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The Status of the Search for Low Mass WIMPs: 2013

Using information from a recent dark matter symposium at Marina del Rey and from various publications in 2012 and 2013, we discuss the most recent evidence and constraints on low mass WIMPs. There are now five separate experimental limits on such WIMPs, including a new paper on the XENON100 225 day exposure. There are very different experimental methods with different backgrounds that comprise this limit. We speculate on the possible sources of the reported low mass WIMP signals and background. We present recent arguments concerning DAMA that show the possible DM claims are likely misleading. We discuss the new CDMS claims for a signal and question the very low ionization in these events. We also discuss an analysis of XENON 100 data that uses information theory that further excludes the CDMS results.

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