

Abstract Submitted  
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**Measurement of the  $^{25}\text{Al}(\text{d}, \text{n})^{26}\text{Si}(\text{p})$  reaction at RESOLUT: Spectroscopy of  $l = 0$  and  $l = 1$  resonances** JESSICA BAKER, INGO WIEDENHOVER, ALEXANDER ROJAS, LAGY BABY, SEAN KUVIN, PATRICK PELOWSKI, DANIEL SANTIAGO-GONZALEZ, Florida State University, GEORGIOS PERDIKAKIS, National Superconducting Cyclotron Laboratory, Michigan State University, DENNIS GAY, University of North Florida — Studies of rp-process nucleosynthesis in stellar explosions show that establishing the lowest  $l = 0$  and  $l = 1$  resonances is the most important step to determine reaction rates in the astrophysical  $rp$ -process path. In an experiment performed at the RESOLUT radioactive beam facility of Florida State University, we have studied the  $^{25}\text{Al}(\text{d}, \text{n})^{26}\text{Si}$  reaction in inverse kinematics to establish the spectrum of the lowest  $l = 0$  and  $l = 1$  resonances. The spectrum is consistent with a previous experiment using the same reaction at RESOLUT [1] and results obtained from recent stable beam experiments [2].

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