

# **Listening for Dark Matter**

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Most of the matter in the universe is of an unknown type that cosmologists call Dark Matter. It's very exciting for particle physicists because it seems it must be composed of a new fundamental particle, pointing to long-sought physics beyond the Standard Model. Depending on its properties there are different ways this particle may interact with ordinary matter, so several groups are using a variety of strategies to directly detect it. It requires an extremely "quiet" particle detector. SuperCDMS employs very cold germanium and silicon crystals instrumented with phonon sensors - essentially listening for the sound that would be produced by a Dark Matter particle.