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Jefferson Lab Neutron Transversity Experiments (E06-010)

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Jefferson Lab Hall A “Neutron Transversity” experiment (E06-010) collected data between Oct. 2008 and Feb. 2009. An electron beam of 5.9 GeV energy was used to scatter from a transversely polarized neutron (^3He) target. The scattered electrons were detected in coincidence with charged hadrons (pion or Kaon) in deep inelastic kinematics of $x:0.1-0.4$ with an average Q^2 of 2.2 GeV². The measured target single-spin asymmetries in semi-inclusive reactions allowed access to the quark transversity distributions as well as the T-odd Sivers distributions. The most recent status of physics analysis will be reported.