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DAMIC results and future plans

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DAMIC is a direct detection dark matter experiment using thick silicon CCDs as target and sensor.
This technique is sensitive to nuclear recoil induced by the interaction of low mass WIMP on the target nucleus thanks to the silicon crystal characteristics and low noise readout capabilities.
DAMIC is installed at SNOLAB and has set limits on WIMP-nucleon cross section between 1 and 20 Gev/c^2 with a detector of 9 grams cumulating an exposure of 0.6 kg.day.
After explaining the functioning and the advantages of the technique we will review the performances and results of the DAMIC detector and the status of the current upgrade to DAMIC100. We will also focus on the challenges and the potential of a prospective versions of a kg scale detector.

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Classification de Session: Dark Matter & Axions

Classification de thématique: Experiment