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## Overview of DAMIC and its upgrade DAMIC-M

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The DAMIC experiment at SNOLAB uses thick, fully-depleted, scientific grade charge-coupled devices (CCDs) to search for the interactions between proposed dark matter particles in the galactic halo and the ordinary silicon atoms in the detector. DAMIC CCDs operate with an extremely low instrument noise and dark current, making them particularly sensitive to ionization signals expected from low-mass dark matter particles. For the past two years, DAMIC has collected dark-matter search data with an array of seven CCDs (40-gram target) installed in a low radiation environment in the SNOLAB underground laboratory. This talk will focus on the recent dark matter search results from DAMIC. We will present the search methodology and results from an 11 kg day exposure WIMP search, including the strictest limit on the WIMP-nucleon cross section for a silicon target for  $m_{\chi} < 9 \text{ GeV } c^{-2}$ . Additionally, We will present the upgrade of this detector, a kg-size detector will be installed at the Laboratoire Souterrain de Modane in France. DAMIC-M (DAMIC at Modane) will combine the excellent understanding of CCD backgrounds from DAMIC at SNOLAB with ongoing developments in the single-electron resolution of Skipper amplifiers to provide unprecedented sensitivity to light dark matter particles. The DAMIC-M program takes advantage of the unparalleled capability to reject events from radioactivity in the CCDs by exploiting spatial coincidences within a decay chain over timescales as long as months. This, combined with aggressive controls over detector design and material selection, will allow DAMIC-M to probe new models of light dark matter.

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