

Abstract Submitted
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Sub-GeV Dark Matter: Nuclear Recoil Search Strategies SCOTT HERTEL, Univ of Mass - Amherst — The direct detection of dark matter in the keV-MeV mass range via nuclear recoils is made difficult by the extremely small recoil energies involved: meV-eV. Such recoils are below the production threshold of standard signal quanta (ionization, scintillation, etc.), and bring us into a necessarily phonon-only detector regime. I will review various strategies and technologies in this nuclear recoil energy window, with some emphasis on superfluid 4He as a target mass.

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