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1409 W. Green St, Urbana, IL 61801. *p-adic properties of modular and mock modular forms.*

I will describe explicit Hecke-type congruences modulo arbitrary powers of primes for families of weight  $3/2$  modular and mock modular forms. There are applications to generating functions of combinatorial and number theoretic interest (including the “smallest parts” partition function of Andrews and Zagier’s generating function for the traces of singular moduli). Some of this is joint work with Kathrin Bringmann and Jeremy Lovejoy. (Received January 20, 2011)