数学与系统科学研究院

计算数学所学术报告

报告人：Associate Prof. Yang Xiaofeng

（ *University of South Carolina* ）

报告题目：

A second order in time, non-iterative linear approach to solve the epitaxial thin film model

邀请人： 于海军 副研究员

报告时间：2017 年 7 月 5 日（周三）

下午 15:30-16:30

报告地点： 科技综合楼三层

311 报告厅

Abstract：

The free energy of epitaxial thin film model consists of a highly nonlinear, logarithmic potential which presents a major challenge in the construction of efficient and accurate time discretization schemes. We overcome this challenge by developing a flexible and robust non-iterative IEQ approach (or called as IEQ-SAV method) which enables us to develop unconditional energy stable time discretization schemes. More precisely, the developed schemes (i) are accurate (up to second order in time); (ii) are stable (unconditional energy dissipation law holds); and (iii) are efficient and easy to implement (only need to solve two bi-Laplacian equations with constant coefficients at each time step).

欢迎大家参加！