Title:	Type-II Dirac semimetal candidates ATe2 (A= Pt, Pd): A de Haas-van Alphen study
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Abstract:	We report on a magnetotransport and quantum oscillations study on high quality single crystals of the transition metal di-tellurides PtTe2 and PdTe2. The de Haas-van Alphen (dHvA) oscillations in the magnetization measurements on PtTe2 reveal a complicated, anisotropic band structure characterized by low effective masses and high mobilities for the carriers. Extracted transport parameters for PtTe2 reveal a strong anisotropy which might be related to the tilted nature of the Dirac cone. Using a Landau level fan diagram analysis we find at least one Fermi surface orbit with a Berry phase of π consistent with Dirac electrons for both PtTe2 and PdTe2. The light effective mass and high mobility are also consistent with Dirac electrons in PtTe2. Our results therefore suggest that similar to PdTe2, PtTe2 might also be a three-dimensional Dirac semimetal.
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