

Abstract Submitted
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Signature of Hidden Order in URu₂Si₂ in the c-axis Optical Conductivity JESSE HALL, SARAH PURDY, TRAVIS WILLIAMS, GRAEME LUKE, THOMAS TIMUSK, McMaster University, TOOMAS RÕÕM, TAANIEL ULEKSIN, URMAS NAGEL, Natl. Inst. of Chem Phys & Biophys., Tallinn, Estonia, RICARDO LOBO, ESPCI-Paris-Tech, Paris France — We present high quality c-axis far infrared optical data for the heavy fermion compound URu₂Si₂. In particular, we compare the signature of the as yet poorly understood 'hidden order' state along the a- and c-axes of the tetragonal structure. The results presented here demonstrate the presence of the hidden order in the ac plane along the c- direction, although there is a very pronounced difference from the absorption at 5 meV seen along the a-axis. We present an assessment of the nature and significance of the a-c anisotropy of the hidden order signature.

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