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Analysis of ^{26}Al + p elastic and inelastic scattering reactions in inverse kinematics at the HRIBF S.T. PITTMAN, K.Y. CHAE, K.L. JONES, B.H. MOAZEN, Univ. of TN, D.W. BARDAYAN, C.D. NESARAJA, S.D. PAIN, M.S. SMITH, ORNL, K.A. CHIPPS, CO School of Mines, R.L. KOZUB, J.F. SHRINER, JR., TN Tech., C. MATEI, ORAU, M. MATOS, LSU, P.D. O'MALLEY, W.A. PETERS, Rutgers Univ., P.D. PARKER, Yale Univ. — It is unknown to what degree novae contribute to the abundance of ^{26}Al in the Galaxy. Destruction through the ^{26}Al(p,γ)^{27}Si reaction may reduce the nova contribution, but uncertainties in the properties of ^{27}Si levels above the proton threshold limit reaction rate estimates. Inelastic proton scattering in these environments may also reduce the net production of ^{26}Al. To constrain estimates of the degree of ^{26}Al destruction in novae, the ^{26}Al + p elastic and inelastic reactions were investigated in inverse kinematics ($E_{c.m.}$= 0.5-1.5 MeV) at the HRIBF. The experiment and results of the analysis will be discussed.

Stephen Pittman
University of TN

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