On the stability of the Calderón inverse problem on rough planar domains

Keith Rogers

Instituto de Ciencias Matematicas (Madrid)

We consider Calderón's inverse problem on planar domains Ω with conductivities in fractional Sobolev spaces. When Ω is Lipschitz, the problem was known to be stable in the L^2-sense. We remove the Lipschitz condition on the boundary. To this end, we will analyse the Sobolev regularity of the characteristic function of Ω.