

Abstract Submitted
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Fulde-Ferrell-Larkin-Ovchinnikov state in d-wave superconductivity K. MAKI, Dept. of Physics and Astronomy, University of Southern California, Los Angeles, CA 90089-0484, USA , H. WON, Dept. of Physics, Hallym University, Chuncheon 200-702, Korea , F. WEICKERT, P. GEGENWART, Max Planck Institute for CPFS, D-01187 Dresden, Germany — Within the BCS theory of d-wave superconductivity we have analysed $H_{c2}(t, \phi)$ for \mathbf{H} parallel to the a-b plane in a heavy fermion superconductor CeCoIn_5 . We describe both the angle dependence and the temperature dependence, though the present theory predict the second order phase transition at $H = H_{c2}$. Also we obtain the local quasiparticle density of states $G(\mathbf{r}, E)$ in the vicinity of $H = H_{c2}(t, \phi)$, which can be tested by STM and NMR for example.

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