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Yang Yang* (yang926@purdue.edu), 150 N. University Street, West Lafayette, IN 47906, and
Plamen Stefanov (stefanop@purdue.edu), 150 N. University Street, West Lafayette, IN 47906.

Thermo-Acoustic Tomography with reflectors.

Thermo-Acoustic tomography (TAT) is a recently developed coupled physics imaging modality. In this talk we will discuss the mathematical model of TAT in heterogeneous medium with the presence of sound-hard reflectors. We will demonstrate an averaged time reversal algorithm which leads to an exponentially convergent Neumann series reconstruction. Numerical implementation of the algorithm will be presented. This is joint work with Plamen Stefanov. (Received September 01, 2016)