

Abstract Submitted
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Nonlinear motion of Supersonic Dust particles in Complex Plasmas WILLIAM THEISEN, Ohio Northern University — A strongly-coupled dusty plasma disk consisting of electrically charged microspheres was arranged in a hexagonal lattice in a horizontal plane and levitated in a parabolic potential well. Dust particles traveling at supersonic velocities below the two dimensional Coulomb crystal were studied. Trajectory plots of one, two and three supersonic particles were analyzed using common nonlinear techniques.

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