

Analysis Seminar

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Resonances for Normally Hyperbolic Trapped Sets

Series: Analysis Seminar

Semyon Dyatlov

University of California

Date & Time: Tue, 04/02/2013 - 15:15 - 16:15

Location: S-101

Video Link:

<http://video.ias.edu/analysis/1213/0402-SemyonDyatlov>

Resonances are complex analogs of eigenvalues for Laplacians on noncompact manifolds, arising in long time resonance expansions of linear waves. We prove a Weyl type asymptotic formula for the number of resonances in a strip, provided that the set of trapped geodesics is r -normally hyperbolic for large r and satisfies a pinching condition. Our dynamical assumptions are stable under small smooth perturbations and motivated by applications to black holes. We also establish a high frequency analog of resonance expansions.

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Wed, 09/26/2012 - 15:45

Mon, 02/25/2013 - 15:40

terms:

- [School of Mathematics](#)