SHIMON BROOKS, Stony Brook University *Spectral Multiplicities and Arithmetic QUE*

We present joint work with E. Lindenstrauss, showing that joint eigenfunctions of the Laplacian and one Hecke operator on congruence surfaces become equidistributed as the Laplace eigenvalue grows to infinity. We will then discuss what can be inferred from this— and conjectured— about the relationship between equidistribution of Laplace eigenfunctions and degeneracies in the spectrum.