GEOMETRIC ANALYSIS SEMINAR

" Spectral invariants under collapse of a hypersurface"

Pierre Albin
(University of Illinois at Urbana-Champaign)

Abstract: I will report on joint work with Frédéric Rochon and David Sher in which we study the determinant of the Hodge Laplacian for a family of Riemannian metrics on a closed manifold that are collapsing along a hypersurface in a controlled fashion. We use our results to relate analytic torsion, a spectral invariant, with Reidemeister torsion, a topological invariant, extending a theorem of Cheeger and Müller to manifolds with cusp ends or non-isolated conic singularities.

Monday November 13, 2017
MIT, Room 2-146
Time: 4:00PM-5:00PM

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