

Abstract Submitted
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The NEXT Experiment¹ KARLA SILVA², University of Texas at Arlington, RARE EVENT SEARCHES AND TECHNIQUES COLLABORATION³ — The Neutrino Experiment with a Xenon TPC is an experiment designed to develop high pressure xenon gas time projection chambers to search for neutrino less double beta decay of Xenon 136. The goal in creating these TPCs is to create both a greater energy resolution and greater discrimination of signal against the background noise. An optical TPC is being developed where a camera is introduced to capture images of the event. The images are stitched together to recreate an energy track, which in turn determines if a double beta decay occurred. This presentation will cover the basic concepts observed in xenon time projection chambers with an emphasis on the optical time projection chamber.

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