

Special Department of Physics Seminar

Thursday, September 30, 2010 • 4:00 P.M. • 2241 Chamberlin Hall cookies & coffee served at 3:30 p.m

Dark Matter Searches with DM-Ice and CUORE



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Observations from cosmology tell us that less than 4% of our Universe is comprised of ordinary visible matter, and that the rest is made of Dark Matter and Dark Energy. Much of our understanding of Dark Matter is inferred from astronomical and astrophysical observations. There are concerted efforts to study the properties of Dark Matter by directly observing its interaction in underground detectors. I will present two new efforts: DM-Ice, a sodium-iodide detector to be located in the Antarctic Ice at the South Pole, will search for the expected annual modulation of the Dark Matter signal. I will also discuss the potentialof CUORE as a Dark Matter experiment.