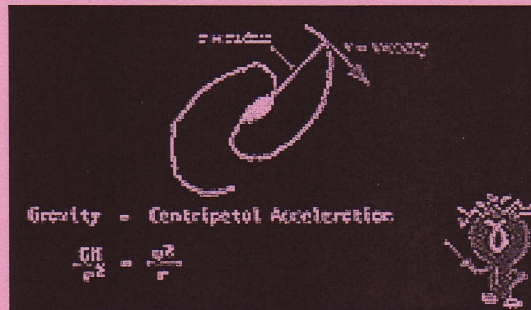


Physics Department Seminar

Friday April 5th, 2002

11:00am in PhSc 105

“The Cryogenic Dark Matter Search”



Dr. M. Scott Armel
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University of California, Berkeley

Abstract:

The Cryogenic Dark Matter Search (CDMS) employs crystal detectors and state-of-the-art superconducting technology to probe the possible interactions between galactic dark matter (WIMPs) and ordinary matter. The CDMS project is entering its most important phase of operation. After demonstrating its effectiveness at the Stanford Underground Facility, the experiment is now being installed in the Soudan Mine facility in Minnesota. The Stanford result itself was good enough to state a new exclusion limit on the scattering cross section between putative WIMPs and nucleons. Operation in the depths of the Soudan mine will diminish known backgrounds significantly allowing the experiment to probe into a regime of cross-sections which are very attractive theoretically.