"Conditional stability of Calderón problem for less regular conductivities"

Abstract

A recent log-type conditional stability result with Hölder norm for the Calderón problem will be presented, assuming continuously differentiable conductivities with Hölder continuous first-order derivatives in a Lipschitz domain of the Euclidean space with dimension greater than or equal to three.

This is a joint work with Pedro Caro from the University of Helsinki and Andoni García from the University of Jyväskylä. The idea of decay in average used by B. Haberman and D. Tataru to obtain their uniqueness result for either continuously differentiable conductivities or Lipschitz conductivities such that their logarythm has small gradient in a Lipschitz domain of $\mathbb{R}^n$ with $n \geq 3$ is followed.