

Imaging Seminar - Department of Mathematics

Date and Time: Monday April 27, 2015, 2-3 PM

Location: PGH 646

Title: *Super-Resolution using a Compressive Sensing Architecture*

speaker: Glenn Easley, MITRE Corporation

Abstract: We present experimental results for a novel super-resolution imaging device that measures projections onto a random basis. The imaging system follows an architecture that comes from the theory of compressed sensing. We developed the system model from experimentally acquired calibration data and evaluate system performance as a function of the size of the basis set, or equivalently, the number of projections applied in the reconstruction. Simulations show sensitivity of the approach to fundamental physical parameters certain to be encountered with real systems, including optical diffraction and noise.

Upcoming talks at: <http://www.math.uh.edu/~dlabate/ImSeminar.html>