

SEMINARIO DE ANÁLISIS Y APLICACIONES

Viernes, 3 de febrero de 2012

11:30 h., Módulo 17 (antiguo C-XV) - Aula 520 (Depto. Matemáticas UAM)

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The inverse Calderón problem for
Schrödinger operator on Riemann
surfaces

Resumen: *Joint work with Colin Guillarmou of ENS. The speaker is partially supported by NSF Grant No. DMS-0807502 during this work.*

We show that on a smooth compact Riemann surface with boundary $(M_0; g)$ the Dirichlet-to-Neumann map of the Schrödinger operator $\Delta_g + V$ determines uniquely the potential V .

This seemingly analytical problem turns out to have connections with ideas in symplectic geometry and differential topology. We will discuss how these geometrical features arise and the techniques we use to treat them.

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