Abstract Submitted for the DNP12 Meeting of The American Physical Society

**sPHENIX Upgrade Program** JAMES NAGLE, University of Colorado, PHENIX COLLABORATION — The PHENIX collaboration has submitted a proposal for a major upgrade, referred to as sPHENIX, enabling key new physics capabilities for the RHIC facility. A comprehensive program of jets, dijets, and gammajet probes of the quark-gluon plasma in a temperature range of strongest coupling are enabled. In addition, future incremental upgrades allow for tagging of heavy flavor jets, multiple upsilon state measurements, and other key observables. We detail the unique and also the complementary physics to the LHC heavy ion program and the detector program that makes it possible.

> James Nagle University of Colorado

Date submitted: 06 Jul 2012

Electronic form version 1.4