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Type: Poster

Medium-energy Nuclear Physics with sPHENIX

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A potential upgrade with forward instrumentation of the proposed sPHENIX detector at the Relativistic Heavy Ion Collider (RHIC), together with RHIC's unique capabilities to collide polarized protons and heavy nuclei, will open the door to exciting new measurements to enhance our understanding of quantum chromodynamics (QCD). These measurements will reveal more about how partons behave in a nuclear environment, explore spin-spin and spin-momentum correlations in the nucleon in a new kinematic regime, and investigate high-temperature QCD systems over a range of baryon densities. In addition, they will probe early times in the formation of the strongly coupled quark-gluon plasma. This poster focuses on the measurements enabled by the sPHENIX forward upgrade, as well as the medium-energy nuclear physics program for the sPHENIX mid-rapidity detector itself.

Content type

Experiment

Collaboration

sPHENIX

Centralised submission by Collaboration

Presenter name already specified

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