## 2019 Meeting of the Division of Particles & Fields of the American Physical Society



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## Direct detection limits on sub-GeV Dark Matter from the DAMIC@Snolab experiment

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We present direct detection constraints on sub-GeV dark matter interacting with electrons using the DAMIC@Snolab experiment –which utilizes high resistivity, scientific grade CCDs to image ionization deposits produced by particle interactions within the devices. Using a relatively novel methodology of placing constraints based on leakage current, we report preliminary limits probing new parameter space for dark matter-electron scattering for masses roughly between 0.6 MeV  $c^{-2}$  to 5 MeV  $c^{-2}$ , along with limits on the flux of Lightly Ionizing Particles from fractional charge  $e^-/30$  to  $e^-/10000$  using a similar analysis.

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