Abstract Submitted
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Search for resonant enhancement of the ^{7}Be+d reaction[1] P.D. OMALLEY, A. ADEKOLA, J.A. CIZEWSKI, M.E. HOWARD, S.Y. STRAUSS, Rutgers University, D.W. BARDAYAN, K.Y. CHAE, C.D. NESARAJA, S.D. PAIN, M.S. SMITH, Oak Ridge National Laboratory, S. AHN, K.L. JONES, S.T. PITTMAN, K.T. SCHMITT, University of Tennessee, Knoxville, S. GRAVES, R.L. KOZUB, J.F. SHRINER JR., J.L. WHEELER, Tennessee Technological University, M. MATOS, B.M. MOAZEN, Lousiana State University, W.A. PETERS, I. SPASSOVA, Oak Ridge Associated Universities — ^{7}Li abundances in the early universe extrapolated from observations are several standard deviations lowers than that produced by Big Bang Nucleosynthesis calculations constrained by WMAP. Since most ^{7}Li is produced by the beta decay of ^{7}Be, one proposed solution to this mystery is a resonant enhancement of the ^{7}Be$(d,p)2\alpha$ reaction rate via the $5/2^+$ 16.7 MeV state in ^{9}B. The ^{7}Be(d,d) reaction was done at Oak Ridge National Laboratory to search for such a resonance. This was performed in inverse kinematics using a 10 MeV ^{7}Be beam and a thick CD_2 target. Experimental data will be shown and results will be discussed.

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