1035-11-978 Chris A. Kurth and Ling Long* (linglong@iastate.edu), 396 Carver Hall, Iowa State University, Ames, IA 50014. On modular forms for some noncongruence subgroups.

It is well-known that the Fourier coefficients of any holomorphic modular form for a congruence subgroup of the modular group (with algebraic coefficients) have bounded denominators. It was observed by Atkin and Swinnerton-Dyer that this is no longer true for modular forms for noncongruence subgroups and they pointed out that unbounded denominator property is a clear distinction between modular forms for noncongruence and congruence modular forms. It is an open question whether genuine noncongruence modular forms (with algebraic coefficients) always satisfy the unbounded denominator property.

In this talk, we give a partial positive answer to the above open question by considering some special noncongruence modular forms. (Received September 18, 2007)