Abstract Submitted for the OSS12 Meeting of The American Physical Society

Longitudinal Waves in Strongly Coupled Two-ring Dust Chains

W.L. THEISEN, T.E. SHERIDAN, Ohio Northern University — A strongly coupled two-ring dust chain of micron sized particles is created experimentally in an R-F generated plasma. The two rings with different radii are confined in a circular potential well and longitudinal dust lattice waves are transmitted along the chain. The dispersion relation is measured and compared to theory.

W. L. Theisen Ohio Northern University

Date submitted: 16 Mar 2012

Electronic form version 1.4