

Abstract Submitted  
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**Quantum criticality in high temperature superconducting cuprates** ARKADY SHEKHTER, BRAD RAMSHAW, ROSS MCDONALD, JON B. BETTS, FEDOR BALAKIREV, Pulsed Field Facility, NHMFL, LANL, Los Alamos, NM, SCOTT RIGGS, Stanford University, Palo Alto, CA, RUIXING LIANG, DOUG BONN, WALTER HARDY, University of British Columbia, Vancouver, Canada, ALBERT MIGLIORI, Pulsed Field Facility, NHMFL, LANL, Los Alamos, NM, MAGNET LAB COLLABORATION, UBC COLLABORATION — Anomalous transport behavior in near-optimally-doped high temperature superconducting cuprates has been linked to fluctuations associated with a quantum critical point. Using resonant ultrasound spectroscopy we find evidence for a phase boundary inside the superconducting dome in the temperature-doping phase diagram of YBCO cuprates. This suggests a quantum critical point near optimal doping that is hidden by superconductivity.

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