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Bernhard Siebenborn (Karlsruhe Inst. of Technology (KIT)): Results from the EDELWEISS-III Dark Matter search, prospects for EDELWEISS-LT and beyond

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EDELWEISS is a phased direct Dark Matter search program looking for WIMPs in the GeV-TeV mass range with cryogenic Ge mono-crystals. The simultaneous measurement of heat via thermal sensors (NTDs) and ionization signals allows for discrimination of nuclear against electron recoils. We present our results of the first stage of EDELWEISS-III and discuss the currently ongoing R&D approaches and measurements to further improve the experiment's sensitivity to smaller WIMP masses by utilizing the Neganov-Trofimov-Luke effect in EDELWEISS-LT. The timeline and the anticipated sensitivity will be presented together with an outlook beyond EDELWEISS-LT.

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