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## Probing New Physics with Germanium Detectors having sub-keV Sensitivity

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Evidence of finite neutrino masses and cosmological dark matter both imply the necessity of physics beyond Standard Model, and triggered intensive and diverse theoretical and experimental research programs. Germanium ionization detectors with their low threshold and excellent energy resolution are particularly suited to pursue such studies where the final state measurables are nuclear recoils or atomic transitions. The TEXONO Collaboration has been performing studies on low-energy neutrino ( $\nu$ ) physics at the Kuo-Sheng Neutrino Laboratory (KSNL) in Taiwan [1] and, as participant to the CDEX program, light WIMP ( $\chi$ ) searches in the China Jinping Underground Laboratory (CJPL) in China [2] with Ge-ionization detectors, supported by theoretical studies on atomic effects to  $\nu/\chi$  interactions [3]. We will present an overview of the research efforts, with highlights on the new direct constraints on millicharged particles [4] and light- $\chi$  searches [5].

### References

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### Collaboration name

TEXONO

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