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Analysis of the Neutron Lifetime Data from the UCNτ Experiment EVAN ADAMEK, Indiana Univ - Bloomington, UCNTAU COLLABORATION — The UCNτ experiment seeks to precisely measure the neutron lifetime by storing ultracold neutrons in a magneto-gravitational trap. During the 2014-2015 run cycle at the Ultracold Neutron Facility at the Los Alamos Neutron Science Center, the experiment collected data to investigate systematic and statistical uncertainties. Preliminary analysis of this data set has allowed estimation of the eventual statistical reach of our current experimental configuration. Additionally, analysis of the effect of changing detector backgrounds has resulted in an improved understanding of their effect on measured trap lifetimes. Finally, analysis of this data set has allowed preliminary estimation of many of the leading systematic uncertainties in the experiment.

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