Abstract Submitted
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Origin of bulk quantum oscillations in the bulk Kondo insulating ground state of SmB_6 SUCHITRA SEBASTIAN, B. S. TAN, Y.-T. HSU, University of Cambridge, B. ZENG, NHMFL, M. CIOMAGA HATNEAN, University of Warwick, N. HARRISON, Z. ZHU, LANL, M. HARTSTEIN, M. KIOURLAPPOU, M. SRIVASTAVA, University of Cambridge, M. D. JOHANNES, Naval Research Laboratory, T. P. MURPHY, J.-H. PARK, L. BALICAS, NHMFL, N. SHITSEVALOVA, National Academy of Sciences of Ukraine, G. G. LONZARICH, University of Cambridge, G. BALAKRISHNAN, University of Warwick — I will discuss our recent observation of quantum oscillations corresponding to a bulk Fermi surface in the Kondo insulator SmB_6, and consider their possible origin. New complementary experimental results will be presented which raise the interesting question of whether the underlying ground state corresponds to a novel Kondo regime in which the spin channel is gapless while the charge channel is gapped.

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