

UNIVERSITY OF NOTRE DAME
DEPARTMENT OF PHYSICS

NUCLEAR SEMINAR

Monday, April 9

Measurement of $7\text{Li}(\alpha,\gamma)11\text{B}$ cross section at Notre Dame

Gwenaëlle Gilardy

University of Notre Dame

At the end of its life, a massive star collapses into a neutron star leading to a supernovae explosion. The neutrino flux released during the collapse is so significant that the probability of neutrino interacting with nuclei can actually impact the nucleosynthesis. The ν -process has been proposed as a candidate for the production of 11B . Neutrino triggered reaction lead to the production of 11B via the reaction $7\text{Li}(\alpha,\gamma)11\text{B}$. Its cross section has been measured in 1967 and we have some evidence of it being a lower limit. $7\text{Li}(\alpha,\gamma)11\text{B}$ was recently studied at Notre Dame in the range of energy relevant to the ν -process and the result of this experiment will be presented.

4 pm – 5 pm
Nuclear Science
Laboratory
124 Nieuwland
Science Hall

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All interested  
persons are  
cordially invited  
to attend

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Refreshments will be
served prior to the
seminar in room 124