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Preliminary investigation of a plasma sheath using dust THOMAS E. STEINBERGER, W.L. THEISEN, T.E. SHERIDAN, Ohio Northern University — The plasma sheath is the boundary layer that separates a plasma from a material surface. Dust particles in a plasma typically acquire a negative charge and float at the edge of the plasma sheath. The charge on dust in a two-particle cluster can be found from normal mode analysis. The electric field and field gradient can then be determined at the particles' positions. Preliminary results from the Dusty O.N.U. experimenT (D.ONU.T) will be presented.

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