

Special
Day!

Special
Time!

LEPP Journal Club

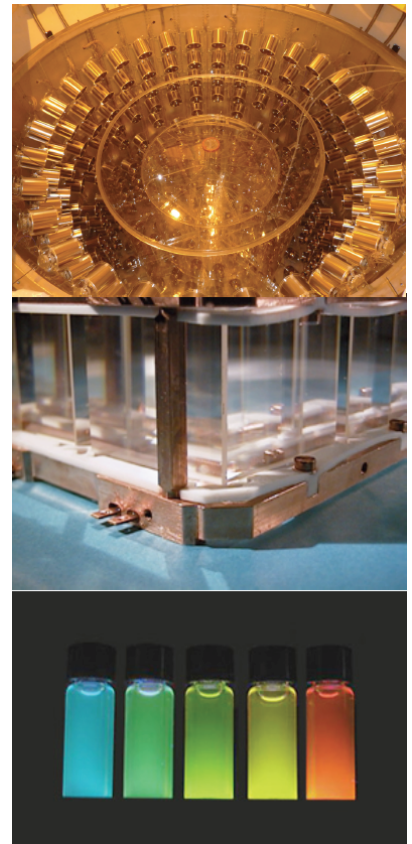
Tuesday, March 6, 2012. 3:30 pm (3:15 refreshments)
401 Physical Sciences Building



Lindley Winslow
Massachusetts Institute of Technology

Revolution: Neutrino Oscillation and Beyond

The once-massless neutrino may be the key to unlocking the mysteries of the physics at the GUT scale. The two main experimental questions are: what is the size of the CP violation in the neutrino sector? And is the neutrino Majorana: is it its own anti-particle? I will review the first results from Double Chooz and consider the global fits to oscillation parameters. Looking to the future, I will discuss the prospects for determining the Majorana nature of the neutrino with neutrino-less double beta decay. I will highlight two interesting technologies: CUORE, which uses TeO₂ crystals, & a new idea based on quantum dot nanotechnology.



LEPP, the Cornell University Laboratory for Elementary-Particle Physics, has joined with CHESSE to become the Cornell Laboratory for Accelerator-based Sciences and Education (CLASSE). LEPP's primary source of support is the National Science Foundation.

