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## **Alvaro Chavarria (U. of Washington): First results from the full CCD array of DAMIC at SNOLAB**

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Millimeter-thick charge-coupled devices (CCDs) are outstanding particle detectors. Although initially developed for near-infrared astronomy, the low pixel noise also makes them the most sensitive detectors to signals from ionizing radiation. By virtue of their very low energy threshold ( $<100$  eV of ionizing energy) and their unique capabilities for background characterization based on their high spatial resolution, CCDs are poised to become the leading technology in the search for a wide variety of dark matter candidates with masses in the range 1 eV–10 GeV. I will present the first results from the completed seven-CCD array of DAMIC at SNOLAB. Sensitivity to WIMP-nucleus elastic scattering has been significantly improved thanks to the increased exposure, lower noise and lower radioactive backgrounds of the final detector configuration. I will also discuss the recent progress toward DAMIC-1K, a lower-background 1-kg CCD dark matter detector with an ionization threshold of 2 electrons.

**Presenter:** Prof. CHAVARRIA, Alvaro (University of Washington)

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