

数学与系统科学研究院

计算数学所学术报告

报告人: 杨爱利 副教授

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报告题目:

Minimum residual Hermitian and skew-Hermitian splitting iteration methods for non-Hermitian positive definite linear systems

邀请人: 白中治 研究员

报告时间: 2016 年 8 月 13 日 (周六)

上午 11:00-12:00

报告地点: 科技综合楼三层

311 报告厅

Abstract:

By applying the minimum residual technique respectively on the one-step and the two-step Hermitian and skew-Hermitian splitting (HSS) iteration schemes, we introduce two new non-stationary iteration methods to solve non-Hermitian positive definite linear systems. The convergence properties of the two new iteration methods are derived by analyzing the residual norms of the iteration schemes, which show that the iteration sequences generated by the two iteration methods are convergent to the unique solution of the non-Hermitian positive definite linear systems unconditionally. Numerical results verify the correctness of the theoretical analysis and the effectiveness of the new iteration methods.

欢迎大家参加！