Inverse Problems Seminar

The Calderón problem for quasilinear conductivities

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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