

Latest Results and Future Directions of CRESST

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The CRESST experiment (Cryogenic Rare Event Search with Superconducting Thermometers) focuses on detecting dark matter particles scatter off nuclei in cryogenic detectors using different materials such as CaWO_4 , Al_2O_3 , LiAlO_2 , and Si. Capable of identifying nuclear recoils with detection thresholds as low as 10 eV, CRESST is highly effective in the pursuit of low mass dark matter particles. The latest results from CRESST-III in the dark matter search are presented in this talk. It also addresses the observation of an unexplained event population at very low energy levels, known as the “low energy excess,” which compromises the sensitivity of many low mass dark matter detection experiments. Additionally, the talk outlines future directions for the CRESST experiment.

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