

Abstract Submitted
for the MAR16 Meeting of
The American Physical Society

Metamagnetism and Quantum Acoustic Oscillations in UPt_3 :¹ V.

ULRICH, B SHIVARAM, Univ of Virginia — We present results of high resolution sound velocity measurements performed at the NHMFL, Tallahassee, in magnetic fields upto 33 T in a dilution refrigerator at temperatures down to 35 mK. For magnetic field parallel to the basal plane the observed quantum acoustic oscillations show a change in frequency as expected at the metamagnetic transition of 20 T. However, we find a similar abrupt change in frequency at 25 T for magnetic field parallel to the c-axis. The implications of this fermi surface instability even though there is no metamagnetic transition in this orientation will be discussed.

¹Work at the University of Virginia was supported through NSF DMR-0073456 and the NHMFL is supported by NSF and the State of Florida.

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Date submitted: 06 Nov 2015

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