward Upgrade

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The STAR Collaboration has been building a Forward Upgrade to supplement the excellent mid-rapidity capabilities of the STAR Detector for the final years of the RHIC program. The Forward Upgrade utilizes tracking and electromagnetic and hadronic calorimetry to trigger on and measure charged and neutral hadrons, photons, jets, and di-electrons over the pseudorapidity region $2.5 < \eta < 4$. The Forward Upgrade enables critical measurements to test the limits of universality and factorization in QCD when combined with future data from the EIC. In *pp* collisions, it probes the structure of the nucleon at very high and low *x*, including for example measurements of the Sivers and Collins effects at *x* values higher than have been studied in semi-inclusive DIS. In *p*+Au collisions, it enables to study nuclear modifications of the gluon density at low *x* and explore non-linear dynamics characteristic of the onset of gluon saturation. In Au+Au collisions, it will probe the longitudinal dynamics of hot QCD matter. This talk will present the status of the Forward Upgrade of operation during the current RHIC Run-2022 and describe the physics program that it will enable.