## 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:

Introduction of some space-time methods

邀请人: 龚伟 博士

报告时间: 2014年12月1日(周一)

下午 15:00-16:00

报告地点: 数学院南楼二层 212

会议室

## **Abstract:**

Some time-parallel algorithms such as "parareal" algorithm and parallel full approximation scheme in space and time (PFASST) algorithm will be introduced. Then we present convergence theory for the two-level space-time additive Schwarz algorithm applied to parabolic equations, and show how the convergence rate depend on the fine/coarse mesh sizes in space and time, the number of subdomains, and the window size (i.e., the number of coupled time steps). Some numerical results are also presented.

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