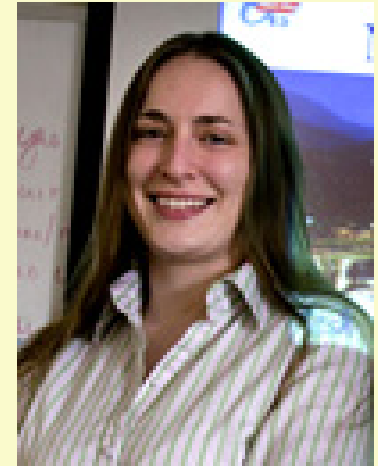


# CU Physics Department Particle Seminar

Wednesday, October 13, 2010 705 Pupin Hall 1:00 PM

## "Recent Results from MINOS"

The MINOS experiment records interactions of neutrinos produced by the Fermilab NuMI beam line in two detectors, 734 km apart. Comparisons of the energy spectra and beam composition at the two sites yield precision measurements of neutrino oscillations. In this talk, I will give an overview of the most recent results from MINOS. The measurement of the probability of muon-neutrino disappearance as a function of energy will be presented. I will report on the measurement of neutral current interaction rates in each detector, which enables a search for light neutrino families that do not couple via the weak interaction. The results from the search for electron-neutrino events in the Far Detector will be discussed. Finally, I will report on the dedicated anti-neutrino run, which allows for measurement of anti-neutrino oscillation parameters.



**LISA WHITEHEAD, BROOKHAVEN NATIONAL LABORATORY**