



Department of Mathematics
The Institute of Mathematical Sciences
The Chinese University of Hong Kong

數學系
數學科學研究所
香港中文大學

Phone: (852) 3943 7988 • Fax: (852) 2603 5154 • Email: dept@math.cuhk.edu.hk (Math. Dept.)
Room 220, Lady Shaw Building, The Chinese University of Hong Kong, Shatin, N.T., Hong Kong

Joint Geometric Analysis Seminar

(Part of MIST program)

Singular boundary problems for a class of fully nonlinear parabolic equations

Prof. Takashi Kagaya
Muroran Institute of Technology

Abstract

In this talk, we discuss singular boundary problems for a class of fully nonlinear parabolic equations in one space dimension. Our model is derived from two motivations, one is to analyze the case when a zero contact angle appears in geometric flows. The other one is to study a planar curve sliding along the boundary with a zero contact angle, which can be viewed as a limiting model for the capillary phenomenon. We discuss the existence and non-existence of solution for the problems depending on the parabolic equations.

This talk is based on joint works with Q. Liu (Okinawa Institute of Science and Technology) and H. Mitake (The University of Tokyo).

Date: March 18, 2024 (Monday)
Time: 10:30am-11:30am
Venue: AB1 501a

All are Welcome