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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. We also specialize this convergence analysis to the case that the system of linear equations represents the average consensus problem over an undirected graph. (Received January 15, 2021)