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Lithium Gadolinium Borate Scintillator for Low Flux Neutron Detection in Laboratory Nuclear Astrophysics JACOB A.J. SIEBACH, JOHN E. ELLSWORTH, LAWRENCE B. REES, Brigham Young University, Physics and Astronomy — Lithium gadolinium borate crystal embedded in a plastic scintillator promises to enhance low flux neutron detection through paired pulse scintillation. The signal from this detector contains an energy pulse and a capture gate pulse. We report here efforts to develop a method to recognize the neutron gate signal, extract energy information, and calibrate this new scintillator.

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