## Mahadevan Ganesh A fast iterative algorithm for simulation of wave interactions between large number of 3D particles

Department of Applied Mathematics Statistics
Colorado School of Mines
Golden
CO 80401
mganesh@mines.edu
Stuart Hawkins

We discuss a fast and memory efficient scheme for simulating the wave interactions between large numbers of particles. This is crucial for iteratively computing a time harmonic field exterior to a configuration of the particles. The main focus is on efficient computation of the wave interactions between the particles in any iterative multiple scattering approach.