
STEVE LESTER, University of Montreal

Quantum Unique Ergodicity for half integral weight automorphic forms

Given a smooth compact Riemannian manifold (M, g) with no boundary an important problem in Quantum Chaos studies the distribution of L^2 mass of eigenfunctions of the Laplace-Beltrami operator in the limit as the eigenvalue tends to infinity. For M with negative curvature Rudnick and Sarnak have conjectured that the L^2 mass of all eigenfunctions equidistributes with respect to the Riemannian volume form; this is known as the Quantum Unique Ergodicity (QUE) Conjecture. In certain arithmetic settings QUE is now known. In this talk I will discuss the analogue of QUE in the context of half-integral weight automorphic forms. This is based on joint work Maksym Radziwill.