Abstract Submitted
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Evolution of the Fermi Surface of Chromium at High Pressure and High Magnetic Fields RYAN STILLWELL, National High Magnetic Field Laboratory/FSU, DAVID GRAF, WILLIAM CONIGLIO, TIMOTHY MURPHY, ERIC PALM, JU-HYUN PARK, National High Magnetic Field Laboratory, PEDRO SCHLOTTMANN, JEFFREY WHALEN, RAFAEL VASQUEZ, THEO SIEGRIST, National High Magnetic Field Laboratory/FSU, STANLEY TOZER, National High Magnetic Field Laboratory — Results on the pressure dependence of the Fermi surface of chromium will be presented. Employing plastic turnbuckle diamond anvil pressure cells in pulsed magnetic fields and metal diamond anvil cells in DC magnetic fields, skin depth measurements of chromium were made at low temperatures which yielded Shubnikov-de Haas oscillations. By performing in situ rotations of the pressure cell we are able to map out the Fermi surfaces as we move towards the quantum critical point at which the antiferromagnetic phase is suppressed.

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