

Abstract Submitted  
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**Development of position and n/g discriminant neutron detector modules** DUSTIN SCRIVEN, Texas AM University Department of Physics and Astronomy, Cyclotron Institute, GREG CHRISTIAN, Saint Mary's University Department of Astronomy and Physics, Texas AM University Department of Physics and Astronomy, Cyclotron Institute, GRIGORY ROGACHEV, Texas AM University Department of Physics and Astronomy, Cyclotron Institute, CODY PARKER, Cyclotron Institute, LEE SOBOTKA, Washington University in St. Louis Department of Chemistry and Physics, TONY AHN, GRIGORY CHUBARIAN, SHUYA OTA, YEVGIN KOSHCHIY, Cyclotron Institute, ANTHONY THOMAS, Washington University in St. Louis Department of Chemistry and Physics, ERIC ABOUD, Texas AM University Department of Physics and Astronomy, Cyclotron Institute, JACK BISHOP, Cyclotron Institute — We present progress in the development of a neutron detector module made with p-terphenyl, a bright, fast, n/g discriminating solid organic scintillator. The module is comprised of medium sized p-terphenyl crystals that have been optically coupled together to create a pseudo-bar module. While only relying on two photo detectors the PB is capable of distinguishing interactions between six or more crystals. Furthermore, the module retains the p-terphenyl's pulse shape discrimination (PSD) capability. Here we present the characteristics of the module – the pulse shape and position discrimination, as well as the timing resolution, and briefly discuss future plans for these modules.

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