K-Theory, Quadratic Forms and Number Theory Seminar

Title: Heegner divisors, L-functions and Maass forms

Speaker: Professor Ken Ono (University of Wisconsin-Madison)

Date: Wed 3rd October 2007 at 4:00PM

Location: Mathematical Sciences Seminar Room

Abstract: In joint work with Bruinier, we extend work of Waldspurger, Kohnen and Zagier on the values of quadratic twists of modular L-functions. We show that harmonic Maass forms are generating functions for both the values and derivatives of quadratic twists of weight 2 newforms. This work depends on the interplay between Maass-Heegner divisors on Jacobians of modular curves, and Maass forms. In short we obtain a Gross-Kohnen-Zagier theorem for Maass forms.