## Abstract Submitted for the APR14 Meeting of The American Physical Society

First experiments performed with the JENSA gas jet target system P.J. THOMPSON, UTK, K.A. CHIPPS, ORNL/UTK, U. GREIFE, CSM, D.W. BARDAYAN, ND, J.C. BLACKMON, L.E. LINHARDT, S.T. PITTMAN, LSU, A. KONTOS, MSU/NSCL/JINA, M. MATOS, IAEA, S.D. PAIN, M.S. SMITH, ORNL, H. SCHATZ, MSU/NSCL, K.T. SCHMITT, ORTEC, JENSA COLLABORATION — With the Jet Experiments in Nuclear Structure and Astrophysics (JENSA) gas jet target, we have the unique opportunity to study reactions with pure gas targets. One reaction of interest is  $^{20}{\rm Ne}({\rm p,t})^{18}{\rm Ne}$ .  $^{18}{\rm Ne}$  can decay via electron capture to the potential astrophysical observable  $^{18}{\rm F}$ , and states in  $^{18}{\rm Ne}$  affect the rate of some other astrophysically important reactions, such as  $^{17}{\rm F}({\rm p},\gamma)^{18}{\rm Ne}$ . We present some of the first transfer reaction results using the JENSA gas jet target system performed at Oak Ridge National Laboratory, with a focus on the  $^{20}{\rm Ne}({\rm p,t})^{18}{\rm Ne}$  transfer reaction performed with a 37MeV proton beam.

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