

Meeting: 1003, Atlanta, Georgia, SS 32A, AMS Special Session on Arithmetic Algebraic Geometry, I

1003-11-444 **Romyar T. Sharifi*** (sharifi@math.mcmaster.ca), Department of Mathematics and Statistics, McMaster University, 1280 Main Street West, Hamilton, Ontario L8S 4K1, Canada. *Iwasawa theory over Kummer extensions*. Preliminary report.

We will discuss Iwasawa modules over pro- p Kummer extensions of cyclotomic \mathbf{Z}_p -extensions of number fields, relating the structure of the Galois groups of the maximal unramified abelian pro- p extensions of such fields to cup products, Eisenstein ideals in certain Hecke algebras, and p -adic L -functions of cusp forms congruent to Eisenstein series modulo p . (Received September 14, 2004)