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## Medium-energy Nuclear Physics at RHIC with sPHENIX and an sPHENIX Forward Upgrade

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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, and provide data to investigate effects of non-universality. A potential upgrade to sPHENIX with forward instrumentation could significantly enhance these physics capabilities. The medium-energy nuclear physics program for the proposed sPHENIX midrapidity detector as well as the enhanced program enabled with forward upgrades will be presented.

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