

Analysis-Imaging Seminar - Department of Mathematics

Date and Time: Tuesday September 4, 2012, 2-3 PM

Location: PGH 646

Title: Sharp semiclassical bounds for the moments of eigenvalues for some Schroedinger type operators with unbounded potentials

Speaker: Vitali Vougalter, University of Cape Town

Abstracts: We establish sharp semiclassical upper bounds for the moments of some negative powers for the eigenvalues of the Dirichlet Laplacian. When a constant magnetic field is incorporated in the problem, we obtain sharp lower bounds for the moments of positive powers not exceeding one for such eigenvalues. When considering a Schroedinger operator with the relativistic kinetic energy and a smooth, nonnegative, unbounded potential, we prove the sharp Lieb-Thirring estimate for the moments of some negative powers of its eigenvalues.

Upcoming talks at: <http://www.math.uh.edu/~dlabate/ImSeminar.html>