

BOSTON UNIVERSITY NUMBER THEORY SEMINAR

The nilpotence method for bounding dimensions of Hecke algebras from below

Anna Medvedovsky
(Brandeis University)

Monday, Dec 8 at 4:15 pm
111 Cummington Street, MCS B21
Tea and cookies in MCS 144 at 4:00 pm

Abstract: I will present a new elementary method for obtaining a lower bound on the dimension of a Hecke algebra acting on modular forms modulo a prime p . This method currently works only for a few small primes and level one, and only $p = 3$ is new, but I will also discuss probable and possible generalizations, as well as applications to characteristic-zero Hecke algebras.