

Abstract Submitted  
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**Detailed characterization of low background  $\beta$ -delayed proton detector**<sup>1</sup> MOLLY JANASIK, MOSHE FRIEDMAN, TAMAS BUDNER, CHRIS WREDE, Michigan State Univ — In order to determine the rates of two important reactions for the astrophysical rapid proton (rp) capture process, a segmented, low background  $\beta$ -delayed proton detector has been built at NSCL. The detector is currently in the process of being optimized. A detailed characterization of the detector's Micromegas pad plane is being performed using measurements with a radioactive <sup>55</sup>Fe x-ray calibration source. A fitting routine has been developed to extract the energy resolution from the spectra. First results of detector resolution with P10 gas will be presented.

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