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：

Operator Splitting Methods for Linear Complementarity Problems

邀请人： 于海军 副研究员

报告时间：2019 年 6 月 12 日（周三）

上午 10:00-11:00

报告地点： 科技综合楼三层

301 报告厅

Abstract：

The first mathematical formulation of linear complementarity problems (LCPs) was proposed by Cottle and Dantzig in optimization and game theory. Over the decades, LCPs appear widely in scientific and engineering applications. The importance of solving such matrix systems has increased. We focus on time-dependent LCPs for pricing American options. In spite of various numerical methods like projected SOR, front-tracking, penalty, and coordinator transformation, there are still issues not completely understood. We will study the operator splitting method first proposed by Ikonen and Toivanen in 2004. I will talk about the design of operator splitting methods, stability and error analysis, extensions to fractional models, and the similarity to projection methods for Navier-Stokes equations.

欢迎大家参加！