

Abstract Submitted
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Polarimetries for the Polarized ^3He Target at JLab NGUYEN TON, University of Virginia, JEFFERSON LAB POLARIZED ^3HE TARGET COLLABORATION — At Jefferson Lab, a Polarized ^3He Target has been used as an effective polarized neutron target for studying nucleon spin structure. For the 12 GeV program at JLab, the first stage upgrade of the target aim to increase luminosity by a factor of 2 (to luminosity $\sim 2 \times 10^{36} \text{cm}^{-2}\text{s}^{-1}$) while keep maximum in-beam polarization at 60% with 30 μA beam current and reach a systematic uncertainty of polarimetry below 3%. During the 6 GeV era, the target polarization was measured by two polarimetries: adiabatic fast passage-nuclear magnetic resonance (AFP-NMR) and electron paramagnetic resonance (EPR). With the upgrade, a new polarimetry, Pulse-NMR, is being studied in the lab for the up-coming metal coated target. In this talk, we will discuss the detail study of AFP-NMR, EPR, Pulsed-NMR measurements and their corresponding uncertainties.

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