

THE HONG KONG UNIVERSITY OF SCIENCE & TECHNOLOGY

Department of Mathematics

SEMINAR ON PDE

On the one-phase problem **Prof. Xavier Fernandez-Real**

EPFL

Abstract

In this talk we present an introduction to elliptic free boundary problems, with a particular emphasis on the one-phase problem. We will explain the basic regularity theory for it, and compare it with other classical free boundary problems. At the end of the talk, we will introduce some recent results in collaboration with Max Engelstein and Hui Yu on both the Bernstein problem for one-phase free boundaries, and generic uniqueness and regularity for both the one-phase and Alt- Phillips problem.

Date: 18 April 2024 (Thursday)

Time: 4:00pm

Zoom Meeting: https://hkust.zoom.us/j/92718161052 (Passcode: 657193)

All are Welcome!