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The measurement of neutron beta decay observables with the Nab spectrometer

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Nab, an experiment that allows studying unpolarized neutron beta decay at the Spallation Neutron Source at Oak Ridge National Lab, aims to determine a , the neutrino-electron correlation coefficient, and b , the Fierz interference term, with high precision. Such measurements provide opportunities to search for evidence of extensions to the Standard Model. Nab is presently being constructed, with beam readiness planned for end of 2016. I will discuss the experiment's motivation and design, the planned modes of operation, and the performance of its components.