

1103-41-152

Alexander M Powell* (alexander.m.powell@vanderbilt.edu) and **Xuemei Chen**. *Fusion frames and randomized subspace actions.*

We investigate a version of the randomized Kaczmarz algorithm for recovering a signal from a collection of projection-valued fusion-frame measurements. We prove error bounds on the rates of almost sure convergence for this algorithm, and we address the question of which probability distributions on a randomized fusion frame lead to fast convergence. If time permits, we shall also discuss a variant of the Kaczmarz algorithm for consistent reconstruction from measurements that have been perturbed by uniform noise. (Received August 18, 2014)