The Heat Kernel of a Contact Manifold in the Sub-Riemannian Limit

Hadrian Quan University of Illinois

In this talk I will describe joint work with Pierre Albin in which we study the limits of heat kernels on contact manifolds corresponding to a Riemannian metric degenerating to a submetric of the contact structure. This question is approached using the tools of geometric microlocal analysis. Time permitting, I will discuss connections with the Rumin complex, and the associated limit of Analytic Torsion.