DIFFERENTIAL GEOMETRY/PDE SEMINAR

Wednesday, October 24, 2012 Padelford C-36 3:50PM-5PM

Spectral rigidity and invariant distributions on Anosov surfaces

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I will discuss inverse problems on a closed Riemannian surface whose geodesic flow is Anosov. More specifically, I will try to establish spectral rigidity (a problem that has been open for some time) and surjectivity results for the adjoint of the geodesic ray transform. These surjectivity results imply the existence of many geometric distributions in H^{-1} invariant under the geodesic flow and play a key role to prove spectral rigidity. This is joint work with Mikko Salo and Gunther Uhlmann.

For more information about this seminar, visit the DG/PDE Seminar Web page (from the Math Department home page, www.math.washington.edu, follow the link Seminars, Colloquia, and Conferences).