IP/DIFFERENTIAL GEOMETRY/PDE SEMINAR

Tuesday, February 17, 2015
Padelford C-401
1:30–2:30PM

Resonances and wave decay for manifolds with hyperbolic ends

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Resonances are the natural extension of the discrete spectrum of the Laplacian to noncompact manifolds. Each resonance gives an exponentially decaying solution to the wave equation, with decay rate given by its imaginary part. As energy grows, decay rates are related to properties of geodesic flow and to the structure at infinity. For a cusp, infinity is "small", which typically slows decay. However, I will present a class of examples for which decay rates go to infinity with energy even in the presence of a cusp. This is part of a more general investigation of resonances on manifolds with hyperbolic ends.

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**).