Philadelphia Area Number Theory Seminar

Peter Humphries

University College London

Quantum unique ergodicity in almost every shrinking ball

Abstract: I will discuss the problem of small scale equidistribution of Hecke–Maass eigenforms, namely the problem of the rate at which hyperbolic balls can shrink as the Laplacian eigenvalue tends to infinity for which the Laplacian eigenfunctions still equidistribute on these balls. There is a natural barrier — the Planck scale — for which equidistribution fails, but conditionally equidistribution occurs in almost every shrinking ball at every larger scale. I will also discuss related small scale equidistribution problems for geometric invariants associated to quadratic fields.

Wednesday, March 28, 2017

2:40 – 4:00 PM

Bryn Mawr College

Department of Mathematics

Park Science Center **328**

Tea and refreshments at 2:20PM in Park 339