

数学与系统科学研究院

计算数学所学术报告

报告人: **Prof. Pengtao Sun**

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报告题目:

**Numerical Methodologies for
Fluid-Structure Interactions and
Beyond: Interface Problems**

邀请人: 张晨松 副研究员

报告时间: 2017 年 4 月 11 日 (周二)

下午 14:00-15:00

报告地点: 科技综合楼三层

301 小报告厅

Abstract:

In this talk, I will introduce different modeling and numerical methods for fluid-structure interaction (FSI) problems based upon different numerical strategies and solution interests, where, the arbitrary Lagrangian-Eulerian (ALE) method will be introduced first for different motions of structure, then the full Eulerian-phase field method and the fictitious domain method will be addressed for cases ALE method cannot handle. Relevant numerical analyses (well-posedness, stability and convergence properties) and realistic applications of FSI problems will be illustrated as well in this talk. My recent research work about the distributed Lagrange multiplier/fictitious domain method for general interface problems will be presented as well.

欢迎大家参加！