

1158-65-238

Jamie Haddock* (jhaddock@math.ucla.edu) and **Anna Ma.** *Analyzing Hybrid Randomized and Greedy Projection Methods.*

Stochastic iterative algorithms have gained recent interest for solving large-scale systems of equations, $Ax=y$. One such example is the Randomized Kaczmarz (RK) algorithm, which acts only on single rows of the matrix A at a time. While RK randomly selects a row, Motzkin's algorithm employs a greedy row selection; the Sampling Kaczmarz-Motzkin (SKM) algorithm combines these two strategies. In this talk, we present a convergence analysis for SKM which interpolates between RK and Motzkin's algorithm. (Received March 02, 2020)