Abstract Submitted for the DAMOP05 Meeting of The American Physical Society

Kinetic Energy oscillations in ultracold plasma SAMPAD LAHA, Rice University, Y.C. CHEN, Institute of Atomic and Molecular Sciences Academia Sinica, P. GUPTA, Y.N. MARTINEZ, P.G. MICKELSON, S.B. NAGEL, A.D. SAENZ, C.E. SIMIEN, T.C. KILLIAN, Rice University — After imaging ultracold Sr plasma using 422 nm light, we investigate temporal and spatial variation of kinetic energy of the ions before it has reached global thermal equilibrium. The spatial resolution of our imaging system allows us to probe the annular regions of the plasma and it is found that kinetic energy of the ions undergoes damped oscillations before reaching global thermal equilibrium.

> Sampad Laha Rice University

Date submitted: 28 Jan 2005

Electronic form version 1.4