

Abstract Submitted  
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**First tests of the ND-Cube Active-Target Detector**<sup>1</sup> TAN AHN, S. AGUILAR, L. DELGADO, N. DIXNEUF, W. JACKSON, L. JENSEN, S. L. HENDERSON, J. KOZI, J. LEVANO, A. MUBARAK, P. D. O'MALLEY, S. RAMERIZ MARTIN, M. Z. SERIKOW, S. JIN, A. TOLLEFSON, L. YAN, University of Notre Dame — Active-target detectors are becoming a ubiquitous tool for studying reactions both with radioactive and stable beams due to their high efficiency and tracking abilities. We are developing the active-target detector ND-Cube at the University of Notre Dame for studies in nuclear clustering, reactions for nuclear astrophysics, and fusion reactions with radioactive beams. The ND-Cube will also serve as a development platform for Micropattern Gas Detector designs, and detector optimization. Progress on the development of the ND-Cube will be presented including the plans for using a laser system for in-situ drift velocity measurements. The ND-Cube will enable a wide range of measurements that can take advantage of radioactive beams produced at Notre Dames Nuclear Science Laboratory in the light mass region.

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