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The ND-Cube Active-Target Detector Commissioning[1] TAN AHN, J. RANDHAWA, S. JIN, M. RENAUD, S. L. HENDERSON, S. AGUILAR, M. Z. SERIKOW, W. JACKSON, L. YAN, A. TOLLEFSON, L. DELGADO, S. RAMERIZ MARTIN, J. KOCI, J. LEVANO, A. MUBARAK, L. JENSEN, N. DIXNEUF, J. LEVANO, P. D. O'MALLEY, University of Notre Dame — Active-target detectors have become an important tool in studying nuclear reactions for radioactive-beam programs due to their gas target and tracking abilities. The ND-Cube is an active-target detector that is being developed for use in radioactive beam experiments from TwinSol at the University of Notre Dame. The ND-Cube will allow for a range of radioactive-beam experiments using light-ion reactions. An important step in using the ND-Cube is to characterize its tracking ability for the geometry and pad plane design chosen. The ND-Cube has a rectangular geometry with a 20 cm by 30 cm active area and uses a Micromegas or ThGEMs for amplification with a high-granularity pad plane. The current status of the testing and commissioning of the detector with α source measurements and in-beam measurements will be presented including gas gain measurements, various trigger configurations, and track reconstruction.

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Tan Ahn
University of Notre Dame

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