

Status and new results of the CRESST Experiment

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The CRESST-III (Cryogenic Rare Event Search with Superconducting Thermometers) experiment is looking for the direct detection of dark matter particles via their scattering off target nuclei in cryogenic detectors, operated at mK temperatures. Energy thresholds of less than 100 eV allow for the search of sub-GeV dark matter masses, making CRESST one of the leading experiments in low-mass DM searches. At low energies (< 200 eV) an unexpected rise of events is observed, limiting the sensitivity of CRESST. The current data-taking campaign is fully dedicated to study the origin of this “Low Energy Excess” (LEE). We present an overview of the CRESST-III experiment and report on both, new DM results and recent observations concerning the LEE. Furthermore, we give an update on R&D and plans for the CRESST upgrade.

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