

Abstract Submitted  
for the DNP17 Meeting of  
The American Physical Society

**A streamlined Python framework for AT-TPC data analysis** J.Z. TAYLOR, Davidson College, J. BRADT, D. BAZIN, National Superconducting Cyclotron Laboratory, M.P. KUCHERA, Davidson College — User-friendly data analysis software has been developed for the Active-Target Time Projection Chamber (AT-TPC) experiment at the National Superconducting Cyclotron Laboratory at Michigan State University. The AT-TPC, commissioned in 2014, is a gas-filled detector that acts as both the detector and target for high-efficiency detection of low-intensity, exotic nuclear reactions. The pytpc framework is a Python package for analyzing AT-TPC data. The package was developed for the analysis of  $^{46}\text{Ar}(p, p)$  data. The existing software was used to analyze data produced by the  $^{40}\text{Ar}(p, p)$  experiment that ran in August, 2015. Usage of the package was documented in an analysis manual both to improve analysis steps and aid in the work of future AT-TPC users. Software features and analysis methods in the pytpc framework will be presented along with the  $^{40}\text{Ar}$  results.

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Date submitted: 14 Jul 2017

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