

# 11th International Conference on Hard and Electromagnetic Probes of High-Energy Nuclear Collisions



Beitrag ID: 194

Typ: Poster

## The jet physics program with sPHENIX

*Dienstag, 28. März 2023 18:15 (2 Stunden)*

In Spring 2023, the sPHENIX detector at BNL's Relativistic Heavy Ion Collider (RHIC) will begin measuring a suite of unique jet and heavy flavor observables with unprecedented statistics and kinematic reach at the RHIC energies.

The combination of electromagnetic calorimetry, hadronic calorimetry, precision tracking, and the ability to record data at a very high rates enables measurements of jets, jet substructure, and jet correlations at RHIC with a kinematic reach that will overlap with similar measurements at the LHC. Jet observables are a particularly useful probe of the Quark Gluon Plasma (QGP) formed in heavy-ion collisions since the hard scattered partons that fragment into final state jets are strongly "quenched", losing energy to the medium as they traverse it. The detection method, physics projection and possible impacts to the field of heavy ion physics will be presented.

### Experiment/Theory

Other

### Affiliation

Iowa State University

**Hauptautoren:** CONNORS, Megan; BAILEY, Virginia

**Vortragende(r):** CONNORS, Megan

**Sitzung Einordnung:** Poster Session

**Track Klassifizierung:** Future experimental facilities