Abstract Submitted
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Partially Screened Edgemagnetoplasmons MEHMET GOKSU, Millersville University — We present a study of edgemagnetoplasmons in a partially-screened system of electrons on a helium surface. We compare experiment results with Fetter's theory fits the mode frequency versus field and screening parameter for small magnetic fields. Fetter's theory fits the mode frequency versus field and screening parameter for small magnetic fields. Deviations at larger fields occur near the point where the penetration length becomes shorter than the width of the density profile at the sample perimeter. At larger fields, the mode frequencies are in reasonable agreement with the theoretical predictions of Volkov and Mikhailov. The linewidths are in fair qualitative agreement with their theory.

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