

UNIVERSITY OF NOTRE DAME
DEPARTMENT OF PHYSICS

NUCLEAR SEMINAR

Monday, February 13

Low energy magnetic radiation enhancement within the Nuclear Shell Model

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The γ -ray strength function (γ SF), the average strength of the γ transition, is an indispensable quantity for calculations of astrophysical interest. The resonances dominating the γ SF were assumed to be known, however, recent experiments have revealed an intriguing behavior of the γ SF. It was found that the γ SF has a characteristic upbend in the low γ -energy region, never observed before. This low-energy enhancement cannot be explained by the semiclassical models developed to describe the known resonances and its physical origin is not yet fully understood. We will be discussing the characteristics of the γ SF, as well as the steps done towards the better understanding of the mechanism which generates the characteristic upbend within the Nuclear Shell Model.

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