

Abstract Submitted
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High Precision Measurement of the ^{19}Ne Lifetime LEAH BROUSSARD, H.O. BACK, M.S. BOSWELL, A.S. CROWELL, C.R. HOWELL, M.F. KIDD, R.W. PATTIE, JR., A.R. YOUNG, TUNL, P.G. DENDOOVEN, G.S. GIRI, D.J. VAN DER HOEK, K. JUNGSMANN, W.L. KRUIHOF, C.J.G. ONDERWATER, B. SANTRA, P.D. SHIDLING, M. SOHANI, O.O. VERSOLOTA, L. WILLMANN, H.W. WILSCHUT, KVI — Recently, a rigorous review of the $T=\frac{1}{2}$ mirror transitions has identified several systems which can contribute to high precision tests exploring deviations from the Standard Model's description of the electroweak interaction. Arguably, one of the best candidates is the β^+ decay of ^{19}Ne to ^{19}F . In this system, the main contribution to the uncertainty of extracted Standard Model parameters is due to the measured value of the lifetime of the decay. In March 2009, a high precision measurement of the lifetime of ^{19}Ne was made by a collaboration between the Triangle Universities Nuclear Laboratory (TUNL) and the Kernfysisch Versneller Instituut (KVI) at the Trapped Radioactive Isotopes: Microlaboratories for Fundamental Physics (Tri μ p) facility. An overview of the experiment and preliminary results will be presented.

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