数学与系统科学研究院

计算数学所学术报告

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报告题目：

Block Alternating Splitting Iteration Method for Saddle-Point Problems from Distributed Optimal Control with Time-Periodic Parabolic Equations

邀请人： 白中治 研究员

报告时间：**2014** 年 **10** 月 **18** 日（周六）

上午 **11:00-12:00**

报告地点： 数学院南楼七层 **702** 会议室

Abstract：

Optimization problems with partial differential equations as constraints arise widely in many areas of science and engineering. In this paper, we focus on solving a class of block two-by-two complex linear system arising from the distributed optimal control with time-periodic parabolic equations. We introduce a new block alternating splitting (BAS) iteration method for solving the class of complex linear system. The convergence theory and the spectral properties of the BAS iteration method are discussed. Numerical experiments show that the feasibility and effectiveness of the BAS iteration method when it is employed as solver as well as a preconditioner for Krylov subspace methods such as GMRES.

欢迎大家参加！