

*Department of Mathematics,
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Math 209 - Number Theory

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UCLA

Eisenstein ideal with squarefree level

Abstract:

In his influential paper “Modular curves and the Eisenstein ideal,” Barry Mazur studied congruences modulo p between cusp forms and the Eisenstein series of weight 2 and prime level N . In particular, he defined the Eisenstein ideal in the relevant Hecke algebra, and showed that it is locally principal. We’ll discuss the analogous situation for certain squarefree levels N , and show that, while the Eisenstein ideal may not be locally principal, we can count the minimal number of generators and explain the arithmetic significance of this number. This is joint work with Carl Wang-Erickson.

Special Note:

There will be a pre-talk at 1:20pm.

Host: Benedict Gross

Thursday, May 17, 2018

2:00 PM

AP&M 7421
