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*Congruences Between Spaces of Cuspidal Modular Forms.*

A prime  $p$  is said to be a congruence prime linking two spaces of cuspidal modular forms  $X$  and  $Y$  if there exist two cusp forms,  $f \in X$  and  $g \in Y$ , such that the Fourier coefficients of  $f$  and  $g$  are all congruent modulo  $p$ . We describe research to date on the problem and discuss a novel approach. (Received September 22, 2010)