1042-11-64 **Matthew Emerton**, **Robert Pollack** and **Tom Weston***, Department of Mathematics and Statistics, University of Massachusetts, Amherst, MA 01002. *Mazur-Tate elements of non-ordinary modular forms I.*

The p-adic Iwasawa theory of modular forms is relatively well understood for modular forms which are ordinary at p as well as for elliptic curves which are supersingular at p. However, little is known about the Iwasawa theory of higher weight modular forms which are non-ordinary at p. In this talk we study the finite level analytic Iwasawa invariants of such forms. In particular, we use work of Ash-Stevens to give precise formulae for these invariants for forms of weight at most p^2. (Received August 06, 2008)