

Philadelphia Area Number Theory Seminar

Zvi Shem-Tov

Institute for Advanced Study

Arithmetic Quantum Unique Ergodicity for 3-dimensional hyperbolic manifolds

Abstract: The Quantum Unique Ergodicity conjecture of Rudnick and Sarnak says that eigenfunctions of the Laplacian on a compact manifold of negative curvature become equidistributed as the eigenvalue tends to infinity. In the talk I will discuss a recent work on this problem for arithmetic quotients of the three dimensional hyperbolic space. I will present a rather detailed proof of our key result that these eigenfunctions cannot concentrate on certain proper submanifolds. Joint work with Lior Silberman.

Wednesday, March 1, 2023
3-5 PM

Bryn Mawr College
Department of Mathematics
Park Science Center **328**

Informal refreshments at 3PM – Talk at 3:30PM