Stable determination of an inclusion by boundary measurements

M. Di Cristo, Università degli Studi di Trieste, Italy

Abstract

We deal with the problem of determining an inclusion within an electrostatic conductor from electrical boundary measurements. This is a special instance of the well-known Calderón's inverse conductivity problem. Under mild a priori assumptions we establish a stability estimate of the unknown inclusion from the Dirichlet-to-Neumann map. We show a modulus of continuity of logarithmic type and we prove that it is optimal.