

UNIVERSITY OF NOTRE DAME
DEPARTMENT OF PHYSICS

SPECIAL NUCLEAR SEMINAR

Thursday, May 11

Tricks and Traps: Low Energy Searches for High Energy Physics

Dr. Guy Gon
Hebrew University of Jerusalem, Israel

Trapped radioactive atoms and ions have become a standard tool of the trade for precision studies of beyond SM physics. β decay studies, in particular, offer the possibility of detecting deviations from standard model predictions of the weak interaction which signal new physics. These 'precision frontier' searches are complementary to the high energy searches performed by the LHC and other high energy/high luminosity facilities.

I will present a general overview of magneto-optical, optical traps, and electrostatic traps, and their use for weak interaction studies. I will further present the new Hebrew University trapping program (TRAPLAB), recent experimental results, and future plans.

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