

Título: "Inverse spectral results for the Dirichlet-to-Neumann operator"

Resumen: The Dirichlet-to-Neumann operator of a compact Riemannian manifold M with boundary is a linear map $C^\infty(\partial M) \rightarrow C^\infty(\partial M)$ that maps the Dirichlet boundary values of each harmonic function f on M to the Neumann boundary values of f . The spectrum of this operator is discrete and is called the Steklov spectrum. The Dirichlet-to-Neumann operator also generalizes to the setting of orbifolds. We will compare the behavior of the Steklov spectrum on smooth surfaces with that of two-dimensional orbifolds. If time permits, we will also discuss the adaptation to the Steklov setting of techniques for constructing isospectral manifolds.