Matthew T. Calef Performance and examination of a Krylov accelerator

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We present a variant of Anderson Mixing, and compare it to the Broyden and JFNK methods used to solve a discretization of the Boltzmann equation. We show that, for the problems under consideration, our variant of Anderson Mixing finds the solution in the fewest number of iterations. In addition we examine and extend some recent theoretical work regarding Anderson Mixing.