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**Electronic Tuning in CeCoIn<sub>5</sub>** K. GOFRYK, F. RONNING, J.-X. ZHU, M.N. OU, P.H. TOBASH, X. LU, E.D. BAUER, J.D. THOMPSON, Los Alamos National Lab., S.S. STOYKO, A. MAR, Department of Chemistry, University of Alberta, Canada, T. PARK, Sungkyunkwan University, South Korea, Z. FISK, University of California, Irvine — We report a globally reversible effect of electronic tuning on the magnetic phase diagram in CeCoIn<sub>5</sub> driven by electron (Pt and Sn) and hole (Cd, Hg) doping. Consequently, we are able to extract the superconducting pair breaking component for hole and electron dopants with pressure and codoping studies, respectively. We find that these nominally nonmagnetic dopants have a remarkably weak pair breaking effect for a *d*-wave superconductor. The pair breaking is weaker for hole dopants, which induce magnetic moments, than for electron dopants. Furthermore, both Pt and Sn doping have a similar effect on superconductivity despite being on different dopant sites, arguing against the notion that superconductivity lives predominantly in the CeIn<sub>3</sub> planes of these materials. In addition, we shed qualitative understanding on the doping dependence with density functional theory calculations.

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