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Large Area Pico-second Photodetectors (LAPPD) in Liquid Argon¹ RANJAN DHARMAPALAN, Argonne National Laboratory, LAPPD COLLABORATION — The Large Area Pico-second Photodetector (LAPPD) project has recently produced the first working devices with a small form factor and pico-second timing resolution. A number of current and proposed neutrino and dark matter experiments use liquid argon as a detector medium. A flat photodetector with excellent timing resolution will help with background suppression and improve the overall sensitivity of the experiment. We present the research done and some preliminary results to customize the LAPPD devices to work in a cryogenic environment.

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