Abstract Submitted
for the DNP15 Meeting of
The American Physical Society

Transfer reactions with JENSA: study of the levels in ^{12}N using ^{14}N(p,t)[1] K.A. CHIPPS, Oak Ridge National Laboratory, JENSA COLLABORATION — The Jet Experiments in Nuclear Structure and Astrophysics (JENSA) gas jet target, recently recommissioned in the ReA3 facility at the NSCL, will provide a state-of-the-art, dense, localized, and pure target of light, gaseous elements for various reaction studies. As one of a series of commissioning physics measurements to demonstrate the benefit of the new Jet Experiments in Nuclear Structure and Astrophysics (JENSA) gas jet target for enabling next-generation transfer reaction studies, the ^{14}N(p,t)^{12}N reaction was studied using a pure 300 psig jet of nitrogen, in order to help elucidate the structure of ^{12}N. The experiment and lessons learned for future gas jet transfer reaction measurements will be discussed.

[1]Research supported by the U. S. Department of Energy Office of Science and NSF.

Kelly Chipps
Oak Ridge National Laboratory

Date submitted: 26 Jun 2015 Electronic form version 1.4