Contribution ID: 8

Type: Talk

Absolute Polarimetry of Proton Beams at RHIC

Monday 14 September 2015 14:00 (30 minutes)

The Relativistic Heavy Ion Collider (RHIC) has successfully collided polarized proton beams with momenta as high as 255 GeV/c and average polarizations up to P=60%. The polarization of the proton beams is vital input to any of the spin-dependent measurements at the RHIC experiments. The absolute beam polarization is determined through spin dependent elastic scattering with a polarized hydrogen jet target. Recent improvements of beam luminosities and a new set of silicon detectors have enabled studies of systematic effects in the polarimeters with unprecedented accuracy. We will present the latest polarimetry results with protons beams of 100 and 255 GeV/c. We will also discuss the polarimeter performance in the presence of heavy ion beams during the recently concluded RHIC run 2015.

Primary author: Dr EYSER, Oleg (Brookhaven National Laboratory)Presenter: Dr EYSER, Oleg (Brookhaven National Laboratory)Session Classification: Session 2