

Contributions to “Prospects in Low Mass Dark Matter” Workshop

DARK MATTER [AND NEUTRINO] PHYSICS WITH SUB-KEV GERMANIUM DETECTORS

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Germanium detectors with sub-keV sensitivities[1] offer a unique opportunity to study neutrino interactions and properties [2] as well as to search for light WIMP Dark Matter[3]. The TEXONO and CDEX Collaborations has been pursuing this research program at the Kuo-Sheng Neutrino Laboratory (KSNL) in Taiwan and in the China Jinping Underground Laboratory (CJPL) in China. We will present highlights of the detector R&D program which allow us to experimental probe this new energy window. The results, status and plans of our dark matter program will be discussed.

[1] H. T. Wong et al., [J. Phys. Conf. Ser. **39**, 266 \(2006\)](#) ; H.B. Li et al., [Astropart. Phys. **56**, 1 \(2014\)](#) ; A.K. Soma et al., [arXiv:1411.4802 \(2014\)](#) .

[2] J.-W. Chen et al., [Phys. Rev. **D 90**, 011301\(R\) \(2014\)](#) ; J.-W. Chen et al., [Phys.Rev. **D 91**,013005 \(2015\)](#).

[3] H.B. Li et al, [Phys. Rev. Lett. **110**, 261301 \(2013\)](#) ; Q. Yue et al., [Phys. Rev. **D 90**, 091701\(R\) \(2014\)](#) ; S.K. Liu et al., [Phys. Rev. **D 90**, 032003 \(2014\)](#).

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