

Current status of the CRESST experiment

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Summary

CRESST is a cryogenic experiment directly searching for dark matter interactions using scintillating CaWO_4 crystals. The previous CRESST-II phase² established leading limits on the spin-independent dark matter-nucleon cross section down to masses for the dark matter particle candidate below $1 \text{ GeV}/c^2$.

We report the status of the current CRESST-III phase¹ which started this spring. It operates an upgraded detector set-up with enhanced sensitivity for low-mass dark matter due to a reduced detection threshold for nuclear recoils. The improvements in detector design and crystal production will be discussed. In addition, we will give an outlook on the potential of the next CRESST-III phase².

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