DISSERTATION DEFENSE

Resonance asymptotics for asymptotically hyperbolic manifolds with warped-product ends

Pascal Philipp Emory University

Abstract: We study the spectral theory of asymptotically hyperbolic manifolds with ends of warped-product type. Our main result is an upper bound on the resonance counting function, with a geometric constant expressed in terms of the respective Weyl constants for the core of the manifold and the base manifold defining the ends. As part of this analysis, we derive asymptotic expansions of the modified Bessel functions of complex order.

Tuesday, June 3, 2014, 10:00 am Mathematics and Science Center: W301

Advisor: David Borthwick

MATHEMATICS AND COMPUTER SCIENCE EMORY UNIVERSITY