

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,
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versity, GEORGIOS PERDIKAKIS, NSCL, DENNIS GAY, University of North
Florida — Studies of rp-process nucleosynthesis in stellar explosions show that es-
tablishing 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. Recent results include neutron
coincidences from the newly developed neutron detector array RESONEUT.

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