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**Anomalous upper critical field in CeCoIn<sub>5</sub>/YbCoIn<sub>5</sub> superlattices with a Rashba-type heavy fermion interface** MASA AKI SHIMOZAWA, Department of Physics, Kyoto University, S.K. GOH, Cavendish Laboratory, University of Cambridge, Y. MIZUKAMI, H. SHISHIDO, D. WATANABE, S. YASUMOTO, M. YAMASHITA, Department of Physics, Kyoto University, T. TERASHIMA, Research Center for Low Temperature and Materials Science, Kyoto University, Y. YANASE, T. SHIBAUCH, Department of Physics, Kyoto University, A.I. BUZDIN, Universite Bordeaux I, LOMA, Y. MATSUDA, Department of Physics, Kyoto University — We report the precise angular dependence of the upper critical field ( $H_{c2}$ ) in the epitaxial superlattices CeCoIn<sub>5</sub>( $n$ )/YbCoIn<sub>5</sub>(5), formed by alternating layers of  $n$  and 5 unit-cells thick CeCoIn<sub>5</sub> with a strong Pauli effect and normal metal YbCoIn<sub>5</sub>, respectively [1]. For the  $n = 3$  superlattice,  $H_{c2}(\theta)$  changes smoothly as a function of the field angle  $\theta$ . However, near the superconducting transition temperature,  $H_{c2}(\theta)$  shows a cusp near the angle parallel to the plane of the superlattice. This cusp behavior disappears for  $n = 4$  and 5. This sudden disappearance suggests the relative dominance of the orbital depairing effect in the  $n = 3$  superlattice, which may be due to the suppression of the Pauli effect in a system with local inversion symmetry breaking [2].

[1] Y. Mizukami *et al.*, Nature Phys. **7**, 849 (2011).

[2] S. K. Goh *et al.*, Phys. Rev. Lett. **109**, 157006 (2012).

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