Nuclear Physics in Astrophysics VIII



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7Li(a,g)11B: An update

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At the end of its life, a massive star collapses into a neutron star. The neutrino flux released during the collapse is so significant that the probability of a neutrino interacting with a nucleus is enhanced enough to have an influence on element nucleosynthesis [1]. The origins of light elements, specifically ^{11}B , is not fully understood. The ν -process has been proposed as a candidate for ^{11}B production [2]. Neutrino triggered reactions lead to the creation of ^{11}B , with the reaction $^{7}Li(\alpha,\gamma)^{11}B$ as a component of the main reaction chain. This reaction was recently studied at Notre Dame and the results of that measurement will be presented.

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