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Testing Supersymmetry with Neutron Decay W.S. WILBURN, V. CIRIGLIANO, A. KLEIN, P.L. MCGAUGHEY, M.F. MAKELA, C.L. MORRIS, J. RAMSEY, A. SALAS-BACCI, A. SAUNDERS, Los Alamos National Laboratory, L.J. BROUSSARD, Duke University, A.R. YOUNG, North Carolina State University — It has been recently realized that the neutrino correlation parameter B in neutron decay is sensitive to Minimal Supersymmetric Models for the case of maximal mixing. B is currently known to a precision of 3×10^{-3}, but a precision of better than 1×10^{-3} is required to test these models. Improvements in experimental techniques developed for the ongoing UCNA experiment and the planned abBA experiment may allow an improved measurement of B with a precision approaching 1×10^{-4}. An emerging concept for combining these techniques into an experiment to measure B using ultracold neutrons and large-area silicon detectors will be discussed.

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