



XLVII International Symposium on  
Multiparticle Dynamics (ISMD2017)

September 11-15, 2017, Tlaxcala City, Mexico

Contribution ID : 52

Type : **not specified**

## The RHIC Cold QCD Program: A Gaze into EIC Physics

*Wednesday, 13 September 2017 09:25 (0:25)*

### Content

The Relativistic Heavy Ion Collider (RHIC) at Brookhaven National Laboratory is the world's only polarized proton collider with center-of-mass energies up to 500 GeV and polarizations of about 60% for each proton beam and the the worlds most versatile collider, able to collide different species over an extremely wide kinematic range. It provides unique opportunities to study the spin structure in hadronic systems and opens new kinematic regions compared to deep inelastic scattering. The three pillars of the RHIC spin program cover the gluon polarization, sea quark helicity distributions, and transverse spin effects in hadronic systems. The talk will summarize recent results and discuss near term plans and their implications on parton distribution functions in the collinear and transverse momentum dependent frameworks. In addition the new results and unique opportunities to study nuclear effects in the initial and final state will be presented as well.

### Session

Proton structure, small and large  $x$  physics

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**Session Classification :** Proton structure, small-and large- $x$  physics (III)