

Abstract Submitted  
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**Latest Results from the EDELWEISS Dark Matter Experiment**

G. ADAM COX, Karlsruhe Institute for Technology, EDELWEISS COLLABORATION — The EDELWEISS experiment utilizes an array of cryogenic Germanium bolometers to search for observations of recoiling nuclei due to the scattering of exotic particles. Under the assumption that these exotic particles are the weakly interacting massive particles (WIMPs) that constitute the Dark Matter halo in our galaxy, upper limits have been placed on their interaction cross-section and mass. Since 2007, EDELWEISS has been taking data in the underground laboratory, LSM, in Modane, France, which has a 4800 m.w.e. rock overburden. Analysis of data from 2009 and 2010 using 400-g Ge detectors set an upper limit on the spin-independent cross-section of  $5 \times 10^{-44} \text{ cm}^2$  for an 80-GeV WIMP, among the world leading results and comparable to limits achieved by CDMS and XENON100. Recently, 800-g bolometers have been installed and are acquiring data. These bolometers were constructed with the most recent iteration of the “interdigitized” electrode design. This newer design produces a significantly larger fiducial volume while maintaining the excellent  $\beta$ - and  $\gamma$ -rejection properties of the original design. The status of the experiment and the latest analysis results will be discussed.

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