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Measurement of the Parity-odd Neutron Spin Rotation in Liquid Helium H. ERIK SWANSON, University of Washington, C.D. BASS, National Institute of Standards and Technology NIST, T.D. BASS, Indiana University/IUCF, B.E. CRAWFORD, Gettysburg College, J.M. DAWKINS, Indiana University/IUCF, K. GAN, The George Washington University, B.R. HECKEL, University of Washington, J.C. HORTON, Indiana University/IUCF, C.R. HUFFER, North Carolina State University, D. LUO, Indiana University/IUCF, D.M. MARKOFF, North Carolina Central University, A.M. MICHERDZINSKA, The George Washington University, H.P. MUMM, J.S. NICO, National Institute of Standards and Technology NIST, A.K. OPPER, The George Washington University, M.G. SARSOUR, Georga State University, E. SHARAPOV, Joint Institute for Nuclear Research, W.M. SNOW, S.C. WALBRIDGE, Indiana University/IUCF, V. ZHUMABEKOVA, Al-Farabi Kazakh National University — A weak interaction between nucleons is induced by the quark- quark weak interaction in the Standard Model. At present the NN weak interaction is poorly constrained by experiment. We conducted an experiment to search for parity violation in the rotation of the plane of polarization of slow neutrons in liquid 4He at the Center for Neutron Research at the National Institute of Standards and Technology. We will discuss the analysis of data from this experiment.

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