

数学与系统科学研究院
计算数学所网络学术报告

报告人: Prof. Weiqing REN

(*Department of Mathematics, National University of Singapore*)

报告题目:

**INTERFACE PROFILE NEAR THE
CONTACT LINE IN
ELECTRO-WETTING ON
DIELECTRIC**

邀请人: 许现民 副研究员

报告时间: 2020 年 12 月 3 日 (周四)

上午 10:00-11:00

报告工具: 腾讯会议 (ID: 754 323 412)

会议链接:

<https://meeting.tencent.com/s/M4vYjFXx9oEH>

Abstract:

We consider a charged droplet sitting on a dielectric substrate and study the static profile of the interface near the contact line. We first derive the governing equations using the principle of minimum energy, then discuss the distinguished limit of the model as the dimensionless parameters go to zero. Analysis of the inner problem, which governs the interface profile near the contact line, shows the existence of a well-defined apparent contact angle. The apparent contact angle depends on the applied electrical potential and the thickness of the insulator, and the relation agrees well with the Lippmann-Berge equation.

欢迎大家参加！