Meeting: 1003, Atlanta, Georgia, SS 5A, AMS Special Session on Radon Transform and Inverse Problems, I

1003-44-1281

Gaik Ambartsoumian* (gambarts@math.tamu.edu), Department of Mathematics, Mailstop 3368, Texas A&M University, College Station, TX 77843-3368, and Sarah Patch (Sarah.Patch@med.ge.com). Numerical reconstructions in 3D thermo-acoustic tomography. Preliminary report.

The talk presents the results of a numerical implementation of backprojection inversion formulas for 3D thermo-acoustic tomography (TCT). The numerics were based on analytic formulas derived in an earlier work by D. Finch, S. Patch and Rakesh. The results were obtained during a 2004 summer project on TCT at GE Healthcare. (Received October 04, 2004)