



香港中文大學
The Chinese University of Hong Kong



香港城市大學
City University of Hong Kong



THE HONG KONG
UNIVERSITY OF SCIENCE
AND TECHNOLOGY

數學系
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

Inverse Problems Seminar

The Calderón problem for quasilinear conductivities

Dr. Yavar Kian
Aix-Marseille Université

Abstract

In this talk, we will consider the Calderón inverse problem of determining uniquely a quasilinear isotropic conductivity appearing in an elliptic equation on a bounded open set. More precisely, we consider the problem of determining a general quasi-linear conductivity depending simultaneously on the space variable, the solutions and the gradient of the solutions of an elliptic non-linear equation. We give a positive answer to this problem for some general class of conductivities subjected to some analytic dependency with respect to the gradient of the solutions of the equation. This talk is based on a joint work with Catalin Carstea, Ali Feizmohammadi, Katya Krupchyk and Gunther Uhlmann.

Date: March 1, 2023 (Wednesday)
Time: 4:00pm – 5:00pm (Hong Kong Time)
ZOOM link: <https://cuhk.zoom.us/j/98241093146>
Meeting ID: 982 4109 3146

All are Welcome