数学与系统科学研究院

计算数学所网络学术报告

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报告题目：

A Variant Modified Skew-Normal Splitting Iterative Method for Non-Hermitian Positive Definite Linear Systems

邀请人： 白中治 研究员

报告时间：2021 年 10 月 23 日（周六）

上午 **10:00-11:00**

报告工具：腾讯会议 ID：（433 453 491）

Abstract：

Non-Hermitian positive definite linear system arises from many applications in the area of scientific computing. In this talk, we propose a variant modified skew-normal splitting iterative method to solve it. Applying the preconditioning technique we also construct the preconditioned version of the proposed method. Theoretical analysis shows that the proposed method is unconditionally convergent even when the real part and the imaginary part of the coefficient matrix are non-symmetric. Meanwhile, when the real part and the imaginary part of the coefficient matrix are symmetric positive definite, we prove that the preconditioned variant modified skew-normal splitting iterative method will also unconditionally converge. Numerical experiments are presented to illustrate the efficiency of the proposed methods and show better performance of it when compared with some other methods.

欢迎大家参加！