

UNIVERSITY OF NOTRE DAME  
DEPARTMENT OF PHYSICS

# NUCLEAR SEMINAR

Monday, February 19

## *Trapping at CARIBU: An overview of mass measurements with the Canadian Penning Trap*

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McGill University, Canada

Masses play a role in a variety nuclear physics applications. They are used to directly observe nuclear structure effects and serve as critical input into astrophysical models and calculations. Direct mass measurements using Penning traps have been the preferred method for both accuracy and precision over the past few decades, and as new RIB facilities turn on this trend will likely continue. The Canadian Penning Trap mass spectrometer is located in the CARIBU facility at Argonne National Laboratory where neutron-rich isotopes are produced from the spontaneous fission of Cf-252. I will discuss some recent upgrades which have improved the sensitivity of the experiment by a couple orders of magnitude allowing for new measurements of nuclei far from stability.

**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