

abstract

Analysis Seminar
Topic:

Speaker:

Affiliation:

Date:

Time/Room:

We describe some results concerning the number of connected components of nodal lines of high frequency Maass forms on the modular surface. Based on heuristics connecting these to a critical percolation model, Bogomolny and Schmit have conjectured, and numerics confirm, that this number follows an asymptotic law. While proving this appears to be very difficult, some approximations to it can be proved by developing number theoretic and analytic methods. The work report on is joint with A. Ghosh and A. Reznikov.