

Abstract Submitted
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Construction of Anode Plane Assembly Detectors for the DUNE Far Detector MAXWELL HERRMANN, The University of Iowa, JAMES THOMPSON, COLE DORMAN, University of Iowa — An international consortium will commence construction of the first module of Fermilabs Deep Underground Neutrino Experiment (DUNE) Far Detector this year. The Anode Plane Assemblies (APAs) form the central component of the detector, instrumented with wire planes, photon detectors, and readout electronics. Prototype APAs have been constructed in the US at Physical Sciences Laboratory in Madison Wisconsin as well as in the U.K. Work is being done by University of Iowa students to estimate effects of alignment on electron transparency for the DUNE APA using the Garfield simulation program. The procedure for the construction and quality assurance of these large precision detectors, implementation in ProtoDUNE, and plans for construction of the full ensemble of APA detectors for the first two modules of the DUNE Far Detector will be presented.

Maxwell Herrmann
The University of Iowa

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