Contribution ID: **179** Type: **oral**

The sPHENIX experiment at RHIC

Thursday, 14 January 2021 15:55 (20 minutes)

The sPHENIX experiment at RHIC is currently under construction and on schedule for first data in early 2023. 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 hybrid streaming/triggered readout of the detector enables full exploitation of the luminosity provided by RHIC. The science program of sPHENIX focuses on jets and heavy flavor, observables with specific relevance to questions of the initial state in heavy ion collisions. The talk will describe the readiness of the experiment for operations, present an overview of the envisioned physics program. The science program of sPHENIX focuses on jets and heavy flavor, observables with specific relevance to questions of the initial state in heavy ion collisions. The talk will describe the readiness of the experiment for operations, present current projections of key jet and heavy flavor measurements, and discuss their potential scientific impact.

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Session Classification: FE

Track Classification: New facilities: DIS and hadronic experiments