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Status of Direct Searches for Low Mass WIMPs

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The standard WIMP paradigm motivates us to search for relic dark matter in the form of an $O(100)$ GeV particle. Traditional direct detection experiments have thus been designed to search for WIMPs in the mass range of several 10's to 1000's of GeV. However, in past years there have been a series of direct detection experiments reporting excess events over background at the lowest recoil energies. The most recent of these is CDMS II, which reported 3 candidate Si recoils over an expected background of ~ 0.5 events. Taken at face value, these results seem to be hinting at a signal from a WIMP of mass ~ 10 GeV. At the same time, other direct detection experiments do not see a signal consistent with these findings. Reconciling these observations has been a high priority in both the experimental and theoretical communities for some time now. I will review the status of recent searches for light WIMPs. I will also discuss future experimental efforts, which aim to clarify this confusing yet exciting situation.

Primary author: HSU, Lauren (FNAL)

Presenter: HSU, Lauren (FNAL)

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