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Characterization of two-dimensional elliptical complex plasma K.D. WELLS, T.E. SHERIDAN, Ohio Northern University — An elliptical complex plasma is a system of n particles with the same charge q and mass m confined in a two-dimensional anisotropic well. Particles interact through a screened Coulomb potential with a Debye length λ . An elliptical complex plasma has been created experimentally using a rectangular aperture (17.5 mm \times 30.2 mm) placed on a flat electrode to create an anisotropic parabolic well. Measured properties of this system will be compared with computed configurations and normal modes.

Terrence Sheridan Ohio Northern University

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