

UCLA Nuclear Physics Seminar

“Probe Quark-Gluon-Plasma with Heavy Quarks in sPHENIX Experiment at Relativistic Heavy Ion Collider”

Presented by Ming Liu
Los Alamos National Laboratory

The 2015 US Nuclear Physics Long Range Plan calls for a state-of-the-art jet and upsilon detector at RHIC, called sPHENIX, to study the microscopic nature of the QGP, complementing similar studies at the CERN LHC. The sPHENIX detector will provide precision vertexing, tracking and full calorimetry over pseudorapidity $|\eta| < 1.1$ and full azimuth at the full RHIC collision rate, delivering unprecedented data sets for jet and upsilon measurements at RHIC. This will enable the three pillars of the sPHENIX physics program, i.e., 1) studies of jet structure modifications, 2) measurements of heavy-flavor tagged jet production and 3) precision upsilon spectroscopy.

In this talk I will present an overview of the sPHENIX heavy flavor physics program, from detector design, expected construction and running schedule and planned physics program.

Location: Knudsen 4-134

Date: Monday, January 8, 2018

Time: 1:00pm

