Abstract Submitted
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Measurement of low-energy resonances in the ^{22}Ne(α,n)^{25}Mg Reaction[1] THOMAS KADLECEK, FRANK STRIEDER, South Dakota School of Mines Technology, DANIEL ROBERTSON, University of Notre Dame, MARK HANHARDT, TYLER BORGWARDT, South Dakota School of Mines Technology, MANOEL COUDER, MICHAEL WIESCHER, University of Notre Dame, CASPAR COLLABORATION — The ^{22}Ne(α,n)^{25}Mg reaction is a key neutron source for the slow neutron-capture process. The reaction rate at stellar energies is most likely dominated by a resonance at 832 keV which experimental strength determination carries a large uncertainty. Due to low resonance strengths at lower energies only upper limits have been previously determined for resonances below 832 keV. Recent measurements were completed for the strengths of those low-energy resonances. These measurements utilized the Compact Accelerator System for Performing Astrophysical Research (CASPAR), located on the 4850-feet level of the Sanford Underground Research Facility (SURF). Preliminary results will be presented.

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