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The Anomalous Hall Effect in Ultra-Thin Amorphous CNi₃ Films¹ YIMIN XIONG, PHILIP ADAMS, Department of Physics and Astronomy, Louisiana State University, Baton Rouge, LA 70803-4001 — We present anomalous Hall effect(AHE) measurements in ultra-thin CNi₃ films. Films with sheet resistances in the range $R \ll R_Q$ to $R \sim R_Q$ were studied in fields up to 9 T and temperatures down to 2 K. We find that in addition to scattering processes, the AHE in high resistance films is strongly influenced by disorder-enhanced electron-electron interaction effects.

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