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SubGeV Dark Matter searches with EDELWEISS

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The EDELWEISS collaboration is performing direct searches for light Dark Matter particles using cryogenic germanium detectors equipped with a charge and thermal signal readout. This versatile and highly performing technology opens new possibilities for searches for signals in the subGeV region, involving either electrons or nuclear recoils. This is attested to by results on Axion-Like Particles in the keV range, and by the attainment of the first sub-GeV spin-independent dark matter limit based on a germanium target. The search has been extended to Strongly Interacting Particles (SIMP) down to 45 MeV by exploiting the Migdal effect. New results on SIMPs with spin-dependent interactions will also be presented. Future developments will be discussed.

Less than 5 years of experience since completion of Ph.D

N

Student (Ph.D., M.Sc. or B.Sc.)

N

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