

Abstract Submitted
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Optimization of Pixel Sizes for Proton Alignment Monitor for DUNE at Fermilab MONICA AVILA, Presenter, JEAHOON YU, Supervisor, RONALD MUSSER, JOSHUA MEDFORD, ERIC AMADOR, GARRETT BROWN, SUSAN KEMBOI, ANIMESH CHATTERJEE, ELIZABETH MALORY, KIMBERLY NGUYEN, co-author, HIGH ENERGY PHYSICS GROUP OF UNIVERSITY OF TEXAS AT ARLINGTON COLLABORATION — The purposes of this study is to readout the energy spectrum of the neutrino beam and locate protons that hit the beam's target, this experiment is currently being monitored by Deep Underground Neutrino Experiment (DUNE). Focusing in, my role is to take a closer look at the Proton Beam Alignment Monitor (PBAM), which is located at the end of the neutrino beam. My study is to find the optimal parameters of the pixel size that will be used to read data in the PBAM. We begin by setting standard centimeter-by-centimeter parameters. The studies have shown that a pixel size under 10cm is optimal. In the future, the plan is to continue with the parameter study and to determine the overall best pixel size.

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