

APR05-2005-000871

Abstract for an Invited Paper  
for the APR05 Meeting of  
the American Physical Society

### **Results from CDMS II**

RICHARD SCHNEE, Case Western Reserve University, CDMS COLLABORATION

The Cryogenic Dark Matter Search (CDMS II) employs low-temperature detectors to search for interactions of WIMPs while discriminating against interactions of background particles. In 2004 we completed the experiment's first two runs at the Soudan Underground Laboratory, for which the background from neutrons is negligible. For the first run, four Ge and two Si detectors were operated for 52.6 live days, resulting in the world's lowest exclusion limits on the coherent WIMP-nucleon scalar cross-section for all WIMP masses above 15 GeV, and ruling out a significant range of neutralino supersymmetric models. The second run included twice the number of detectors and lasted longer than the first, resulting in an exposure of approximately 100 kg days. A blind analysis was performed using only calibration data to define the energy threshold and selection criteria for WIMP candidates. Results of this second, most recent dataset will be presented and compared to previously published results. We will discuss the plans for future running and the projected sensitivity.