Abstract Submitted for the DNP06 Meeting of The American Physical Society

A Direct Measurement of the Neutron-Neutron Scattering Length: Progress and Status<sup>1</sup> S.L. STEPHENSON, B.E. CRAWFORD, Gettysburg College, C.R. HOWELL, W. TORNOW, Duke University and TUNL, G.E. MITCHELL, NC State University and TUNL, W.I. FURMAN, A.R. KRYLOV, E.V. LYCHAGIN, A. YU. MUZICHKA, G.V. NEKHAEV, E.I. SHARAPOV, V.N. SHVETSOV, A.V. STRELKOV, JINR, Dubna, Russia, YU. I. CHERNUKHIN, YA. Z. KANDIEV, B.G. LEVAKOV, A.E. LYZHIN, All-Russian Research Institute of Technical Physics, Snezhinsk, Russia — A direct measurement of the neutronneutron scattering length  $(a_{nn})$  provides a unique contribution to understanding charge symmetry breaking in the nuclear force. A brief status report on such an experiment at the YAGUAR reactor facility will be given.

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