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Friday, March 1, 2013  
Green Hall, Room 0120  
1:30 P.M.

Computational Imaging Approach for Fanbeam X-Ray Scatter Imaging

Abstract: In x-ray scatter imaging, tomographic measurements of the forward scatter distribution from objects of interest are used to infer scatter densities within a volume. These scatter densities comprise both coherent and incoherent components which together characterize the material. A mask placed between the object and the detector array provides information about scatter angles. An efficient computational implementation of the forward and backward model facilitate iterative algorithms based upon a Poisson log-likelihood. Results are presented on simulated and Monte Carlo data.

Note: This work is part of a project on Coded Aperture X-Ray Scatter Imaging funded by the Department of Homeland Security through the Science and Technology Directorate, in collaboration with colleagues at Washington University, Duke University, and the University of Pittsburgh.