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Magnetoresistance in Graphite: Do Dirac Fermions play a role? HRIDIS PAL, DMITRII MASLOV, University of Florida — We calculate the dependence of basal transverse magnetoresistance in graphite (H parallel to the c axis) on magnetic field and find a regime where this dependence is linear in field. The linearity is attributed to the presence of extremely light carriers near the H points of the Brillouin zone. We also explore theoretically quantum oscillations in conductivity and examine if the presence of Dirac fermions near the H points can have any signature in these oscillations.

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