

数学与系统科学研究院

计算数学所学术报告

报告人: 贺冬冬 助理教授

(香港中文大学 (深圳))

报告题目:

Threads and liquid jets: stability analysis and non-isothermal effect

邀请人: 许现民 副研究员

报告时间: 2021 年 7 月 30 日 (周三)

上午 10:30-11:30

报告地点: 科技综合楼

311 教室

Abstract:

The motion of liquid jets and droplets are fundamental phenomenon in many real industrial applications, such as fiber spinning and inkjet printing. In this talk, I will first talk about the stretching a highly viscous thread with non-isothermal effect, the minimum stretching force to get pinch-off for the thread is determined, and the effect of non-isothermal is included. Secondly, the stability analysis for two-phase viscoelastic liquid fluids are discussed. It shows that the appearance of the outer fluid will provide more secondary droplets in the beads on a string structure. Finally, if time allows, I will also discuss a little about the motion of a droplet under non-isothermal condition and with surfactant effect.

欢迎大家参加！