962-35-1161 Andrzej W Kedzierawski* (kedziera@geneseo.edu). Numerical solution of inverse scattering problem for acoustic waves in inhomogeneous medium.

A numerical solution of the inverse scattering problem of determining the complex absorption coefficient of bounded and unbounded, penetrable and inhomogeneous mediums from a knowledge of the far-field patterns of the scattered fields corresponding to many incident time-harmonic plane acoustic waves is presented. Our solution is based on the orthogonal projection method of Colton-Monk. (Received October 02, 2000)