

The b_1 Polarized Target Experiment

The University of New Hampshire (UNH) Nuclear Physics Group (NPG) is planning to run the b_1 and A_{zz} experiment at JLab in Hall C using an 11.0 GeV, High Luminosity electron beam ($10^{38} \text{ cm}^{-2} \text{ s}^{-1}$) with 115 nA beam current, a 5T superconducting magnet, the ND_3 dynamically polarized target and the HallC stacked spectrometer to study the deuteron spin observables and asymmetries for polarized beam and target. Additionally, the UNH NPG will implement the tensor enhancement techniques of selective semi-saturated RF(ssRF) and Adiabatic Fast Passage (AFP) that we deployed and tested in Slifer Lab (DeMeritt 103). I will be using my experience with the RGC analysis to prepare for the b_1 experiment (Spokesperson Karl Slifer) and for a series of additional tensor polarized target experiments that are planned by the members of the UNH Nuclear Physics Group.

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Track Classification: Polarized ion and lepton sources and targets