Contribution ID: 25

Type: Talk

New DAQ for the HJET polarimeter at RHIC

Monday, 14 September 2015 16:50 (40 minutes)

In RHIC Run 15 the new DAQ for the polarized hydrogen jet target polarimeter (HJET) was tested and employed.

The DAQ based on JLAB 12 bit 250 MHz FADC and new set of silicon detectors allowed us to improve the quality of data analysis.

Comparison of different methods of energy calibration of the detectors will be reported. The analysis of the signal shape was found to be very helpful for separation of stopped and punched through protons. Such a separation results in extension of the energy range of detected protons as well as in suppression of inelastic background. A possible improvement of the systematic errors of the beam polarization measurements will be discussed.

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Session Classification: Session 3