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Low-mass WIMP search with the EDELWEISS experiment

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EDELWEISS is an experiment dedicated to direct dark matter searches using high-purity germanium detectors equipped with a full charge and thermal signal readout. The detectors are operated at 18 mK in the underground laboratory of Modane, in the Frejus tunnel. Recent results on the spin-independent WIMP-nucleon cross-section for WIMP masses below 30 GeV for a fiducial exposure of 582kg.day will be shown. In addition, we present a measurement of the cosmogenic activation of tritium in germanium detectors, an important background to consider in searches for low-mass WIMPs. Technical developments to explore the region from 1 to 20 GeV will be presented as well.

Author's Name

E.Queguiner, for the EDELWEISS collaboration

Author's Institute

IPNL

Author's e-mail

queguiner@ipnl.in2p3.fr

Abstract Title

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Subject

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Authors: QUEGUINER, Emeline (IPNL-Université Lyon 1); FOR THE EDELWEISS COLLABORATION

Presenter: QUEGUINER, Emeline (IPNL-Université Lyon 1)

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