

Status and prospects of the EDELWEISS direct WIMP search experiment

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The EDELWEISS collaboration performs a direct search for WIMP dark matter with an array of heat-and-ionization cryogenic detectors equipped with Inter-Digit electrodes on all the surfaces for the rejection of near-surface events.

The experiment and the FID (Full Inter-Digit) detectors are described.

We report preliminary results of EDELWEISS-III. Upgrades to the detectors and the electronics enhance the background discrimination and the low energy sensitivity with respect to EDELWEISS-II and allow to probe the low mass region down to 5 GeV/c².

Expected results with the full exposure of the twenty-four 800g detectors of the EDELWEISS-III experiment and prospects for the R&D to increase the sensitivity to very low mass Wimps ($M_w < 5$ GeV) are discussed.

