

Title: The sPHENIX experiment at RHIC

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sPHENIX started data taking in Spring 2023 at the Relativistic Heavy Ion Collider (RHIC) at Brookhaven National Laboratory. Built around the excellent BaBar superconducting solenoid, the central detector consists of a silicon pixel vertexer adapted from the ALICE ITS design, a silicon strip detector with single event timing resolution, a compact TPC, novel EM calorimetry, and two layers of hadronic calorimetry. The plan is to use the combination of electromagnetic calorimetry, hermetic hadronic calorimetry, precision tracking, and the ability to record data at high rates without trigger bias to make precision measurements of Heavy Flavor, Upsilon, and jets to probe the Quark Gluon Plasma (QGP) formed in heavy ion collisions. These measurements will have a kinematic reach that not only overlaps those performed at the LHC, but extends them into a new, low- p_T regime. The sPHENIX physics program, its potential impact, and the recent detector development will be discussed in this talk.