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Edgemagnetoplasmons in a partially screened two-dimensional electron gas[1] A.J. DAHM, Case Western Reserve University, M.I. GOKSU, Truman State University, MOKYANG R. KIM, Californmia State University-Dominguez Hills, K.A. MANTEY, University of Illinois — We report a study of edgemagnetoplasmons in a partially-screened system of electrons on a helium surface. We compare experimental results with theories of Fetter and of Mikhailov and Volkov on the frequency, damping, and penetration-depth dependence on magnetic field, temperature-dependent damping, and the dependence of the frequency on screening. We show explicitly the dependence of frequency on edge density profile.

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