

TEMPLE UNIVERSITY  
Department of Mathematics

# Applied Mathematics and Scientific Computing Seminar

Wednesday, 1 October 2014, 4:00 p.m.  
Room 617 Wachman Hall

(refreshments and social at 3:45 p.m)

## Convergence of Nonstationary Iterative Methods for Solving Singular Linear Equations with Index One

by Jieryong Zhou

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**Abstract.** We study nonstationary iterative schemes for solving consistent singular linear system with index one. We utilize the group inverse to present a sufficient condition for the convergence of the iterative methods. This work extends the known results of stationary iterative scheme. Lastly, we give a sufficient condition for two-stage iterative algorithms.