

**Tuesday**

**Nov. 12<sup>th</sup>**

**At 3:45 pm**



**Tricks and Traps: Low Energy Searches  
for High Energy Physics**

**Abstract:**

Trapped radioactive atoms and ions have become a standard tool of the trade for precision studies of beyond SM physics.  $\beta$  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/Weizmann Institute/NRCN trapping program (TRAPLAB), recent experimental results, and future plans.

**CYCLOTRON  
COLLOQUIUM**

—

**Dr. Guy Ron**

—

**Associate  
Professor**

—

**Hebrew  
University of  
Jerusalem**

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**CYCLOTRON  
INSTITUTE**

Room 228

Refreshments will be  
served at 3:30 pm



**TEXAS A&M**  
UNIVERSITY