Title: CONVERGENCE OF STOCHASTIC FIXED POINT ALGORITHMS

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Abstract: Recent random fixed point algorithms are particularly well suited to largescale optimization in signal and image processing. These algorithms feature random sweeping rules to select arbitrarily blocks of variables that are activated over the course of the iterations and they allow for stochastic errors in the evaluation of the operators. The present talk provides new convergence results in this general context. These convergence rates are compared to those of standard deterministic algorithms both theoretically and experimentally in an image recovery problem.