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Charge Transport Studies in SuperCDMS Detectors ARRAN PHIPPS, University of California, Berkeley, KYLE SUNDQVIST, Universtiy of California, Berkeley, ALBERT LAM, BERNARD SADOULET, University of California, Berkeley — We present an overview of charge transport in CDMS (Cryogenic Dark Matter Search) germanium detectors. Complete charge collection is necessary to correctly distinguish between electron and nuclear recoils, however carrier transport under the CDMS operating regime of low temperature ($\sim$40mK) and low field ($\sim$V/cm) is poorly understood. We discuss our current understanding of carrier dynamics and how this translates into the observed detector response. Our theory is compared to direct measurements of transport properties we performed on SuperCDMS detectors.

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