

SuperCDMS

Detection with crystals

SuperCDMS uses silicon and germanium crystals to look for dark matter particles when they collide with the crystal molecules and create a vibration.

The crystals are kept at extremely low temperatures to reduce thermal noise created by the crystals themselves. SuperCDMS will operate at ~ 30 milliKelvin, 100 times colder than interstellar space.

Each of the germanium and silicon crystals (10 cm across) are sensitive to ultra-small energy deposits thanks to cutting edge readout technology.

