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HL 5 Pressure Dependence of the Ferromagnetic Curie Temperature in Single Crystal EuB₆. C. N. GUY⁺, S. VON MOLNAR, J. ETOURNEAU⁺⁺, IBM T. J. Watson Res. Cntr., Yorktown Heights, NY 10598 and Z. FISK, U.C. San Diego, La Jolla, CA 92093-- We report a large positive pressure dependence of the magnetic ordering temperature, T_c , with $\Delta T_c / (T_c \Delta P) \sim 4 \times 10^{-2} \text{kbar}^{-1}$, obtained using a SQUID magnetometer with a pressure cell similar to that of Wohleben and Maple¹. This value is larger than comparable results for, e.g. doped Eu-chalcogenides². We also demonstrate that the indirect exchange mechanism applicable in the case of Eu-chalcogenides³ is insufficient to account for the magnitude of that pressure shift.

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