## Seminario de análisis matemático y aplicaciones Analisi matematikoa eta aplikazioak mintegia

## Stability in the Calderón problem with partial data

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**ABSTRACT:** In this work, we establish global stability estimates on the potential in a Schrödinger equation on a smooth bounded open set from the partial Dirichlet-to-Neumann map. This is a quantitative counter-part of the uniqueness result of Kenig, Sjöstrand and Uhlmann on the Calderón problem with partial data, where the measurements are made on the illuminated part of the boundary by a source located outside of the convex hull of the open set. In an earlier article, using quantitative analogues of micro local arguments on the Radon transform, we were able to obtain local estimates in the penumbra region of the open set in dimension n = 3. In this work, inspired by constructions of complex geometrical optics solutions to the Schrödinger equation performed in the anisotropic context, we manage to obtain global estimates in all dimensions.

This is a joint work with Pedro Caro (ICMAT, Madrid) and Alberto Ruiz (UAM, Madrid).

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