**LABORATORI NAZIONALI DEL GRAN SASSO**

# SEMINAR ANNOUNCEMENT

***Andrew Sonnenschein***
***(Fermilab)***

# *"Recent Results from COUPP"*

*Bubble chambers have emerged as promising detectors for Weakly Interacting Massive dark matter Particles (WIMPs). A very high degree of background discrimination can be achieved by tuning the thermodynamic parameters to avoid nucleation by electron recoils, while maintaining low nuclear-recoil thresholds. Nuclear recoils from WIMPs can be discriminated from alpha particle induced events by analysis of the acoustic pulses produced by the expanding bubbles. The COUPP collaboration operated a 4-kg CF3I bubble chamber at SNOLAB in 2010-2011 and is in the process of commissioning a 60-kg chamber. Recent runs demonstrate reduced alpha backgrounds and improved sensitivity to dark matter.*

## OCTOBER 10, 2011 – 2:30 PM
## LNGS - "PONTECORVO" ROOM