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Magnetic penetration depth in noncentrosymmetric Re_3W YURI ZUEV, Oak Ridge Nat'l Lab, VALENTINA KUZNETSOVA, JAMES THOMPSON, University of Tennessee, DAVID CHRISTEN, Oak Ridge National Lab — The magnetic penetration depth is one of the most fundamental characteristics of a superconductor. We report measurements of temperature dependence of the penetration depth λ in Re_3W- a superconductor without inversion symmetry. The penetration depth was extracted from dc magnetic susceptibility, measured on aligned quenched powder in epoxy using a SQUID magnetometer. At present, based on the low-temperature behavior of the superfluid density $1/\lambda^2$, we see no evidence of unconventional behavior, i.e we see a fully-gapped state. Higher resolution data at low temperatures are needed to decide the case. ORNL is managed by UT-Battelle, LLC for USDOE under contract DE-AC05-00OR22725

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