

Abstract Submitted
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UCNA Systematic Uncertainties MICHAEL MENDENHALL, California Institute of Technology, UCNA COLLABORATION — The UCNA experiment uses ultracold neutrons to measure the A beta-decay angular correlation between electron emission direction and neutron spin. In 2007, an initial “proof-of-principle” statistics-limited data set was taken, providing a 4.4% determination of A_0 . For the higher statistics data set taken in 2008 and 2009, systematic uncertainties become increasingly important. This talk is an overview of the main systematic uncertainties (including decay-beta scattering and energy reconstruction, neutron polarization, and backgrounds) contributing to a 1.4% determination of A_0 from the 2008-2009 data.

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