Abstract Submitted for the TSF19 Meeting of The American Physical Society

Determining and Designing a Time Of Flight Detector for the NOvA Test Beam Experiment ENIOLA SOBIMPE, University of Dallas, AIDAN MEDCALF TEAM, STEVEN BLOCK TEAM, WILL FLANAGAN TEAM — The NOvA neutrino oscillation experiment is undergoing a charged particle test beam effort to gain an increased understanding of the NOvA detectors. The incident beam utilizes scintillator-based time of flight detectors to make particle identification upstream of the NOvA replica detector. Emphasis was given to the rise time, transit time, and pulse area when evaluating each prototype. This talk will give an overview of the various prototypes constructed and tests employed to choose the ideal photodetectors and scintillators for the NOvA test beam time of flight system.

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Date submitted: 09 Oct 2019

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