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Joshua Z. Du* (jdu@kennesaw.edu), Department of Mathematics, Kennesaw State University, 1000 Chastain Road, Kennesaw, GA 30144-5591. *A Modified Jacobi Iteration Method for Linear System*. Preliminary report.

Jacobi, Gauss-Seidel, and SOR Iteration Methods are very powerful iteration methods for solving linear system with strictly diagonally dominated coefficient matrix. A modified iteration method is introduced in this talk. By modification, it expedites the convergence and it works for linear system with non-strictly diagonal dominated coefficient matrices. (Received March 02, 2006)