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# Holger Kluck (HEPHY, Vienna): Search for low-mass dark matter with the CRESST-III experiment

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The third stage of the *Cryogenic Rare Event Search with Superconducting Thermometers* (CRESST-III) searches directly for interactions of dark matter with ordinary matter
at the *Laboratori Nazionali del Gran Sasso* (LNGS) in Italy. The detector targets of CRESST-III are CaWO_4 crystals which are operated as cryogenic calorimeters at O(10)mK. The main event signature for a potential dark matter interaction would be a nuclear recoil inside one of the targets. The simultaneous readout of both a phonon and a scintillation light signal is used to discriminate backgrounds.

Starting with the CRESST-II results in 2014, CRESST is leading the field below 1.7 GeV/cˆ2: The global exclusion limits for spin-independent dark matter-nucleus scattering were extended by CRESST down to the O(100)MeV scale for the first time.

In this contribution we will report the status of the current stage of the experiment, CRESST-III phase 1, discuss the latest results, and give an outlook to future stages of CRESST.

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