SPEAKER:

Robert Wolf, University of Kentucky

TITLE:

Compactness of Isospectral Potentials

ABSTRACT:

The spectrum of the Laplace-Beltrami operator with a potential on a manifold give rise to the "heat invariants" through a small t expansion of the related heat semi-group. We consider operators with potentials that are isospectral. The formulas for the heat invariants can be used to show (for example, by J. Brüning) that for compact manifolds without boundary of dimension 2 and 3 such sets of isospectral potentials are compact in the space of C-infinity functions on the manifold.