

Abstract Submitted
for the DNP16 Meeting of
The American Physical Society

Commissioning of the JENSA gas jet target at NSCL¹ KONRAD SCHMIDT, JINA-CEE, NSCL, Michigan State University, JENSA COLLABORATION — The Jet Experiments in Nuclear Structure and Astrophysics (JENSA) gas jet target enables the direct measurement of previously inaccessible reactions with reaccelerated radioactive beams at the National Superconducting Cyclotron Laboratory (NSCL), USA. JENSA is going to be the main target for the recoil separator for capture reactions (SECAR) at the Facility of Rare Isotope Beams (FRIB). Commissioning and first experiments at Oak Ridge National Laboratory (ORNL) showed a highly localized, pure gas target with a density of about 10^{19} atoms per square centimeter. Confirming results from recent thickness studies of the JENSA gas jet target at NSCL will be presented as well as preliminary results from a commissioning experiment studying the ${}^4\text{He}({}^{14}\text{N},\text{p}){}^{17}\text{O}$ reaction at $\sim 1.3\text{ MeV/u}$ with stable beams provided by the rare isotope beam facility ReA3 at NSCL. This research is supported by the U.S. Department of Energy and the National Science Foundation.

¹The JENSA collaboration is a large group of researchers from CSM, ORNL, LSU, NSCL, UND, PNNL, LBNL, and UTK.

Konrad Schmidt
JINA-CEE, NSCL, Michigan State University

Date submitted: 29 Jun 2016

Electronic form version 1.4