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New Approaches to Very Low-energyCalibration of Cryogenic Detectors

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The search for dark matter candidates using solid crystals operated at cryogenic temperatures, push towards a lower energy threshold at each development stages for the detectors. Consequently, new approaches for detector calibration at the proposed energy scales are necessary. In the case of SuperCDMS SNOLAB, energy thresholds in the range of few eVs are expected. In this talk, we are presenting new approaches for the calibration of cryogenic detectors in eV energy range, using LEDs of various wavelengths operated at cryogenic temperatures. In addition, we will present the design of a low-energy electron source for calibration in the same energy range.

Less than 5 years of experience since completion of Ph.D

Y

Student (Ph.D., M.Sc. or B.Sc.)

Y

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