Spin Asymmetries Of The Nucleon Experiment; Spectrometer Data

The Spin Asymmetries of the Nucleon Experiment (SANE) is a measurement of the physics asymmetry A_1 and spin-structure function g_2 of the proton over a broad kinematic range of Bjorken scaling variable x_{Bj} of 0.3 to 0.8, for four-momentum transfers Q^2 of 2.5 to 6.5 GeV^2. SANE measured inclusive double spin asymmetries using the TJNAF polarized electron beam with energies 4.7 and 5.9 GeV, scattered off the UVA polarized solid NH_3 target in both parallel and perpendicular configurations. The experiment utilized both a large acceptance detector as well as a magnetic spectrometer. With the spectrometer, the coverage is extended to Q^2 of about 1.3 and 1.8 GeV^2, lowering x_{Bj} to about 0.2. Also, a portion of this data is sensitive to the ratio of electric and magnetic form-factors of the proton G_{Ep}/G_{Mp}. The focus of this talk will be on the spectrometer data, going into detail about the motivation and status of the analysis.