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**Spin Structures of the Deuteron and the Neutron - New Results from CLAS** NEVZAT GULER, Old Dominion University, CLAS COLLABORATION — In the EG1B experiment, carried out at Jefferson Lab using the CLAS detector, we have measured double polarization asymmetries in and above the nucleon resonance region ( 1.08 GeV $< W <$ 3.0 GeV ). We used a longitudinally polarized electron beam with energies of 1.6, 2.5, 4.2 and 5.75 GeV incident on longitudinally polarized proton and deuteron targets. The large kinematic coverage of the experiment ( 0.05 GeV$^2$ $<$ Q$^2$ $<$ 5.0 GeV$^2$ ) helps us to understand the spin structure of the nucleon, especially in the transition region between hadronic and quark-gluon degrees of freedom. We will present results on $A_1$, $g_1$ and $\Gamma_1$ using the entire data set for the deuteron and extractions of the neutron spin structure functions from the combined deuteron and proton data.

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