Trace distributions and heat invariants for Schrödinger operators

MICHAEL HITRIK University of California at Berkeley

We provide a complete description of the asymptotics of regularized traces for functions of Schrödinger operators with long range potentials. The traces in question involve higher order terms in associated noncommutative Taylor expansions, and the coefficients in the asymptotics are expressed in terms of powers of the full operator applied to the Euclidean distance function. This is joint work with I. Polterovich.