

数学与系统科学研究院

计算数学所学术报告

报告人: **Prof. Duvan Henao**

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报告题目:

Debonding of a gel from a rigid substrate

邀请人: 许现民 副研究员

报告时间: **2019 年 11 月 26 日 (周二)**

上午 10:00-11:00

报告地点: **科技综合楼三层**

311 报告厅

Abstract:

A variational model for the delamination of polymer gel thin films from rigid substrates is presented. A formal asymptotic analysis of a simplified 2D version of the underlying governing equations show that, as the film grows thinner, the absorption of the moisture of its surroundings tends to produce a homogeneous vertical stretch in the part of the film that remains bonded to the substrate and a state of free swelling in the debonded part. A transition layer, with a width comparable to the film thickness, is developed in order to connect the two swelling modes. This work is joint with Carme Calderer (U. Minnesota), Carlos Garavito-Garzon (U. Minnesota), Suping Lyu (Medtronic, Inc.), and Lorenzo Tapia (PUC - Chile).

欢迎大家参加！