

Abstract Submitted  
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**Nature of the superconducting state of CeCoIn<sub>5</sub> as revealed by NMR.** GEORGIOS KOUTROULAKIS, VESNA MITROVIC, MARC-ANDRÉ VACHON, Brown University, MLADEN HORVATIC, CLAUDE BERTHIER, GHMFL, GEORG KNEBEL, GERARD LAPERTOT, JACQUES FLOUQUET, SPSMS — We report low temperature nuclear magnetic resonance (NMR) measurements of the heavy-fermion superconductor CeCoIn<sub>5</sub> in high magnetic fields. The effect of the RF penetration on the NMR spectrum for the different parts of the phase diagram is studied. The implications of this study for the nature of a possible inhomogeneous superconducting state, the Fulde-Ferrell-Larkin-Ovchinnikov (FFLO) state, are discussed.

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