

Abstract Submitted
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Study of excited states in nuclei of astrophysical interest via the $({}^3\text{He}, p)$ reaction¹ K. CHIPPS, L. ERIKSON, U. GREIFE, F. SARAZIN, Colorado School of Mines, Golden, CO, USA, J. BLACKMON, D. BARDAYAN, M. SMITH, Oak Ridge National Laboratory, Oak Ridge, TN, USA, J. PEARSON, TRIUMF, Vancouver, BC, Canada — The $({}^3\text{He}, p)$ reaction may be used to populate excited states in nuclei of astrophysical interest due to its high Q value. To this end, a ${}^3\text{He}$ gas cell target has been designed and constructed for use with radioactive ion beams. Simulations were run using GEANT for several different beams, and experiments using ${}^{17}\text{O}$ and ${}^{17}\text{F}$ beams are in preparation at the Holifield Radioactive Ion Beam Facility at Oak Ridge National Laboratory.

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