

DAMIC - Dark Matter In CCD: Looking for Dark Matter with CCDs

Friday, 20 July 2018 14:00 (15 minutes)

DAMIC for Dark Matter in CCDs, will search for dark matter particle interaction with silicon CCDs. The experiment takes place at SNOLAB where 8 CCDs are used. We measure the energy spectrum of ionization events in the bulk silicon of charge-coupled devices down to a signal of 60 eV electron equivalent. Thus it's necessary to measure and understand our background noise. I will give an introduction on the DAMIC experiment (pros and cons of the CCDs, Dark Matter Particles). Then I will give a presentation of the different works produced to evaluate the background noise (Geant4 simulations, Analysis of the data).

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